



**Faculty of
Medicine**

RESEARCH PROJECTS

Context Sensitive Half-time of Remifentanil After Long Neurosurgical Procedure

- ✉ CHAN Matthew Tak Vai • TAM Yuk Ho • CHUI Po Tong • GIN Tony • POON Wai Sang (Surgery)
- ☐ 1 December 1998
- ❖ CUHK Departmental Funding

The context-sensitive half time (CSHT) is the time to halving the blood concentration after termination of drug administration by an infusion targeted to maintain a constant concentration. This concept allows better prediction of recovery from intravenous infusion at the termination of surgery. Previously CSHT was only estimated using computer simulation. It is not certain whether the predicted CSHT is accurate after prolonged remifentanil infusion in long neurosurgical procedure. This study aims to determine the *in vivo* CSHT after long neurosurgical procedures. (MD98163)

Dose Response of Cisatracurium Besilate in Children During Intravenous Anaesthesia

- ✉ CHAN Matthew Tak Vai • CHEE Yee Eot • AUN Sui Tee Cindy
- ☐ 31 December 1998
- ❖ CUHK Departmental Funding

Children require a greater dose of non-depolarising neuromuscular blockers. This age-dependency phenomenon has been documented. Changes in the sensitivity of neuromuscular junction and the volume of distribution may explain the change in dose requirements. Cisatracurium besylate is a purified form of one of the ten stereoisomers, *R-cis*, *R'-cis* isomer. Recent data showed that time of recovery from cisatracurium block in children was not different from adult, suggesting the potency of cisatracurium between the two groups were similar. There are no 'direct data' regarding the dose-response relation of cisatracurium in paediatric patients from newborns to adolescents. This study construct the dose response curves of cisatracurium in children. (MD98162)

The Electroencephalographic Effects of Regional Anaesthesia and Their application During Combined Regional and General Anaesthesia

- ✉ CHUNG David Chi Wai • MORLEY Andrew Peter# • CHAN Matthew Tak Vai
- ☐ 1 August 1998
- ❖ Research Grants Council

Combined regional and general anaesthesia (CRGA) is a common anaesthetic technique for major surgery. Advantages over general anaesthesia alone include an apparent reduction in general anaesthetic requirements, though the extent of this reduction is unclear. Electroencephalograph (EEG) variables have been proposed as measures of anaesthetic depth. This project aims to establish the EEG changes accompanying regional anaesthesia, both alone and in combination with general anaesthesia. EEG variables will then be used to determine the extent to which general anaesthetic requirements are reduced by the combined technique.

EEG variables differ between patients receiving CRGA and those receiving general anaesthesia alone. In the part one of the project we intend to investigate these differences. As they may be partly explained by independent EEG changes accompanying regional anaesthesia, we will determine, in part two, the effects of regional anaesthesia alone on the EEG.

In part three, general anaesthesia will be administered to patients with (i.e. CRGA) and without regional anaesthesia, using closed loop feedback control on the EEG. In this way the same depth of anaesthesia will be maintained in each group. The anaesthetic requirements, intraoperative physiological data and recovery characteristics of the two groups will be compared. (CU98044)

Plasma Lignocaine Level Following Topical Anaesthesia of the Airway by the Aspiration

- ✉ CHUNG David Chi Wai • HO Ming Hei Anthony • WOODWARD David Keith
- ☐ 26 April 1999
- ❖ CUHK Departmental Funding

To check blood level of lignocaine following airway anaesthesia by aspiration of lignocaine a technique developed at the Prince of Wales Hospital. (MD98160)

The Use of Dihydroergotamine in Spinal Anaesthesia

- ✉ CRITCHLEY Lester Augustus Hall
- ☐ 1 June 1999
- ❖ CUHK Departmental Funding

Dihydroergotamine is an agent that raises blood pressure. Its use in anaesthesia and particularly Hong Kong is limited. This study investigates the dosage required to treat episodes of hypotension, low blood pressure, during spinal anaesthesia in elderly patients. (MD98158)

Intraocular Pressure Changes in Patients with Intracranial Hypertension

✉ HO Ming Hei Anthony • CHUNG David Chi Wai • JOYNT Gavin Matthew • YEO Victor*

□ 1 June 1999

❖ CUHK Departmental Funding

There is significant anatomic and physiologic basis for intraocular pressure to be affected by intracranial pressure. To delineate the correlation between the two pressures could allow non-invasive assessment of cranial pressure in patients with intracranial space occupying lesions, fluids or oedema. (MD98154)

Arteriovenous Plasma Concentration of Ropivacaine Following Epidural Administration

✉ KARMAKAR Manoj Kumar • CHUNG David Chi Wai • KWOK Wing Hong • CHEE Yee Eot

□ 12 November 1998

❖ CUHK Departmental Funding

Ropivacaine is long acting aminoamide local anaesthetic agent, which has recently been introduced into clinical practice. Ropivacaine has a chemical structure similar to Bupivacaine, the butyl group being replaced by a propyl group on the piperidine nitrogen atom. While Bupivacaine is available as a mixture containing equal proportions of the "R(-)" and "S(-)" isomer. Ropivacaine is the first local anaesthetic agent to be available as a pure "S(-)" isomer with an enantiomeric purity of 99.5%. This isomeric difference is believed to confer advantages in the toxicity profile of Ropivacaine over Bupivacaine. Recent pharmacokinetic data from adult volunteers following epidural administration of Ropivacaine has demonstrated a significant peripheral arteriovenous concentration difference (up to 50%) for as long as sixty minutes following epidural injection. This difference in plasma concentration of Ropivacaine appears to be greater and persists for longer than that seen with the use of Bupivacaine. Therefore peripheral venous plasma concentration of Ropivacaine may be a very unreliable measure of vital organ concentration (heart/brain) for assessing toxicity during systemic absorption and will necessitate arterial blood sampling in future pharmacokinetic studies.

Our review of the literature to date shows that there are no pharmacokinetic data in clinical practice comparing the simultaneous arteriovenous (central venous, arterial and peripheral venous) concentrations of Ropivacaine following epidural administration. An understanding of the plasma concentration profile at these various sites during systemic absorption may have significant implications in the interpretation of plasma concentrations of Ropivacaine. (MD98156)

Comparative Systemic Absorption of Ropivacaine and Bupivacaine Following Caudal Epidural Administration in Children

✉ KARMAKAR Manoj Kumar • AUN Sui Tee Cindy • YEUNG Chung Kwong (Surgery) • CHAN S. C.*

□ 8 December 1998

❖ CUHK Departmental Funding

Bupivacaine is the local anaesthetic agent most commonly used in children. Used for prolonged infusion it has been associated with significant systemic accumulation and clinical reports of toxicity. Ropivacaine is a local anaesthetic agent very similar in chemical structure to bupivacaine. While bupivacaine is available as a racemic mixture Ropivacaine is the only local anesthetic agent available as a pure isomer "S". This isomeric difference is believed to confer advantage in toxicity profile of Ropivacaine.

Ropivacaine has been safely used in children for epidural administration. However there is no pharmacokinetic data to date comparing the systemic absorption of Ropivacaine and Bupivacaine. This prospective randomised double blind study aims to compare the systemic absorption of either of these two drugs during systemic absorption following caudal epidural administration. (MD98155)

Spinal Anaesthesia for Caesarean Section Using Ropivacaine

✉ KHAW Kim Sun • NGAN KEE Warwick Dean • LEE Bee Beng • CHUNG David Chi Wai

□ 11 September 1998

❖ CUHK Departmental Funding

Ropivacaine is a new local anaesthetic with a better toxicity safety profile. While epidural of ropivacaine use has been extensively investigated there has been very little data on spinal administration. There is not publications or report so far on the use of spinal ropivacaine for caesarean section. Therefore this research is conducted to investigate the dose response of this drug when used for caesarean section. (MD98159)

Ropivacaine as an Intrathecal Agent: Part I – A Dose Response Study

✉ KHAW Kim Sun • NGAN KEE Warwick Dean • CRITCHLEY Lester Augustus Hall

□ 3 April 1999

❖ CUHK Departmental Funding

Ropivacaine is a new local anaesthetic with a better toxicity safety profile. While epidural of ropivacaine use has been extensively investigated there has been very little data on spinal administration. There is very few publications or report so far on the use of spinal ropivacaine. Therefore this research is conducted to investigate the dose response of this drug when used for spinal anaesthesia. (MD98153)

Randomised Double-blind Comparison of Ephedrine and Metaraminol for the Treatment of Hypotension During Spinal Anaesthesia for Caesarean Section

- ✉ NGAN KEE Warwick Dean • KHAW Kim Sun • LEE Bee Beng • LAU Tze Kin (Obstetrics & Gynaecology)
- ☐ 1 October 1998
- ❖ CUHK Departmental Funding

Spinal anaesthesia is a popular method of anaesthesia for Caesarean section, but has the potential to cause hypotension which can be detrimental to mother and fetus. Hypotension is traditionally treated with intravenous fluid and a vasopressor, of which historically ephedrine has been the most commonly used. Recently, there has been a reappraisal of vasopressors in obstetrics. Several human studies have shown that the direct alpha agonists may be as effective or more effective than ephedrine. In Hong Kong the main alpha agonist in use is metaraminol. Previous work from our department showed that metaraminol was more effective than ephedrine in preventing hypotension during spinal anaesthesia in non-obstetric patients. However, few data are available on the use of metaraminol in human obstetric patients. Therefore the aim of this randomised double-blind study is to evaluate metaraminol for management of hypotension during spinal anaesthesia for Caesarean section by comparing it with ephedrine. Effects on maternal haemodynamics and fetal outcome will be compared. In addition, the potential effects of metaraminol on the uterine vasculature will be assessed using Doppler ultrasound. (MD98150)

Randomized Double-Blind Evaluation of Ropivacaine-Adrenaline as an Epidural Test Dose

- ✉ NGAN KEE Warwick Dean • KHAW Kim Sun • LEE Bee Beng
- ☐ 1 October 1998
- ❖ CUHK Departmental Funding

Ropivacaine, a new local anaesthetic agent, ropivacaine has been recently approved for use in Hong Kong. Ropivacaine has a similar

pharmacological profile to bupivacaine but has advantages of lower toxicity and a lower ratio of motor: sensory block. These properties make ropivacaine useful for obstetric anaesthesia and analgesia. However, to date, there is little information available on the use of ropivacaine as a test dose, which is an important aid to preventing adverse outcomes associated with incorrect placement of epidural catheters. Because of its lower toxicity compared with other local anaesthetics, ropivacaine is particularly suitable as an agent to detect intravenous injection. In addition, as it is likely that the use of ropivacaine will increase worldwide, it is important that the effects of intrathecally injected ropivacaine be determined. This randomised double-blind study investigates the use of an epidural test dose using ropivacaine in combination with low dose adrenaline. (MD98151)

Dose-Response Investigation of Ephedrine by Intravenous Bolus for the Prevention of Hypotension During Spinal Anaesthesia for Caesarean Section

- ✉ NGAN KEE Warwick Dean • KHAW Kim Sun • LEE Bee Beng • LAU Tze Kin (Obstetrics & Gynaecology)
- ☐ 1 October 1998
- ❖ CUHK Departmental Funding

Spinal anaesthesia is popular for Caesarean section but has the disadvantage of the potential to cause hypotension from rapid onset of sympathetic block and peripheral vasodilatation. This can have detrimental effects on both mother and fetus. Therefore, there has been much interest in methods of prevention and treatment of this side effect. In general, these have focused on the use of intravenous fluid preload and vasopressors. Of the available vasopressors, historically ephedrine has been the most commonly used. However, despite the widespread acceptance of ephedrine as a standard drug in obstetric spinal anaesthesia, the optimum dose regimen for ephedrine is undetermined. Therefore the aim of this randomized, double blind study is to evaluate different doses of ephedrine (0-30mg) given as intravenous boluses for prevention of hypotension during spinal anaesthesia for Caesarean section. The primary outcome to be compared will be maternal haemodynamics. In addition, any differences in fetal outcome will be compared. (MD98152)

Determination of the Influence of Inspired Oxygen Concentration on Maternal and Neonatal Outcome During General Anaesthesia for Caesarean Section

- ✉ NGAN KEE Warwick Dean • KHAW Kim Sun
• MA Kwok Chiu (Paediatrics) • LEE Bee Beng
- ☐ 1 June 1999
- ❖ CUHK Research Committee Funding

The optimum concentration of inspired oxygen that should be used during general anaesthesia for Caesarean section is unknown and current practice of anaesthetists is based on questionable historical information. The aim of this prospective, randomized, double-blind controlled study is to investigate the influence of inspired concentrations of oxygen ranging from 30-100% on maternal and neonatal outcome. General anaesthesia will be maintained using a new volatile anaesthetic agent: sevoflurane. Sevoflurane has a very low blood gas partition coefficient and thus a very rapid onset of action; this will eliminate light anaesthesia and high circulating maternal catecholamine concentrations as a potential confounding factor. The primary outcome compared will be neonatal condition which will be assessed by biochemical analysis of umbilical cord blood and clinical and neurobehavioural assessment. In addition to standard blood gas analysis of umbilical cord blood, we will directly measure the actual oxygen content of samples using a technique known as co-oximetry. This has advantages over simple measurement of oxygen tension, because fetal haemoglobin has different affinity for oxygen compared with adult haemoglobin making it difficult to interpret blood gas results, especially in the face of simultaneous changes in PCO₂ and pH which frequently occur at birth. Clinical neonatal assessment will include conventional Apgar scoring, plus neurobehavioural scoring which is a sensitive measurement of drug effects on the neonate. Maternal assessment will be a secondary outcome and will include measurement of intraoperative haemodynamics and plasma concentrations of adrenaline and noradrenaline at delivery, measured using high performance liquid chromatography. (MD98092)

Investigation of the Use of Ropivacaine 1% as the Sole Anaesthetic Agent for Peribulbar Anaesthesia

- ✉ WOODWARD David Keith • LEUNG Tai Shing (Ophthalmology and Visual Sciences) • NGAN KEE Warwick Dean • TSE Marvin* • LAW Ricky*
- ☐ 4 June 1999
- ❖ CUHK Departmental Funding

Peribulbar anaesthesia for eye surgery has gained favour over the retrobulbar technique because of an improved safety record with respect to sight- and life-threatening complications. A variety of local anaesthetic agents have been used, the most frequent being a mixture of bupivacaine 0.5% and lignocaine

2%, with or without hyaluronidase and adrenaline, in volumes of up to 12 mls. A recent study demonstrated that adding a large dose of hyaluronidase (300 iu/ml) to a bupivacaine / lignocaine mixture improved the quality and speed of the block.

Ropivacaine (Astra Pharmaceuticals) is a relatively new local anaesthetic recently approved for use in Hong Kong, with the advantage of improved cardiovascular and neurological toxicity profiles compared to bupivacaine. Although ropivacaine has been shown to have a 'motor sparing' effect at low concentrations, a recent report on intraorbital ropivacaine demonstrated improved ocular akinesia with a ropivacaine / lignocaine / hyaluronidase mixture when compared with a bupivacaine / lignocaine / hyaluronidase mixture. This suggests that ropivacaine may be a suitable local anaesthetic agent for peribulbar anaesthesia.

We piloted peribulbar ropivacaine 1% plus hyaluronidase 300 iu/ml in 13 patients, and found that this mixture provided satisfactory conditions for surgery in all the patients; however the rate of onset, and degree of akinesia were possibly inferior to an anaesthetic combination incorporating lignocaine.

We set out to determine whether ropivacaine alone is a suitable agent for peribulbar block, in terms of speed of onset and the quality of anaesthesia produced, when combined with 300 iu/ml hyaluronidase.

(MD98157)

Please refer to previous issues of this publication for more details of the following ongoing research at the department:

<u>Edition</u>	<u>Title/Investigators</u>
1997-98	Comparison of Two Methods of Cardiac Output Measurements and the Effect of Lung Fluid on Their Relationship (MD97186) ✉ CRITCHLEY Lester Augustus Hall
1997-98	Hypotension During Spinal Anaesthesia: How Should the Vasopressor be Given? (MD97185) ✉ CRITCHLEY Lester Augustus Hall • YU S. C.*
1996-97	Effect of Pregnancy on the Concentrations of Propofol Required for Hypnosis and Anaesthesia (MD96107) ✉ JOYNT Gavin Matthew • MORLEY Andrew Peter#
1997-98	Thoracic Paravertebral Infusion of Bupivacaine for Post-thoracotomy Analgesia. What is the Most Effective Concentration? (MD97184)

✉ KARMAKAR Manoj Kumar •
 LOW S. John Matthew# • NG Siu
 Keung • YIM Ping Chuen Anthony
 (Surgery) • LEE T. W. (Surgery)*

RESEARCH OUTPUTS AND PUBLICATIONS

- <P975058> **Derrick, James.** "Metrics". *Compiler Plugin to Measure Cyclomatic Complexity Metric* 1997.09.
- <P980702> **Critchley, L.A.H.** "Impedance Cardiography: The Impact of New Technology". *Anaesthesia* vol.53, pp.677-684. Britain, 1998.07.
- <P981018> **Ngan Kee, Warwick Dean.** *The Clinical Use of Epidural Pethidine for Postoperative Analgesia After Caesarean Section.* 183 pgs. New Zealand: University of Auckland, 1998.07.
- <P981611> **Ngan Kee, W.D.; Khaw K.S. and Wong E.L.Y.** "Addition of Alfentanil to Morphine for Patient-Controlled Analgesia". Paper presented in the Combined CECANZ and Australian Society of Anesthetists Meeting. New Zealand, 1998.08.20.
- <P981777> **Critchley, Lester A.H. and Ross Calcroft.** "Electrical Bioimpedance for Noninvasive Cardiac Measurement". *Critical Care Medicine* vol.26 no.8, p.1460. USA, 1998.08.
- <P982260> **Brown, Karen; Cindy Aun; Janet Stocks; Elizabeth Jackson; Angela Mackersie and David Hatch.** "A Comparison of the Respiratory Effects of Sevoflurane and Halothane in Infants and Young Children". *Anesthesiology* vol.89 no.1, pp.86-92. USA, 1998.07.
- <P982504> **Yap, J.C.M.; L.A.H. Critchley; S.C. Yu; R.M. Calcroft and J.L. Derrick.** "A Comparison of Three Fluid-Vasopressor Regimens Used to Prevent Hypotension During Subarachnoid Anaesthesia in the Elderly". *Anaesthesia and Intensive Care* vol.26 no.5, pp.497-502. Australia, 1998.10.
- <P982515> **Ngan Kee, W.D.; K.S. Khaw and M.L. Ma.** "The Effect of the Addition of Adrenaline to Pethidine for Patient-Controlled Epidural Analgesia after Caesarean Section". *Anaesthesia* vol.53, pp.1012-1027. UK, 1998.10.
- <P982516> **Chen, P.P.; M. Ma; S. Chan and T.E. Oh.** "Incident Reporting in Acute Pain Management". *Anaesthesia* vol.53 no.8, pp.730-735. UK, 1998.08.
- <P982645> **Wong, W.C.W.; M.T.V. Chan; T.K. Lau; T.Y. Fung; P.A. Mainland and D.C. Chung.** "Oxytocic Effect of Syntocinon During Early Pregnancy". *Anesthesiology* vol.89 no.3A, p.A1051. USA, 1998.09.
- <P982646> **Gin, T.; M.T.V. Chan; T.K. Lau and K.K. Lam.** "Pregnancy Potentiates the Sedative Effects of Nitrous Oxide". *Anesthesiology* vol.89 no.3A, p.A1042. USA, 1998.09.
- <P982675> **Chan, Matthew T.V.; Tony Gin and W.S. Poon.** "Propofol Requirements is Decreased in Patients with Supratentorial Brain Tumor". *Journal of Neurosurgical Anaesthesiology* vol.10 no.4, p.278. 1998.10.
- <P982676> **Chan, K.L.; Matthew T.V. Chan and Tony Gin.** "Main Stream Sampling of End-Tidal CO₂ Improves Prediction of Arterial CO₂ Tension During Neurosurgical Procedures" *Journal of Neurosurgical Anaesthesiology* vol.10 no.4, p.290. USA, 1998.10.
- <P982677> **Chan, S.K.C.; S.K. Ng; A.M.W. Cho and T.E. Oh.** "Anaesthetic Implications of Maffucci's Syndrome". *Anaesth Intensive Care* vol.26 no.5, pp.586-589. Australia, 1998.10.

- <P982682> **Gomersall, C.D.; P.L. Leung; T. Gin; G.M. Joynt; R.J. Young; W.S. Poon and T.E. Oh.** "A Comparison of the Hamamatsu NIRO 500 and the INVOS 3100 Near-Infrared Spectrophotometers". *Anaesth Intensive Care* vol.26 no.5, pp.548-557. Australia, 1998.10.
- <P982747> **Cheam, Eddy W.S. and Lester A.H. Critchley.** "Anesthesia for a Child with Complex I Respiratory Chain Enzyme Deficiency". *Journal of Clinical Anesthesia* vol.10 no.6, pp.524-527. USA, 1998.09.
- <P982748> **Critchley, Lester A.H.; Julian A.J.H. Critchley and Y.H. Tam.** "Effects of Selective Parasympathetic Blockade with Atropine on Power Spectral Analysis of Heart Rate Variability During Subarachnoid Block". *Proceedings of the 20th Annual International Conference of the IEEE Engineering in Medicine and Biology Soci* 1998.11.
- <P982789> **Chan, Matthew T.V.; Po Tong Chui; Wai Sun Ho and Walter W.K. King.** "Single-Dose Tropisetron for Preventing Postoperative Nausea and Vomiting after Breast Surgery". *Anesth Analg* vol.87, pp.931-935. USA, 1998.10.
- <P982832> **Critchley, Lester A.H.; Simon Chan and Y.H. Tam.** "Spectral Analysis of Sudden Bradycardia During Intrathecal Meperidine Anesthesia". *Regional Anesthesia and Pain Medicine* vol.23 no.5, pp.506-510. USA, 1998.09.
- <P982972> **Ngan Kee, W.D.** "Dosage of Intrathecal Pethidine - Reply". *Anaesthesia and Intensive Care* vol.26, pp.707-709. Australia, 1998.12.
- <P983126> **Chung, David Chi Wai.** "Basics of Fiberoptic Intubation". *Abstract Book of the Hong Kong College of Anaesthesiologists Satellite Symposium on "Management of Difficult Airway"* China, 1998.11.28.
- <P983127> 張志偉. "腦創傷病人之麻醉處理". 《第一屆全國重症監測治療學術會議論文匯編》頁 6-10. 中國湖北: 中華醫學會麻醉學分會, 湖北省醫學會麻醉學分會, 1998.10.13.
- <P983131> **Lam, K.K.; M.T.V. Chan; P.P. Chen; W.D. Ngan Kee and P.T. Chui.** "Structured Preoperative Patient Education on PCA Usage". Paper presented in the Annual Scientific Meeting in Anaesthesiology, organized by HKCA and SAHK. Hong Kong, 1998.12.06.
- <P983132> **Ngan Kee, Warwick.** "Obstetric Cases". Paper presented in the Annual Scientific Meeting in Anaesthesiology, organized by HKCA and SAHK. Hong Kong, 1998.12.06.
- <P983210> **Derrick, James L. and David J. Bassin.** "Sampling Intervals to Record Severe Hypotensive and Hypoxic Episodes in Anesthetised Patients". *Journal of Clinical Monitoring and Computing* vol.14, pp.347-351. Australia, 1998.07.
- <P983632> **Joynt, G.M.** "The ICU Book, Second Edition". *Hong Kong Medical Journal* vol.4 no.4, pp.447-448. Hong Kong, 1998.12.
- <P983633> **Brown, K.; C. Aun; E. Jackson; A. Mackersie; D. Hatch and J. Stocks.** "Validation of Respiratory Inductive Plethysmography Using the Qualitative Diagnostic Calibration Method in Anaesthetized Infants". *European Respiratory Journal* vol.12, pp.935-943. UK, 1998.
- <P983636> **Short, T.G.; M.Y. Rowbottom; J.P.F. Lau; G.W.Y. Lai; T.A. Buckley and T.E. Oh.** "Translation and Calibration of a Chinese Version of the Sickness Impact Profile for use in Hong Kong". *Hong Kong Medical Journal* vol.4 no.4, pp.375-381. Hong Kong, 1998.12.
- <P983658> **Gomersall, Charles D.; G.M. Joynt; R.C. Freebairn and C. Lai.** "Randomized Controlled Pilot Study of Oxygen Therapy for Hypercapnic Patients with an Acute Exacerbation of Copd". *Chest* vol.114, supplement, p.319S. USA, 1998.10.
- <P983755> **Chui, P.T. and D.C.W. Chung.** "Medications to Withhold or Continue in the Preoperative Consultation". *Current Anaesthesia and Critical Care* vol.9, pp.302-306. UK, 1998.12.

- <P984451> **Derrick, James.** "Computer Controlled Anaesthesia-Unlimited Opportunity or Apocalypse Now?". Paper presented in the 1998 HKCA Annual Scientific Meeting, organized by Hong Kong College of Anaesthesiologists. Hong Kong, 1998.12.06.
- <P984862> **Critchley L.** "New Impedance Cardiographs". Paper presented in Annual Scientific Meeting in Anaesthesiology 1998, organized by The Federation of Medical Societies of Hong Kong. Hong Kong, 1998.12.
- <P984872> **Chan, Matthew; Tony Gin; T.K. Lau and K.K. Lam.** "Increased Hypnotic Effect of Nitrous Oxide During Pregnancy". *Anaesthesia and Intensive Care* vol.26 no.6, pp.695-696. Australia, 1998.12.
- <P984873> **Chirnside, Robyn; Ross Kennedy and Tony Gin.** "Tidal Volume Ventilation Induction of Anaesthesia with 8% Sevoflurane, with an Without Nitrous Oxide". *Anaesthesia and Intensive Care* vol.26, pp.687-688. Australia, 1998.12.
- <P984874> **Cheng, A.Y.; C.S.T. Aun; T. Gin and T.G. Short.** "Comparison of Rocuronium and Suxamethonium for Rapid Sequence Induction of Anaesthesia in Children". *Anaesthesia and Intensive Care* vol.26 no.6, p.696. Australia, 1998.12.
- <P990013> **Cheung, V.; L.A.H. Critchley; C. Hazlett; E.L.Y. Wong and T.E. Oh.** "A Survey of Undergraduate Teaching in Anaesthesia". *Anaesthesia* vol.54, pp.4-12. UK, 1999.01.
- <P990074> **Ngan Kee, W.D..** "Addition of Alfentanil to Morphine for Patient-Controlled Analgesia". *Anaesthesia and Intensive Care* vol.27 no.1, p.81. Australia, 1999.02.
- <P990132> **Lester, Critchley.** "An Atlas of Epidurograms. Epidural Blocks Investigated". *Anaesthesia and Intensive Care* vol.27 no.1, p.120. Australia, 1999.02.
- <P990148> **Lipman, J.; G.M. Joynt; C.D. Gomersall; T. Gin and R.J. Young.** "A Comparison of Bolus Dosing and Continuous Infusion of Ceftazidime in Intensive Care Patients: A Randomized Controlled Trial". *Anaesthesia and Intensive Care* vol.27 no.1, p.108. Australia, 1999.02.
- <P990149> **Joynt, G.M.** "Total Intravenous Anaesthesia". *Anaesthesia and Intensive Care* vol.27 no.1, p.121. Australia, 1999.02.
- <P990210> **Joynt, G.M.; J. Lipman; C.D. Gomersall; R.J. Young; E. Wong and T. Gin.** "Is a Single Daily dose the Correct Way to Administer Ceftriaxone in Intensive Care Patients?". *Critical Care* vol.3 Suppl.1, p.36. UK, 1999.03.
- <P990227> **Short, Timothy G.; Thomas A. Buckley; Man Y. Rowbottom; Eric Wong and Teik E. Oh.** "Long-term Outcome and Functional Health Status Following Intensive Care in Hong Kong". *Critical Care Medicine* vol.27 no.1, pp.51-57. Germany, 1999.01.
- <P990268> **Critchley, L.A.H.; M.K. Karmakar; J.H.H. Cheng and J.A.J.H. Critchley.** "A Study to Determine the Optimum Dose of Metaraminol Required to Increase Blood Pressure by 25% During Subarachnoid Anaesthesia". *Anaesthesia and Intensive Care* vol.27 no.2, pp.170-174. Australia, 1999.04.
- <P990328> **Chung, David C.; Phoebe-Anne Mainland and Andrew S. Kong.** "Anesthesia of the Airway by Aspiration of Lidocaine". *Canadian Journal of Anaesthesia* vol.46 no.3, pp.215-219. 1999.03.
- <P990329> **Ho, Anothony, M.H. and Elizabeth Ling.** "Contamination Susceptibility of Three Needleless and one Standard Needle Injection Systems". *Canadian Journal of Anaesthesia* vol.46 no.3, pp.290-293. Canada, 1999.03.
- <P990330> **Ho, Anthony M.H. and Elizabeth Ling.** "Systemic Air Embolism After Lung Trauma". *Anesthesiology* vol.90 no.2, pp.564-575. USA, 1999.02.

- <P990383> **Joynt, Gavin M.; Kwok M. Ho and Peggy Tan.** "Iliac Venous Pressure Predicts Central Venous Pressure in Spontaneously Breathing Patients". *Critical Care Medicine* vol.27 no.6, p.1219. USA, 1999.06.
- <P990404> **Gomersall, C.D.; P.Y. Tan; G.M. Joynt; T.A. Buckley and E. Wong.** "Does Intensive Care Improve Outcome?". *Critical Care* vol.3 no.S.1, p.123, P249. UK, 1999.03.
- <P990409> **Cheam, Eddy W.S.; Lester A.H.; P.T. Chui; Jackie C.M. Yap and Vicki W.S. Ha.** "Low dose Mivacurium is Less Effective than succinylcholine in Electro-convulsive Therapy". *Canadian Journal of Anaesthesia* vol.46 no.1, pp.49-51. Canada, 1999.01.
- <P990473> **Ho, Anthony Ming-Hei.** "Traumatic Aortic and Diaphragmatic Rupture in a Patient with Dextrocardia and Situs Inversus". *Journal of Trauma: Injury Infection and Critical Care* vol.46, pp.530-531. USA, 1999.03.
- <P990474> **Cheam, E.W.S. and L.A.H. Critchley.** "Spinal Before Epidural Single Interspace CSE Technique for Labour". *Anaesthesia* vol.54, pp.508-509. UK, 1999.05.
- <P990475> **Ho, Anthony M.H.** "Sore Throat after Central Venous Cannulation". *Journal of the Royal Society of Medicine* vol.92 no.4, p.199. London, England, 1999.04.
- <P990476> **Critchley, L.A.H.; A.P. Morley and J. Derrick.** "The Influence of Baricity on the Haemodynamic Effects of Intrathecal Bupivacaine 0.5%". *Anaesthesia* vol.54, pp.469-474. UK, 1999.05.
- <P990727> **Joynt, G.M. and P.Y.H. Tan.** "The Case for Routine Echocardiography in Cardiac Surgical Intensive Care". *Echocardiography in Adult Cardiac Surgery* pp.271-277. UK, 1999.05.
- <P990746> **Ling, Elizabeth; Theodore E. Warkentin; Jo-Ann I. Sheppard; Robin S. Roberts and Anthony M.H. Ho.** "Incidental Heparin Exposure in Invasive Lines and the Frequency of Heparin-Induced Thrombocytopenia (HIT): A Randomized Controlled Trial (RCT)". *Canadian Journal of Anesthesia* vol.46 no.5(II), p.A45-A. Canada: Canadian Anesthesiologists' Society, 1999.05.
- <P990825> **Joynt, G.M.; C.D. Gomersall and D.J. Lyon.** "Severe Necrotising Fasciitis of the Extremities Caused by Vibriaceae: Experience of a Hong Kong Tertiary Hospital". *Hong Kong Medical Journal* vol.5 no.1, pp.63-68. Hong Kong, 1999.03.
- <P990826> **Lipman, J.; C.D. Gomersall; T. Gin; G.M. Joynt and R.J. Young.** "Continuous Infusion Ceftazidime in Intensive Care: A Randomized Controlled Trial". *Journal of Antimicrobial Chemotherapy* vol.43, pp.309-311. UK, 1999.02.
- <P990841> **何名熙.** <體外循環術後的血凝固功能是否可以預測(實驗佈告)>. 《中華醫學會麻醉學分會 1999 年麻醉學術年會刊》 頁 384. 中國杭州: 中國麻醉醫師學會, 1999.04.
- <P990842> **Nelson, P.D. and Joynt, G.M.** "Hoarse Voice and Fine-bore Nasogastric Tubes". *Anaesthesia* vol.54, p.407. UK, 1999.05.
- <P991039> **Derrick, J.L.** "Software Safety and the Diprifusor". *Anaesthesia* vol.54, p.503. UK, 1999.
- <P991592> **Chui, Po T.** "Anesthesia in a Patient with Undiagnosed Salicylate Poisoning Presenting as Intraabdominal Sepsis". *Journal of Clinical Anesthesia* vol.11 no.3, pp.251-253. USA, 1999.05.
- <P991739> **Joynt, Gavin and Charles D. Gomersall.** <全身性感染時的組織氧合第 2 部分: 動物和人體研究的評價(二)>. 《中國危重病急救醫學》 第 11 卷, 第 6 期, 頁 329-331. 中國, 1999.06.
- <P991740> **Joynt, Gavin and Charles D. Gomersall.** <全身性感染時的組織氧合第 2 部分: 動物和人體研究的評價(一)>. 《中國危重病急救醫學》 第 11 卷 第 5 期, 頁 259-261. 中國, 1999.05.

- <P991741> **Joynt, Gavin and Charles D. Gomersall.** <全身性感染時的組織氧合(第1部分:評價方法)>. 《中國危重病急救醫學》第11卷,第4期,頁199-202. 中國, 1999.04.
- <P991748> **Critchley, Lester A.H. and A.J.H. Critchley.** "A Meta-Analysis of Studies Using Bias and Precision Statistics to Compare Cardiac Output Measurement Techniques". *Journal of Clinical Monitoring and Computing* vol.15, pp.85-91. The Netherlands, 1999.02.
- <P991749> **Haryadi, Dinesh G.; Dwayne R. Westenskow; Lester A.H. Critchley; Sergei I. Schookin; Viatcheslav G. Zubenko; Konstantin R. Beliaev and Alexander A. Morozov.** "Evaluation of a New Advanced Thoracic Bioimpedance Device for Estimation of Cardiac Output". *Journal of Clinical Monitoring and Computing* vol.15 no.2, pp.131-138. The Netherlands, 1999.02.
- <P992051> **Khaw, K.S.; W.D. Ngan Kee; C.C. Wang and M. Rogers.** "Fetal Oxygenation During Caesarean Section Under Regional Anaesthesia and Oxygen Supplement". Paper presented in the National Anaesthesia Congress, organized by South African Society of Anaesthesiologists. Suncity, South Africa, 1999.06.
- <P992114> **Gin, Tony.** "Peer Review of Research (Speech)". Paper presented in ANZCA Annual Scientific Meeting 1999, organized by Australian and New Zealand College of Anaesthetists. Adelaide, Australia, 1999.05.12.
- <P992196> **Karmakar, Manoj K.** "Paravertebral Somatic Nerve Block for Outpatient Inguinal Herniorrhaphy". *Regional Anesthesia and Pain Medicine* vol.24 no.1, p.96. USA, 1999.01.
- <P992198> **Low, J.M.; Izzat M.B.; Sanderson J. and Sutton M. St. J.** "Transoesophageal Echocardiography - Introducing the Technology". *Echocardiography in Adult Cardiac Surgery* ed. by John Sanderson and Martin St. John Sutton. pp.15-21. Oxford: ISIS Medica Media, 1999.05.
- <P992223> **Lee, Bee Beng.** "Intrathecal Fentanyl and Fetal Bradycardia". *Regional Anesthesia and Pain Medicine* vol.24, pp.95-96. USA, 1999.01.
- <P992246> **Chan, M.T.V. and J.M.K. Lam.** "New Monitors of Neurological Functions - Part I & Part II". *Current Anaesthesia and Critical Care* vol.10, pp.87-97 & pp.147-157. UK, 1999.
- <P992652> **Yip, G.W.K.; Yan Zhang; P.Y.H. Tan; Mei Wang; P.Y. Ho and J.E. Sanderson.** "Left Ventricular Long Axis Changes in Early Diastole are Closely Related to Systolic Function". *Journal of the Hong Kong College of Cardiology* vol.7, p.52. Hong Kong: Medcom Ltd, 1999.04.

see also <P981803>, <P982505>, <P982522>, <P982919>, <P990001>, <P991205>, <P992052>

RESEARCH PROJECTS

Detection of *Helicobacter Pylori* DNA in Serum and Plasma by Real-time Polymerase Chain Reaction

✉ CHAN Wing Yee • LO Yuk Ming Dennis (Chemical Pathology) • NG Enders Kwok-wai (Surgery)

☐ 1 December 1998

❖ CUHK Research Committee Funding

Helicobacter pylori (HP) infection is prevalent in Hong Kong. HP can be found in 57% endoscopic gastric biopsies. HP has been linked to chronic gastritis, peptic ulcer, gastric carcinoma and MALT type lymphomas. HP has been classified as a Class II carcinogenic agent by the World Health Organization. Eradication of HP has been shown to be a successful method for treatment of peptic ulcers. Many researchers are predicting a future fall in gastric cancer with control of HP infection in endemic regions. The most sensitive methods for diagnosing HP infection involve invasive procedures: biopsy and CLO (rapid urease) test and polymerase chain reaction (PCR) on gastric mucus/ tissue. Urea breath test and bacterial culture are less sensitive. They have limited value for detecting low bacterial density e.g. incomplete response to or early relapse after treatment. Serological IgG antibody titres cannot distinguish between on-going and past infections. Recently, fetal and tumour DNA have been detected in serum and plasma, of pregnant women and cancer patients respectively. This suggests that human plasma may act as a reservoir for accumulation of foreign DNA. Using primers targeting HP specific ribosomal RNA gene sequence and fluorescence labeled nucleotides, PCR is performed in a newly available, highly sensitive thermocycler with real time display of the fluorescence labeled PCR amplified products. We aim to detect and quantify even minute amount of HP DNA in the serum or plasma.

Anticipated significance: To establish a new rapid, non-invasive method for diagnosing HP infection. (MD98022)

Molecular Characterization of Differentially Expressed Genes in Nasopharyngeal Carcinoma

✉ HUANG POON Wai Sin Dolly • CHUI Yiu Loon (Clinical Immunology Unit) • TSAO George* • VAN HASSELT Charles Andrew (Surgery) • TO Ka Fai • PANG Chung Sean Jesse • LO Kwok Wai

☐ 1 September 1998

❖ Research Grants Council

Nasopharyngeal carcinoma (NPC) is a common cancer seen in southern Chinese. The long-term goal of our research is to find better approaches, new or improvement over existing ones, to detect, treat and prevent this malignant disease.

NPC, like other cancers, arises from accumulation of genetic changes within a clonal cell population. Using deletion mapping we have identified several specific regions on the chromosomes that are consistently deleted in the NPC cells. These are regions where putative tumor suppressor genes may reside. We further demonstrated that one of the tumor suppressor genes, *p16/MTS1*, localized to the deleted region on chromosome 9 at 9p21, was inactivated resulting in loss of gene expression. Currently, we are employing an expression genetic approach to look for cancer-related genes. With a subtractive hybridization technique, we have obtained several novel genes that are differentially expressed in normal nasopharyngeal epithelial cells compared with their cancerous counterparts. We are proposing to have these novel genes characterized and to examine their roles in the development of NPC. Furthermore, we propose to screen several hundred known cellular genes from commercially available cDNA expression arrays for their differential expression profiles in this cancer.

The identification and characterization of the aberrantly expressed cancer-related genes in NPC will contribute to our understanding of the molecular pathogenesis of this disease and to provide a key step toward advances in cancer prevention, early detection, diagnosis and treatment.

(CU98284)

Antigen Processing in an Epstein-Barr Virus Positive Nasopharyngeal Carcinoma Cell Line (C666-1)

✉ HUANG POON Wai Sin Dolly • CHEUNG Siu Tim#

☐ 1 September 1998

❖ CUHK Research Committee Funding

Epstein-Barr virus (EBV) is known to be present in almost 100% of undifferentiated nasopharyngeal carcinoma (NPC), a cancer highly prevalent in Southeast Asia and Hong Kong (20-50/100,000). Within the NPC cells, EBV expresses only EBNA 1, LMP 1 and LMP 2. Previous studies demonstrated that LMP 2 is a subdominant target antigen for HLA class I-restricted cytotoxic T lymphocytes (CTLs) with several target epitopes defined in this protein. The presence of such known CTL target antigen within NPC offers the possibility of a CTL-based therapy for this cancer. However, it remains to be determined why the patient's own immune response has failed to clear the tumor. One possibility is that LMP 2-specific CTLs are present at very low frequency in NPC patients, in which case boosting or

eliciting such a response may prove to be an effective therapy. One way to address this issue is by analyzing EBV-specific CTL responses in NPC patients. A second possibility is that NPC cells are defective in the class I processing pathway and are therefore incapable of presenting viral antigens to CTLs. Such defects have already been described for several human malignancies, including the EBV-associated tumor Burkitt's lymphoma (which is defective in expression of the transporters associated with antigen processing, TAPs). The aim of this project is therefore to study the antigen processing function of NPC cells using a cell line C666-1, recently cloned and established in our laboratory from a NPC xenograft.

(MD98023)

PCR-Based Microsatellite Polymorphism in Chromosomes 3, 5, 8, 10, 16,17 and 18 in Prostatic Carcinoma and Prostatic Intraepithelial Neoplasia

✉ MAC-MOUNE LAI Fernand • LIEW Choong Tsek • TO Ka Fai • CHAN Siu Foon Peter (Surgery)

□ 1 September 1998

❖ Research Grants Council

Prostatic carcinoma is the second most common cause of cancer death in Western societies, and despite a ten-fold lower incidence in Asia, both the incidence and mortality of such cancer are slowly rising in Hong Kong. Such great disparity in incidence and mortality among different ethnic groups and geographic areas, have long indicated the importance of genetic and environmental factors in both the carcinogenesis and biologic behavior of such cancer. Recently developed PCR-based microsatellite assay has provided a new means in genomic DNA analysis, and early results in prostatic cancer suggest that new allelic mutations and tumor suppressor genes are operative. This project proposes to study the DNA polymorphism of prostatic carcinoma in Hong Kong Chinese, and of its associated Prostatic Intraepithelial Neoplasia (PIN) lesions, using a high-resolution PCR-based microsatellite analysis, currently representing one of the most sensitive methods to detect genetic mutations. The study will focus on chromosomes 3, 5, 8, 10, 16, 17, and 18, which have previously demonstrated some evidence of allelic mutation. The objective aim at determining a possible role of allelic losses in the disparity of cancer incidence and mortality rate, and also in the genetic events implicated in the initiation and progression of this cancer. Microsatellite analysis of PIN lesions may help to determine whether or not they are precursors to carcinoma. This study will also assess the prognostic value of potential microsatellite markers in correlation with tumor grade, tumor stage and patient survival.

(CU98259)

Biological Studies of the Endothelial Cells in Glioblastoma Multiforme

✉ NG Ho Keung • TO S.S.Tony*

□ 1 November 1998

❖ CUHK Research Committee Funding

Glioblastoma multiforme (GBM) is the commonest primary tumor in human central nervous system. In spite of advances in neurosurgical imaging and techniques, the tumor invariably kills by extensive infiltration of adjacent neural tissues. One of the mechanisms for invasion is through active proliferation of vascular endothelial cells and new vessel formation. Degrading enzymes from both endothelial and glioma cells facilitate tumor invasion. This may involve interaction or "communication" between glioma cells and endothelium cells, through regulation of adhesion molecules and extracellular matrix protein receptors. The role of the endothelium in such cell-to-cell interaction is not clear. As a first step in understanding the interaction between glioma and endothelial cells, we propose to isolate the endothelial cells from clinical samples of GBM. These cells will be examined for expression of different cell adhesion molecules and growth characteristics. The results will lead to more intensive studies on glioma and endothelial cell interaction.

(MD98024)

Please refer to previous issues of this publication for more details of the following ongoing research at the department:

<u>Edition</u>	<u>Title/Investigators</u>
1997-98	Gastric Cancers and Helicobacter Pylori - A Combined Study by Interphase Cytogenetics, Comparative Genomic Hybridization and Molecular Genetic Analysis (Including Microsatellite Analysis) (CU97624) ✉ CHAN Wing Yee • LO Kwok Wai • LEE Chuen Kwun Joseph (School of Chinese Medicine) • WONG Nathalie (Clinical Oncology)
1997-98	Isolation and Characterization of Tumor-Infiltrating Lymphocytes in Gastric Adenocarcinoma: A Comparative Study on Tumors with and without Helicobacter Association (MD97027) ✉ CHAN Wing Yee • WHITNEY Bruce Montfort

- 1993-94 The Investigation of Tumour Marker Expression in Cytology Specimens (MD94033)
 ✍ CHANG Alexander Russell
- 1996-97 Application of Comparative Genomic Hybridization to the Detection of DNA Imbalances in Sinonasal T-cell Lymphoma (MD96010)
 ✍ CHOW John Hei Sing • WONG Nathalie (Clinical Oncology) • WOO Kong Sang John (Surgery)
- 1996-97 Correlation of the Expression of c-myc and bc1-2 Oncoproteins with the Expression of Epstein-Barr Encoded EBER mRNA, LMP-1 and bc1-2 Homologue, BHRF1 in Primary Gastric Lymphoma (MD96029)
 ✍ CHOW John Hei Sing • CHAN Wing Yee
- 1997-98 Determination of the Presence and Type of EBV in Colorectal Carcinoma and Lymphoma by *in situ* Hybridization for EBER and Characterization of LMP1 by PCR-RFLP and PCR-SSCP (MD97029)
 ✍ CHOW John Hei Sing • NAIR Gopinathan Raj# • CHAN Wing Yee
- 1995-96 Epstein-Barr Virus (EBV) specific Latent Membrane Protein (LMP1) Gene and Its Variants in the Hong Kong Chinese Population: Molecular Epidemiology and Pathogenetic Significance in Nasopharyngeal Carcinoma (NPC) (CU95617)
 ✍ HUANG POON Wai Sin Dolly • TAM Siu Lun John (Microbiology) • NG Ho Keung • LEUNG Sing Fai (Clinical Oncology) • FOK Tai Fai (Paediatrics) • VAN HASSELT Charles Andrew (Surgery) • LEE Chuen Kwun Joseph (School of Chinese Medicine)
- 1996-97 Molecular Pathology of the Precancerous Lesions in Nasopharyngeal Carcinoma (CU96639)
 ✍ HUANG POON Wai Sin Dolly • TO Ka Fai • LO Kwok Wai • LEUNG Sing Fai (Clinical Oncology)
- 1997-98 Cloning and Characterizing of the Aberrant DNA Methylation Sequences in Nasopharyngeal Carcinoma (NPS) (MD97028)
 ✍ HUANG POON Wai Sin Dolly • LO Kwok Wai
- 1995-96 The Investigation of Genomic Instability by Polymerase Chain Reaction to Detect Microsatellite Polymorphisms on Chromosomes 1, 2, 3, 4, 6, 7, 11, 16, 17 and 18 in Hepatocellular Carcinoma (CU95661)
 ✍ LIEW Choong Tsek • LEE Chuen Kwun Joseph (School of Chinese Medicine) • LAU Wan Yee Joseph (Surgery)
- 1997-98 A Comparative Investigation of Telomerase Activity in Human Liver with Hepatocellular Carcinoma, Chronic Viral B Hepatitis, Cirrhosis, and Normal Liver (CU97677)
 ✍ LIEW Choong Tsek • LAU Wan Yee Joseph (Surgery) • LEE Chuen Kwun Joseph (School of Chinese Medicine)
- 1995-96 Studies on the Genetic Alterations of CNS Tumours (CU95614)
 ✍ NG Ho Keung • HUANG POON Wai Sin Dolly • POON Wai Sang (Surgery) • WONG Nathalie (Clinical Oncology)
- 1995-96 Molecular Genetics of CNS Diseases in Chinese (MD96001)
 ✍ NG Ho Keung • CHEW Eng Ching (Anatomy) • HUANG POON Wai Sin Dolly • LEE Chuen Kwun Joseph (School of Chinese Medicine) • LO Kwok Wai • PANG Chi Pui Calvin (Ophthalmology and Visual Sciences) • POON Wai Sang (Surgery) • TO Ka Fai
- 1997-98 Studies on the Molecular Genetics of CNS Tumors (CU97671)
 ✍ NG Ho Keung • HUANG POON Wai Sin Dolly • LAM Yeng Po Paula# • LO Kwok Wai • PANG Chung Sean Jesse • POON Wai Sang (Surgery)
- 1997-98 Preliminary Evaluation of Antisense Epidermal Growth Factor Receptor (EGFR) RNA in the Treatment of Malignant Gliomas (MD97110)
 ✍ NG Ho Keung • PANG Chung Sean Jesse • CHEN Jie*
- 1996-97 "Recurrent Urinary Bladder Cancer": True Recurrence or New *de novo* Cancer? Application of Microsatellite Analysis (MD96032)
 ✍ TO Ka Fai • LO Kwok Wai

- 1997-98 "Telomerase Activity in Urinary Bladder Cancer" Does It Correlate with the Biological Behavior? (MD97030) ✉ TO Ka Fai • LO Kwok Wai

RESEARCH OUTPUTS AND PUBLICATIONS

- <P980619> **Chow, Louis T.C.; Andrew C. Cook; Siew Yen Ho; Maurice P. Leung and Robert H. Anderson.** "Isolated Congenitally Complete Heart Block Attributable to Combined Nodoventricular and Intraventricular Discontinuity". *Human Pathology* vol.29, pp.729-736. USA, 1998.07.
- <P980891> 吳珊、劉宗石、孫宏明、鍾尚志、李曉明、幸凌宇、丘殷慶、吳秉銓、李川軍。〈人乳腺浸潤性導管癌端粒酶活性的檢測〉。《中華醫學雜誌》第 78 卷第 7 期，頁 515-516。中國，1998.07。
- <P981077> **To, K.F.; J. Hui; N.L.S. Tang; L.K. Law; N.M. Hjelm and T.F. Fok.** "Extensive Pulmonary Infiltration in a Chinese Niemann Pick Disease Type C (NPC) Patient". *Journal of Inherited Metabolic Diseases(Abstracts of the SSIEM 36th Annual Symposium)* vol.21 suppl.2, p.118. UK, 1998.07.
- <P982709> **Tsoi, W.C.; C.K. Li; D. Plaseska-Karanfilska and G.D. Efremov.** "Hb Brockton [138(H16)Ala->Pro] Observed in a Chinese Boy". *Hemoglobin* vol.22 no.4, pp.397-400. 1998.
- <P983088> 吳珊、劉宗石、孫宏明、鍾尚志、李曉明、幸凌宇、邱殷慶、吳秉銓、李川軍。〈人乳腺浸潤性導管癌端粒酶活性的檢測〉。《中華醫學雜誌》第 78 卷第 7 期，頁 515-516。中國，1998.03.10。
- <P983372> **Wong, I.H.N.; P.J. Johnson; T. Leung; W. Yeo; S. Ho and W.Y. Lau.** "Quantification of Circulating Hepatocellular Carci-Noma Cells in the Peripheral Blood of Patients with Hepatocellular Carcinoma". *Abstracts of the 4th International Symposium on Predictive Oncology and Therapy* vol.22 suppl.1, p.26. USA: International Society for Preventive Oncology, 1998.10.
- <P983630> **Leung, B.; C.T. Liew; P.B.S. Lai; W.Y. Lau and C.K. Leow.** "The Androgenic Influence of a Putative Hepato-Gonadal Axis on Liver Cirrhosis". *Hong Kong Medical Journal Supplement (Hong Kng Academy of Medicine 1st International Congress)* vol.4, p.17. Hong Kong, 1998.12.
- <P983934> **Tian, X.X.; P.Y.P. Lam; J. Chent; J.C.S. Pang; S.S.T. To; E. Di-Tomaso and H.K. Ng.** "Antisense Epidermal Growth Factor Receptor RNA Transfection in Human Malignant Glioma Cells Leads to Inhibition of Proliferation and Induction of Differentiation". *Neuropathology and Applied Neurobiology* vol.24, pp.389-396. UK, 1998.
- <P983943> **Chen, Lan; Larry Baum; Ho Keung Ng; Yuen Shan Chan; Ying Tat Mak; Jean Woo; Helen Chiu and Chi Pui Pang.** "No Association Detected Between Very-Low-Density Lipoprotein Receptor (VLDL-R) and Late-Onset Alzheimer's Disease in Hong Kong Chinese". *Neuroscience Letters* vol.241, pp.33-36. Ireland, 1998.
- <P983946> **Ng, H.K. and L. Chen.** "Apoptosis is Associated with Atypical or Malignant Change in Meningiomas. An *in situ* Labelling and Immunohistochemical Study" *Histopathology* vol.33, pp.64-70. UK, 1998.
- <P983952> **Tse, Jenny Y.M.; Ho-Keung Ng; Kwok-Wai Lo; Edith Y.Y. Chong; Paula Y.P. Lam; Enders K.O. Ng; Wai-Sang Poon and Dolly P. Huang.** "Analysis of Cell Cycle Regulators: P16INK4A, pRb, and CDK4 in Low-and High-Grade Meningiomas". *Human Pathology* vol.29 no.11, pp.1200-1207. USA, 1998.11.

- <P984077> **Wong, Ivy H.N.; H.L. Ng; C.K. Lee; Kwok-Wai Lo; Yuk-Fei Chung and Dolly P. Huang.** "Transcriptional Silencing of the *p16* Gene in Human Myeloma-Derived Cell Lines by Hypermethylation" *British Journal of Haematology* vol.103 no.1, pp.168-175. UK, 1998.10.
- <P990034> **Loftus, William K.; Louis T.C. Chow and Constantine Metreweli.** "Sonographic Measurement of Splenic Length: Correlation with Measurement at Autopsy". *Journal of Clinical Ultrasound* vol.27 no.2, pp.71-74. USA, 1999.02.
- <P990051> **Wong, Ivy H.N.; Y.M. Dennis Lo; Jun Zhang; Choong-Tsek Liew; Margaret H.L. Ng; Nathalie Wong; Paul B.S. Lai; Wan Y. Lau; N. Magnus Hjelm and Philip J. Johnson.** "Detection of Aberrant P16 Methylation in the Plasma and Serum of Liver Cancer Patients". *Cancer Research* vol.59, pp.71-73. Philadelphia, USA, 1999.01.01.
- <P990179> **Leong, Anthony S.Y.; Choong-Tsek Liew; Joseph W.Y. Lau and Philip J. Johnson. ed.** *Hepatocellular Carcinoma Contemporary Diagnosis Investigation and Management.* 271 pgs. Great Britain: Arnold, 1999.
- <P990503> **Liew, Choong Tsek; Hiu Ming Li; Kwok Wai Lo; Chon Kar Leow; Wan Yee Lau; Lin Yee Hin; Boon Kian Lim; Paul Bo San Lai; John Yeuk Hon Chan; Xiao-qiu Wang; Shan Wu and Joseph Chuen Kwun Lee.** "Frequent Allelic Loss on Chromosome 9 in Hepatocellular Carcinoma". *International Journal of Cancer (Publication of the International Union Against Cancer)* vol.81, pp.319-324. USA, 1999.
- <P990631> **Tsang, K.S.; C.K. Li; M.M.K. Shing; K.W. Chik; T.T. Lau; A.P.Y. Wong; K. Li; Y. Leung; A.K.W. Lie and P.M.P. Yuen.** "Enrichment and Transplantation of CD34+ Cells from Bone Marrow and Peripheral Blood as Graft Versus Host Disease Prophylaxis and Tumour Cell Purging". Paper presented in the Hospital Authority Convention 1999. p.39. Hong Kong, 1999.04.18.
- <P990691> **Chen, Lan; Larry Baum; Ho-Keung Ng; Lisa Y.S. Chan; Isabel Sastre; Maria Jesus Artiga; Fernando Valdiveso; Maria Jesus Bullido; Helen F.K. Chiu and Chi-Pui Pang.** "Apolipoprotein E Promoter and α 2-Macroglobulin Polymorphisms are not Genetically Associated with Chinese Late Onset Alzheimer's Disease". *Neuroscience Letters* vol.266, pp.1-5. Ireland, 1999.
- <P990697> **Tong, C.Y.K.; H-K Ng; J.C.S. Pang; A.B.Y. Hui; H.C.W. Ko and J.C.K. Lee.** "Molecular Genetic Analysis of Non-Astrocytic Gliomas". *Histopathology* vol.34, pp.331-341. UK, 1999.
- <P990700> **Cheng, Yue; Ho-Keung Ng; Min Ding; Shang-Fu Zhang; Chung-Sean Pang and Kwok-Wai Lo.** "Molecular Analysis of Microdissected de Novo Glioblastomas and Paired Astrocytic Tumors". *Journal of Neuropathology and Experimental Neurology* vol.58 no.2, pp.120-128. USA, 1999.
- <P990701> **Ng, Ho-Keung.** "Smears in the Diagnosis of Pituitary Adenomas". *Acta Cytologica* vol.42 no.3, pp.614-618. 1999.
- <P990702> **Teo, Jennifer Gek-Choo and Ho-Keung Ng.** "Cytodiagnosis of Pilocytic Astrocytoma in Smear Preparations". *Acta Cytologica* vol.42 no.3, pp.673-678. USA, 1999.
- <P990703> **Chong, Y.Y.; Paula Y.P. Lam; Wai-Sang Poon and Ho-Kueng Ng.** "Telomerase Expression in Gliomas Including the Nonastrocytic Tumors". *Human Pathology* vol.29, pp.599-603. USA, 1999.
- <P990704> **Tian, Xin-Xia; Jesse C.S. Pang; Shing Shun T. To and Ho-Keung Ng.** "Restoration of Wild-type PTEN Expression Leads to Apoptosis Induces Differentiation and Reduces Telomerase Activity in Human Glioma Cells". *Journal of Neuropathology and Experimental Neurology* vol.58 no.5, pp.472-479. USA, 1999.
- <P990705> **Ng, Ho-Keung.** "Cytologic Features of Central Neurocytomas of the Brain". *Acta Cytologica* vol.43 no.2, pp.252-256. USA, 1999.

- <P991695> **To, K.F.; F.K.L. Chan; T.L. Lee; S.C.S. Chung and J.Y. Sung.** "Effects of NSAID and *H. Pylori* Infection on Gastric Epithelial Apoptosis and Proliferation" *Gastroenterology* vol.116 no.4, p.A334. Orlando, USA: WB Saunders, 1999.05.20.
- <P991764> **Lo, Kwok-Wai; Y.M. Dennis Lo; Sing-Fai Leung; Yuen-Shan Tsang; Lisa Y.S. Chan; Philip J. John-son; N. Magnus Hjelm; Joseph C.K. Lee and Dolly P. Huang.** "Analysis of Cell-Free Epstein-Barr Virus-Associated RNA in the Plasma of Patients with Nasopharyngeal Carcinoma". *Clinical Chemistry* vol.45 no.8, pp.1292-1294. 1999.
- <P991940> **Chow, Louis T.C.; James F. Griffith; Shekhar M. Kumta and P.C. Leung.** "Chronic Recurrent Multifocal Osteomyelitis: A Great Clinical and Radiologic Mimic in Need of Recognition by the Pathologist". *APMIS* vol.107, pp.369-379. Denmark, 1999.
- <P991980> **Ng, Margaret Heung Ling, Amanda Kan, Yuk-Fei Chung, Ivy Hing-Nam Wong, Kwok-Wai Lo, Nicolas William Rupert Wickham, Kenny Leng-Kit Lei and Joseph Chuen-Kwan Lee.** "Combined Morphological and Interphase Fluorescence *in Situ* Hybridization Study in Multiple Myeloma of Chinese Patients". *American Journal of Pathology* vol.154 no.1, pp.15-22. United States, 1999.01.

see also <P974926>, <P981078>, <P982141>, <P982537>, <P982649>, <P982670>, <P982678>, <P982716>, <P982717>, <P982741>, <P982758>, <P982850>, <P982898>, <P983061>, <P983065>, <P983067>, <P983207>, <P983274>, <P983370>, <P983479>, <P983619>, <P983863>, <P983901>, <P983929>, <P983944>, <P983945>, <P983978>, <P984116>, <P984138>, <P984215>, <P984250>, <P984251>, <P984517>, <P984899>, <P990030>, <P990036>, <P990068>, <P990167>, <P990292>, <P990603>, <P990632>, <P990676>, <P990699>, <P990707>, <P990726>, <P990752>, <P990821>, <P991057>, <P991111>, <P991117>, <P991554>, <P991648>, <P991698>, <P992299>

RESEARCH PROJECTS

A Study of Gene Expression of Gonadotropin-Releasing Hormone and its Receptor in Normal and Neoplastic Rat Prostates

- ✍ CHAN Leung Franky
□ 1 June 1999
❖ CUHK Research Committee Funding

The normal development and functioning of prostate gland, as well as its abnormal growth, is dependent on androgens. Based on this concept, it forms the basis for the endocrine therapy of prostate cancers by androgen ablation. Besides steroid hormones, other regulatory factors such as growth factors also play roles in prostate growth. In this proposal, we propose to study the mRNA expression of gonadotropin-releasing hormone (GnRH) and its receptor in normal and neoplastic rat prostates, as well as in human prostate cancer cell lines. The hypothalamic GnRH is a key hormone in the regulation of male reproductive system through its stimulation of the secretion of pituitary gonadotropins (luteinizing hormone and follicle stimulating hormone), which in turn stimulate the synthesis of androgens by testis. This decapeptide hormone (GnRH) has been traditionally thought to be functioning mainly in the pituitary gland through its specific cell-surface receptors on the gonadotrophs. Based on this hormonal relationship, GnRH analogs are developed and used to treat prostate cancers by inhibiting the pituitary-testis axis. However, recent studies, including our preliminary results, have indicated that GnRH and its receptor are expressed in a number of tumors derived from reproductive organs including prostate tumors, suggesting that GnRH may be synthesized at the level of prostate and also GnRH analogs may exert a direct effect on tumors in addition to its inhibitory effect on the pituitary-testis axis. However, the precise roles of GnRH and its receptor in male reproductive system and perhaps in prostate cancer are still unknown. Therefore, we propose in this study to examine the gene expression of GnRH and its receptor in normal and neoplastic rat prostates by using molecular biology approaches. The androgen regulation of gene expression of GnRH and its receptor in prostates will also be studied. This examination of the gene expression of GnRH and its receptor in prostates is important as it provides a precise cellular and molecular basis for the use of GnRH analogs and endocrine regimens in the endocrine therapy of prostate cancers. (MD98093)

Migration of Secondary Neural Crest Cells to the Bowel: A Study of Normal and Congenitally Aganglionic Mutant Mice

- ✍ CHAN Wood Yee
□ 1 March 1999
❖ CUHK Research Committee Funding

Aganglionic megacolon, or Hirschsprung's disease is a congenital disease (1 in 2,000 to 10,000 live births) primarily due to a regional absence or reduction of enteric parasympathetic ganglia in the distal colon. Animal studies have already shown that all the enteric ganglia are derived from a special group of embryonic cells arising from the neural crest of the developing central nervous system (neural tube). However, the migration pathways and the contribution of the secondary neural crest cells (caudal neural crest) to the enteric ganglia of the distal colon in mammals are still unknown. It is proposed in the present study to (1) map out the migration pathways of the secondary neural crest cells in normal mouse embryos; (2) find out the relationship between defective development of the enteric ganglia and the migration of the neural crest cells in congenitally aganglionic mutant mouse embryos; and (3) restore the normal number of enteric ganglia by transplantation of neural crest cells. The results will provide new information on neural crest cell migration in normal and mutant mouse embryos and will also evaluate the feasibility of restoring normal ganglionic development by microsurgical transplantation. (MD98025)

Effect of Drug on the Nuclear Matrix of Hepatocellular Carcinoma Cells *in vitro*

- ✍ CHEW Eng Ching
□ 1 October 1998
❖ CUHK Research Committee Funding

The nuclear matrix is the non-chromatin skeleton of the nucleus. This structure contributes to the shape of the nucleus and regulates various nuclear functions. In addition, nuclear matrix has been established as playing an important role in various nuclear activities as well as carcinogenic processes. Dexamethasone inhibites the growth of cervical carcinoma cells with concurrent induction of epithelial cell differentiation. We have recently reported that the HPV E7 oncoprotein in total cellular protein as well as in nuclear matrix fractions was reduced in response to dexamethasone-treatment. In this study, the effect of dexamethasone on hepatocellular carcinoma cells *in vitro* will be investigated. (MD98026)

Induction of Retinal Ganglion Cell Regeneration by the Equineurium of a Peripheral Nerve

- ✍ CHO Yu Pang Eric
□ 1 December 1998

❖ CUHK Research Committee Funding

The inability of injured neurons of the adult mammalian central nervous system (CNS) to regenerate can be partially overcome by stimulating them with a peripheral nerve (PN) environment. Whereas a lot of evidence point to Schwann cells as the active component involved, other cellular elements in the PN remain undefined in their role. In this study, researchers explore the putative role played by one compartment of the connective tissue, the epineurium, in promoting CNS regeneration by an intravitreal transplantation paradigm. This paradigm has been used previously to demonstrate that Schwann cells in the PN act as a source of stimulus for retinal ganglion cells (RGCs) to undergo regenerative sprouting. Their preliminary evidence suggests that in the absence of Schwann cells, the isolated epineurium can stimulate RGC sprouting when transplanted intravitreally. This study will examine the characteristics of sprouting as induced by the epineurium and to elucidate some of the possible mechanisms associated with the stimulus. (MD98027)

The Influence of Mature Astrocytes on the Survival and Regeneration of Adult Retinal Ganglion Cells

✉ CHO Yu Pang Eric

□ 1 January 1999

❖ Research Grants Council

It is now known that an important factor to account for the failure of axons in the adult central nervous system to regenerate is the glial environment. Of the 3 major types of glial cells found in the central nervous system, oligodendrocytes and microglia have both been implicated to have an inhibitory effect on regeneration. The status of mature astrocytes, however, is still unclear since both inhibitory and supportive activities have been reported for this glial cell. We sought to clarify this issue by establishing a model to look at the interactions of adult astrocytes isolated from the optic nerve, with retinal ganglion cells whose axons normally run in the optic nerve and are damaged by lesions of it. We found that when optic nerve astrocytes are co-cultured with the adult retina, extensive regeneration of retinal ganglion cell axons occurs. This suggests that adult astrocytes are supportive of axonal regeneration. In this proposed study, we would like to characterise the factors which are involved in the promotion of regeneration by astrocytes, and to see if similar benefits could be obtained when the astrocytes are re-introduced back into the damaged central nervous system. (CU98265)

Male Accessory Sex Glands and Abnormalities in Embryo Development: The Role of Growth Arrest Specific 6 (Gas6) Gene

✉ CHOW Pak Ham Patricia • LEE Ka Ho Kenneth

□ 15 September 1998

❖ CUHK Research Committee Funding

In most male mammals, the accessory sex glands (ASG) comprise the paired seminal vesicle, coagulating gland, dorsolateral prostate, ampullary gland (AG) and the ventral prostate (VP). Even though secretions from these glands have been reported to have effects on sperm motility and suppression of immunogenicity of the ejaculate in the female genital tract, our studies in the golden hamster model has established that these glands, in particular, the ampullary gland and ventral prostate, are essential for preservation of reproductive efficiency by exerting an effect "after fertilization", thus ensuring proper development of embryos. Up to this point, researchers data suggest that retardation in embryonic development may be seen as early as 48h *post coitus* (*p.c.*). Recently, they observed delayed entry into the S-phase of the first cell cycle and failure of some blastomeres to express proliferating cell nuclear antigen (PCNA) leading to structural malformation of implanting embryos. Researchers hypothesize that growth of some of the blastomeres is arrested. As part of their effort to elucidate the underlying cause of this abnormality, they propose to examine the expression pattern of growth arrest specific 6 (*gas*) gene and its Axl receptor in the experimental embryos. (MD98029)

Ampullary Gland, Ventral prostate and Embryo Implantation

✉ CHOW Pak Ham Patricia • O Wai Sum*

□ 1 October 1998

❖ Research Grants Council

Beyond the epididymis, mammalian spermatozoa are exposed to products from male accessory sex glands (ASG) in the form of seminal plasma. Research on the function of each of these glands has been hampered by the extreme complexity of their biochemistry and interactions between individual components. Functional studies performed on whole animals have shown that in all common laboratory rodents, the presence of one or more of the ASG is essential for preservation of reproductive efficiency under natural mating conditions. In the hamster model, we have demonstrated that this is achieved, not through interference with fertilizing ability of sperm, but by ensuring proper embryonic development after fertilization. While we believe that the active agent(s) is (are) imparted onto the ovum at the time of gamete fusion via the sperm, an

understanding of how embryonic development is disrupted will give us a clue as to how the effect is brought about. We hypothesize that death of embryonic cells by apoptosis is involved and that this will ultimately lead to retardation of development and asynchrony with the maternal environment. We propose to verify this hypothesis by exploring the possible occurrence of apoptosis as well as examining events such as angiogenesis and invasion of endometrial tissues at implantation. The outcome of this study may be useful in improving success rates of assisted reproductive technology in clinical, agricultural and veterinary practice. (CU98030)

Role of Fibroblast Growth Factor Isoforms in the Development of the Mammalian Limb Musculature

✉ LEE Ka Ho Kenneth • PAULIN Denise*

□ 1 January 1999

❖ Research Grants Council

In this proposed study, we will examine the development of the skeletal musculature in the limbs of developing mouse embryos. Specifically, we will investigate the role cell migration plays in muscle development. This will be achieved by implanting transgenically labelled muscle cells into the forelimbs of 11.5 day mouse embryos, *exo uterolly*. We will also construct a fate map of the 11.5 day limb by specifically labelling predetermined sites in the limb with a fluorescent marker. In both experiments, the operated embryos will be allowed to develop in the uterus for 1-3 days before examination under a confocal microscope. The fate map will allow us to comprehend how the limb musculature is formed at the cellular level and how also other tissues, such as cartilage and tendons, are established. Once it has been established that muscle cell migration is involved in skeletal muscle development, we will proceed to examine whether the apical ectodermal ridge (AER, a highly specialized thickening of the ectoderm found at the distal tip of the limb bud) play a role in regulating this migration process. We will again transplant transgenic muscle cells into the mouse limb but will also remove the AER. If the AER is important for maintaining muscle cell migration, we would expect this migration to be inhibited. In addition, we will determine whether the interaction between the AER and myoblast is mediated by Fibroblasts growth factor isoforms (Fgf-2, Fgf-4 and Fgf-8). (CU98273)

Regulation of Apoptosis and Differentiation by a Novel Gene BRE that Modulates TNF- α Action

✉ LEE Ka Ho Kenneth • CHAN Yeuk Hon John (Clinical Oncology) • YEW Tai Wai David

□ 1 June 1999

❖ CUHK Research Committee Funding

This research is aimed at elucidating the function of a novel gene BRE which we have recently found to induce apoptosis or cellular differentiation. Enhanced expression of BRE was also found in embryonic cells of the mouse, that were about to undergo apoptosis. BRE binds to the p55-tumor necrosis factor- α receptor-1 (TNFR1), and inhibits the activation of the transcriptional factor NF- κ B. By blocking the survival pathway induced by NF- κ B and facilitating cell death, BRE may play a very important role in regulating specific actions of cytokines in various pathological and physiological conditions. We propose the followings:

- (1) to further analyze if the altered expression of BRE and NF- κ B is associated with apoptosis or differentiation in cells from mouse embryos,
- (2) in cells of Alzheimer's Disease and neuro-degenerations with immunohistochemistry, Northern blotting and *in situ* hybridization; and
- (3) to determine if transfection of the BRE gene could induce apoptosis and/or differentiation in embryonic cells.

Since many of the cytokines are being used clinically, this modulator of TNF may have practical applications soon in regulating some of the adverse actions of cytokines in immunological function, osteopetrosis and osteoporosis, muscle damage and healing, anti-cancer and anti-aging approaches. (MD98094)

An Experimental Study to Determine the Role of Sonic Hedgehog (Shh) in Controlling Neuronal Differentiation in the Neural Tube

✉ SHUM Sau Wun Alisa • ROELINK Henk*

□ 1 September 1998

❖ CUHK Mainline Research Scheme

The main aim of this study is to determine why the secondary neural tube fails to undergo neuronal differentiation.

During mammalian embryogenesis, the neural tube, which is the primordium of the central nervous system, is formed largely by the process of primary neurulation. However, caudal to the future lumbosacral region, the neural tube is formed by a distinct process, secondary neurulation. Interestingly, the lumbosacral region is the most common site of spina bifida. The recent results have shown that although the secondary neural tube initially expresses several neuron precursor genes in domains equivalent to the primary neural tube, it does not undergo further differentiation and subsequently regresses. The notochord is the primary source of Sonic hedgehog (Shh), a secreted signaling molecule critical for the correct differentiation of the

overlying neural tube. The researchers have observed an intriguing difference in the relative position of the notochord to the primary and secondary neural tubes. The notochord is intimately associated with the primary neural tube, but is physically separated and located at a distance from the secondary neural tube. This finding leads them to propose the hypothesis that absence of neuronal differentiation may be due to a lowering in the level of Shh protein that can reach the secondary neural tube from the notochord because of the gap between these two tissues. The main objective of this project is to test this hypothesis by raising the local concentration of Shh both *in vitro* and *in vivo* to determine whether this can drive neuronal differentiation in the secondary neural tube. (MD98007)

A Study to Determine the Role of Glutamic Acid Decarboxylase (GAD) in the Pathogenesis of Caudal Agenesis Associated with Diabetic Pregnancy

- ✉ SHUM Sau Wun Alisa
- ☐ 1 October 1998
- ❖ CUHK Research Committee Funding

Caudal agenesis is a congenital malformation which is highly associated with diabetic pregnancy. The reason for this linkage is unclear. Recently, by studying a mouse model of caudal agenesis established in the P.I.'s laboratory, the gene glutamic acid decarboxylase (GAD), which has a primary role in the synthesis of γ -aminobutyric acid (GABA), has been identified. It was found that GAD specifically expressed in the tail bud that contains precursor cells for forming various caudal structures of the embryo, but was switched off in embryos that developed caudal agenesis. Since it has been suggested that the development of insulin-dependent diabetes mellitus is due to destruction of islets cells in the pancreas mediated by autoantibodies against GAD, this leads the researchers to propose a hypothesis that caudal agenesis is most common in babies of diabetic mothers because maternal autoantibodies against GAD will cross the placenta, bind to and inhibit the function of GAD in the tail bud of the embryo. The effect is similar to switching off the GAD gene in their mouse model that develops caudal agenesis. The main aim of this study is to test the above hypothesis using mouse as an animal model. The specific objectives include:

- (1) *In vitro* exposure of the mouse embryo to GAD antibodies to determine whether this will lead to caudal agenesis;
- (2) Immunohistochemical detection of GABA to determine if it is synthesized by GAD in the tail bud of the embryo.

(MD98028)

MPTP-Induced Neurotoxicity in Metallothionein-I, II Knock Out Mice

- ✉ STADLIN Alfreda
- ☐ 7 April 1999
- ❖ CUHK Research Committee Funding

Metallothionein (MT) is a low molecular weight, cysteine-rich, heavy metal-binding protein. The MT-I and MT-II isoforms are present in many tissues, in the brain it is located in the astrocytes. The MT-III isoforms occur only in Zn-rich neurons in the brain. There are several physiological functions of MT, this include metal detoxification and sequestration, the control of zinc and copper metabolism, and free radical scavenging. There is increasing evidence that excessive production of free radicals is involved in the pathogenesis of Parkinson's Disease (PD). PD is characterized by the decrease in dopamine (DA) in the striatum and the massive cell loss of DA neurons in the substantia nigra (SN) of the brain. A selective neurotoxin 1-methyl-4-phenyl-1, 2, 3, 6-tetrahydropyridine (MPTP) had been shown to produce pathologies and syndromes in non-human primates and mice which resembles that of PD. MPTP has been widely used as a PD model in the studies on the etiology of this disease.

Given the antioxidant properties of MT, the present study aims to examine the role of MT in its ability to protect against MPTP-induced neurotoxicity. MT-I, II knock out mice and their wild type 129/Sv controls will be used to ascertain whether the lack of MT will render the brain more susceptible to MPTP-induced oxidative injury. Animals will be injected with a single dose of 30mg/kg MPTP s.c. All animals will be sacrificed at 1, 3, 7 days post-treatment. Different brain regions will be dissected, the DA and metabolite contents as well as the no. of tyrosine-hydroxylase positive DA cell loss will be used as an index of MPTP-induced injury. The level of MT protein and levels of the antioxidant, glutathione will be measured. Furthermore, nitric oxide (NO) synthase activity as well as peroxynitrite formation will also be examined to elucidate whether MT can inhibit the generation of NO.

(MD98095)

Neural Plasticity in the Auditory Midbrain: A Combined Histological and Electrophysiological Study

- ✉ YE W Tai Wai David • POON W.F.Paul*
- ☐ 1 November 1998
- ❖ CUHK Research Committee Funding

Abstract: It has long been known that stimulation of an area in the nervous system during development may affect the architecture and physiological function of that area. In this study, we will analyse the

physiological and anatomical changes in the developing auditory midbrain of the neonatal rat subsequent to a pure tone exposure of 4 kHz, 60 dB SPL, 12 hr/day during postnatal days 7-14. Three weeks later, single cell recordings of the neurons in the inferior colliculus will be obtained. The pattern of response and the proportion of FM and AM sensitive cells will be analysed. Anatomical and immunohistochemical studies will typify the morphological changes, the density and distribution of excitatory and inhibitory neurons. This study will determine the neuroplastic alterations in the developing auditory midbrain as a result of early sound exposure. This is a collaborative research project in which the physiological experiments will be performed in Taiwan and the brain specimens will be fixed and mailed to our laboratory for immunohistochemistry and golgi silver studies. (MD98030)

✉ CHAN Sun On • LAM Tim Tak
(Ophthalmology and Visual Sciences)

1997-98 The Role of SPARC, an Extracellular Matrix-Associated Protein, in Ovarian Tumor Growth and Invasion (CU97610)
✉ CHAN Wood Yee • MOK S. C.*

1997-98 The Role of Endothelin-1 in the Development of the Mouse Embryo (MD97033)
✉ CHAN Wood Yee

1997-98 Development of a Novel Diagnostic Kit for Early Detection of Human Cervical Cancer: Identification and Generation of a Monoclonal Antibody (MD97003)
✉ CHEW Eng Ching • LEE Chuen Kwun Joseph (School of Chinese Medicine) • CHEW CHENG Siew Boon (Physiology) • LIU Le-he*

Please refer to previous issues of this publication for more details of the following ongoing research at the department:

Edition Title/Investigators

1995-96 A Study of Glycoproteins and Extracellular Matrix of the Normal, Dysplastic and Neoplastic Prostates of the Noble Rat (CU95622)
✉ CHAN Leung Franky • HO Shuk Mei*

1997-98 Application for Development of a Novel Nuclear Matrix Laboratory for Both Research and Teaching at Prince of Wales Hospital (MD97008)
✉ CHEW Eng Ching

1997-98 Effect of All-Trans-Retinoic Acid on the Nuclear Matrix of Nasopharyngeal Carcinoma Cells *in vitro* (MD97034)
✉ CHEW Eng Ching

1997-98 A Study of Prostatic Secretory Protein of 94 Amino Acids Expression in Normal, Castrated and Hormone-Treated Rat and Mouse Prostate Glands (MD97035)
✉ CHAN Leung Franky • XUAN Jim W.*

1996-97 Long Term Culture of the Whole Retina of Adult Hamsters as a Model to Study Regeneration of Retinal Ganglion Cells (CU96632)
✉ CHO Yu Pang Eric

1995-96 Axon Guidance in the Development of Mammalian Retinofugal Pathways (CU94643)
✉ CHAN Sun On • YUNG Wing Ho (Physiology)

1996-97 The Ampullary Gland, Ventral Prostate and Embryogenesis (BL96033)
✉ CHOW Pak Ham Patricia • O Wai Sum*

1995-96 Investigations of the Cellular Mechanisms Underlying the Turning of Uncrossed Retinal Axons at the Midline of the Optic Chiasm (MD95110)
✉ CHAN Sun On

1996-97 Male Accessory Sex Glands and Fertility: The Role of Apoptosis and Angiogenesis During Early Development (BL96031)
✉ CHOW Pak Ham Patricia • YI Xianjin#

1996-97 Identification of the Molecular Determinants in the Retina that Govern Axon Pathfinding in the Chiasm of Mammals (CU96623)
✉ CHAN Sun On

1996-97 Neurotoxicity of Type I Ribosome-inactivating Proteins (BL96032)
✉ KWONG Wing Hang • WANG Jianbin# • SHEN Wei Zai*

1997-98 Mechanism of Glutamate Induced Neurotoxicity in Retina (MD97032)

1996-97 The Role of BMP and MSX Genes in the Control of Programme Cell Death in the Limbs of Normal and Hammertoe Mutant Embryos (MD96122)

- 1997-98 *LEE Ka Ho Kenneth • MUNEOKA Kenneth**
 Bmp2 and Alk6 Gene Interaction During Programme Cell Death in the Limbs of Mouse Embryos (MD97036)
LEE Ka Ho Kenneth • MUNEOKA Kenneth • NGO-MULLER Valerie**
- 1996-97 Mechanisms Underlying the Immunomodulatory and Antitumor Activities of Selected Lectins (CU96667)
LIU Wing Keung Ken • NG Tzi Bun (Biochemistry) • OOI Vincent E. C. (Biology) • CHANG Shu Ting (Biology)
- 1997-98 The Effect of Mushroom Extract on the Tumor Vascular System in Inbred Mice - A Scanning Electron Microscopic Study (MD97102)
*LIU Wing Keung Ken • KONERDING Moritz**
- 1997-98 A Study of the Molecular Basis of Diabetic Embryopathy and Interaction of Maternal Diabetic Milieu with Genetic or Environmental Factors (CU97691)
*SHUM Sau Wun Alisa • COPP A. J.**
- 1997-98 The Role of Wilms' Tumor Gene (WT1) and Apoptosis in the Development of Renal Agenesis (MD97106)
SHUM Sau Wun Alisa • HASTIE Nicholas D. • TSE K. W. Herman • MENKE Aswin**
- 1996-97 The Effects of Prenatal Heroin Exposure on Postnatal Brain Development and Behavior in Rats (CU96615)
*STADLIN Alfreda • ALI Syed F.**
- 1997-98 Oxygen Free Radicals as Mediators of Methamphetamine-Induced Neurotoxicity (MD97031)
STADLIN Alfreda
- 1994-95 Apoptosis in the Developing, Diseased and Aging Nervous Systems (MD95061)
YEW Tai Wai David • CHAN Wood Yee • CHO Yu Pang Eric • DIXON John Stuart# • LEUNG Ping Chung (Orthopaedics & Traumatology) • SHUM Sau Wun Alisa • GOSLING John Arthur# • YU Mang Chung
- 1995-96 Aging Changes in the Human Central Nervous System (MD95185)
YEW Tai Wai David
- 1997-98 Limbal Stem Cell Identification in a Rabbit Model (BL97007)
YEW Tai Wai David • AU Yue Kong (Ophthalmology and Visual Sciences)#
- 1997-98 Microglial Reaction Pattern in Normal and SCID (Severe Combined Immunodeficient) Mice (MD97103)
YEW Tai Wai David • SCHUMACHER U. • LORKE D. E.**

RESEARCH OUTPUTS AND PUBLICATIONS

- <P980931> **Chan, S.O.; K.F. Wong; K.Y. Chung and W.H. Yung.** "Changes in Morphology and Behaviour of Retinal Growth Cones before and after Crossing the Midline of the Mouse Chiasm - a Confocal Microscopy Study". *European Journal of Neuroscience* vol.10, pp.2511-2522. UK, 1998.08.
- <P981929> **Chan, S.O.** "Axon Guidance in the Mouse Optic Chiasm". *Abstracts for the 1st Global Chinese Ophthalmic Conference* p.88. Beijing, China, 1998.08.24.
- <P981966> **Chan, S.O.** "Axon Guidance in the Mouse Optic Chiasm". *Abstracts of the 2nd International Symposium on "The Challenges and Controversies of Ophthalmology & Visual Sciences in the Next Millennium"* p.49. Hong Kong: Dept. of Ophthalmology and Visual Sciences, CUHK, 1998.08.20.
- <P981998> **Chen, T.A. and S.O. Shan.** "Glutamate Induced Retinal Ganglion Cell Loss in Adult Rats-An *in vitro* Study". *Abstracts of the 2nd International Symposium on "The Challenges and*

Controversies of Ophthalmology & Visual Sciences in the Next Millennium" p.69. Hong Kong: Dept. of Ophthalmology and Visual Sciences, CUHK, 1998.08.20.

- <P981999> **Sun, Q. and S.O. Chan.** "Investigation of Neurodegeneration Following Intraocular Administration of Kainic Acid in the Adult Rat Retina". *Abstracts of the 2nd International Symposium on "The Challenges and Controversies of Ophthalmology & Visual Sciences in the Next Millennium"* p.69. Hong Kong: Dept. of Ophthalmology and Visual Sciences, CUHK, 1998.08.20.
- <P982060> **Stadlin, A. and J.L. Cadet.** "Methamphetamine Toxicity and Its Molecular Mechanisms of Action". *Toxicology Letters* vol.95 suppl.1, p.18. Paris: International Congress of Toxicology, 1998.07.
- <P982679> **Dixon, John S.; Phillip Y.P. Jen and John A. Gosling.** "The Structure and Autonomic Innervation of the Human Vas Deferens: A Review". *Microscopy Research and Technique* vol.42 no.6, pp.423-432. New York, USA, 1998.09.
- <P982990> **Chung, K.Y. and S.O. Chan.** "Axon Guidance in the Mouse Optic Chiasm". *Proceedings of Asia Pacific Symposium on Neural Regeneration* p.9. Hong Kong: Hong Kong University, 1998.12.
- <P982991> **Chung, K.Y. and S.O. Chan.** "Immediate Effects of Early Monocular Enucleation on Axon Routing and Arrangements of Specialized Cells in the Chiasm of Mouse Embryos". *Abstracts of Society for Neuroscience* vol.24, p.309. USA: Society for Neuroscience, 1998.11.
- <P982992> **Chen, T.A.; A.W.S. Cheung and S.O. Chan.** "Glutamate Induced Retinal Ganglion Cell Loss in Adult Rats - An *in vitro* Study". *Abstracts of Society for Neuroscience* vol.24, p.461. USA: Society for Neuroscience, 1998.11.
- <P983030> **Wang, Jian Bin and Wilkin Wai Kuen Cheung.** "Multiple Bacteroids in the Bacteriome of the Lantern Bug *Pyrops Candelaria* Linn. (Homoptera: Fulgoridae)". *Parasitology Research* vol.84, pp.741-745. Austria, 1998.
- <P983168> **Yam, H.F.; Z.H. Wang; P.C. Or; S.W. Wang; J. Li and E.C. Chew.** "Effect of Glucocorticoid Hormone on Nuclear Matrix in Cervical Cancer Cells *in vitro*". *Anticancer Research* vol.18, pp.209-216. Greece, 1998.
- <P983207> **Wang, Z.H.; Gary H.F. Yam; X.X. Tian; H.K. Ng; M.X. Ding; S.B. Chew-Cheng and E.C. Chew.** "Comparison of Nuclear Matrix Proteins Between EGFR-Antisense Transfected and Untransfected Glioblastoma Cells". *International Journal of Molecular Medicine* vol.2, pp.217-220. Greece, 1998.
- <P983619> **Wang, Z.H.; G.H.F. Yam; X.X. Tian; H.K. Ng; S.B. Chew-Cheng; M.X. Ding and E.C. Chew.** "A Study on the Relationship between Antisense EGFR cDNA Fragments and Nuclear Matrix Proteins in Glioblastoma Cells". *International Journal of Molecular Medicine* vol.2, pp.417-421. Greece, 1998.06.
- <P984221> **Wong, Felice W.Y.; W.Y. Chan and Susanna S.T. Lee.** "Resistance to Carbon Tetrachloride-Induced Hepatotoxicity in Mice Which Lack CYP2E1 Expression". *Toxicology and Pharmacology* vol.153, pp.109-118. London, UK, 1998.
- <P984879> **Chung, K.Y. Amy and Chan, S.O.** "Changes in Axon Arrangement in Retinofugal Pathway of Mouse Embryos". *Neuroscience Letters* suppl.49, p.S3. Ireland: Elsevier Science Ltd, 1998.
- <P984880> **Xue, Yongtao and Chan, S.O.** "Isolation of Genes That Specify Ipsilaterally From Contralaterally Projecting Retina in Mouse Embryos". *Neuroscience Letters* suppl.49, p.S9. Ireland: Elsevier Science Ltd, 1998.

- <P984893> **Lau, J.W.S. and A. Stadlin.** "Methamphetamine-Induced Reactive Oxygen Species (Ros) Production in Cultured Astrocytes". *Society for Neuroscience 28th Annual Meeting* vol.24, Abstracts no.4861. Los Angeles, USA: Society for Neurosciences, 1998.11.07.
- <P985002> **Stadlin, A. and C.K. Fu.** "MPTP-Induced Changes in Iron Metabolism and Ho-1 Levels in Cultured Astrocytes". *Society for Neuroscience Abstracts - 28th Annual Meeting* vol.24, p.574.19. Los Angeles, USA: Society for Neuroscience, 1998.11.07.
- <P990003> **Chan, Franky L. and Shuk-Mei Ho.** "Comparative Study of Glycoconjugates of the Rat Prostatic Lobes by Lectin Histochemistry". *The Prostate* vol.38, pp.1-16. New York, USA, 1999.01.
- <P990090> **Xuan, Jim W.; Joseph Kwong; Franky L. Chan; Mariantonietta Ricci; Yushi Imasato; Hideki Sakai; Guo H. Fong; Chandra Panchal and Joseph L. Chin.** "cDNA, Genomic Cloning, and Gene Expression Analysis of Mouse PSP94 (Prostate Secretory Protein of 94 Amino Acids)". *DNA and Cell Biology* vol.18 no.1, pp.11-26. New York, USA, 1999.06.
- <P990136> **Gosling, J; P. Alm; G. Bartsch; L. Brubaker; K. Creed; V. Delmas; P. Norton; P. Smet and B. Mauroy.** "Gross Anatomy of the Lower Urinary Tract". *Incontinence* ed. by Paul Abrams, Saad Khoury and Alan Wein. pp.21-56. UK: Scientific International, 1999.
- <P990137> **Yew, D.T.; W.P. Li; S.E. Webb; H.W.L. Lai and L. Zhang.** "Neurotransmitters, Peptides, and Neural Cell Adhesion Molecules in the Cortices of Normal Elderly Humans and Alzheimer Patients: A Comparison". *Experimental Gerontology* vol.34 no.1, pp.117-133. USA, 1999.
- <P990172> **Yew, D.T.; H.W. Wong; W.P. Li; H.W.L. Lai and Wan-Hua Amy Yu. trans.** "Nitric Oxide Synthase Neurons in Different Areas of Normal Aged and Alzheimer's Brains". *Neuroscience* vol.89 no.3, pp.675-686. Britain, 1999.
- <P990246> **Chan, S.O. and K.Y. Chung.** "Changes in Axon Arrangement in the Retinofungal Pathway of Mouse Embryos: Confocal Microscopy Study Using Single-And Double-Dye Label". *Journal of Comparative Neurology* vol.406, pp.251-262. USA, 1999.04.05.
- <P990281> **Ying, Y.; M.P.L. Cheung; P.H. Chow and W.S.O.** "Effects of Male Accessory Sex Glands on Sperm Decondensation and Oocyte Activation During *in vivo* Fertilization in Golden Hamsters" *International Journal of Andrology* vol.22, pp.68-76. 1999.04.
- <P990283> **Joseph, Kwong and Chan F.L.** "Comparison of MRNA Expression of Two Secretory Proteins (Probasin and PSP94) in Castrated Rat Prostate and Rat Prostate Tumors". *Proceedings of the American Association for Cancer Research* vol.40, p.381. Philadelphia, USA, 1999.03.
- <P990385> **Yew, David T. and W.Y. Chan.** "Early Appearance of Acetylcholinergic, Serotonergic, and Peptidergic Neurons and Fibers in the Developing Human Central Nervous System". *Microscopy Research and Technique* vol.45, pp.389-400. New York, 1999.
- <P990435> **Gosling, John A.; John S. Dixon and Phillip Y.P. Jen.** "The Distribution of Noradrenergic Nerves in the Human Lower Urinary Tract. A Review". *European Urology* vol.36 suppl.1, pp.23-30. Switzerland, 1999.
- <P990467> **Lee, K.K.H.; M.K. Tang; D.T.W. Yew; P.H. Chow; S.P. Yee; C. Schneider and C. Brancolini.** "Gas2 is a Multifunctional Gene Involved in the Regulation of Apoptosis and Chondrogenesis in the Developing Mouse Limb". *Developmental Biology* vol.207, pp.14-25. New York, USA, 1999.03.
- <P990612> **Yew, David T.; W.Y. Chan; C.B. Luo; D.R. Zheng and M.C. Yu.** "Neurotransmitters and Neuropeptides in the Developing Human Central Nervous System". *Biological Signals and Receptors* vol.8, pp.149-159. Switzerland, 1999.

- <P990761> **Chan, F.L.; H.K. Poon; Y. Huang and H.L. Choi.** "Glycoconjugates of the Rat Ciliary Body Epithelium: A Lectin Histochemical and Protein Blotting Study". *The Histochemical Journal* vol.31, pp.95-107. The Netherlands, 1999.06.
- <P991528> **Lai, M.Y. and E.Y.P. Cho.** "Regenerative Sprouting of Retinal Ganglion Cells of Adult Hamsters Induced by the Epineurium of a Peripheral Nerve". *Brain Research* vol.823, pp.241-248. USA, 1999.03.
- <P991529> **Kong, W.C. and E.Y.P. Cho.** "Antibodies Against Neurofilament Subunits Label Retinal Ganglion Cells But Not Displaced Amacrine Cells of Hamsters". *Life Sciences* vol.64 no.19, pp.1773-1778. USA, 1999.04.
- <P991540> **Lee, K.K.H.; C.C. Wong; S.E. Webb; M.K. Tang; A.K.C. Leung; P.F. Kwok; D.Q. Cai and K.M. Chan.** "Hepatocyte Growth Factor Stimulates Chemotactic Response in Mouse Embryonic Limb Myogenic Cells *in Vitro*". *Journal of Experimental Zoology* vol.283, pp.170-180. 1999.
- <P991550> **Chan, K.S.; Poon L.L.M.; Tang W.W.T.; Copp A.J. and Shum A.S.W.** "Retinoic Acid Induces Down-Regulation of *Wnt-3a* in the Pathogenesis of Caudal Agenesis in the Mouse Embryo". *Proceedings of "From Life's Design to Molecular Medicine"* p.72. Oslo, Norway: Congress of the European Developmental Biology Organisation, 1999.06.
- <P991551> **Chan, B.W.H.; Copp A.J. and Shum A.S.W.** "Interactions of Maternal Diabetic Milieu with Vitamin A in Diabetic Embryopathy". *Proceedings of "From Life's Design to Molecular Medicine"* p.166. Oslo, Norway: Congress of the European Developmental Biology Organisation, 1999.06.
- <P991557> **Shum, Alisa S.W.; Leo L.M. Poon; Wilson W.T. Tang; Tsuyoshi Koide; Billy W.H. Chan; Yun-Chun G. Leung; Toshihiko Shiroishi and Andrew J. Copp.** "Retinoic Acid Induces Down-Regulation of *Wnt-3a*, Apoptosis and Diversion of Tail Bud Cells to a Neural Fate in the Mouse Embryo" *Mechanisms of Development* vol.84, pp.17-30. Ireland, 1999.06.
- <P991677> **Cheung, C.S.; Yung R.K.M.; Cheung K.K. and Chan W.Y.** "Initial Migration Pathways of Mouse Postotic Hindbrain Neural Crest Cells". *Program and Abstract Book for the Congress of the European Developmental Biology Organization* p.139. Oslo, Norway: Norwegian Society for Developmental Biology, 1999.06.
- <P991827> **Ying, Y.; P.H. Chow; M.P.L. Cheung and W.S.O.** "Male Accessory Sex Gland Secretions Affect Oocyte Ca^{2+} Oscillations During *in-vitro* Fertilization in Golden Hamsters" *Molecular Human Reproduction* vol.5 no.6, pp.527-533. UK, 1999.
- <P991829> **Yi, X.J.; Jiang H.Y.; K.K.H. Lee; W.S.O.; P.L. Tang and P.H. Chow.** "Expession of Vascular Endothelial Growth Factor (VEGF) and Its Receptors During Embryonic implantation in the Golden Hamster". *Cell and Tissue Research* vol.296, pp.339-349. Germany, 1999.05.
- <P992006> **Yew, David T.; Xianjin Yi; W.Y. Chan and W.K.W. Lam.** "A Rabbit Model of Proliferative Vitreoretinopathy Induced by Injection of Astrocytic Cultures". *Cellular and Molecular Neurobiology* vol.19 no.6, pp.759-773. USA, 1999.
- <P992014> **Wong, Steve S.; Raymond H.Y. Li and Alfreda Stadlin.** "Oxidative Stress Induced by MPTP and MPP⁺: Selective Vulnerability of Cultured Mouse Astrocytes". *Brain Research* vol.836, pp.237-244. 1999.
- <P992406> **Stadlin, A. and J.H. Zhu.** "Change in Acoustic Startle Response and Locomotor Activities in Rats Prenatally Exposed to Heroin". *Proceedings of the College on Problems of Drug Dependence Sixty-First Annual Scientific Meeting* p.153. Acapulco, Mexico: College on Problems of Drug Dependence, 1999.06.12.

see also <P974926>, <P980891>, <P982088>, <P982641>, <P982980>, <P983080>, <P983088>, <P983500>, <P983900>, <P984272>, <P984762>, <P990192>, <P990292>, <P990320>, <P990469>, <P990543>, <P990635>, <P990986>, <P991277>, <P991661>, <P991983>, <P991984>

RESEARCH PROJECTS

Cloning of Common Carp Metal Regulatory Element Binding Proteins

- ✉ CHAN King Ming
- ☐ 1 January 1999
- ❖ CUHK Research Committee Funding

To understand how metal ions regulate gene expression, fish metallothionein (MT) gene promoter is used as a model to delineate the molecular mechanism of how divalent metal ions act on cis-acting elements in the 5'-flanking regions of MT genes. The researchers have obtained MT gene fragments with their 5' flanking regions, from different fish species including common carp, tilapia, and zebrafish. The 5' flanking regions of these MT genes are being subcloned into reporter gene system to study their function and responsiveness to heavy metal ions in primary cultures of fish hepatocytes. Among these MT genes, the 5' flanking region of the common carp MT gene is well characterized in this laboratory, and is now confirmed to exert its metal induction via several cis-acting metal regulatory elements (MREs). The MRE binding factors (trans-acting elements) are more complicated than they anticipated, with studies in mouse and human MT genes recently revealed multiple MRE binding factors. Several models have been proposed to explain how metal ion controls MT gene transcription so far with limited information from mice. The researchers used electrophoretic mobility shift assay to confirm that all the MREs could bind to protein components of nuclear extracts prepared from both un-induced and zinc- induced carp livers and hence support the repression model, among several other models, of molecular mechanism on how metal ions regulate gene transcription. The identities and functions of the fish MRE binding proteins will provide new insights on how metals regulate MT gene transcription in fish, and perhaps in the future, on whether MT gene transcription could be related to metal tolerance in different fish species. Screening of a common carp liver cDNA library (un-induced) using oligonucleotides of MREs have isolated five putative clones which express protein(s) to bind the relevant MRE (MREc, proximal MRE to TATA box). Using one of the positive clones as probe, the researchers have further isolated 24 associated clones from the same library. The first goal of this proposal is thus to reveal the nucleotide sequences (full length) of all the isolated cDNAs for MRE-binding factor(s) and to study their binding activities with different MREs in the presence of different metal ions. The isolated clones express protein that bind strongly with one of the MREs, MREc, and thus other MREs must have other specific binding factors likely to be induced by metal ions but yet to be identified.

Therefore, the second goal of this proposal is to isolate metal inducible cDNA clones expressing proteins to bind with other MREs in the common carp MT gene promoter region.
(BL98005)

IGF Gene Expression Studies in Fish

- ✉ CHENG Hon Ki Christopher
- ☐ 1 January 1999
- ❖ CUHK Research Committee Funding

Previous research work from the researchers' laboratory includes the cloning of the complementary DNA (cDNA) and the gene of a particular type of IGF from common carp, a fish species widely cultured in southern China as well as in other parts of the world. Based on their ground work, the researchers propose to study the molecular biology of IGF gene expression in fish. The first objective is to further their work on the cloning of the cDNAs and genes of other types of IGFs in common carp. The second objective is to study the regulation of IGF gene expression in common carp, both *in vivo* and *in vitro*. Knowledge thus gained on the gene multiplicity and the regulation of IGF expression would contribute significantly towards the basic understanding and expand the application potential of these important growth factors in fish.
(BL98006)

Biochemical Characterisation of Mas Oncoprotein and its Interactions with RAMP

- ✉ CHEUNG Wing Tai • POYNER David*
- ☐ 1 April 1999
- ❖ UK/Hong Kong Joint Research Scheme, the British Council

The mas oncogene was originally isolated from a human tumour, and sequence analysis indicates that it encodes a protein consisting of seven hydrophobic segments. Functional studies have suggested that the mas oncogene enhances angiotensin responses, but the molecular mechanism and its physiological roles are yet to be determined. In the present study, efforts will be made to elucidate the functional roles of the mas oncogene and identify the cellular proteins that interact with it. In particular we will examine possible interactions between mas, the angiotensin receptor and members of the RAMP family; proteins which have been shown to modulate the expression and binding properties of other receptors.
(BL98030)

Glucose transporter as an anti-tumour target

- ✉ FUNG Kwok Pui • LEE Cheuk Yu
- ☐ 1 September 1998

❖ Research Grants Council

Cellular glucose uptake is mediated by glucose transporter proteins. In humans, six glucose transporter isoforms have been identified. They exhibit tissue-specific distribution, but overexpression of isoforms type 1 and 3 has been observed in many types of cancers. Recently, overexpression of type 5 isoform which is primarily a fructose transporter has also been found in breast cancer. Insofar as cancer cells depend mainly on glucose for energy supply and for growth, the overexpression of glucose transporter confers upon them a decided advantage in their competition for glucose supply vis-a-vis their normal counterparts. In the present study, we will examine the possibility of developing a new therapeutic mode in cancer management by suppressing the active glucose transport system of the cancer cells. Anti-sense nucleic acids of glucose transporter types 1,3 and 5 will be used to effect down-regulation of glucose transporter genes. Since glucose transport is feedback regulated by phosphoribosyl pyrophosphate (PRPP), the PRPP-enhancers will be tested for their probable anti-cancer activities. Furthermore, the effects of some newly developed glucose transport inhibitors on the cancer growth will also be scrutinized. The effects of the above-mentioned agents on the growth of multidrug resistant cancers will be examined. It is hoped that from this study a novel anticancer mode using the glucose transport system of cancer cells as a target will be developed. (CU98148)

Mechanistic Study of the Anti-tumour Effect of Step-down Hyperthermia

✍ FUNG Kwok Pui

☐ 1 October 1998

❖ CUHK Research Committee Funding

Hyperthermia is a new treatment modality by applying heat to the tumour sites. Whole body heating or heat generated by microwave or by laser have been on trials in treating various tumours. Like other anti-tumour regimens, prolonged hyperthermia ($\geq 43^\circ\text{C}$) also exhibits adverse side-effects. Recently, a hyperthermic protocol on cultured tumour cells named "step-down hyperthermia (SDH)" has been introduced. In SDH, a relatively short exposure to a high temperature ($\geq 43^\circ\text{C}$) sensitizing treatment increases the heat cytotoxic effect of a lower temperature ($\leq 42^\circ\text{C}$) test treatment on tumour cells. In present project, the cytotoxic mechanism of SDH will be elucidated using cultured human hepatoma (HepG2) and leukemia (HL-60) cell lines and mice bearing Ehrlich ascites tumour cells. The probable effects of SDH on the inhibition of induction of heat shock proteins or antioxidant enzymes in tumour cells will be tested. The actions of SDH on the changes of free radical induction and glucose

transport system in tumour cells will also be examined. The results might shed light on a better design in treatment protocol when step-down hyperthermia is applied to patients in future. (MD98031)

Organization of 8th International Symposium of Society of Chinese Bioscientists in America

✍ FUNG Kwok Pui • TSANG David Sau Cheuk (Biochemistry) • WONG Ricky* • WAYE Mary Miu Yee • KONG Siu Kai (Biochemistry) • CHAN King Ming • FONG Wing Ping (Biochemistry) • TSUI Kwok Wing • WONG Raymond* • CHAN Vivian* • CHUNG Stephen* • WU Rudolf* • CHAU F. T.*

☐ 1 February 1999

❖ Industrial Support Fund, Industry & Technology Development Council

There is increasing interest among industrialists in Hong Kong on drug manufacturing. Drugs such as Traditional Chinese Medicine (TCM), generic antibiotics and vaccines are important fields to be developed in Hong Kong. R & D personnels in the industrial and academic sectors in Hong Kong are eager to be kept abreast with recent research in health issues, especially to understand the etiology, diagnosis and treatment of diseases which are common in Hong Kong, for example, hepatoma, nasopharyngeal cancer, avian flu, hepatitis etc., so that nutraceutical intervention, diagnostic development and drug treatment can be designed. The up-to-date information from overseas are most important for Hong Kong industrialists to determine their directions for future investments in Biotechnology industry. In order to promote the dialogues among local industrialists and overseas research experts, Department of Biochemistry, The Chinese University of Hong Kong and Society of Chinese Bioscientists in America (SCBA) propose to organize the 8th International SCBA symposium in the Convention Centre of Hong Kong from August 14-19, 1999. Renowned researchers including Nobel Laureates will be invited to deliver lectures. Industrialists and R & D personnels in Hong Kong and the Mainland will be invited to participate. It is expected that this Symposium can upgrade the standard in manufacturing drugs and other Biotechnology industries in Hong Kong. (BL98024)

The Role of Mitochondria in the Response of Cells to Anticancer Drugs

✍ KWOK Tim Tak

☐ 1 October 1998

❖ CUHK Research Committee Funding

Two sublines, A5A and A10A, were selected for doxorubicin resistance from human squamous carcinoma A431 cells. Genes differentially expressed in the parent and the drug resistant cells were identified by RT-PCR based differential display and confirmed by Northern blot analysis. One of the clones was found to have sequence homology with part of the cytochrome C oxidase subunit II gene and the other two clones were homology with NADH dehydrogenase 3 gene. These two genes were down-regulated in the doxorubicin resistant cells. Mitochondria are currently believed to play a central role in the process of apoptosis. Since both cytochrome C oxidase and NADH dehydrogenase are mitochondrial enzymes, it is therefore hypothesized that mitochondrial enzyme complexes may be important in determining the response of cells to anticancer drugs. In this proposal, the activity and the expression of mitochondrial enzyme complexes will be examined in the parent and the drug resistant A431 cells. Furthermore, the influence of doxorubicin on mitochondrial enzyme activity and gene expression in relation to drug induced apoptosis will also be measured. The results may confirm the important role of mitochondria and its enzyme complexes in drug resistance and apoptosis. (BL98008)

Isolation and Characterization of Ribosome - Inactivating Proteins with Novel Features

- ✉ NG Tzi Bun
- 1 September 1998
- ❖ Research Grants Council

Ribosome-inactivating proteins (RIPs) are a group of proteins which can attack ribosomes and catalytically cleave the N-glycosidic bond at A4324 in rat 28S RNA resulting in inhibition of protein synthesis. The other biological actions of RIPs included antiproliferative, antitumor, immunosuppressive, antifertility, antiviral and anti-human immunodeficiency virus (anti-HIV) activities. RIPs are divided into type I (consisting of a single chain) and type II (consisting of an A chain with RIP activity and a B chain with lectin activity which facilitates binding to galactose-containing receptors on cell surface and subsequent entry into cells). Type I RIPs have a molecular weight (MW) in the range of 26-32 kilodaltons (kDa). Type II RIPs are around 60kDa in molecular weight. Recently, a group of Chinese investigators in Shanghai reported the isolation of small RIPs with a molecular weight of approximately 10kDa from the seeds of the bitter ground "Momordica Charantia" and the sponge ground "Luffa cylindrica." The small RIP from the latter plant was structurally very dissimilar from the MW 28 kDa RIP from the same plant. It is deemed worthwhile to isolate and further characterize this novel type of RIP from the seeds of plants belonging

to Family Cucurbitaceae. Another objective of the proposed project is to isolate and characterize RIPs from plants belonging to Family Papilionaceae. This family has not previously been examined. (CU98331)

Characterization of the Human 14-3-3 Epsilon Protein

- ✉ TSUI Kwok Wing
- 1 January 1999
- ❖ CUHK Research Committee Funding

14-3-3 proteins belong to a highly conserved family of small proteins that associated with cell cycle and cell death regulators, oncogenes, and signaling molecules. A number of functions have been proposed for 14-3-3 proteins, including inhibition of protein kinase C (PKC), activation of Raf-1 protein kinase, regulation of the biosynthesis of neurotransmitters and determination of the timing of cell division. Since 14-3-3 proteins associate with a number of proto-oncogenes and oncogenes, they might play an important role in tumor development. To date, 14-3-3 proteins are suggested to be a multifunctional regulator of cellular signals mediated by two types of Ca²⁺-dependent protein kinases: PKC and calmodulin-dependent protein kinase (CaM kinase). We have cloned the epsilon isoform of human 14-3-3 proteins (h1433ε) from a heart cDNA library. We have also mapped the h1433ε gene to human chromosome 17p13, which contains a number of cancer related loci and a common hot spot for translocation and mutation in breast cancer. In this project, we plan to study the structure and functions of h1433ε. The effect of h1433ε on the activity of CaM kinase will be determined. To study the change in cellular localization during the cell cycle, a fusion construct with green fluorescent protein will be prepared. Finally, the h1433ε gene will be fine-mapped using radiation hybrid panel to determine whether it is located within any well-established cancer loci. These studies should provide useful information on the role of 14-3-3 proteins in tumor development and cell regulation mediated by calmodulin and CaM kinase. (MD98032)

The role of pre-synaptic motor neuron acetylcholinesterase in neuromuscular synaptogenesis

- ✉ WAN Chi Cheong David • TSIM Karl W. K.*
- 1 September 1998
- ❖ Research Grants Council

Acetylcholinesterase (AChE. EC 3.1.1.7) is a major enzyme of the neuromuscular synapse responsible for the rapid hydrolysis of acetylcholine released from

the nerve terminals. This enzyme is very important in the synaptogenesis of neuromuscular junction as exemplified by the differential expression of various molecular forms of acetylcholinesterase which are highly sensitive to neural activities. The elucidation of the regulation of AChE expression in neuromuscular junction is therefore crucial for the understanding of neuromuscular degenerative diseases such as muscular dystrophy and muscle paralysis. Conventionally, the postsynaptic expression of AChE in muscle myotubes are thought to be the prominent species in the neuromuscular junctions, and their expression in muscle coincides with the stages in neural development. However, several lines of evidence indicate that the presynaptic motor neurons are able to synthesize and secrete AChE at the neuromuscular junctions. The contribution of presynaptic AChE to synaptogenesis is presently not very well characterized. In this project, we propose to characterize the expression of various forms of AChE in presynaptic motor neuron during different stages of neuromuscular development and muscle degeneration. The results of this study should provide further insight into the role of presynaptic AChE in vertebrate synaptogenesis. (CU98140)

The Biological Significance of the Adenine Auxotrophic Heterozygosity in the Obligate Diploid Fungus *Candida Albicans*

✉ WANG Jun

☐ 1 November 1998

❖ CUHK Research Committee Funding

As one of the remaining enigmas in mycology, a number of natural isolates of the obligate diploid fungus *Candida albicans* can be induced to give rise strain-specific, recessive auxotrophic mutants at the frequency as high as few percent of total surviving cells. Recently the researchers have discovered that one of such isolates *C. albicans* CA12 is heterozygous for one of the purine biosynthesis genes, *ADE2*. The parental strain CA12 carries one copy of wild-type allele *ADE2* and one copy of mutant allele *ade2* which bears a 1.1 kb deletion in its promoter and coding regions; while all of the adenine auxotrophic derivatives of CA12 examined carry the mutant allele only. Their discovery has therefore presented the strongest and most direct proof to demonstrate that in those strains that prone to recessive mutants, one of the two homologous alleles involved was congenitally defective and the occurrence of auxotrophic mutants was due to the illegitimate segregation of the mutant allele.

Having also tailored and improved the existing genetic and molecular biology techniques for the study of the fungal heterozygosity, the researchers believe that they are in an advantageous position to explore the physiological significance of this

intriguing and fundamental biological process. They plan to characterize (1) the distribution and frequency of adenine heterozygosity in the clinical isolates of *C. albicans*; (2) the genetic mechanism that preserves *ade2* allele; and (3) the competitiveness of the fungal strains heterozygous at *ADE2* allele. (BL98011)

Establishment of a Catalogue of Genes Expressed in Human Liver Cancer and Mental Diseases

✉ WAYE Mary Miu Yee • LEE Cheuk Yu • FUNG Kwok Pui • TSUI Kwok Wing • JOHNSON Philip James (Clinical Oncology) • LIEW Choong Tsek (Anatomical & Cellular Pathology) • XUE Hong* • SMITH Michael* • LING Victor*

☐ 1 July 1998

❖ Industrial Support Fund, Industry & Technology Development Council

This project aims at establishing a catalogue of genes expressed in human liver cancer and mental diseases. It will be an additional resource incorporated into the Hong Kong Bioinformatics Centre. A project to be conducted in collaboration with the British Columbia (BC) Cancer Agency/BC Cancer Foundation, it will provide a central resource for developing cancer diagnosis and treatment modalities for the Hong Kong biotechnology community. The deliverables will be a catalogue of genes from samples of patients with liver cancer or mental diseases. The objectives include identification of genes that are useful as markers of liver cancer and mental diseases. The target users will be industrial partners who are interested in developing services or diagnostic kits for individuals with liver cancer or mental diseases or individuals who have genes predisposing them to these diseases. Those industrial partners can market their kits to health care providers, independent laboratories or organizations who are capable of performing the tests in cases where the complexities of the assays and the interpretations require skills not available to ordinary consumers. The benefits of predictive genetic tests for liver cancer and mental diseases are substantial, involving a target consumer population of more than 13 million. Thus new markers for the prediction of development of liver cancer and mental diseases are urgently needed for this enormous market. The net amount requested is \$9,906,000 over a three year period. (MD98069)

Molecular Study of FHL2 – a Four and a Half LIM-Domain Protein Specifically Expressed in Heart

✉ WAYE Mary Miu Yee • LEE Cheuk Yu • FUNG Kwok Pui • TSUI Kwok Wing

☐ 1 November 1998

❖ CUHK Research Committee Funding

LIM domain protein family is an important new family of proteins which carries a cysteine-rich zinc-binding domain called the LIM domain. This protein family is found in mammals, amphibians, flies, worms and plants, and they may be involved in cell identity, differentiation, growth control and developmental regulation. While the researchers sequenced more than 7000 ESTs from a human heart cDNA library, they have cloned and characterized five cDNAs coding for novel LIM-only proteins. One of them-FHL2 is of particular interest because it is expressed specifically in the human heart. They have used a yeast two-hybrid system and discovered two interesting protein partners that interact with FHL2. They have raised an antibody against the FHL2 and demonstrated by *in vitro* binding assays that FHL2 can bind to its protein partners. They plan to use site-directed mutagenesis to delineate the domains involved in interaction of FHL2 and its protein partners. *In situ* hybridization, immunohistochemical studies and Green Fluorescent Protein (as a tag) will be used to study the localization of FHL2 and protein/protein interaction in both fixed and living cells. By understanding the molecular mechanisms of gene regulation in heart development, we hope to improve the diagnosis and treatment of heart diseases. (BL98012)

Study on the Expression of LIM-Domain Proteins in Human and Animal Myocardial Tissues

✉ WAYE Mary Miu Yee • ZIMMERMANN Rene* • Andreas KAMPMANN*

☐ 1 March 1999

❖ Germany/Hong Kong Joint Research Scheme

The LIM domain protein family is an important new family of proteins which carries a cysteine-rich zinc-binding domain called the LIM domain. This protein family is found in mammals, amphibians, flies, worms and plants, and they may be involved in cell identity, differentiation, growth control and developmental regulation. hCLIM1 is a LIM domain protein originally cloned in our laboratory while we sequenced more than 7000 Expressed Sequence Tags (ESTs) from a human heart cDNA library and previous works in our laboratory found that it is associated with the cytoskeleton (Kotaka et al, 1998). Other researchers have shown that the rat homologue CPL36 is reduced during hypoxia and therefore it is interesting to find out whether the human CLIM1 is changed in its expression in heart diseases such as dilated cardiomyopathy or in experimental system such as the pig myocardium subjected to coronary microembolization. We plan to study the hCLIM1 mRNA levels by Northern blot analysis and the protein levels by immunohistochemistry. Other LIM-

domain proteins found during the sequencing process include FHL1 (Lee et al, 1998), FHL2 (Chan et al, 1998), and FHL3 will also be studied. These proteins are characterized by four and a half LIM-domains and information about their gene localization in the human chromosomes and interacting protein partners have been obtained in Dr. Waye's laboratory. (BL98034)

Please refer to previous issues of this publication for more details of the following ongoing research at the department:

<u>Edition</u>	<u>Title/Investigators</u>
1997-98	Molecular Mechanism of Metallothionein Gene Regulation (BL97018) ✉ CHAN King Ming
1990-91	Comparative Endocrinology of Prolactin, Growth Hormone, and Their Receptors (BP88031) ✉ CHENG Hon Ki Christopher • NG Tzi Bun • WONG Chun Cheung (Physiology)
1996-97	Structure-function Studies on Fish Growth Hormone and Prolactin: A Protein Engineering Approach (CU96320) ✉ CHENG Hon Ki Christopher • CHAN King Ming • NG Tzi Bun
1997-98	Xanthine Oxidase: Enzyme Inhibition Studies (BL97019) ✉ CHENG Hon Ki Christopher
1997-98	Oligonucleotide Combinatorial Library: Application in Diagnostic and Therapeutic Drug Development (BL97005) ✉ CHEUNG Wing Tai • HO Walter K. K. (Biochemistry) • WAN Chi Cheong David
1995-96	Mechanism of Combination Treatment of Tumour Necrosis Factor- α and Hyperthermia on Tumour Cells (CU95316) ✉ FUNG Kwok Pui
1996-97	Formulation of Preservation Solution for Transplantation of Heart and Other Organs (MD96002) ✉ FUNG Kwok Pui
1996-97	Search for Treatment Strategies to Enhance the Cytotoxic Effect of Free-radical-mediated Antitumour Drugs on Tumour Cells and to Lower Their

- Adverse Side Effects on the Host (CU96311)
 ✎ FUNG Kwok Pui
- 1996-97 Tumour Necrosis Factor- α : Biological Activities and Action Mechanism in Health and Diseases (MD96127)
 ✎ FUNG Kwok Pui • CHAN Leung Franky (Anatomy) • CHENG Hon Ki Christopher • CHOY Yuen Min (Biochemistry) • KONG Siu Kai (Biochemistry) • KWOK Tim Tak • LEUNG Kwok Nam (Biochemistry) • WAN Chi Cheong David
- 1997-98 Establishment of a Hong Kong Bioinformatics Centre (BL97001)
 ✎ FUNG Kwok Pui • LEE Cheuk Yu • WAYE Mary Miu Yee • TSUI Kwok Wing • SMITH David Keith* • XUE Hong* • ZHU Guang*
- 1997-98 Low density lipoprotein as carrier for targeted delivery of antitumoral drugs (CU97309)
 ✎ FUNG Kwok Pui
- 1997-98 Discovery of Traditional Chinese Medicine (TCM) - Derived Saponins with Anti-Tumour and Cardiotonic Activities for Use as Health Food Supplements or Therapeutics (MD97085)
 ✎ FUNG Kwok Pui • WONG Nai Ching Henry (Chemistry) • CHANG Yen Albert# • HUI Yongzheng* • YU Biao*
- 1997-98 Effect of Glucose Transporter Antisense Nucleic Acids on Human Tumour Cells (MD97111)
 ✎ FUNG Kwok Pui
- 1997-98 Gain of Function by p53 Mutation: Induction of Drug Resistance (BL97022)
 ✎ KWOK Tim Tak
- 1995-96 Sequence Analysis of Human Heart cDNA Clones (CU95642)
 ✎ LEE Cheuk Yu • WAYE Mary Miu Yee • FUNG Kwok Pui
- 1997-98 Atherosclerosis Genes (MD97037)
 ✎ LEE Cheuk Yu • WAYE Mary Miu Yee • FUNG Kwok Pui
- 1995-96 Natural and Synthetic Anti-human Immunodeficiency Virus and Anti-Lymphoma Compounds (BL95036)
 ✎ NG Tzi Bun • WONG Nai Ching Henry (Chemistry) • FONG Wing Ping (Biochemistry) • WAN Chi Cheong David • YEUNG Hin Wing (Biochemistry)#
- 1997-98 Natural Products with Anti-Human Immunodeficiency Virus Activity (CU97688)
 ✎ NG Tzi Bun • WAN Chi Cheong David • FONG Wing Ping (Biochemistry) • Yeung Hin Wing*
- 1997-98 Biological Activities of Milk Proteins (MD97038)
 ✎ NG Tzi Bun
- 1997-98 Studies on the Terminal Differentiation of Cardiac Myocytes (BL97024)
 ✎ TSUI Kwok Wing
- 1997-98 Structural and Functional Studies of Human 14-3-3 ϵ Protein (BL97041)
 ✎ TSUI Kwok Wing
- 1996-97 Characterization of Isoforms of Endothelin Converting Enzyme in Cultured Endothelial Cells (BL96008)
 ✎ WAN Chi Cheong David
- 1997-98 Molecular and Immunological Characterization of Endothelin Converting Enzymes (CU97320)
 ✎ WAN Chi Cheong David
- 1996-97 Molecular Cloning and Characterization of Human Heart cDNAs Coding for LIM Domain Containing Proteins (CU96313)
 ✎ WAYE Mary Miu Yee • LEE Cheuk Yu • FUNG Kwok Pui
- 1997-98 Cloning of the Mouse FHL2 Gene (BL97011)
 ✎ WAYE Mary Miu Yee
- 1997-98 Sequence Analysis of the SLIM1(FHL1) Gene (BL97017)
 ✎ WAYE Mary Miu Yee • BENTLEY David R.* • ROSS Mark*
- 1997-98 Study on the Expression of HSP 27L in Animal & Model Systems (BL97015)
 ✎ WAYE Mary Miu Yee • ZIMMERMANN Rene*

RESEARCH OUTPUTS AND PUBLICATIONS

- <P974984> **Wan, David Chi-Cheong; Sandy Ka-Shing Luk; Karl Wah-Keung Tsim and Wing-Tai Cheung.** "Expression and Localization of Endothelin Converting Enzyme in Rat Vas Deferens". *Life Sciences* vol.60 no.18, pp.1605-1612. USA, 1997.
- <P974985> **Choi, Roy C.Y.; San Pun; Tina T.X. Dong; David C.C. Wan and Karl W.K. Tsim.** "NG108-15 Cells Induce the Expression of Muscular Acetylcholinesterase When Co-Cultured with Myotubes". *Neuroscience Letters* vol.236 no.3, pp.167-170. USA, 1997.
- <P980930> **Mak, L.H.; Y.L. Chui; C.C. Wan; K.K. Ho; S.O. Leung and W.T. Cheung.** "Construction of an Unbiased Phage-Displayed Combinatorial Antibody Library". Paper presented in the 7th Conference on Radioimmuno-detection and Radioimmunotherapy of Cancer, organized by Garden State Canees Centes. USA, 1998.10.
- <P981404> **Marshall, Anderson; James Baggott; Marcel Blanchaer; Ted Cleary; Hans Jacobs; Peter Schwaty; Mary M.Y. Waye and Craig Zimitat.** "Computer Assisted Learning in Medical Biochemistry on the World Wide Web Accomplished by Electronic Collaboration". *Basic Science Educator* vol.8, pp.18-20. (International Association of Medical Science Educators), 1999.
- <P981405> **Collins, R.A.; T.B. Ng; W.P. Fong; C.C. Wan and H.W. Yeung.** "Inhibition of Protein Synthesis in a Rabbit Reticulocyte System by Aqueous Extracts of Chinese Medicinal Herbs". *Abstracts of the International Symposium on "the Worldwide Herbal Industry: Present and Future"* p.7. Hong Kong, 1998.07.
- <P981406> **Collins, R.A.; T.B. Ng; W.P. Fong; C.C. Wan and H.W. Yeung.** "Rapid Assay of Glycohydrolase Enzyme Inhibition by Extracts of Chinese Medicinal Herbs". *Abstracts of the International Symposium on "the Worldwide Herbal Industry: Present and Future"* p.6. Hong Kong, 1998.07.
- <P981418> **Au, Tai-Kong; Wing-Ping Fong; Mei-Ling Lam; Tzi-Bun Ng; Hin-Wing Yeung and David Chi-Cheong Wan.** "Inhibition of Human Hiv-1 Protease by Partially Purified Aqueous Extracts of Chinese Medicinal Plants". *International Symposium on "the Worldwide Herbal Industry: Present and Future" Program & Abstracts* p.17. Hong Kong, 1998.07.
- <P981419> **Collins, R.A.; T.B. Ng; W.P. Fong; C.C. Wan and H.W. Yeung.** "Anionic Polysaccharides from *Chrysanthemum Morifolium* Inhibit Mechanistic Assays of Human Immunodeficiency Virus Type 1 Replication". *International Symposium on "the Worldwide Herbal Industry: Present and Future" Program & Abstracts* p.9. Hong Kong, 1998.07.
- <P981420> **Collins, R.A.; T.B. Ng; W.P. Fong; C.C. Wan and H.W. Yeung.** "Screening of Aqueous Extracts of Various Chinese Medicinal Herbs for Human Immunodeficiency Virus Type-1 Inhibitory Activity". *International Symposium on "the Worldwide Herbal Industry: Present and Future"*. p.5. Hong Kong, 1998.07.
- <P981421> **Collins, R.A.; T.B. Ng; W.P. Fong; C.C. Wan and H.W. Yeung.** "The Effect of Plant Ribosome Inactivating Proteins on Human Immunodeficiency Virus Type-1 Replication". *International Symposium on "the Worldwide Herbal Industry: Present and Future" Program & Abstracts* p.8. Hong Kong, 1998.07.
- <P981422> **Collins, R.A.; T.B. Ng; W.P. Fong; C.C. Wan and H.W. Yeung.** "Polyamide Minicolumns: Complete Removal of Contaminating Polyphenolic Compounds from Small Samples of Aqueous Plant Extracts". *International Symposium on "the Worldwide Herbal Industry: Present and Future" Program & Abstracts* p.4. Hong Kong, 1998.07.
- <P983262> **曹暉、劉玉萍、邵鵬柱、畢培曦.** <DNA 分子指紋圖譜與測序技術在中藥品質研究中的現狀及展望>. 《中國中藥雜誌》第 23 期, 頁 643-653. 北京, 1998.11.

- <P983323> **Cheng, E.N.M.; K.P. Fung and K.S. Leung.** "The Effect of Venting Hole and Marrow Suction on Intramedullary Pressure". *Proceedings of the 18th Annual Congress of the Hong Kong Orthopaedic Association* pp.53-54. Hong Kong, 1998.11.
- <P983773> **Fu, Rong-Zhao; Jun Wang; Yong-Ru Sun and Pang-Chui Shaw.** "Extraction of Genomic DNA Suitable for PCR Analysis from Dried Plant Rhizomes/Roots". vol.25 no.5, pp.796-801. USA, 1998.11.
- <P984977> **Collins, R.A.; T.B. Ng; W.P. Fong; C.C. Wan and H.W. Yeung.** "Removal of Polyphenolic Compounds from Aqueous Plant Extracts Using Polyamide Minicolumns". *Biochemistry and Molecular Biology International* vol.45 no.4, pp.791-796. Australia, 1998.07.
- <P985005> **Wong, Dobe C.C.; Wing-Ping Fong; Susanna S.T. Lee; Yun-Cheung Kong; Kin-Fai Cheng and Grant Stone.** "Induction of Estradiol-2-hydroxylase and Ethoxyresorufin-*O*-Deethylase by 3-Substituted Indole Compounds". *European Journal of Pharmacology* vol.362 no.1, pp.87-93. The Netherlands, 1998.11.
- <P990144> **Luk, Sharon C.W.; Sai-Ming Ngai; Stephen K.W. Tsui; Kwok-Pui Fung; Cheuk-Yu Lee and Mary M.Y. Waye.** "*In vivo* and *in vitro* Association of 14-3-3 Epsilon Isoform with Calmodulin: Implication for Signal Transduction and Cell Proliferation" *Journal of Cellular Biochemistry* vol.73, pp.31-35. USA, 1999.04.01.
- <P990178> **Ngan, F.; P. Shaw; P. But and J. Wang.** "Molecular Authentication of *Panax* Species" *Phytochemistry* vol.50, pp.787-791. 1999.02.
- <P990394> **Wan, David C.C.; L.K. Law; Denis T.M. Ip; W.T. Cheung; Walter K.K. Ho; Karl W.K. Tsim; R. Kay; J. Woo and C.P. Pang.** "Lack of Allelic Association of Dopamine D4 Receptor Gene Polymorphisms with Parkinson's Disease in a Chinese Population". *Movement Disorders* vol.14, pp.225-229. USA, 1999.
- <P990398> **He, Xian-Hui; Pang-Chui Shaw; Li-Hui Xu and Siu-Cheung Tam.** "Site-directed Polyethylene Glycol Modification of Trichosanthin: Effects on its Biological Activities, Pharmacokinetics, and Antigenicity". *Life Sciences* vol.64 no.14, pp.1163-1175. USA, 1999.
- <P991555> **He, Xian-Hui; Pang-Chui Shaw and Siu-Cheung Tam.** "Reducing the Immunogenicity and Improving the *in Vivo* Activity of Trichosanthin by Site-Directed Pegylation" *Life Sciences* vol.65 no.4, pp.355-368. USA, 1999.
- <P992054> **Wang, H.X.; T.B. Ng and V.E.C. Ooi.** "Studies on Purification of a Lectin From Fruiting Bodies of the Edible Shiitake Mushroom *Lentinus Edodes*". *The International Journal of Biochemistry & Cell Biology* vol.31, pp.595-599. USA, 1999.
- <P992515> **Kok, L.D.S.; S.K.W. Tsui; M. Waye; C.C. Liew; C.Y. Lee and K.P. Fung.** "Cloning and Characterization of a cDNA Encoding a Novel Fibroblast Growth Factor Preferentially Expressed in Human Heart". *Biochemical and Biophysical Research Communications* vol.255, pp.717-721. USA, 1999.02.24.

see also <P980996>, <P981939>, <P982009>, <P982088>, <P983162>, <P983305>, <P983306>, <P984815>, <P984875>, <P984934>, <P984979>, <P990184>, <P990397>, <P990406>, <P991522>, <P991533>, <P992516>, <P992655>, <P992666>

RESEARCH PROJECTS

The Role of Mitogen-activated Protein Kinases (MAPK) in Regulating Apoptosis of Eosinophils in Allergic Inflammation

✉ LAM Wai Kei Christopher • WONG Chun Kwok • HJELM Nils Magnus

☐ 1 November 1998

❖ CUHK Research Committee Funding

Eosinophils are the principal effector of late-phase inflammation in allergic diseases. In response to allergen sensitisation, cytokines IL-3, IL-5 and GM-CSF not only activate eosinophils but also prolong their life-span by inhibiting apoptotic cell death. Mitogen-activated protein kinases (MAPK) are a family of >12 kinases that mediate eukaryotic cell signal transduction. Among them ERK, JNK and p38 MAPK have been shown to affect apoptosis. It is possible that cytokines regulate eosinophilic growth and function via intracellular MAPK pathways.

This project aims to utilise our established eosinophil culture techniques to elucidate the role of MAPK pathways in regulating eosinophilic apoptosis in allergy, thereby linking and providing mechanisms for cytokine activation, eosinophilia and allergic inflammation. It will study the (1) activation of ERK, JNK and p38 MAPK in cultured and peripheral blood eosinophils by cytokines IL-3, IL-5 and GM-CSF, (2) relationship between the above MAPK activities and eosinophilic apoptosis, and (3) effect of MAPK inhibitors on apoptosis of eosinophils.

Elucidation of these intracellular controlled mechanisms will explain the immunopathogenesis of allergic diseases, and provide further biochemical basis for the design of pharmacological agents for treatment of allergy.

(MD98033)

Novel Analyte Assay in Experimental and Human Cataract

✉ LAM Wai Kei Christopher • PETERS T J*

☐ 31 December 1998

❖ UK/Hong Kong Joint Research Scheme, the British Council

Cataract is a major cause of morbidity World Wide. The importance of identifying risk factors, pathogenic mechanisms and preventative strategies has recently been reviewed. If a factor/therapy could be identified which delayed the onset by 10 yrs, the number of annual cataract operations World Wide has been estimated to decrease by 40%. We have recently shown that male alcohol misusers have an 8-fold higher risk for developing cataracts than control subjects. Various hypotheses have been put forward for the development of these cataract. These include

the accumulation of sugar alcohols. The GC-MS facilities developed by Professor NM Hjelm and colleagues in the Department of Chemical Pathology, Chinese University of Hong Kong will allow detailed analysis of normal and cataract lens extracts for these substances.

Experimental cataract will be induced by galactose feeding in mice (this model is established in the Department of Anatomy, Hong Kong University) and by chronic ethanol feeding in rats (this model is established in the Department of Clinical Biochemistry, King's College, London). Low molecular analytes including thiol, aldehydes, sugar alcohols will be extracted from the isolated lenses using methods to minimize degradation. After a preliminary purification using ion exchange resin/gel filtration, the concentrated extracts will be analysed and assayed using the state of the art GC-MS facilities in the Chinese University of Hong Kong. (MD98089)

Evaluation of Molecular Markers for Solid Organ Rejection

✉ LO Yuk Ming Dennis • HJELM Nils Magnus • PANG Chi Pui Calvin (Ophthalmology and Visual Sciences) • YEUNG Chung Kwong (Surgery) • CHAN Albert Yan Wo* • TONG Kwok Lung*

☐ 1 September 1998

❖ CUHK Research Committee Funding

We have recently described the presence of donor-specific DNA in the plasma of liver and kidney transplant recipients. As plasma DNA has been postulated as a marker of cell death, our observations open up the possibility that detection and quantitation of donor-specific DNA may be used as a novel marker for graft rejection. This project involves the development of new methods for donor-derived DNA quantitation and its correlation with rejection episodes following liver and kidney transplantation. The relationship between plasma donor-derived DNA with various immunosuppressive regimes and HLA mismatch between the donor and recipient will also be elucidated. The potential establishment of plasma DNA as a rejection marker will contribute significantly towards the monitoring of liver and kidney transplant. It has the advantage of being non-invasive, safe and rapid and represents a major step forward from conventional methods such as liver and kidney biopsy.

(MD98034)

Non-Invasive Prenatal Diagnosis

✉ LO Yuk Ming Dennis

☐ 1 September 1998

❖ ISIS Innovation Limited

This project aims to utilise the recent discovery that cell-free fetal DNA exists in the plasma and serum of pregnant women to develop new methods for non-invasive prenatal diagnosis. Efficient methods for DNA extraction from plasma and serum will be developed. Sensitive and quantitative polymerase chain reaction (PCR) based detection methods for fetal DNA will then be developed. These methodology will then be used to develop a system for the prenatal determination of paternally-inherited genetic polymorphisms in the fetus. This method may ultimately help to improve the safety of prenatal genetic diagnosis.
(MD98115C)

Genetic Predisposition to Breast Cancer in Chinese: Study of Mutations and Genotypes of BRCA1, Estrogen Receptor and Estradiol 17 Betadehydrogenase II Genes

- ✉ TANG Leung Sang Nelson • YEO Winnie (Clinical Oncology)
- ☐ 1 May 1999
- ❖ CUHK Research Committee Funding

This project studies the role of genetic predisposition in breast cancer among Chinese. Inherited mutations in high penetrant genes, like BRCA1 and BRCA2 confer an high absolute risk of breast cancer, and the life-time risk for breast cancer among mutation carriers is up to 85%. In addition, there are other cancer predisposition genes, which lead to a modest increase in cancer risk in the magnitude of 2 to 3 folds. Some of these candidate genes were identified by studying genotypes in case-control studies. From our previous limited investigation, some novel mutations in BRCA1 were found in Chinese patients. We propose to study the prevalence of these BRCA1 mutations in an extended sample of Chinese patients. In addition, the association of two other candidate genes, which are involved in estrogen bioactivity, and breast cancer risk will also be determined in a case-control study.
(MD98096)

Please refer to previous issues of this publication for more details of the following ongoing research at the department:

<u>Edition</u>	<u>Title/Investigators</u>
1996-97	Clinical Usefulness of a Novel Serum Marker, 1,5-anhydroglucitol in Monitoring Glycaemic Control (MD96111) ✉ ARUMANAYAGAM Manoharan • COCKRAM Clive Stewart (Medicine & Therapeutics)

1997-98	Combined Effects of Thyroid Hormone and Insulin on Na ⁺ ,K ⁺ -ATPase Isoform Expression in Rat Skeletal Muscle: A Possible Animal Model for Thyrotoxic Hypokalaemic Periodic Paralysis (MD97045) ✉ ARUMANAYAGAM Manoharan • COCKRAM Clive Stewart (Medicine & Therapeutics)
1996-97	Development and Application of an <i>in situ</i> PCR Method for the Detection of Mutations and DNA Polymorphisms in Single Intact Cells (MD96052) ✉ HJELM Nils Magnus • LO Yuk Ming Dennis
1997-98	Telemedicine Project (MD96202) ✉ HJELM Nils Magnus • LEE Chuen Kwun Joseph (School of Chinese Medicine) • TONG Fuk Kay Franklin (Information Engineering) • TSUI Hung Tat (Electronic Engineering) • ZHANG Yuanting (Electronic Engineering)
1996-97	Molecular Epidemiology of Diabetes Mellitus: Detection and Prevalence of a Mutation in Mitochondrial DNA (MD96109) ✉ LAM Ching Wan • PANG Chi Pui Calvin (Ophthalmology and Visual Sciences) • TSANG M. W.* • HJELM Nils Magnus
1997-98	Mutation Screening of a New Oncogene: The Human Smoothed (SMO) in Sporadic Basal Cell Carcinoma (MD97112) ✉ LAM Ching Wan • XIE J* • MCCORMICK F* • TO Ka Fai (Anatomical & Cellular Pathology) • YUEN W. F.* • LEE K. C.*
1997-98	Activation of Eosinophils in Allergy (MD97043) ✉ LAM Wai Kei Christopher • HJELM Nils Magnus
1997-98	Trafficking of Nucleated Cells between Fetus and Mother (CU97670) ✉ LO Yuk Ming Dennis • CHANG Mang Z. Allan (Obstetrics & Gynaecology) • HJELM Nils Magnus
1997-98	Development of a Rapid and Accurate Molecular Assay for the Diagnosis of Chromosomal Aneuploidies (MD97044)

- 1996-97
- ☞ LO Yuk Ming Dennis • HJELM Nils Magnus • LAM Ching Wan
- 1997-98
- The Role of *Androgen Receptor* and *Vitamin D Receptor* Genotypes on the Risk of Prostate Carcinoma and Patient Prognosis in Chinese Patients (MD97046)
- ☞ TANG Leung Sang Nelson • PANG Chi Pui Calvin (Ophthalmology and Visual Sciences) • CHAN Lung Wai (Surgery) • TO Ka Fai (Anatomical & Cellular Pathology)
- Detection of Tumor Cells and Tumor DNA in Peripheral Circulation in Patients with Breast Carcinoma (MD96110)
- ☞ TANG Leung Sang Nelson • PANG Chi Pui Calvin (Ophthalmology and Visual Sciences) • KING Wing Keung Walter (Surgery) • HJELM Nils Magnus

RESEARCH OUTPUTS AND PUBLICATIONS

- <P975043> **Chan, Lisa Y.S.; Y.T. Mak; B. Tomlinson; J.R.L. Masarei and Calvin C.P. Pang.** "Investigation of Mutations in the Lipoprotein Lipase Gene in Hypertriglyceridaemic Subjects". *1st Hong Kong Conference of Clinical Chemistry* Abs.p11. Hong Kong: Hong Kong Society of Clinical Chemistry, 1997.12.05.
- <P980806> **Lam, Christopher W.K.; Hin K. Fung; Lilian L.P. Vrijmoed; Lydia C.W. Lit; Mei C. Wong; John K.S. Woo and Nils M. Hjelm.** "Aetiology of Allergic Rhinitis in Hong Kong". *Allergology International* vol.47, pp.23-28. 1998.08.
- <P980825> **Tang, N.L.S.; Xiao G. and Lam C.W.K.** "Serum Zinc Concentration (sZn) in Patients with Acute Myocardial Infarction (AMI) and Its Prognostic Implications". *Clinical Chemistry* vol.44 no.6, Abstracts no.A157. Chicago, 1998.08.
- <P981078> **Tang, N.L.S.; J. Hui; L.K. Law; K.F. To; J.P.N. Ruiter; L.I. Jlst; R.J.A. Wanders; C.S. Ho; T.F. Fok; P.M.P. Yuen and N.M. Hjelm.** "Primary Plasmalemmal Carnitine Transporter Defect Manifested with Dicarboxylic Aciduria and Impaired Fatty Acid Oxidation". *Journal of Inherited Metabolic Disease* vol.21 no.4, pp.423-425. The Netherlands, 1998.07.
- <P982559> **Wong, Lee-Jun C.; Min-Hui Liang; Wuh-Liang Hwu and Ching-Wan Lam.** "Linkage Disequilibrium and Linkage Analysis of the Glucose-6-Phosphatase Gene". *Human Genetics* vol.103, pp.199-203. USA, 1998.
- <P982722> **Hjelm, N.M.** "Telemedicine: Academic and Professional Aspects". *Hong Kong Medical Journal* vol.4 no.3, pp.289-292. Hong Kong, 1998.09.03.
- <P982851> **Lo, Y.M. Dennis; N. Magnus Hjelm; Carrie Fidler; Ian L. Sargent; Michael F. Murphy; Paul F. Chamberlain; Priscilla M.K. Poon; Christopher W.G. Redman and James S. Wainscoat.** "Prenatal Diagnosis of Fetal RhD Status by Molecular Analysis of Maternal Plasma". *The New England Journal of Medicine* vol.339, pp.1734-1738. Waltham, USA, 1998.12.10.
- <P982853> **Panesar, N.S. and C.W. Poon.** "hCG: Its Pancreatic and Duodenal Receptors and *in vivo* Electrolyte Secretion in Female Rats" *American Journal of Physiology* vol.275, pp.G1430-1436. USA, 1998.12.
- <P983001> **Lo, Y.M. Dennis.** "Quantitative Assays for Telomerase: Means for Studying the End". *Clinical Chemistry* vol.44 no.12, pp.2399-2400. Washington DC, USA, 1998.12.
- <P983075> **Law, Wai-Keung; Sui-Fun Tong; Kwong-Wai Choy and Ching-Wan Lam.** "A Single Nucleotide Polymorphism (9678G→A) for Linkage Analysis of Acute Intermittent Prophyria". *2nd Hong Kong Conference of Clinical Chemistry* p.15. Hong Kong, 1998.12.

- <P983090> **Tang, N.** "Energy Cost of Acute Asthmatic Attack in Children". *The 4th Congress of Parenteral and Enteral Nutrition Society of Asia (PENSA) - Program and Abstracts* p.16. Hong Kong, 1998.12.
- <P983091> **Tang, N.L.S.; Chan C.K.; Gohel M.D.I.; Woo J. and Hjelm N.M.** "Vitamin B₂ and B₆ Status Among Hospital Inpatients". *The 4th Congress of Parenteral and Enteral Nutrition Society of Asia (PENSA) - Program and Abstracts* p.34. Hong Kong, 1998.12.
- <P983092> **Tang, N.L.S.; Chung M.L.; Hui E.; Lum C.M.; Or K.H.; Luk J.; Ching S.; Lau R.; Kong D.; Ling Y.H.; Elia M.; Woo J. and Hjelm N.M.** "Total Energy Expenditure (TEE) in Chronic Obstructive Airway Disease (COAD) Patients Undergoing Rehabilitation Program". *The 4th Congress of Parenteral and Enteral Nutrition Society of Asia (PENSA) - Program and Abstracts* p.46. Hong Kong, 1998.12.09.
- <P983093> **Tang, N.L.S.; Chan Y.K.; Hui E.; Lum C.M.; Or K.H.; Hjelm N.M. and Woo J.** "Evaluation of Empirically Derived Enteral Tube Feeding in Chronically Debilitated Patients". *The 4th Congress of Parenteral and Enteral Nutrition Society of Asia (PENSA) - Program and Abstracts* p.36. Hong Kong: The Parenteral and Enteral Nutrition Society of Asia, 1998.12.
- <P983094> **Tang, Nelson L.S.; J. Hui; Y. Ou; K.L. Cheung; L.K. Law; T.F. Fok; S.W. Brusilow; D.W. Bartholomew and N.M. Hjelm.** "A Symptomatic Ornithine Carbamyl-Transferase (OTC) Carrier in a Chinese Girl Due to an Inherited Heterozygote R141Q Mutation". *Abstracts of the 2nd Hong Kong Conference of Clinical Chemistry* p.21. Hong Kong: Hong Kong Society of Clinical Chemistry, 1998.12.
- <P983095> **Tang, N.L.S.; J. Hui; K.L. Cheung; L.K. Law; W.L. Yeung; T.F. Fok and N.M. Hjelm.** "The First Year Experience of Running a Metabolic Clinic in Hong Kong for Chinese Patients. A Preliminary Examination of Spectrum of Metabolic Diseases in Chinese". *Abstracts of the 2nd Hong Kong Conference of Clinical Chemistry* p.9. Hong Kong: Hong Kong Society of Clinical Chemistry, 1998.12.
- <P983110> **Chan, M.H.M.; C.W. Lam; N.L.S. Tang; P.J. Johnson and N.M. Hjelm.** "An Anaemic Woman with a Failing Heart". *Abstracts of the 2nd Hong Kong Conference of Clinical Chemistry* p.12. Hong Kong: Hong Kong Society of Clinical Chemistry, 1998.12.
- <P983222> **Lam, Ching-Wan.** "Activating Smoothed Mutations in Sporadic Basal Cell Carcinoma and Medulloblastomas". 論文發表於中國遺傳學會第五屆理事會青年工作委員會第二次會議暨學術討論會,主辦機構為中國遺傳學會青年工作委員會. 9 頁. 中國海南, 1998.12.
- <P983641> **Mak, Tony W.L.; Chi-Chung Shek; Chun-Chung Chow; Yun-Kwok Wing and Sing Lee.** "Effects of Lithium Therapy on Bone Mineral Metabolism: A Two-Year Prospective Longitudinal Study". *Journal of Clinical Endocrinology and Metabolism* vol.83 no.11, pp.3857-3859. USA, 1998.
- <P983741> **Mak, Ying-Tat; Chi-Pui Pang; Brian Tomlinson; Jun Zhang; Yuen-Shan Chan; Tony W.L. Mak and John R.L. Masarei.** "Mutations in the Low-Density Lipoprotein Receptor Gene in Chinese Familial Hypercholesterolemia Patients". *Arteriosclerosis Thrombosis and Vascular Biology* vol.18, pp.1600-1605. USA, 1998.10.
- <P983768> **Mak, Ying-Tat; Brian Tomlinson; Jun Zhang; Yuen-Shan Chan; Tony W.L. Mak; John R.L. Masarei and Chi-Pui Pang.** "Study of the Low Density Lipoprotein Gene in Chinese". *Abstracts of the 1st Congress of the Asian-Pacific Society of Atherosclerosis and Vascular Disease* vol.139, p.S68absFO86. Taipei, 1998.03.14.
- <P983769> **Chan, L.Y.S.; Y.T. Mak; L. Baum; B. Tomlinson; T.W.L. Mak; J.R.L. Masarei and C.P. Pang.** "Characterization of L252R and L252V in the Lipoprotein Lipase Gene: Studies of Catalytic Function of the Mutant Proteins by *in vitro* Expression". *Abstracts of the 1st Conference Recent Progress in Molecular Biology Technology* p.69. Singapore, 1998.03.15.

- <P983772> **Chan, L.Y.S.; Y.T. Mak; B. Tomlinson; T.W.L. Mak; W.M. Tsang; J.R.L. Masarei and C.P. Pang.** "Identification of Novel and Reported Mutations in the Lipoprotein Lipase Gene in Chinese Hypertriglyceridaemic Subjects by Polymerase Chain Reaction-Single Strand Conformation Polymorphism (PCR-SSCP)". Paper presented in the 1st Conference Recent Progress in Molecular Biology Technology, 1998.03.15.
- <P983929> **Baum, Larry; Lan Chen; Ho-Keung Ng; Yuen Shan Chan; Ying Tat Mak; Jean Woo; Helen F.K. Chiu and Chi Pui Pang.** "Low Density Lipoprotein Receptor Related Protein Gene Exon 3 Polymorphism Association with Alzheimer's Disease in Chinese". *Neuroscience Letters* vol.247, pp.33-36. Ireland, 1998.
- <P983944> **Baum, Larry; Zhi-Ya Dong; Kwong Wai Choy; Chi Pui Pang and Ho-Keung Ng.** "Low Density Lipoprotein Receptor Related Protein Gene Amplification and 766T Polymorphism in Astrocytomas". *Neuroscience Letters* vol.256, pp.5-8. Ireland, 1998.
- <P983945> **Baum, Larry and Ho-Keung Ng.** "A New Kind of Alzheimer's Disease Plaque". *Advances in Anatomic Pathology* vol.5 no.3, pp.170-174. 1998.
- <P983978> **Panesar, N.S.; C.W. Poon; C.T. Liew; G.W.K. Wong and N.M. Hjelm.** "Histochemical, Clinical, and *in vitro* Cell Responses in a Neonate with Persistent Hyperinsulinaemic Hypoglycaemia of Infancy" *Archives of Diseases in Childhood Fetal and Neonatal* vol.79 no.2, pp.F141-F144. London, UK, 1998.
- <P984024> **Chan, Lisa Y.S.; Ying T. Mak; Brian Tomlinson; Larry Baum; Man W. Tsang; John R.L. Masarei and Chi-Pui Pang.** "Screening for Mutations in the Lipoprotein Lipase Gene by Polymerase Chain Reaction and Single Strand Conformation Polymorphism". *Abstracts of the 2nd Hong Kong Conference of Clinical Chemistry* p.4. Hong Kong, 1998.
- <P984026> **Mak, Ying-Tat; Jun Zhang; Lisa Yuen-Shan Chan; Brian Tomlinson; Tony W.L. Mak; John R.L. Masarei and Calvin C.P. Pang.** "Detection of Mutations in the Low Density Lipoprotein Receptor Gene in Chinese Familial Hypercholesterolaemia Patients by Single Strand Conformation Polymorphism". *Proceedings of 1st Hong Kong Medical Genetics Conference 1997* ed. by S.T.S. Lam 1998.
- <P984027> **Chan, Y.S.; Ying-Tat Mak; Brian Tomlinson; John Masarei and C.P. Pang.** "Multiple Gene Defects in Five Siblings Having Hyperlipidaemia". *Proceedings of 1st Hong Kong Medical Genetics Conference 1997* ed. by S.T.S. Lam, M.H.Y. Tang, I.F.M. Lo and W.K. Chan. pp.95-98. Hong Kong, 1998.
- <P984028> **Baum, Larry; E.C.W. Lam; P. Poon; J. Keung; Dennis S.C. Lam and C.P. Pang.** "Mitochondrial Mutation in Leber's Hereditary Optic Neuropathy". *Abstracts of the Hong Kong Ophthalmological Symposium 1998* p.42. Hong Kong, 1998.
- <P984029> **Choy, K.W.; Pang C.P.; Tang L.S.N.; Yeo W.; Suen M.; King W.K.K.; Johnson P. and Hjelm M.** "Sequence Alterations in the *BRCA1* gene in Breast Cancer Patients". *Abstracts of the 2nd Hong Kong Conference of Clinical Chemistry* p.6. Hong Kong, 1998.
- <P984030> **Poon, Priscilla M.K.; Qian L. Chen; Kelly Y.C. Lai; C.H. Lau; C.K. Wong and C.P. Pang.** "Interspersion of AGG Trinucleotide in the *FMR1* Gene". *Abstracts of the 2nd Hong Kong Conference of Clinical Chemistry* P16. Hong Kong, 1998.
- <P984032> **Lam, Ching-Wan; Min-Hui Liang; Chi-Pui Pang; Sui-Fan Tong and Lee-Jun C. Wong.** "A Novel *Dral* Polymorphism in the 3' Untranslated Region of Human Glucose-6-Phosphatase Gene: Useful for Carrier Detection and Prenatal Diagnosis of Glycogen Storage Disease Type 1A" *Clinical Genetics* vol.53, pp.502-503. Denmark, 1998.
- <P984033> **Lo, Y.M. Dennis; Mark S.C. Tein; Calvin C.P. Pang; Chung K. Yeung; Kwok-Lung Tong and N. Magnus Hjelm.** "Presence of Donor-Specific DNA in Plasma of Kidney and Liver-Transplant Recipients". *The Lancet* vol.351, pp.781-784. UK, 1998.

- <P984037> **Lai, Wai-Kai; Chi-Pui Pang; Lap-Kay Law; Raymond Wong; Chi-Kong Li and Patrick Man-Pan Yuen.** "Routine Analysis of Plasma Busulfan by Gas Chromatography-Mass Fragmentography". *Clinical Chemistry* vol.44 no.12, pp.2506-2510. USA, 1998.
- <P984038> **Tang, N.L.S.; Yeung, V.T.F.; Cockram C.S. and Pang C.P.** "Determination of the Risk for Familial Disease in Ret Mutation-Negative Patients with Medullary Thyroid Cancer". *Journal of Internal Medicine* vol.244, pp.185-187. USA, 1998.
- <P984136> **Poon, Priscilla M.K.; Qian L. Chen; Kelly Y.C. Lai; Chung-Kwong Wong and Chi-Pui Pang.** "CGG Repeat Interruptions in the *FMR1* Gene in Patients with Infantile Autism" *Clin Chem Lab Med* vol.36, pp.649-653. Germany, 1998.
- <P984757> **Poon, Priscilla M.K.; Z. Zhao; C.H. Yin; Q.L. Chen; Kelly Y.C. Lai; C.H. Lau; C.K. Wong; Stephen T.S. Lam and Calvin C.P. Pang.** "CGG Repeat Pattern in the *FMR-1* Gene in Mentally Retarded Patients with and without Infantile Autism". *Proceedings of 1st Hong Kong Medical Genetics Conference 1997* ed. by S.T.S. Lam, M.H.Y. Tang, I.F.M. Lo and W.K. Chan. pp.51-63. Hong Kon: Hong Kong Society of Medicine Genetics, 1998.
- <P990014> **Lo, Y.M. Dennis** "Du Sang Maternel Pour Le Diagnostic Prénatal". *Biofutur* vol.185, pp.30-33. France, 1999.01.
- <P990032> **Lo, Y.M. Dennis; Tse N. Leung; Mark S.C. Tein; Ian L. Sargent; Jun Zhang; Tze K. Lau; Christopher J. Haines and Christopher W.G. Redman.** "Quantitative Abnormalities of Fetal DNA in Maternal Serum in Preeclampsia". *Clinical Chemistry* vol.45 no.2, pp.184-188. USA, 1999.02.
- <P990033> **Law, Wai-Keung; Kwong-Wai Choy and Ching-Wan Lam.** "Novel Single Nucleotide Polymorphism (9678G→A) for Linkage Analysis of Acute Intermittent Porphyria". *Clinical Chemistry* vol.45 no.2, pp.308-309. 1999.02.
- <P990052> **Lo, Y.M. Dennis; Jun Zhang; Tse N. Leung; Tze K. Lau; Allan M.Z. Chang and N. Magnus Hjelm.** "Rapid Clearance of Fetal DNA from Maternal Plasma". *American Journal of Human Genetics* vol.64, pp.218-224. Chicago, USA, 1999.01.
- <P990068> **Lam, Ching-Wan; Jingwu Xie; Ka-Fai To; Ho-Keung Ng; Kam-Cheong Lee; Nancy Wah-Fun Yuen; Pak-Leong Lim; Lisa Yuen-Shan Chan; Sui-Fan Tong and Frank McCormick.** "A Frequent Activated Smoothed Mutation in Sporadic Basal Cell Carcinomas". *Oncogene* vol.18, pp.833-836. UK, 1999.
- <P990167> **Lo, Y.M. Dennis; Lisa Y.S. Chan; Kwok-Wai Lo; Sing-Fai Leung; Jun Zhang; Anthony T.C. Chan; Joseph C.K. Lee; N. Magnus Hjelm; Philip J. Johnson and Dolly P. Huang.** "Quantitative Analysis of Cell-free Epstein-Barr Virus DNA in Plasma of Patients with Nasopharyngeal Carcinoma". *Cancer Research* vol.59, pp.1188-1191. USA, 1999.03.15.
- <P990256> **Lam, Ching-Wan; Bik-Yan Chan and Sui-Fan Tong.** "Definition of the Correct Sequence in the Donor Splice Site of Intron 2 in the Human Glucose 6-Phosphate Translocase Gene". *Federation of European Biochemical Societies* vol.445, pp.449-450. 1999.
- <P990290> **Tang, Nelson L.S.; V. Ganapathy; Xiang Wu; Joannie Hui; Pankaj Seth; Patrick M.P. Yuen; T.F. Fok and N.M. Hjelm.** "Mutations of *OCTN2* an Organic Cation/Carnitine Transporter, Lead to Deficient Cellular Carnitine Uptake in Primary Carnitine Deficiency" *Human Molecular Genetics* vol.8 no.4, pp.655-660. UK, 1999.
- <P990623> **Lam, Ching-Wan.** "Origin of the Japanese Population". *Science* vol.284 no.5417, p.1123. 1999.
- <P990699> **Baum, Larry; Lan Chen; Eliezer Masliah; Yuen Shan Chan; Ho-Keung Ng and Chi Pui Pang.** "Lipoprotein Lipase Mutations and Alzheimer's Disease". *American Journal of Medical Genetics* vol.88, pp.136-139. USA, 1999.

- <P990706> **Arumanayagam, M.; Chan S.; Tong S. and Sanderson J.** "Effects of Carvedilol and Metoprolol on Plasma Total Antioxidant Status (TAS), Erythrocyte Superoxide Dismutase (SOD) and Glutathione Peroxidase (GPX) Activity in Chronic Heart Failure". *Clinical Chemistry and Laboratory Medicine* vol.37 special suppl., p.S324. New York, USA, 1999.06.06.
- <P990726> **Tang, N.L.; Hui J.; To K.F.; Ng H.K.; Hjelm N.M. and Fok T.F.** "Severe Hypokalemic Myopathy in Gitelman's Syndrome". *Muscle Nerve* vol.22 no.4, pp.545-547. 1999.04.
- <P990802> **Mano, Arumanayagam and Michael Rogers.** "Platelet Sodium Pump and Sodium Potassium Cotransport Activity in Nonpregnant, Normotensive, and Hypertensive Pregnant Women". *Hypertension in Pregnancy* vol.18 no.1, pp.35-44. New York, USA, 1999.
- <P990926> **Yang, T.; Lam C.W.; Tsang M.W. and Pang C.P.** "Genetic Variation of the Mitochondrial DNA in Non-Insulin-Dependent Diabetes Mellitus". *Clinical Chemistry Laboratory of Medicine* vol.37 special suppl., p.S159-M169. Germany, 1999.
- <P990930> **Poon, Priscilla M.K.; C.P. Pang; Qian L. Chen; Nan Zhong; Kelly Y.C. Lai; C.H. Lau; C.K. Wong and W. Ted Brown.** "FRAXAC1 and DXS548 Polymorphisms in the Chinese Population". *American Journal of Medical Genetics* vol.84, pp.208-213. USA, 1999.
- <P990931> **Zhong, Nan; Weina Ju; Weimin Xu; Lingling Ye; Yan Shen; Guangyun Wu; Shi-Han Chen; Runming Jin; Xiao-Feng Hu; Aide Yang; Xixian Liu; Priscilla Poon; Calvin Pang; Yu Zheng; Li Song; Pei Zhao; Bojing Fu; Hongjuan Gu and W. Ted Brown.** "Frequency of the Fragile X Syndrome in Chinese Mentally Retarded Populations is Similar to that in Caucasians". *American Journal of Medical Genetics* vol.84, pp.191-194. USA, 1999.
- <P990933> **Tang, N.L.S.; Chi-Pui Pang; Winnie Yeo; Kwong-Wai Choy.; P. Kuen Lam; Michael Suen; Lap K. Law; Walter W.K.King; Philip Johnson and Magnus Hjelm.** "Prevalence of Mutations in the BRCA1 Gene Among Chinese Patients With Breast Cancer". *Journal of the National Cancer Institute* vol.91 no.10, pp.882-885. USA, 1999.
- <P990934> **Poon, P.M.; Chen Q.L.; Lai K.Y.; Wong C.K. and Pang C.P.** "CGG Configuration in the FMR1 Gene". *Clin Chem Lab Med* vol.37 Special suppl., p.S147-M122. Germany, 1999.
- <P990947> **Baum, L.; D.S.C. Lam; T.C. Lau; D.S.P. Fan; P.M.K. Poon and C.P. Pang.** "PAX6 Mutations in Aniridia". *Invest Ophthalmol Vis Sci* vol.40 no.4, pp.S468-2463. USA, 1999.
- <P991047> **Hjelm, Magnus.** "Benefits and Drawbacks of Telemedicine". *Introduction to Telemedicine* ed. by Richard Wootton and John Craig. pp.139-157. UK: The Royal Society of Medicine, 1999.
- <P991763> **Wong, C.K.; C.Y. Ho; C.W.K. Lam; J.P. Zhang and N.M. Hjelm.** "Differentiation of a Human Eosinophilic Leukemic Cell Line, EoL-1: Characterization by the Expression of Cytokine Receptors, Adhesion Molecules, CD95 and Eosinophilic Cationic Protein (ECP)". *Immunology Letters* vol.68, pp.317-323. 1999.
- <P992356> **Arumanayagam, Mano; Skiva Chan; Shirley Tong and John Sanderson.** "Effects of Carvedilol and Metoprolol on Plasma Total Antioxidant Status (TAS), Erythrocyte Superoxide Dismutase (SOD) and Glutathione Peroxidase (GPX) Activity in Chronic Heart Failure". *Journal of the Hong Kong College of Cardiology* vol.7, p.66. Hong Kong: Medcom Limited, 1999.04.
- <P992449> **Arumanayagam, M.; Tam W.H.; Tong S. and Rogers M.R.** "Plasma 1,5-Anhydroglucitol in Gestational Diabetes Mellitus". *Clinical Chemistry and Laboratory Medicine* vol.37 no.1, pp.S1-S576. Italy: International Federation of Clinical Chemistry and Laboratory Medicine, 1999.06.

see also <P974966>, <P974967>, <P974969>, <P974970>, <P974971>, <P974976>, <P981077>, <P981079>, <P982505>, <P982510>, <P982557>, <P982716>, <P982717>, <P982752>, <P982963>, <P982964>, <P983324>, <P983451>, <P983459>, <P983466>, <P983467>, <P983770>, <P983771>, <P983859>.

<P983934>, <P983943>, <P984021>, <P984025>, <P984041>, <P984128>, <P984161>, <P984162>, <P984898>, <P984942>, <P990051>, <P990394>, <P990583>, <P990592>, <P990610>, <P990660>, <P990691>, <P990927>, <P990929>, <P990946>, <P990949>, <P990950>, <P991087>, <P991108>, <P991110>, <P991132>, <P991543>, <P991764>, <P991882>, <P992450>

RESEARCH PROJECTS

A Randomized, Double-Blind, Placebo Controlled Study to Evaluate the Effect of Cisplatin / Epinephrine Injectable Gel (Product MPI 5010) When Administered Intratumorally for Achievement of Treatment Goals in Recurrent or Refractory Squamous Cell Carcinoma of the Head and Neck

✉ CHAN Anthony Tak Cheung • LEUNG Wai Tong Thomas • MOK Shu Kam Tony • YU Simon* • JOHNSON Philip James

☐ 1 July 1998

❖ Matrix Pharmaceutical Inc.

The main objectives of this trial are to compare the effect of MPI 5010 to placebo gel on local tumor volume, to assess achievement of an identified improvable primary treatment goal selected for the most troublesome tumor in patients with recurrent or refractory squamous cell carcinoma of the head and neck following up to 6 weekly intratumoral treatments of cisplatin/epinephrine (cisplatin/adrenaline) gel (MPI 5010) compared to treatment with placebo gel, to compare the time to response and the time to progression for the most troublesome tumor after local treatment with MPI 5010 as compared to placebo gel, and to assess improvement or stabilization in quality of life as measured by FACT-H&N. (MD98011)

Specific Inactivation of a Suppressor Gene PML in Small Cell Lung Cancer

✉ CHAN Yeuk Hon John

☐ 1 November 1998

❖ Research Grants Council

Tumor suppressor genes are known to play crucial roles in the pathogenesis of many types of cancer. We have recently analyzed the protein levels of the growth and transformation suppressor gene, PML (Promyelocytic Leukemia), in human lung cancer using immunohistochemical staining. Our preliminary studies demonstrated that PML expression was almost completely absent in all of the small cell lung cancer (SCLC) samples examined, while enhanced expression was found in adeno- and squamous cell carcinomas of the lung, and moderate expression was found in normal lung. The specific inactivation of PML may be an obligatory step in the tumorigenesis of SCLC. We propose to: (1) confirm if the expression of the PML protein is suppressed in a larger cohort of SCLC tissues and cell lines; (2) determine if the levels of mRNA and the structure of the *PML* gene are altered in SCLC; 3) transfect the wild-type *PML* cDNA into SCLC cells in order to

determine if this suppressor would specifically inhibit cell growth and the transformed phenotypes of SCLC. The identification of this molecular defect may permit the development of new strategy for early diagnosis and therapy of one of the most common neoplasms in Hong Kong and Southern China. (CU98280)

Analysis for Chromosomal Anomalies in Hepatocellular Carcinoma by Conventional Cytogenetics and Comparative Genomic Hybridization

✉ JOHNSON Philip James • WONG Nathalie • LAI Bo San Paul (Surgery)

☐ 1 October 1998

❖ Research Grants Council

Chromosomal aberrations associated with hepatocellular carcinoma (HCC) have received very little investigation to date. This is largely due to the low mitotic index of cultured hepatocytes and the poor chromosome morphology obtained that rendered banding analysis difficult. So far, only two complete karyotypes of HCC have been reported. With the recent development of comparative genomic hybridization (CGH) it is now possible to detect losses, gains and amplifications of DNA sequences in tumours in the absence of cell culture. The technique of CGH has been developed within our department, and we now propose to employ CGH to the investigation of genomic imbalances in HCC. However, the detection of chromosomal translocations and the ability to distinguish between different sub-clones are limited in CGH, and such analysis remain the strength of conventional karyotyping. The cytogenetics team of the Department of Clinical Oncology has recently achieved much success on the cell culture and chromosomal analysis of HCC. Successful HCC culture was attained in all cases attempted, and chromosomal anomalies of both numerical and structural were identified. We therefore propose in the present investigation to perform CGH and conventional karyotyping simultaneously on HCC specimens. This parallel study of CGH and karyotypic analyses is expected to provide us with a comprehensive and complementary insight into the genetic alterations that are involved in HCC. (CU98264)

The Study of Genomic Alterations in Breast Cancer by Comparative Genomic Hybridization

✉ JOHNSON Philip James • WONG Nathalie • TANG Leung Sang Nelson (Chemical Pathology)

☐ 1 April 1999

❖ CUHK Research Committee Funding

The incidence of breast cancer is rising rapidly in Hong Kong and promises soon to reach the epidemic proportions seen in the West. There are, however, several marked differences in the cancer epidemiology and age-specific incidence of breast cancers in the Chinese and those from the West. A higher proportion of cases is found to present before the age of 45 in the Chinese population, while in most Western countries, the incidence of breast cancer amongst aged 55-64 is three times that of 35-44. Published literature have suggested frequent deletions of 8p, 16q, 13q, 17p and 18q in breast cancer, however the genetic changes underlying the development and progression of this malignancy is not well understood. Conventional cytogenetics can provide an overall view on the genetic aberrations present. Although the success rate and sensitivity of G-banding analysis on breast cancers have improved during the last years, the frequency of aberrations may still be underestimated because of the inability to obtain analysable metaphase cells from some tumours. Comparative genomic hybridization (CGH) is a molecular cytogenetic technique that allows a rapid survey of the entire tumour genome for region of DNA sequences gains and losses without the need of cell culture. We therefore propose, in the present study, to apply CGH analysis to the study of genomic aberrations in breast cancers of Hong Kong. A better understanding on the genetic alterations of our local breast cancers should have important implications in diagnosis, prognosis and treatment strategies. (MD98098)

A Specific Isoform of Alpha-fetoprotein for the Diagnosis of Hepatocellular Carcinoma

- ✉ JOHNSON Philip James • POON Chuen Wai
- ☐ 7 June 1999
- ❖ Oxford GlycoSciences

Alpha-fetoprotein (AFP) is a glycoprotein that is widely used as a serum tumour marker in the diagnosis of hepatocellular carcinoma (HCC or 'hepatoma'), a common and highly malignant tumour in China, including Hong Kong. If detected early, HCC can often be cured by surgery. Measurement of the serum total AFP level is the only currently available routine biochemical assay for the diagnosis of HCC. However, because over 80% of HCCs arise in patients with a cirrhotic liver, a condition which may, by itself, also lead to the elevation of serum total AFP, the specificity of serum total AFP for early diagnosis of HCC is low. To help overcome this shortcoming we have previously examined the qualitative nature of AFP. AFP has a constant protein core with heterogeneous carbohydrate side-chains, which define different AFP glycoforms. Some of these glycoforms appear relatively specific for HCC ("hepatoma specific-AFP" (HS-AFP)). We successfully developed a technique involving

isoelectric focusing (IEF) to detect HS-AFP. We now plan to develop a quantitative assay with improved diagnostic specificity, which can measure the serum levels of HS-AFP, and thereby differentiate between the cirrhosis and HCC. (MD98128)

Universal DNA Amplification by Degenerate Oligonucleotide-Primed PCR in the Study of Genomic Aberrations in Nasopharyngeal Carcinoma

- ✉ MOK Shu Kam Tony • WONG Nathalie • TO Ka Fai (Anatomical & Cellular Pathology)
- ☐ 1 September 1998
- ❖ CUHK Research Committee Funding

Nasopharyngeal carcinoma (NPC) is a common tumour in southern China, including Hong Kong. It is characterised by a strong association with Epstein-Barr virus (EBV) and has a young peak incidence. The genetic changes underlying the development and progression of NPC are still not well understood, although molecular studies have revealed frequent deletions on chromosomes 3p, 9p, 11q and 14q. Cytogenetic information on NPC has been little. This is largely due to the poor tumour growth *in vitro*. A better understanding on the genetic changes of NPC is believed to have important implications in diagnosis, prognosis and treatment strategies. Comparative genomic hybridization (CGH) is a powerful molecular cytogenetic technique that allows a rapid survey of the entire tumour genome for region of DNA sequences gains and losses without the need of cell culture. The technique of CGH is well established within our department. Attempts to carry out CGH analysis on primary NPC tissues have, however, been hampered by the normal lymphocytes infiltration, a well-known phenomenon associated with EBV-related carcinomas. We therefore propose, in the present study, to microdissect the malignant NPC colonies from tissue sections and to universally amplify this small amount of target DNA by Degenerate Oligonucleotide Primed (DOP)-PCR reaction before subsequent CGH analysis. In this way, we aim to reduce the amount of contaminating normal DNA within the tumour genome and return be able to study the genomic imbalances without interference. (MD98037)

OGT 719-003 HCC Study

- ✉ MOK Shu Kam Tony • LEUNG Wai Tong Thomas • JOHNSON Philip James
- ☐ 1 February 1999
- ❖ Oxford Glycosciences (UK) Ltd.

The is a phase I/II study to investigating the efficiency of OG7-711 is treatment of advanced HCC. (BL98040)

A Randomized Phase II Study of Gemcitabine Plus Oral Etoposide Versus Gemcitabine Plus Cisplatin in Treatment of Advanced Non-Small Cell Lung Cancer

- ✉ MOK Shu Kam Tony
- 1 February 1999
- ❖ Eli Eilly

This is a randomized study of cisplatin versus non-cisplatin based treatment using gemcitabine, a relatively less toxic novel cytotoxic drug. The primary endpoint is toxicity and quality of life and secondary endpoint includes response and survival. Development of this randomized study is based on the results of our last phase II study on use of gemcitabine and oral etoposide in treatment of advanced non-small cell lung cancer. (MD98144)

A Prospective Study Using Sequencing Analysis to Determine Mutation Variants of Hepatitis B Virus (HBV) Genome and their Incidence in Cancer Patients with HBV Reactivation during Chemotherapy

- ✉ YEO Winnie • STEINBERG Joyce Leta# • ZHONG Sheng • TAM Siu Lun John (Microbiology) • CHAN Yeuk Hon John • JOHNSON Philip James
- 1 January 1999
- ❖ CUHK Research Committee Funding

Background: In Hong Kong, up to 15% of the population are hepatitis B carriers. Patients who are chronic carriers of the HBV with a mutation in nucleotide (nt) 1898 (G to A) in the precore (preC) region often develop more severe liver disease. This is thought to be due to rapid selection and enhanced replication ability of the mutant strain. In addition, previous reports have also suggested that the promoter region and HBx of HBV genome appears to be associated with fulminant disease in chronic carriers. In cancer patients undergoing cytotoxic therapy, reactivation of the hepatitis B virus (HBV) is a well described complication of chemotherapy which sometimes leads to hepatic failure. There is very little Information published about chemotherapy patients reactivating HBV with a mutant form of the virus. With cancer as the major cause of mortality in this area, many patients who are hepatitis B carrier will be exposed to cytotoxic therapy as part or all of the treatment, it is important to establish the role of viral B mutants in the process of HBV reactivation during chemotherapy.

Objectives: (1) To identify the type of viral genome mutations and to estimate their incidence in chronic hepatitis B carriers who develop HBV reactivation during chemotherapy. (2) To correlate the laboratory findings of individual mutation in relation to the clinical outcome, i.e. the severity of hepatic impairment. (3) To establish a background information for future investigation into the role of these mutant viruses in relation to the mechanisms of HBV reactivation during chemotherapy.

Methods: We propose to apply direct DNA sequencing of the polymerase chain reaction products of the precore (pre C), promoter and HBx regions of the HBV-DNA on serum samples of patients who develop HBV reactivation during chemotherapy. Laboratory findings will then be correlated with clinical outcome of individual patient. (MD98038)

Please refer to previous issues of this publication for more details of the following ongoing research at the department:

<u>Edition</u>	<u>Title/Investigators</u>
1995-96	Hepatocellular Carcinoma Health Care Services (MD95174) ✉ CHAN Anthony Tak Cheung • YEO Winnie • JOHNSON Philip James • HAZLETT Clarke Blaine (Office of Educational Services)
1996-97	Cell Kinetic Studies in Undifferentiated Nasopharyngeal Carcinoma and the Implications for Clinical Management (CU96636) ✉ CHAN Anthony Tak Cheung • TEO Man Lung Peter • LEUNG Wai Tong Thomas • CHANG Alexander Russell (Anatomical & Cellular Pathology) • JOHNSON Philip James
1997-98	Detection, Purification and Identification of Isoforms of Serum Glycoproteins: Use as Diagnostic and Dedifferentiation Markers in Cancer (CU97654) ✉ CHAN Anthony Tak Cheung • JOHNSON Philip James • HJELM Nils Magnus (Chemical Pathology) • HO Chung Shun (Chemical Pathology)
1997-98	An Open-Label Phase II Study of a 28-day Oral Regimen of 5-Fluorouracil Plus 776C85 in Patients with Advanced Nasopharyngeal Carcinoma (FUMB2011) (MD97180)

- ✎ CHAN Anthony Tak Cheung •
 LEUNG Wai Tong Thomas •
 JOHNSON Philip James
- 1996-97 The Application of Comparative Genomic Hybridisation for the Detection of Genomic Imbalances in Nasopharyngeal Carcinoma (CU96637)
- ✎ LEUNG Sing Fai • WONG Nathalie
 • HUANG POON Wai Sin Dolly
 (Anatomical & Cellular Pathology) •
 TSAO George* • JOHNSON Philip
 James
- 1997-98 The Role of Biological Markers as Prognosticators in Undifferentiated Nasopharyngeal Carcinoma (MD97114)
- ✎ CHAN Anthony Tak Cheung • HO
 King Wah Stephen* • TEO Man
 Lung Peter • CHIU Kwok Wing
 Samuel • JOHNSON Philip James
- 1997-98 Functional Analysis of a New Gene (BRE) Responsive to DNA Damage and Retinoic Acid, and its Interactions with the TNF Receptor (CU97672)
- ✎ CHAN Yeuk Hon John
- 1997-98 Aberrant Telomerase Activity in Malignant Tumors (MD97041)
- ✎ CHAN Yeuk Hon John
- 1996-97 Novel Mutations in HBV PreS2/S Gene in Hepatocellular Carcinomas: Potential Induction of the Transactivator Function During Oncogenesis (MD96044)
- ✎ JOHNSON Philip James • CHAN
 Yeuk Hon John
- 1997-98 A Pilot Study of 5-Azacytidine in Patients with Relapsed and/or Refractory EBV-Associated Malignancies (MD97011)
- ✎ JOHNSON Philip James •
 AMBINDER R* • WICKHAM
 Nicholas William Rupert# • LEUNG
 Wai Tong Thomas • CHAN
 Anthony Tak Cheung • MOK Shu
 Kam Tony • CHOW John Hei Sing
 (Anatomical & Cellular Pathology) •
 FLINN I* • MANN R*
- 1996-97 Randomised Trial of Radiotherapy Alone Versus Concomitant Radiotherapy and Chemotherapy in Locoregional Advanced Nasopharyngeal Carcinoma (MD96152)
- ✎ LEUNG Wai Tong Thomas • CHAN
 Anthony Tak Cheung • TEO Man
 Lung Peter • LEUNG Sing Fai
- 1997-98 T-Cell Immunotherapy for Advanced Nasopharyngeal Carcinoma: A Pilot Study of Immunisation with LMP2 Peptide Epitopes Presented on Autologous Dendritic Cells in Patients with Metastatic or Locally Recurrent Nasopharyngeal Carcinoma (MD97144)
- ✎ JOHNSON Philip James • CHAN
 Anthony Tak Cheung •
 RICKINSON Alan B.* • LEE
 Steven P.*
- 1996-97 A Phase II Study of Temozolomide (SCH 52365) in the Treatment of Patients with Advanced Nasopharyngeal Carcinoma (MD96220C)
- ✎ LEUNG Wai Tong Thomas • CHAN Anthony Tak Cheung
- 1996-97 An Open Label Phase II Study to Evaluate a 28 Days Regimen of Oral 5-Fluorouracil (5FU) Plus 776C85 in Patients with Inoperable Hepatocellular Carcinoma (MD96156)
- ✎ LEUNG Wai Tong Thomas •
 JOHNSON Philip James • LAU
 Wan Yee Joseph (Surgery) • MOK
 Shu Kam Tony • CHAN Anthony
 Tak Cheung • YEO Winnie • LAM
 Shun Chiu Dennis (Ophthalmology
 and Visual Sciences)
- 1997-98 The Prognostic Significance of Serum Levels of Soluble ICAM-1 in Patients with Primary Extranodal Non-Hodgkin's Lymphomas (MD97040)
- ✎ JOHNSON Philip James • LEI Ieng-
 Kit Kenny*
- 1996-97 Phase III Randomised Trial of ⁹⁰Yttrium-Microspheres Selective Internal Radiation Versus Systemic Doxorubicin in the Treatment of Inoperable Hepatocellular Carcinoma (MD96157)
- ✎ LEUNG Wai Tong Thomas • LAU
 Wan Yee Joseph (Surgery) •
 JOHNSON Philip James • HO S.* •
 CHAN M.* • CHAN Anthony Tak

- Cheung • YEO Winnie • MOK Shu Kam Tony • LEUNG Nancy*
- 1997-98 A Two Stage Phase II Safety and Efficacy Study of Intradose (Cisplatin/Epinephrine) Injectable Gel (MPF 5010) Administered to Patients with Unresectable Primary Hepatocellular Carcinoma (MD97013)
 ✎ LEUNG Wai Tong Thomas • JOHNSON Philip James • YU S.* • LAU Wan Yee Joseph (Surgery) • CHAN Anthony Tak Cheung • MOK Shu Kam Tony • YEO Winnie • TANG Mei Yee
- 1997-98 A Multicentre, Randomised, Phase III Study Comparing the Combination of Recombinant Human Interferon- β 1a and 5-Fluorouracil to Standard Therapy in the Treatment of Advanced Colorectal Cancer (MD97145)
 ✎ LEUNG Wai Tong Thomas • CHAN Anthony Tak Cheung
- 1997-98 A Randomised Open-label Phase III Study of a 28-day Oral Regimen or 776C85/5-Fluorouracil Versus Intravenous 5-Fluorouracil Plus Leucovorin as First-time Therapy in Patients with Advanced Colorectal Cancer (Protocol No.FUMB3002) (MD97178C)
 ✎ LEUNG Wai Tong Thomas • JOHNSON Philip James • CHAN Anthony Tak Cheung • YEO Winnie
- 1996-97 Investigation of Possible Subtypes of Prostatic Specific Antigen Related to Prostatic Cancer and Benign Prostatic Hypertrophy by Isoelectric Focusing Technique (MD96045)
 ✎ MOK Shu Kam Tony • LEUNG Wai Tong Thomas • HO Stephen K. W. • CHAN Siu Foon Peter (Surgery) • JOHNSON Philip James
- 1996-97 Phase II Study of Gemcitabine and Oral Etoposide in Treatment of Advanced Non-small Cell Lung Cancer (MD96154)
 ✎ MOK Shu Kam Tony • CHAN Anthony Tak Cheung • YEO Winnie • YIM Ping Chuen Anthony (Surgery) • HUI P.* • JOHNSON Philip James
- 1997-98 Phase I/II Study of Topotecan and Oral Etoposide in Treatment of Small Cell Lung Cancer (MD97012)
- ✎ MOK Shu Kam Tony • CHAN Anthony Tak Cheung • YEO Winnie • YIM Ping Chuen Anthony (Surgery) • JOHNSON Philip James
- 1997-98 Molecular Prognostication of Therapeutic Response of Liver and Lung Cancers (MD97082)
 ✎ MOK Shu Kam Tony • CHAN Yeuk Hon John
- 1996-97 Detection of Genetic Imbalance in Multiple Myeloma by Comparative Genomic Hybridization (MD96047)
 ✎ WONG Nathalie • NG Heung Ling Margaret (Anatomical & Cellular Pathology)
- 1997-98 The Application of Comparative Genomic Hybridization to the Analysis of Genetic Changes During Development and Progression of Hepatocellular Carcinoma (MD97042)
 ✎ WONG Nathalie • JOHNSON Philip James
- 1996-97 Application of Reverse Transcriptase Polymerase Chain Reaction in the Detection of Circulating Tumour Cells in Peripheral Blood (MD96048)
 ✎ YEO Winnie • WONG Hing Nam (Anatomical & Cellular Pathology) • JOHNSON Philip James
- 1997-98 High Dose Adjuvant Chemotherapy and Peripheral Stem Cell Transplant for High Risk Breast Cancer Patients (MD95266)
 ✎ YEO Winnie • KWAN Wing Hong • TEO Man Lung Peter • LEUNG Wai Tong Thomas • SUEN Wang Ming Michael (Anatomical & Cellular Pathology) • KING Wing Keung Walter (Surgery)
- 1997-98 Adjuvant Tamoxifen - Longer Against Short (ATLAS) (MD96216)
 ✎ YEO Winnie • KWAN W. H.* • LEUNG C. M.*
- 1997-98 Detection and Characterization of Circulating Hepatocellular (HCC) Cells for Predicting HCC Metastasis and Monitoring Treatment of HCC Patients (CU97656)
 ✎ YEO Winnie • WONG Hing Nam (Anatomical & Cellular Pathology) • JOHNSON Philip James • LEUNG Wai Tong Thomas • LAU Wan Yee Joseph (Surgery) • HO King Wah Stephen* • CHAN Sai Yu Michael

- (Diagnostic Radiology & Organ Imaging)#
- 1997-98 Phase II Study of Taxotere and Epirubicin for Metastatic Breast Cancer (MD97177)
 ✍ YEO Winnie • MOK Shu Kam Tony • LEUNG Wai Tong Thomas • CHAN Anthony Tak Cheung • JOHNSON Philip James • KWAN W. H.* • LAM K C* • TSE K. K.* • CHIU K W*
- 1997-98 Phase II Trial to Document the Efficacy and Tolerability of Daily Dose of 2.5mg Femara in Postmenopausal Chinese Women with Advanced or Metastatic Breast Cancer as Second Line Hormonal Treatment after Tamoxifen (MD97165)
 ✍ YEO Winnie • KWAN W. H.* • MOK Shu Kam Tony • CHAN Anthony Tak Cheung • LEUNG Wai Tong Thomas • JOHNSON Philip James
- 1997-98 A Randomized Open-Label Phase III Study of a 28-Day Oral Regimen of 776C85/5-Fluorouracil Versus Intravenous 5-Fluorouracil Plus Leucovorin as First Line Therapy in Patients with Advanced Colorectal Cancer (MD97166)
 ✍ YEO Winnie • JOHNSON Philip James • LEUNG Wai Tong Thomas
- 1997-98 Randomized Trial of Tamoxifen Versus Placebo for the Treatment of Inoperable Hepatocellular Carcinoma (MD97169)
 ✍ YEO Winnie • JOHNSON Philip James • LEUNG Wai Tong Thomas
- 1997-98 Phase II Trial to Document the Efficacy and Tolerability of Daily Dose of 2.5mg Femara in Postmenopausal Chinese Women with Advanced or Metastatic Breast Cancer as Second Line Hormonal Treatment After Tamoxifen (FEM-HK-01) (MD97179)
 ✍ YEO Winnie • KWAN Wing Hong • MOK Shu Kam Tony • LEUNG Wai Tong Thomas • CHIU Kwok Wing Samuel • JOHNSON Philip James

RESEARCH OUTPUTS AND PUBLICATIONS

- <P964274> **Yeo, Winnie; Thomas W.T. Leung; Wei T.Yang; Wing H. Kwan; Anthony T.C. Chan and Philip J. Johnson.** "Primary Breast Lymphoma of the Breast". Paper presented in the 3rd International Conference of Asian Clinical Oncology Society. China, 1996.08.
- <P982609> **Gu, Chenghua; Alexander Castellino; John Y.-H. Chan and Moses V. Chao.** "BRE: A Modulator of TNF- Action". *FASEB Journal* vol.12, pp.1101-1108. 1998.09.
- <P982649> **Chan, J.Y.H.; W. Chin; C.-T. Liew; K.-S. Chang and P.J. Johnson.** "Altered Expression of the Growth and Transformation Suppressor *PML* Gene in Human Hepatocellular Carcinomas and in Hepatitis Tissues" *European Journal of Cancer* vol.34 no.7, pp.1015-1022. Great Britain, 1998.
- <P982670> **Chan, Anthony T.C.; Peter M.L. Teo; Kwok C. Lam; Wing Y. Chan; John H.S. Chow; Anthony P.C. Yim; Tony S.K. Mok; Wing H. Kwan; Thomas W.T. Leung and Philip J. Johnson.** "Multimodality Treatment of Primary Lymphoepithelioma-Like Carcinoma of the Lung". *Cancer* vol.83, pp.925-929. USA, 1998.09.01.
- <P982809> **Chan, J.Y.H.; W. Chin; C.-T. Liew; K.-S. Chang and P.J. Johnson.** "Altered Expression of the Growth and Transformation Suppressor *PML* Gene in Human Hepatocellular Carcinomas and in Hepatitis Tissues" *European Journal of Cancer* vol.34 no.7, pp.1015-1022. Great Britain, 1998.
- <P983173> **Kwok, Sek Keung; Patrick Chi Ping Ho; Shing Fai Leung; Sonal Gandhi; Vincent Wing Hong Lee; Dennis Shun Chiu Lam; Ivan Chen Ngan and Jimmy Lai Shiu Ming.** "An Analysis of the Incidence and Risk Factors of Developing Severe Keratopathy in Eyes after Megavoltage External Beam Irradiation". *Ophthalmology* vol.105 no.11, pp.2051-2055. USA, 1998.11.

- <P983247> **Ho, S.; P. Teo; W.H. Kwan; P. Choi; J. Tjong and P.J. Johnson.** "Staging and IgA VCA Titre in Patients with Nasopharyngeal Carcinoma: Changes over a 12-year Period". *Oral Oncology* vol.34, pp.491-495. USA, 1998.
- <P983367> **Yeo, W.; T.W.T. Leung; A.T.C. Chan; S.K.W. Chiu; P. Yu; T.S.K. Mok and P.J. Johnson.** "A Phase II Study of Combination Paclitaxel and Carboplatin in Advanced Nasopharyngeal Carcinoma". *European Journal of Cancer* vol.34 no.13, pp.2027-2031. Hong Kong, 1998.
- <P983369> **Yeo, Winnie; Conrad C.Y. Lee and Philip J. Johnson.** "Flagellate Hyperpigmentation Secondary to Bleomycin". *Oncology Forum* vol.2 no.3, p.21. Hong Kong, 1998.
- <P983370> **Yeo, Winnie; Peter Man Lung Teo; Wing Hong Kwan and Michael Suen.** "Desmoid Tumor Mimicking Local Recurrence of Carcinoma of the Breast". *Int J Clin Oncol* vol.3, pp.49-51. Japan, 1998.
- <P983412> **Mok, T.M.D.; A.T.C. Chan; T. Leung; S.F. Leung; A. Yim; W. Yeo; K.C. Lam; K. Chak and P. Johnson.** "Preliminary Results of a Phase II Study of Gemcitabine Plus Oral Etoposide in Treatment of Advanced Non-Small Cell Lung Cancer". *Chemotherapy of Non-Small Cell Lung Cancer: Ten Years Later. Proceedings* p.129. Perugia, 1998.10.12.
- <P983413> **Mok, Tony.** "Chemotherapy for Pancreatic Cancer: What Is New?". *Pancreas 98. Proceedings* p.18. Kuala Lumpur: College of Surgeons Academy of Medicine of Malaysia, 1998.03.07.
- <P983637> **Johnson, Philip J.** "New Treatment for Hepatocellular Carcinoma". *Journal of Gastroenterology and Hepatology* vol.13, pp.S311-S314. 1998.
- <P983788> **Chan, Anthony T.C. and Philip J. Johnson.** "Immunotherapy of Nasopharyngeal Carcinoma". *Proceedings of 5th HK International Cancer Congress* p.8.2. Hong Kong, 1998.11.
- <P984941> **Wong, Nathalie; Boli Fan; Winnie Yeo; Joyce Yuen and Nicholas Wickham.** "Confirming the Origin of Add(9q) and Marker Chromosome in a Case of Acute Monoblastic Leukemia (M5b) by Fluorescence in Situ Hybridization". *Cancer Genet Cytogenet* vol.106, pp.87-89. 1998.
- <P990036> **Wong, Nathalie; Paul Lai; Siu-Wah Lee; Susanna Fan; Elizabeth Pang; Choong-Tsek Liew; Zhong Sheng; Joseph Wan-Yee Lau and Philip James Johnson.** "Assessment of Genetic Changes in Hepatocellular Carcinoma by Comparative Genomic Hybridization Analysis: Relationship to Disease Stage, Tumor Size, and Cirrhosis". *American Journal of Pathology* vol.154 no.1, pp.37-43. USA, 1999.
- <P990037> **Ho, S.; P.J. Johnson; W.T. Leung and W.T. Lau.** "Combating Hepatocellular Carcinoma with an Integrated Approach". *Chinese Medical Journal* vol.112 no.1, pp.80-83. China, 1999.01.
- <P990105> **Mok, Tony S.K.** "Lung Cancer Research in Hong Kong". *Management of Lung Cancer in 1999, Proceedings* pp.69-70. Chiangmai: Thai Society of Clinical Oncology & International Association for the Study of Lung cancer, 1999.02.26.
- <P990107> **Mok, T.; M. Liu; S. Lee; Y Chao; T Leung; A. Johnston and P. Johnson.** "A Phase II/III Randomized Study Comparing Efficacy of Nilotrexed (Thymitaq, AG337) to Doxorubicin in Patients with Unresectable Hepatocellular Carcinoma (HCC)". *Proceedings of the 10th Nci-Eortc Symposium on New Drugs in Cancer Therapy* Abstract N. Nci-Eortc, 1999.06.18.
- <P990177> **Johnson, P.J.** "Hepatocellular Carcinoma - 'Presentation and Approach to Diagnosis'". *Hepatocellular Carcinoma: Diagnosis, Investigation and Management* ed. by Anthony S.Y. Leong, Choong Tsek Liew, Joseph W.Y. Lau and Philip J. Johnson. pp.19-28. Great Britain: Edward Arnold (Publishers) Ltd., 1999.
- <P990180> **Johnson, P.J.** "Future Prospects". *Hepatocellular Carcinoma: Diagnosis, Investigation and Management* ed. by Anthony S.Y. Leong, Choong Tsek Leiw, Joseph W.Y. Lau and Philip J. Johnson. pp.257-267. Great Britain: Arnold, 1999.

- <P990181> **Johnson, P.J.** "Hepatocellular Carcinoma in Other Regions of the World: Europe". *Hepatocellular Carcinoma: Diagnosis, Investigation and Management* ed. by Anthony S.Y. Leong, C.T. Liew, J. W.Y. Lau and P.J. Johnson. pp.219-223. Great Britain: Arnold, 1999.
- <P990182> **Chan, A.T.C. and P.J. Johnson.** "Palliative Care". *Hepatocellular Carcinoma: Diagnosis, Investigation and Management* ed. by Anthony S. Y. Leong, C. T. Liew, J. W. Y. Lau and P. J. Johnson. pp.205-210. Great Britain: Arnold, 1999.
- <P990183> **Ho, S.K.W. and P.J. Johnson.** "Tumor Markers". *Hepatocellular Carcinoma: Diagnosis, Investigation and Management* ed. by Anthony S. Y. Leong, C. T. Liew, J. W. Y. Lau and P. J. Johnson. pp.31-39. Great Britain: Arnold, 1999.
- <P990245> **Teo, P.M.L.; A.T.C. Chan; S.F. Leung; R.M.C. Chau; P.K.W. Yu; W.W.K. King and P.J. Johnson.** "Increased Incidence of Tongue Cancer after Primary Radiotherapy for Nasopharyngeal Carcinoma - The Possibility of Radiation Carcinogenesis". *European Journal of Cancer* vol.35 no.2, pp.219-225. UK, 1999.
- <P990252> **Teo, Peter Man Lung; Anthony Tak Cheung Chan; Wai Yee Lee; Thomas Wai Tong Leung and Philip James Johnson.** "Enhancement of Local Control in Locally Advanced Node-Positive Nasopharyngeal Carcinoma by Adjunctive Chemotherapy". *International Journal of Radiation Oncology Biology Physics* vol.43 no.2, pp.261-271. USA, 1999.01.
- <P990413> **Yeo, Winnie; Macy M.S. Tong and Y.L. Chan.** "Multifocal Cerebral Demyelination Secondary to Fluorouracil and Levamisole Therapy". *Journal of Clinical Oncology* vol.17 no.1, pp.430-433. USA, 1999.01.
- <P990441> **Zhong, S.; J.Y. Chan; W. Yeo; J.S. Tam and P.J. Johnson.** "Hepatitis B Envelope Protein Mutants in Human Hepatocellular Carcinoma Tissues". *Journal of Viral Hepatitis* vol.6, pp.195-202. Hong Kong, 1999.06.
- <P990443> **Steinberg, J.L.; T.S. Mok; W. Yeo; P.J. Johnson; J.S. Tam and P.K.S. Chan.** "Anonymous Retrospective HIV Testing in Chinese Patients with Non-hodgkin's Lymphoma". *Hong Kong Medical Journal* vol.5 no.1, pp.96-97. Hong Kong, 1999.03.
- <P990676> **Ambinder, Richard F.; Anthony Chan; Qian Tao; Keith D. Robertson; Risa B. Mann; Chris Crone; John Chow; Thomas Leung and Phillip J. Johnson.** "Pilot Trials of 5-Azacytidine Therapy in Patients with EBV-Associated Malignancies". *Proceedings of American Society of Clinical Oncology* vol.18, p.1555. USA, 1999.05.
- <P990678> **Poon, T.C.W.; Chan A.T.C.; Ho S.K.W. and Johnson P.J.** "Combining Use of Serum Liver Markers in the Diagnosis of Hepatocellular Carcinoma". *Proceedings of American Association for Cancer Research* vol.40 no.2276, p.344. 1999.04.
- <P990679> **Chan, A.T.C.; P. Jacobs; W. Yeo; M. Lai; S. Nip; C. Hazlett; T. Mok; W.T. Leung; W.Y. Lau and P.J. Johnson.** "The Cost of Palliative Care for Hepatocellular Carcinoma". *Proceedings of American Society of Clinical Oncology* vol.18, p.1618. USA, 1999.05.
- <P990680> **Chan, Anthony and Philip Johnson.** "Multimodality Treatment of Nasopharyngeal Carcinoma". *Proceedings of 12th Asian Conference of Radiographers and Radiological Technologists* p.48. Hong Kong: HK Radiological Technologists' Association, 1999.04.
- <P990715> **Yeo, Winnie; Anthony Tak-Cheung Chan; Clark Hazlett and Philip Johnson.** "Quality of Life Patients with Inoperable Hepatocellular Carcinoma". Paper presented in the Asia Pacific Hospice Conference 1999, organized by Society for the Promotion of Hospice Care Ltd. Hong Kong, 1999.06.
- <P991010> **Mok, T.S.K.; Teo P.; Kwan W.H.; Yeo W.; Chan A.T.C.; Chan E.; Chiu J.; Chak K.; Leung T. and Johnson P.J.** "Clinical Outcomes of Postoperative Locoregional Radiotherapy in Premenopausal and Postmenopausal Chinese Women with Breast Cancer". *Proceedings of American Society of Clinical Oncology* vol.18, p.372. USA, 1999.05.

- <P991193> **Yeo, Winnie; Kenneth K. Chan; Geoffrey Mukwaya; Michael Ross; W.T. Leung; Stephen Ho; A.T.C. Chan and Philip J. Johnson.** "Phase II Studies with DaunoXome in Patients with Nonresectable Hepatocellular Carcinoma: Clinical and Pharmacokinetic Outcomes". *Cancer Chemother Pharmacol* vol.44, pp.124-130. Hong Kong, 1999.01.
- <P992573> **Mok, Tony S.K.; Thomas W.T. Leung; Shou-Dong Lee; Yee Chao; Anthony T.C. Chan; Andrew Huang; Mei-Ching Lui; Winnie Yeo; Karen Chak; Amanda Johnston and Philip Johnson.** "A Multi-Centre Randomized Phase II Study of Nolatrexed Versus Doxorubicin in Treatment of Chinese Patients with Advanced Hepatocellular Carcinoma". *Cancer Chemother Pharmacol* vol.44, pp.307-311. Hong Kong, 1999.01.

see also <P974941>, <P974942>, <P982141>, <P982660>, <P982808>, <P983060>, <P983110>, <P983372>, <P983864>, <P984029>, <P984383>, <P984385>, <P990051>, <P990065>, <P990133>, <P990163>, <P990166>, <P990167>, <P990168>, <P990179>, <P990323>, <P990487>, <P990503>, <P990526>, <P990602>, <P990603>, <P990717>, <P990739>, <P990764>, <P990767>, <P990933>, <P991057>, <P991111>, <P991345>, <P991535>, <P991705>, <P991764>, <P992023>, <P992125>

RESEARCH PROJECTS

Andec Supplementation Trial – A Randomized Controlled Trial of the Effect of Milk Supplementation on the Rate of Bone Accretion in Chinese Children (Aged 9-10 years) in Hong Kong

✉ LAU Edith Ming Chu • WOO Jean (Medicine & Therapeutics) • CHENG Chun Yiu Jack (Orthopaedics & Traumatology) • FOK Tai Fai (Paediatrics)

☐ 1 April 1999

❖ New Zealand Dairy Board

The study was designed to measure the effects of calcium supplementation (in the form of high calcium milk powder) on bone accretion in Chinese children. Study subjects (boys and girls aged 9-10) will be randomly assigned to 3 groups:- 40g of high calcium milk powder (equivalent to 650mg of calcium; 80g of high calcium milk powder (equivalent to 1,300mg of calcium) or no supplement. Supplementation will last for 18 months, and bone mineral density at the hip, spine and total body will be measured at baseline, 6 months, 12 months, 18 months and 33 months. The rate of bone accretion in the 3 groups will be compared.
(MD98087)

Work-Related Factors and Risk of Incident Low Back Pain in Hong Kong Nurses – A Cohort Study

✉ LAU Edith Ming Chu • LEUNG Arran* • CHAN Eric* • WONG C. M.* • LAM Dicky*

☐ 12 April 1999

❖ Health Services Research Fund, Hospital Authority

Objectives: To investigate the prevalence, cost and occupational and lifestyle risk factors for low back pain in female nurses working in acute care and rehabilitative care for the elderly in Hong Kong.

Design: A cross-sectional survey to study the prevalence and cost of low back pain, and the cohort of nurses to be followed-up for a year to investigate how current work practice predispose to the development of low back pain.

Setting: Acute care hospitals and rehabilitative hospitals in Hong Kong.

Subjects: 1200 female nurses working in various specialties in the hospitals.

Methods: Observations will be made in several hospitals at work to identify work practice which may be associated with low back pain. Such observations will be applied to modify a questionnaire (which has been developed) to measure how occupational practice predispose to low back pain. In the cross-sectional phase of the study, 1200 nurses will be interviewed to measure the 1 year and life-time

prevalence of low back pain. The cost of low back pain in nurses will also be estimated.

The frequency of transferring, moving and lifting patients manually with or without mechanical aids will also be measured at baseline. Other factors as vitality and mental health (as measured by the SF 36), job satisfaction (as measured by the McClosky Scale), body weight and height, cigarette smoking and participation in sports activity will also be assessed. The study subjects will then be followed up for a year for the development of back pain.

Statistical methods: The percentage prevalence and 95% confidence intervals of low back pain will be calculated. Discrete-time logistic normal survival modelling will be used to study risk factors for low back pain in this cohort of nurses.

(MD98078)

Collagen Type I Alpha I Gene, Estrogen Receptor Gene, and Lifestyle Factors in the Etiology of Osteoporosis in Chinese

✉ LAU Edith Ming Chu • HO CHAN Suzanne • WOO Jean (Medicine & Therapeutics) • CRITCHLEY Julian A J H (Medicine & Therapeutics)

☐ 1 May 1999

❖ CUHK Research Committee Funding

Osteoporosis (thinning bones) is presenting as an epidemic in Hong Kong Chinese. Both genetic and environmental factors contribute to osteoporosis. In 1995-96, we were awarded an Earmarked Grant by the RGC to study the role of the vitamin D receptor gene in determining bone mineral density (BMD) in 250 postmenopausal Chinese women. We have found that this gene could only account for a small proportion of the variation in BMD. Recently, the estrogen receptor gene (ER) and the Collagen type I Alpha 1 (COLIA 1) gene have been found to be associated with BMD in Caucasians. We proposed to study the relationship between the ER and COLIA 1 gene and BMD in the 500 Chinese women. DNA has been extracted and stored. In this study, polymorphism in intron 1 of the COLIA 1 will be detected by polymerase chain reaction restriction fragment length polymorphism by established laboratory methods. Polymorphisms in Intron 1 and Dinucleotide repeat polymorphism upstream of the polymorphism upstream of the ER gene will be studied by PCR amplification using the appropriate primers. BMD in the ER genotypes (PPxx, ppXX and heterozygotes for P and X), and COLIA 1 genotypes (SS, Ss, ss) will be compared.
(MD98099)

Manual Handling and Low Back Pain among Nursing Home Staff in Hong Kong

✉ LAU Edith Ming Chu • LEUNG Ping Chung (Orthopaedics & Traumatology) • WONG Louisa* • LEUNG Arran* • CHAN Wai Sing*

☐ 1 June 1999

❖ Occupational Safety and Health Council Research Grant

The objectives of the study are to observe and describe manual handling practices of staff working in nursing homes in Hong Kong. The relationship between 'at risk' practices and the occurrence of low back pain will be studied. Guidelines on 'proper manual handling procedures to prevent injury' will be produced for elderly health care workers in Hong Kong.

A cross sectional survey will be conducted on a random sample of 300 nursing homes in Hong Kong (200 subvented and 100 private). The total number of staff surveyed will be around 1200. On site observation will be made on manual handling practices (using a standard protocol), and all workers will be interviewed on the prevalence of low back pain and frequency of manual handling. Other life style factors for low back pain will also be studied. The correlation of low back pain (in the previous year) and the frequency of manual handling as well as other life style factors will be studied. Based on the study results, guidelines on 'Safety Recommendations on manual handling'.

(MD98114C)

Smoking and Health in Hong Kong Women

✉ LAU Edith Ming Chu • WOO Jean (Medicine & Therapeutics) • HEDLEY A J* • LAM T H* • AU T K* • YAU Helen* • IP Shirley*

☐ 1 June 1999

❖ Hong Kong Council on Smoking and Health

A random sample of women aged 18-24 and 50-69 will be surveyed by telephone. The smoking habits, exposure to environmental tobacco smoke, attitudes to smoking and other health information will be gathered. The prevalence of smoking and reason for smoking uptake will be studied. A subsample of smokers and non-smokers will be followed up to study the health effects of smoking on cardiovascular, bone and reproductive health.

(MD98119C)

Please refer to previous issues of this publication for more details of the following ongoing research at the department:

Edition Title/Investigators

1997-98 Interactive Multimedia Health Web Pages (MD97167)

✉ CHAN Shiu Yee Cynthia • CHAN Keith*

1997-98 Computer-Assisted Interactive Tutorials on Clinical Problem Solving in Family Medicine (MD97022)

✉ CHAN Shiu Yee Cynthia • WUN Yuk Tsan Kyran Patrick • CHAN Keith*

1997-98 Qualitative Study of HIV/AIDS Risk Behaviour among Hong Kong's Teenage "Street Roamers" and Approaches for Harm Reduction (MD97094)

✉ CHAN Shiu Yee Cynthia • TANG Shao Fen Joyce

1997-98 Developing Problem Based Learning Tutorials in Family Medicine (MD97130)

✉ CHAN Shiu Yee Cynthia • WUN Yuk Tsan Kyran Patrick • DICKINSON James Arthur

1995-96 A Study of Bone Mass and Bone Loss in Chinese Perimenopausal Women (MD95065)

✉ HO CHAN Suzanne • WOO Jean (Medicine & Therapeutics) • CHAN Shiu Yee Cynthia • LEUNG Ping Chung (Orthopaedics & Traumatology) • CHAN Sieu Gaen#

1996-97 Habitual Physical Activity, Health Fitness and Behaviour among Adult Population in Hong Kong (MD96011)

✉ HO CHAN Suzanne • LEE Shiu Hung • CHAN Sieu Gaen#

1996-97 The Relationship between Sex Hormones and Bone Mass in Chinese Perimenopausal Women (MD96041)

✉ HO CHAN Suzanne • LEE Kwong Man Simon (Lee Hysan Clinical Research Laboratories) • WOO Jean (Medicine & Therapeutics) • CHAN Shiu Yee Cynthia • CHAN Sieu Gaen#

1996-97 Asian Osteoporosis Study (AOS) (MD96193)

✉ LAU Edith Ming Chu

1996-97 A Randomized Controlled Trial of the Effect of Milk Supplementation on the Rate of Bone Loss in the Post Menopausal Women in Hong Kong (MD96136)

✉ LAU Edith Ming Chu

- 1997-98 A Randomized, Parallel-group Study to Compare the Effects on Bone Density of Oral Alendronate or Placebo in Postmenopausal Women with Osteoporosis (MD97009)
 ✎ LAU Edith Ming Chu • WOO Jean (Medicine & Therapeutics) • LEUNG Suk Fong Sophie (Paediatrics)#
- 1997-98 A Randomized, Parallel-Group Study to Compare the Effects on Bone Density of Oral Alendronate or Placebo in Elderly Chinese Men and Women with Vertebral Fractures (MD97099)
 ✎ LAU Edith Ming Chu • LEUNG Ping Chung (Orthopaedics & Traumatology) • CHAN W. S.*
- 1997-98 A Randomized, Parallel-Group Study to Compare the Effects on Bone Density of Oral Alendronate and Calcium Supplementation or Calcium Supplementation Dose in Chinese Patients on High Dose Inhaled Steroid (MD97098)
 ✎ LAU Edith Ming Chu • WOO Jean (Medicine & Therapeutics) • LAI Kei Wai Christopher (Medicine & Therapeutics)
- 1996-97 Level of and Reasons for Utilising Accident and Emergency Services by Non Urgent Patients (MD96022)
 ✎ LEE Albert • LAU Fei Lung* • HAZLETT Clarke Blaine (Office of Educational Services)
- 1997-98 Social Costs of Drug Abuse in Hong Kong (SS97030)
 ✎ LEE Albert • CHEUNG Yuet Wah (Sociology) • CHIEN James M. N.* • LEE Shiu Hung • LAM K C*
- 1997-98 "How do Physicians' Effort and Quality of Services Differ in Public and Private Sector?" (MD97081)
 ✎ LEUNG Chi Ming Michael
- 1997-98 A Survey of Patients' Knowledge, Attitude and Behaviour on Drug Prescriptions (MD97115)
 ✎ WUN Yuk Tsan Kyran Patrick • CHAN Shiu Yee Cynthia • DICKINSON James Arthur
- 1996-97 Occupational Noise Exposure and Hearing Impairment Among Employees in the Service Industry in Hong Kong (MD96025)
 ✎ YU Tak Sun Ignatius • WONG Tze Wai
- 1997-98 Conducting a Review of the Situation Regarding Occupational Health Research and Occupational Health Services in Hong Kong (MD97007)
 ✎ YU Tak Sun Ignatius • WONG Tze Wai

RESEARCH OUTPUTS AND PUBLICATIONS

- <P975001> **Wun, Y.T. and R. Chung.** "Constant Statistical Texture of Liver Ultrasound Image". *Proceedings of the 4th Hong Kong (Asia Pacific) Medical Informatics Conference (MIC'97)* pp.168-176. Hong Kong, 1997.10.
- <P975033> **Lee, H.S.** "The Future Directions of Public Health Education in Hong Kong". Paper presented in the 110th Anniversary Scientific Congress-University of Hong Kong. Hong Kong, 1997.10.
- <P975068> **Lee, Albert.** "Level of and Reasons for Utilising Accident and Emergency (A&E) Services by Nonurgent Patients in One Major Regional Hospital in Hong Kong". *Master of Public Health Thesis, The Chinese University of Hong Kong* 79 pgs. Hong Kong: The Chinese University of Hong Kong, 1997.12.
- <P975069> **Yu, Tak-Sun Ignatius; Wong Tze-Wai; Wong Siu-Lan; Song Hong and Robinson Paul D.** *The Effects of Air Pollution on Health of School Children in Hong Kong-Respiratory Symptoms, Lung Functions, Cardio-Pulmonary Fitness and Immune Response.* 37 pgs. Hong Kong: Dept of Community & Family Medicine, CUHK, 1997.10.

- <P980666> **Yu, T.S.I.; T.W. Wong; S.L. Wong and H. Song.** "The Effects of Air Pollution on Lung Function Among Children in Hong Kong". *Epidemiology* vol.9 no.4, p.S162. USA, 1998.07.
- <P981156> **Lau, E.M.C.** "Epidemiology and Primary Prevention". Paper presented in the Consensus Development Conference of the Singapore Osteoporosis Society. Singapore, 1998.07.10.
- <P981158> **Lau, E.M.C.** "Osteoporosis Among Asians & What Can We Do About It". Paper presented in the Osteoporosis Workshop of the Singapore Osteoporosis Society. 1998.07.
- <P981685> **Wong, T.W.; T.S.I. Yu; T.S. Lau; A. Neller; K.M. Ho and S.L. Wong.** "Associations Between Ambient Air Pollution and Daily Hospital Admissions in Hong Kong". *Epidemiology* vol.9 no.4, p.S63. Boston, USA, 1998.07.
- <P982503> **Chan, C.; N. Yuen; N.F. Chan; F. Cheng and C. Hazlett.** "Hepatitis B Immunity Status Post-Vaccination in Healthy Chinese Subjects". *The Hong Kong Practitioner* vol.20 no.9, pp.475-483. Hong Kong, 1998.09.
- <P982596> **Ho, S.C.** "Dietary Factors Other Than Calcium in Relation with Bone Health in Young Chinese Women". *Abstracts of the American College of Epidemiology Annual Meeting* vol.8 no.7, p.462. USA, 1998.09.
- <P982597> **Ho, S.C.; S.S.G. Chan; E. Wong; C. Chan; J. Lau; Y.K. Fan and P.C. Leung.** "Effects of Milk Supplementantion and Exercise on Peak Bone Mass in Chinese Women". *Abstracts of the American College of Epidemiology Annual Meeting* vol.8 no.7, p.461. USA, 1998.09.
- <P982604> **Chao, David V.K.** "Reflections on the Art and Science of Family Practice" *The Hong Kong Practitioner: The Journal of the Hong Kong College of Family Physicians* vol.20 no.9, pp.473-474. Hong Kong, 1998.
- <P982669> 陳兆儀. <全人與家庭保健及關顧>. 論文發表於「二十一世紀醫療衛生服務及管理」學術研討會, 主辦機構為江蘇職工醫科大學. 中國南京, 1998.09.
- <P982672> **Wun, Y.T. and A.M.N. Ting.** "Should Hepatitis B Surface Antibody Be Determined after Standard Vaccination?". *The Hong Kong Practitioner* vol.20, pp.187-192. Hong Kong, 1998.08.
- <P982680> 余德新. <香港的職業衛生與職業病防治>. 《職業醫學》第 25 卷 第 5 期, 頁 41-42. 中國廣州, 1998.10.20.
- <P982681> **Tang, Jin-Ling and James A. Dickinson.** "Smoking and Risk of Myocardial Infarction: Studying Relative Risk is Not Enough". *British Medical Journal* vol.317, p.1018. UK, 1998.10.10.
- <P982815> **Lau, Edith M.C.** "The Epidemiology of Osteoporosis in Chinese Men and Women - Implications for Prevention and Treatment". Paper presented in the Symposium on Osteoporosis, organized by Society for the Study of Endocrinology, Metabolism Reproduction and the Hong Kong Geriatrics Society 1998.09.10.
- <P982828> **Chan, C.** "Update on Recommendations for Post-Vaccination Testing and Boosters After Hepatitis B Vaccination". *The Hong Kong Practitioner* vol.20 no.9, pp.492-504. Hong Kong, 1998.09.
- <P982862> **Lau, A. Prof. E.M.C.** "The Epidemiology of Osteoporosis in Asia". Paper presented in Malaysian Osteoporosis Society 2nd AGM & Scientific Meeting. Subang, Malaysia, 1998.11.
- <P982915> **Lau, E.; D.D. Shamal; P. Suriwongpaisal; W.C. Chie; J.K. Lee; M.R. Festin and P. Sambrook.** "Risk Factors for Hip Fracture in Five Asian Countries - The Asian Osteoporosis Study (AOS)". Paper presented in the 2nd Joint Meeting of the American Society for Bone and Mineral Research and the International Bone and Mineral Society, organized by A 1998.12.

- <P982916> **Lau, E.** "Calcium and Other Dietary Factors for Bone Health". Paper presented in the 4th Congress of Parenteral and Enteral Nutrition Society of Asia (PENSA), organized by Department of Surgery, The Chinese University of Hong Kong. Hong Kong, 1998.12.
- <P983048> **Lee, A.; C.B. Hazlett; F.L. Lau; C.W. Kam; P. Wong; T.W. Wong and S. Chow.** "Why Patients with Conditions that Would Be Treated by Family Physicians Utilising Accident and Emergency Department Services?". *Hong Kong Medical Journal: Supplement - Hong Kong Academy of Medicine 1st International Congress* vol.4, no.4, p.115. 1998.12.
- <P983049> **Lee, A and J.C.N. Chan.** "The Role of Family Doctors in Seamless Health Care: Shared Care in Diabetes Mellitus as an Example". *Hong Kong Medical Journal: Supplement - Hong Kong Academy of Medicine 1st International Congress* vol.4 no.4, p.116. Hong Kong, 1998.12.
- <P983051> **Lee, S.H.** "The Public Health Aspects of Tuberculosis". Paper presented in the Conference on TB in the Year 2000, organized by the Hong Kong Tuberculosis and Heart Diseases Association. Hong Kong, 1998.10.15.
- <P983052> **Lee, S.H.** "Future of Public Health in Hong Kong". Paper presented in the Seminar on the Future of Public Health and Its Interaction with Medicine, organized by Department of Community & Family Medicine and Department of Ophthalmology & Visual Sciences. Hong Kong, 1998.10.16.
- <P983108> **Cheng F.; Yu T.S. and Wong T.W.** "The State of Occupational Health and Safety Services in Construction Industry". *Abstracts of the Hong Kong College of Community Medicine 4th Annual Scientific Meeting "Public Health Challenges for the Next Millennium"* p.9. Hong Kong, 1998.11.22.
- <P983130> **Lau, E.M.C.** "Can osteoporotic Fractures be Prevented?". Paper presented in the Hong Kong Academy of Medicine 1st International Congress. Hong Kong, 1998.11.
- <P983174> **Lau, E.; R. Young; J. Woo; S.C. Ho; J. Kwok and J. Critchley.** "Vitamin D Receptor Gene Polymorphism and Bone Mineral Density in Elderly Chinese Men and Women". Paper presented in the 2nd Joint Meeting of the American Society for Bone and Mineral Research and the International Bone and Mineral Society, San Francisco, 1998.12.
- <P983224> **Chan, C.S.Y.** "Understanding the Family Dynamics of the Heart Sink Patient". *Abstracts of Hong Kong Medical Journal Supplement Hong Kong Acadeacy of Medicine 1st International Congress* vol.4 no.4, p.53. Hong Kong, 1998.11.
- <P983227> **Wong, Tze-Wai; Siu-Lan Wong; Tak-Sun Yu; Joseph L.Y. Liu and Owen L. Lloyd.** "Socioeconomic Correlates of Infant Mortality in Hong Kong 1979-93". *Scand J Soc Med* vol.26 no.4, pp.281-286. Sweden, 1998.11.
- <P983239> **Lee, Albert.** "Seamless Health Care for Chronic Diseases in a Dual Health Care System: Manged Care and the Role of Family Physicians". *Journal of Management in Medicine* vol.12 no.6, pp.398-405. UK, 1998.12.
- <P983420> **Wong, Tze-Wai; Tak-Sun Yu; Cheuk-Ming Tam and Xiao Rong Wang.** "A Silicosis Patient Presenting with an Enlarged Supraclavicular Lymph Node". *Respirology (Official Journal of the Asian Pacific Society of Respirology)* vol.3, pp.281-283. Tokyo, Japan, 1998.
- <P983626> **Yu, I.T.S.; T.W. Wong; X.R. Wang; H. Song and S.L. Wong.** "The Effects of Air Pollution on Respiratory Health of School Children in Hong Kong". *Hong Kong Medical Journal Supplement Hong Kong Academy of Medicine 1st International Congress* vol.4 no.4, p.118. Hong Kong, 1998.12.
- <P983628> **陳兆儀.** <家庭醫學的特點>. 《上海預防醫學》 第 10 卷 第 12 期, 頁 558-561. 上海, 中國, 1998.12.
- <P983687> **Au, S.Y.; M.F. Leung; C.S. Chan; S.H. Choi; P.C. Leung; C. Haines; G.W.K. Tang; L.C.H. Tang; A.W.C. Kung; J. Ma; T.P. Lam; A. Lee and E.M.C. Lau.** "Clinical Management

- Guidelines for Osteoporosis in Hong Kong". *Hong Kong Medical Journal* vol.4 no.4, pp.423-431. Hong Kong, 1998.12.
- <P983688> **Lau, E.M.C. and J. Woo.** "Osteoporosis-is it Really Preventable?". *Hong Kong Medical Journal* vol.4 no.4, pp.395-399. Hong Kong, 1998.12.
- <P983784> **Ho, Suzanne.** "Bone Mass and Bone Changes in Chinese Perimenopausal Women: Implications for Osteoporosis Prevention". Paper presented in the Osteoporosis Research Programme, organized by Osteoporosis Research Programme. Hong Kong, 1998.05.02.
- <P983785> **Ho, S.C.** "A Prospective Study of Influences on Peak Bone Mass in Chinese Women". Paper presented in the 2nd International Symposium, organized by University of British Columbia Vancouver, Canada, 1998.11.29.
- <P983791> **Ho, Suzanne C.; Sieu Gaen Chan; Eric Wong; Cynthia Chan; Joseph Lau and Ping Chung Leung.** "Longitudinal Study of Determinants of Bone Mass in Young Chinese Women". Paper presented in the 2nd Joint Meeting of ASBMR & IBMS, organized by American Society for Bone & Mineral Research & the International Bone & Mineral Society. San Francisco, 1998.12.
- <P983802> **Lau, E.M.C.; Young R.; Woo J.; Ho S.C.; Kwok J. and Critchley J.** "Vitamin D Receptor Gene Polymorphism and Bone Mineral Density in Elderly Chinese Men and Women". Paper presented in the 16th Meeting of Japanese Society of Bone & Mineral Research, organized by Japanese Society of Bone and Mineral Research. Japan, 1998.11.
- <P983924> **Lau, E.M.C.; T. Kwok; J. Woo and S.C. Ho.** "Bone Mineral Density in Chinese Elderly Female Vegetarians, Vegans, Lactovegetarians and Omnivores". *European Journal of Clinical Nutrition* vol.52, pp.60-64. 1998.
- <P983926> **Lau, Edith M.C.; Timothy Kwok; Jean Woo and Suzanne C. Ho.** "Bone Health and Nutritional Status of Chinese Vegetarians". *Nutritional Aspects of Osteoporosis* ed. by Peter Burckhardt Bess Dawson-Hughes and Robert P. Heaney. pp.193-198. USA: A Serono Symposia S.A. Publication, 1998.
- <P984248> **Lau, E.M.C.; J. Woo; H. Chan; M.K.F. Chan; J. Griffith; Y.H. Chan and P.C. Leung.** "The Health Consequences of Vertebral Deformity in Elderly Chinese Men and Women". *Calcified Tissue International* vol.63, pp.1-4. 1998.
- <P984449> **Chan, K.K.C.; Y.T. Wun; A. Lee and P.L. Ma.** "Seasonal Variation of Morbidity in Hong Kong". *The Hong Kong Practitioner* vol.20 no.5, pp.78-81. Hong Kong, 1998.05.
- <P984939> **Ho, Suzanne C.** "Nutritional Issues in Women". Paper presented in the 4th Congress of Parental and External Nutrition Society of Asia (PENSA). Hong Kong, 1998.12.
- <P990011> **Lee, Albert.** "Are Hong Kong Adolescents at Risk of Hepatitis A infection: Sero-Epidemiological Study". Paper presented in the Symposium on Food Hygiene in Hong Kong, organized by Hong Kong Epidemiology Association. Hong Kong, 1999.01.20.
- <P990012> **Lee, Shiu-hung; Albert Lee; Cho-Yee To; Kam-Fai Ho; Kai-Hong Phua and Clement Tsang.** *Evaluation of Community Rehabilitation Network Consultancy Report to Hong Kong SAR Government* 64 pgs. Hong Kong, 1999.
- <P990024> **Wang, Xiaorong; Ignatius T.S. Yu; Tze Wai Wong and Eiji Yano.** "Respiratory Symptoms and Pulmonary Function in Coal Miners: Looking into the Effects of Simple Pneumoconiosis". *American Journal of Industrial Medicine* vol.35, pp.124-131. USA, 1999.
- <P990122> **李紹鴻.** <二十一世紀藥物濫用的防治 - 香港特別行政區何去何從>. 論文發表於首屆中國內地與香港藥物濫用防治研討會 - 跨世紀政策與服務的新挑戰, 主辦機構為中國藥物濫用防治協會與香港社會服務聯會藥物濫用問題委員會. 香港, 1999.01.26.

- <P990191> **Lee, Shiu-Hung.** "Public Health Issues in Hong Kong and China". *Journal of Epidemiology and Community Health* vol.53 no.3, pp.130-131. 1999.03.
- <P990204> **Chan, C.S.Y.** "Detection and Management of Psychosocial Problems in Family Practice". *Abstracts of the 1999 WONCA Asia-Pacific Regional Conference* p.82. Taipei, Taiwan: Chinese Ophthalmological Society, 1999.03.
- <P990207> **Chan, Cynthia and Y.T. Wun.** "Computer-Assisted Interactive Tutorials on Clinical Problem Solving in Family Medicine". *Abstracts of the 1999 WONCA Asia-Pacific Regional Conference* p.109. Taipei, Taiwan: Chinese Taipei Association of Family Medicine, 1999.03.
- <P990208> **Chan, C.S.Y.; W.E. Fabb and C.B. Hazlett.** "A Study to Validate an Instrument to Ascertain Patient Factors in the Prescribing of Pharmaceuticals by Doctors". *Abstracts of the 1999 WONCA Asia-Pacific Regional Conference* p.191. Taipei, Taiwan: Chinese Taipei Association of Family Medicine, 1999.03.
- <P990209> **Chan, H.K. and C.S.Y. Chan.** "Health Education for the New Generation". *Abstracts of the 1999 WONCA Asia-Pacific Regional Conference* p.103. Taipei, Taiwan: Chinese Taipei Association of Family Medicine, 1999.03.
- <P990223> **李紹鴻.** <基礎及臨床教育整合>. 論文發表於第三屆海峽兩岸暨香港地區醫學教育研討會, 主辦機構為台灣陽明大學. 台灣, 1999.03.07.
- <P990272> **Lau, Edith M.C.** "The Epidemiology of Osteoporosis: The Asian Scene in a World Perspective". *Proceedings of the 3rd International Congress on Osteoporosis* pp.158-160. Xian, China, 1999.03.
- <P990416> **Schwartz, Ann V.; Jennifer L. Kelsey; Stefania Maggi; Marilyn Tuttleman; Suzanne C. Ho; Palmi V. Jonsson; Gyula Poor; Jose A. Sisson De Castro; Xu Ling; C. Chantal Matkin; Lorene Nelson and Stephen P. Heyse.** "International Variation in the Incidence of Hip Fractures: The World Health Organization Cross-national Project on Osteoporosis". *Osteoporosis International* vol.9, pp.242-253. UK, 1999.
- <P990485> **Lau, Edith.** "Osteoporosis in Asian Populations: Nature Versus Nurture". *Advances in Medicine 1999* p.40. Hong Kong: Dept of Medicine & Therapeutics, CUHK, 1999.05.30.
- <P990596> **Joyce, T'ang; Cynthia Chan; Nang Fong Chan; Chun Bor Ng; Keith Tse and Louisa Lau.** "A Survey of Elderly Diabetic Patients Attending a Community Clinic in Hong Kong". *Patient Education and Counseling* vol.36, pp.259-270. 1999.
- <P990677> **Tang, Jin-Ling; James A. Dickinson and Joseph L.Y. Liu.** "Coronary Risk Assessment Methods and Cholesterol Lowering". *The Lancet* vol.353, pp.1095-1096. 1999.03.27.
- <P990813> **Yu, Tak-Sun Ignatius; Yi Min Liu; Jiong-Liang Zhou and Tze-Wai Wong.** "Occupational Injuries in Shunde City-A County Undergoing Rapid Economic Change in Southern China". *Accident Analysis and Prevention* vol.31, pp.313-317. 1999.
- <P990995> **Chan, Cynthia; B.S.H. Chui; C.K. Lee and J.S. Tjong.** "Functional Status of the Elderly Patients Attending Three General Out-Patient Clinics". *Proceedings of Asia-Pacific Regional Conference for the International Year of Older Persons* vol.1, pp.325-331. Hong Kong: The HK Council of Social Service / The Social Welfare Department, 1999.04.
- <P991362> **Wong, Tze Wai; Yu Tak Sun Ignatius; Wong Chi Ngai; Kwok Lan and Chiu Yuk Lan.** *Report of a Survey on Hearing Threshold Among Hong Kong Police Firearm Instructors and Noise Level at Their Worksites.* 56 pgs. Hong Kong: Dept of Community & Family Medicine, CUHK, 1999.02.
- <P991363> **Wong, Tze Wai and Yu Tak Sun.** *A Survey on Noise Exposure and Hearing Impairment Among Transport Workers in Hong Kong.* 119 pgs. Hong Kong: Dept of Community & Family Medicine, CUHK, 1999.01.

- <P991381> **Yu, Tak Sun Ignatius; Wong Tze Wai; Wang Xiao-Rong and Tse Lap-Ah.** *A Report on the Collection and Review of Information Regarding Occupational Health Research in Hong Kong.* 40 pgs. Hong Kong: Dept of Community & Family Medicine, CUHK, 1999.04.
- <P991872> **Lee, Albert.** "New Family Medicine: Greater Involvement of Family Physicians in Community Health Care". Paper presented in the 1999 Taipei WONCA Asia Pacific Regional Conference. p.51. Taiwan, 1999.03.
- <P991875> **Lee, A.** "Development of Family Medicine at the Crossroads! Are We Lost?". *The Hong Kong Practitioner* vol.21 no.5, pp.217-222. Hong Kong, 1999.05.
- <P991898> **Lee, Albert.** "Are Hong Kong Adolescents at Risk of Hepatitis A Infection: Sero-epidemiological Study". *The Hong Kong Epidemiological Association* vol.3 issue 2, p.4. Hong Kong, 1999.04.
- <P992529> **Ho, Suzanne C.; Edith M.C. Lau; Jean Woo; Aprille Sham; Kai Ming Chan; Simon Lee and Ping Chung Leung.** "The Prevalence of Osteoporosis in the Hong Kong Chinese Female Population". *Maturitas* vol.32, pp.171-178. UK, 1999.04.23.
- <P992530> **Lau, E.M.C.; R.P. Young; S.C.H. Ho; J. Woo; J.L.Y. Kwok; Z. Birjandi; G.N. Thomas; A. Sham and J.A.J.H. Critchley.** "Vitamin D Receptor Gene Polymorphisms and Bone Mineral Density in Elderly Chinese Men and Women in Hong Kong". *Osteoporosis International* vol.10, pp.226-230. 1999.02.15.
- <P992540> **Wun, Y.T. and J.A. Dickinson.** "What is the Risk of Hepatocellular Carcinoma for a Hepatitis B Carrier?". *Abstracts of the 1999 Asia Pacific Regional Conference, WONCA (World Organization of Family Doctors)* p.197 Abstract no.R004-2. Taipei: Chinese Taipei Association of Family Medicine, 1999.03.09.
- <P992541> **Wun, Yuk-Tsan.** "Information Systems in Primary Care in Hong Kong". *Abstracts of the 1999 Asia Pacific Regional Conference, WONCA (World Organization of Family Doctors)* p.99. Taipei: Chinese Taipei Association of Family Medicine, 1999.03.09.
- <P992544> **Ho, Suzanne C.** "Peak Bone Mass and Its Determinants in Chinese Women". *Proceedings of the 3rd The International Congress on Osteoporosis* p.OR22. Xi'an, China: Osteoporosis Update 1999, 1999.03.31.
- <P992552> **Lau, E.M.C.; C. Cooper; H. Fung; D. Lam and K.K. Tsang.** "Hip Fracture in Hong Kong Over the Last Decade - A Comparison with the UK". *Journal of Public Health Medicine* vol.21 no.3, pp.249-250. Great Britain, 1999.02.17.
- <P992553> **Ho, Suzanne C.** "Health Status of Perimenopausal Women in Hong Kong". Paper presented in Programme in Women's Health Issues in Advances in Medicine. Hong Kong, 1999.05.
- <P992554> **Ho, Suzanne C.** "Health Issues of Mature Women". Paper presented in the Symposium in 'Women & Ageing' in Asia-Pacific Regional Conference for the International Year of Older Persons. Hong Kong, 1999.04.

see also <P975050>, <P975053>, <P981941>, <P981942>, <P982524>, <P982715>, <P983129>, <P983219>, <P983279>, <P983492>, <P983836>, <P983950>, <P984075>, <P984076>, <P984129>, <P984450>, <P990626>, <P990714>, <P990725>, <P991249>, <P991325>, <P991346>

RESEARCH PROJECTS

Please refer to previous issues of this publication for more details of the following ongoing research at the department:

Edition Title/Investigators

1996-97 Magnetic Resonance Signal Changes in Processed and Fresh Frozen Bone Allografts: An *in vitro* Study (MD96053)
 ✉ KEW Jacqueline • KUMTA Shekhar Madhukar (Orthopaedics & Traumatology) • GRIFFITH James Francis • METREWELI Constantine • LEUNG Ping Chung (Orthopaedics & Traumatology)

RESEARCH OUTPUTS AND PUBLICATIONS

- <P964271> **Roebuck, Derek J.** "Ionising Radiation in Diagnosis: Do the Risks Outweigh the Benefits". *The Medical Journal of Australia* vol.164 no.12, pp.743-747. Australia, 1996.06.
- <P974937> **Roebuck, D.J.; W.T. Yang; W.W.M. Lam and P. Stanley.** "Hepatobiliary Rhabdomyosarcoma in Children". *Pediatric Radiology* vol.27 no.8, p.715. USA: Springer, 1997.08.
- <P974938> **Roebuck, D.J.** "Non-metastatic Skeletal Complications in Paediatric Oncology Patients". *Pediatric Radiology* vol.27 no.5, p.493. USA, 1997.05.
- <P974939> **Roebuck, D.J.; W.T. Yang; W.W.M. Lam and P. Stanley.** "The Role of Radiology in Hepatobiliary Rhabdomyosarcoma of Childhood". *Pediatric Radiology* vol.27 no.5, p.484. USA, 1997.05.
- <P974956> **Clunie, Gavin; Margaret A. Hall-Craggs; Martyn N. Paley; Anne King; Iain D. Wilkinson; Peter J. Ell and Jo C.W. Edwards.** "Measurement of Synovial Lining Volume by Magnetic Resonance Imaging of the Knee in Chronic Synovitis". *Annals of the Rheumatic Diseases* vol.56, pp.526-534. UK, 1997.
- <P975003> **So, N.M.C.; W.K. Loftus and C. Metreweli.** "Atypical Computed Tomography Appearance of a Duodenal Diverticulum". *Australasian Radiology* vol.41 no.4, pp.371-372. Australia, 1997.
- <P981427> **Loftus, William K.; Roger J. Gent; Garry W. LeQuesne and Constantine Metreweli.** "Renal Length in Chinese Children: Sonographic Measurement and Comparison with Western Data". *Journal of Clinical Ultrasound* vol.26 no.7, pp.349-352. USA, 1998.09.
- <P981953> **Yang, W.T.** "Diagnostic Ultrasound of the Breast". *Abstracts of the Malaysian Radiological Society 21st Annual General Meeting & Scientific Meeting* p.23. Malaysia, 1998.08.
- <P981954> **Yang, W.T.** "CT and MRI of the Female Pelvis". *Abstracts of the Malaysian Radiological Society 21st Annual General Meeting & Scientific Meeting* pp.17-19. 1998.08.
- <P982563> **King, A.D.; Y.L. Chan; K.S. Wong; J.J.Y. Sung; K. Fung and W.S. Poon.** "Cranial Actinomycosis". *Singapore Medical Journal* vol.39 no.10, pp.465-467. Singapore, 1998.
- <P982567> **Roebuck, Derek J. and Constantine Metreweli.** "Radiation Risk in CT for Acute Abdominal Pain". *Radiology* vol.209 no.1, p.287. USA, 1998.
- <P982603> **Stephens, D. and D. Roebuck.** "Pituitary Adenomas in Childhood and Adolescence". *Proceedings of the Royal Australasian College of Radiologists 49th Annual Scientific Meeting* p.228. Brisbane, Australia, 1998.10.

- <P982656> **Roebuck, D.J.; Y.L. Chan; K.Y. Lau; P. Yuen; C.K. Li; K.W. Chik and C. Metreweli.** "Magnetic Resonance Imaging of the Brain in Patients Cured of Acute Lymphoblastic Leukemia". *Proceedings of Hong Kong College of Radiologists 6th Annual Scientific Meeting* p.32. Hong Kong, 1998.10.
- <P982657> **Wong, K.T.; Y.L. Chan and C. Metreweli.** "Magnetic Resonance Imaging Evaluation of the Clivus in Normal and NPC Patients". *Proceedings of Hong Kong College of Radiologists 6th Annual Scientific Meeting* p.44. Hong Kong, 1998.10.
- <P982658> **Yeung, David; Y.L. Chan; A.D. King; W.W.M. Lam; G. Cao and C. Metreweli.** "Turbo Chemical Shift Imaging: Its Advantages and Limitations Compared to Conventional Chemical Shift Imaging and Single-Voxel Spectroscopy". *Proceedings of Hong Kong College of Radiologists 6th Annual Scientific Meeting* p.30. Hong Kong, 1998.10.
- <P982659> **Wong, Y.Y.; Y.L. Chan and C. Metreweli.** "Feasibility of Gadolinium Enhanced MRA in Paediatric Patient". *Proceedings of Hong Kong College of Radiologists 6th Annual Scientific Meeting* p.42. Hong Kong, 1998.10.
- <P982660> **Chan, Yu Leung; Leung Sing Fai; David Yeung and Con Metreweli.** "Magnetic Resonance Spectroscopy of Late Delayed Radiation-Induced Injury of the Brain". *Proceedings of Hong Kong College of Radiologists 6th Annual Scientific Meeting* p.31. Hong Kong, 1998.10.
- <P982661> **Lee, Paul S.F.; Simon C.H. Yu and C. Metreweli.** "FNAB of Intrathoracic Lesions: Cytology or Microhistology? (Work in Progress)". *Proceedings of Hong Kong College of Radiologists 6th Annual Scientific Meeting* p.21. Hong Kong, 1998.10.
- <P982662> **Lee, Paul S.F.; Simon Yu; S.K.H. Wong; Y.H. Lam; Sydney S.C. Chung and C. Metreweli.** "Percutaneous Cholecystostomy and Endoscopic Cholecystolithotripsy in Acute Cholecystitis". *Proceedings of Hong Kong College of Radiologists 6th Annual Scientific Meeting* p.17. Hong Kong, 1998.10.
- <P982663> **Metreweli, C.** "Update on Ultrasound of Lymph Nodes". *Proceedings of Hong Kong College of Radiologists 6th Annual Scientific Meeting* p.5. Hong Kong, 1998.10.
- <P982664> **Yu, S.C.H.; W.Y. Lau; J.Y. Sung and C. Metreweli.** "A Comparison of the Diagnostic Efficacy of Biopsy Guns and Aspiration Needles in the Biopsy of Retroperitoneal Lesions with an Ultrasound Guided Bowel Transgressing Approach". *Proceedings of Hong Kong College of Radiologists 6th Annual Scientific Meeting* p.1998.10.
- <P982678> **Ahuja, A.T.; E.S.Y. Chan; P.W. Allen; K.Y. Lau; W. King and C. Metreweli.** "Carcinoma Showing Thymiclike Differentiation (CASTLE Tumor)". *American Journal of Neuroradiology* vol.19, pp.1225-1228. 1998.10.
- <P982724> **Griffith, J.F.; D.J. Roebuck; J.C.Y. Cheng; T.H. Rainer and C. Metreweli.** "MR Imaging of Acute Elbow Trauma in Children". *Programme & Book of Abstracts of the Royal Australasian College of Radiologists 49th Annual Scientific Meeting* p.129. Australia, 1998.10.
- <P982734> **Metreweli, C.** "Role of Imaging in Diagnosis of Hepatocellular Carcinoma". Paper presented in the 5th Hong Kong International Cancer Congress, organized by the University of Hong Kong and Queen Mary Hospital. Hong Kong, 1998.11.
- <P982756> **Lau, K.Y.; Y.L. Chan; W.W.M. Lam; C.K. Li and C. Metreweli.** "Magnetic Resonance Imaging Evaluation of the Pituitary Gland and Hypothalamus in Thalassaemic Children with Elevated Serum Ferritin Levels". *Journal of Paediatrics and Child Health* vol.34, pp.463-466. Australia, 1998.
- <P982765> **Lam, W.W.M.; Z.J. Wang; H. Zhao; G.T. Berry; P. Kaplan; J. Gibson; B.S. Kaplan; L.T. Bilaniuk; J.V. Hunter; J.C. Haselgrove and R.A. Zimmermann.** "1H MR Spectroscopy of the Basal Ganglia in Childhood: A Semiquantitative Analysis". *Neuroradiology* vol.40, pp.315-323. 1998.

- <P982782> **Kew, J.; Kumta S.M.; Griffith J.F.; Metreweli C. and Leung P.C.** "Magnetic Susceptibility Artefacts of *in vitro* Bone Allografts". *Proceedings of Hong Kong College of Radiologists 6th Annual Scientific Meeting* p.52. Hong Kong, 1998.10.
- <P982783> **Kew, J.; Ahuja A.T. and Metreweli C.** "Ultrasonographic and Computed Tomographic Findings in Madelung Disease in Two Chinese Patients". *Chinese Medical Journal* vol.111 no.10, pp.959-960. China, 1998.10.
- <P982786> **Griffith, J.F.; Tong C.; Leung K.S. and Metreweli C.** "Spiral CT of Tibial Fractures". *Programme & Book of Abstracts of the Royal Australasian College of Radiologists 49th Annual Scientific Meeting* p.185. Australia, 1998.10.
- <P982788> **Griffith, James F.; Jack C.Y. Cheng; Lung T.K. and Michael Chan.** "Pseudoaneurysm after High Tibial Osteotomy and Limb Lengthening". *Clinical Orthopaedics and Related Research* vol.354, pp.175-179. USA, 1998.09.
- <P982803> **Lam, W.W.M.; K.W. Chan; W. Poon and C. Metreweli.** "Preliminary Experience in Using MR Diffusion Imaging in Grading of Intracranial Glioma". *Proceedings of Hong Kong College of Radiologists 6th Annual Scientific Meeting* p.36. Hong Kong, 1998.10.
- <P982836> **Roebuck, Derek J.** "Cat-Scratch Disease with an Extraaxial Mass". *American Journal of Neuroradiology* vol.19, pp.1294-1295. USA, 1998.08.
- <P982898> **Yang, W.T.; T.H. Cheung; S.S.Y. Ho; M.Y. Yu and C. Metreweli.** "Comparison of Laparoscopic Sonography with Surgical Pathology in the Evaluation of Pelvic Lymph Nodes in Cervical Cancer". *Abstracts of the 8th World Congress on Ultrasound in Obstetrics & Gynecology: The Official Journal of the International Society* 1998.11.
- <P982919> **Yang, Wei Tse; Po Tong Chui and Constantine Metreweli.** "Anatomy of the Normal Brachial Plexus Revealed by Sonography and the Role of Sonographic Guidance in Anesthesia of the Brachial Plexus". *American Journal of Roentgenology* vol.171, pp.1631-1636. USA, 1998.12.
- <P982920> **Kew, J.** "The Paranasal Sinuses". *Journal of the Hong Kong College of Radiologists* vol.1 no.2, pp.151-156. Hong Kong, 1998.
- <P982925> **Ahuja, A.T.; S.S.Y. Ho; M. Ying and C. Metreweli.** "The Role of Colour Flow Imaging in Distinguishing Between Benign and Metastatic Cervical Lymph Nodes from Head and Neck Carcinomas". *Proceedings of 30th Annual Meeting of British Medical Ultrasound Society* p.45. Harrogate, UK, 1998.12.
- <P982926> **Griffith, J.F.; T.H. Rainer; A. Ching; K.L. Law; R.A. Cocks and C. Metreweli.** "Ultrasound Versus Radiography in Rib Fracture Detection". *British Medical Ultrasound Society 30th Annual Meeting* p.31. UK, 1998.12.09.
- <P982927> **Griffith, J.F.; A. Ching and C. Metreweli.** "Extended Field of View Imaging in Musculoskeletal Ultrasound". *British Medical Ultrasound Society 30th Annual Meeting* p.84. UK, 1998.12.09.
- <P982939> **Roebuck, D.J.; S.H. Hui; W.K. Loftus; A.W. Rushton; C. Metreweli and T. Fok.** "High-Resolution CT Findings in Pediatric Tuberculosis". *Pediatric Radiology* vol.28 no.8, p.658. USA, 1998.08.
- <P982974> **Chan, P.N. and J.F. Griffith.** "The Knee Joint". *Journal of the Hong Kong College of Radiologists* vol.1 no.1, pp.74-79. Hong Kong, 1998.
- <P982985> **Metreweli, C. and C.K. Yeung.** "Recurrent Abdominal Pain in Children". *Abstracts of the 30th Annual Meeting British Medical Ultrasound Society* p.23. Harrogate, UK, 1998.12.09.
- <P982986> **Ho, S.S.Y. and C. Metreweli.** "The Influence of Unilateral Cerebral Infarction on the Common Carotid Blood Flow". *Abstracts of the 30th Annual Meeting British Medical Ultrasound Society* p.66. Harrogate, UK, 1998.12.

- <P982987> **Metreweli, C. and A. Ahuja.** "Work in Progress: 3D Colour Power Angio Does It have a Potentially Useful Role in Lymphadenopathy?". *Abstracts of the 30th Annual Meeting British Medical Ultrasound Society* p.46. Harrogate, UK, 1998.12.09.
- <P982988> **Leung, V.Y.F. and C. Metreweli.** "Anmiotic Fluid Volume: Work in Progress Creating a Model to Elucidate Better Methods of Estimating AFV". *Abstracts of the 30th Annual Meeting British Medical Ultrasound Society* p.43. Harrogate, UK, 1998.12.09.
- <P982989> **Metreweli, C.; R. Howard and S.S.Y. Ho.** "One Haemangioma, Two Appearances". *Abstracts of the 30th Annual Meeting British Medical Ultrasound Society* p.83. Harrogate, UK, 1998.12.
- <P983059> **Lo, I.F.M.; L.M. Wong; D.J. Roebuck; K.H. Lee and S.T.S. Lam.** "Acampomelic Campomelic Dysplasia Presenting with Pierre Robin Sequence and Sex Reversal: Report of a Chinese Patient". *Hong Kong Medical Journal Supplement - Hong Kong Academy of Medicine 1st International Congress* p.61. Hong Kong, 1998.11.
- <P983060> **Chan, Y.L.; D. Yeung; S.F. Leung; P.H.K. Choi and C. Metreweli.** "Late Radiation Injury in Patients Treated for Nasopharyngeal Carcinoma - Features on Magnetic Resonance Imaging and Magnetic Resonance Spectroscopy". *Hong Kong Medical Journal Supplement - Hong Kong Academy of Medicine 1st International Congress* vol.4 no.4. 1998.11.
- <P983067> **Lam, W.M.; K.W. Chan; W.S. Poon; H.K. Ng and C. Metreweli.** "Grading of Glioma by MRI Proton Spectroscopy". *Hong Kong Medical Journal Supplement* vol.4, no.4, p.29. Hong Kong, 1998.11.
- <P983111> **So, N.M.C.; W.W.M. Lam and C. Metreweli.** "The Usefulness of a Signal Coronal T1W Sequence in the Assessment of Grave's Ophthalmopathy". *Hong Kong Medical Journal Supplement Hong Kong Academy of Medicine 1st International Congress* vol.4 no.4, p.157. Hong Kong, 1998.11.
- <P983157> **Griffith, J.F.; T.H. Rainer; S.C. Ching; K.L. Law; R.A. Cocks and C. Metreweli.** "Ultrasound Versus Radiography in Rib Fracture Detection". *Proceedings of the Hong Kong College of Radiologists 6th Annual Scientific Meeting* p.39. Hong Kong, 1998.10.
- <P983158> **Griffith, J.F.; T.H. Rainer; A. Ching; K.L. Law; R.A. Cocks and C. Metreweli.** "Ultrasound Vastly Improves the Detection of Rib Fractures". *Programme and Book of the Royal Australasian College of Radiologists 49th Annual Scientific Meeting* p.183. Australia, 1998.10.
- <P983161> **Yuen, H.Y.; J. Kew and C. Metreweli.** "Case Quiz - Prolonged Decrease in Vision Due to Injury with Iron Nail". *Australasian Radiology* vol.42, pp.395-396. Australia, 1998.
- <P983177> **Roebuck, Derek J.; Robert G. Howard; C.K. Li; K.W. Chik; M.K. Shing; J.T. Wu and C. Metreweli.** "Misleading Leads Orbital Cellulitis Following Chemotherapy for Retinoblastoma". *Medical and Pediatric Oncology* vol.31, pp.534-535. USA: Wiley-Liss, Inc., 1998.12.
- <P983214> **So, Nina M.C. and Wynn W.M. Lam.** "Perforation of the Gall Bladder". *The Journal of Emergency Medicine* vol.16 no.6, p.891. USA, 1998.
- <P983232> **King, Ann D.; James F. Griffith; Anthony Rushton and Constantine Metreweli.** "On Tuberculosis of the Bones and Joints". *The Journal of Rheumatology* vol.25 no.11, pp.2284-2285. Canada, 1998.
- <P983240> **Ip, C.B.; D.J. Roebuck; W.K. Loftus; I.F.M. Lo and C. Metreweli.** "The Establishment of Normal Age-Related Values of Patellar Size in Young Children by Ultrasonography". *Pediatric Radiology* vol.28 no.5, pp.399-400. USA, 1998.05.
- <P983241> **Metreweli, C.; D. Roebuck and C.K. Yeung.** "On the Origin of Renal Parenchymal Scars in Reflux Pyelonephropathy: Rethink Overdue". *Pediatric Radiology* vol.28 no.5, p.353. USA, 1998.05.

- <P983242> **Roebuck, D.J.; R.G. Howard and C. Metreweli.** "How Sensitive is Ultrasound in the Detection of Vesicoureteric Reflux?". *Pediatric Radiology* vol.28 no.5, pp.352-353. USA, 1998.05.
- <P983243> **Roebuck, D.J.; M.D. Nelson; J. Villablanca and K. Maher.** "Surveillance Imaging in Medulloblastoma". *Pediatric Radiology* vol.28 no.5, pp.374-375. USA, 1998.05.
- <P983244> **Roebuck, D.J.; J.F. Griffith; J.C.Y. Cheng; T.H. Rainer and C. Metreweli.** "Work in Progress: The Utility of MR Imaging Following Elbow Trauma in Children". *Pediatric Radiology* vol.28 no.5, p.373. USA, 1998.05.
- <P983245> **Roebuck, D.J.; J. Griffith; S.M. Kumta; P.C. Leung and C. Metreweli.** "Imaging Findings Following Limb Salvage Surgery with Allograft Reconstruction for Malignant Bone Tumors of Childhood". *Pediatric Radiology* vol.28 no.8, p.670. USA, 1998.08.
- <P983246> **Roebuck, D.J.; Y.L. Chan; K.Y. Lau; M.P. Yuen; C.K. Li; W. Chik and C. Metreweli.** "Neuro-imaging in Patients Cured of Acute Lymphoblastic Leukemia (ALL)". *Pediatric Radiology* vol.28 no.5, p.368. USA, 1998.05.
- <P983252> **Chan, Y.L.; K.W. Chan; C.K. Yeung; D.J. Roebuck; W. Chu; K.H. Lee and C. Metreweli.** "MR Imaging of Renal Scar-Comparison with Renal Scintigram". *Pediatric Radiology* vol.28 no.5, p.353. USA, 1998.
- <P983290> **Howard, Robert G.; Derek J. Roebuck and Constantine Metreweli.** "The Association of Mediastinal Germ Cell Tumour and Testicular Microlithiasis". *Pediatric Radiology* vol.28, p.998. USA, 1998.
- <P983291> **Loftus, W.K.; D.J. Roebuck and C. Metreweli.** "The Normal Range of Lung Density in Children in the First Decade of Life". *Pediatric Radiology* vol.28 no.5, p.389. USA, 1998.
- <P983292> **Roebuck, D.J.; Y.L. Chan; K.Y. Lau; P. Yuen; C.K. Li and C. Metreweli.** "Neuroradiologic Findings in Patients Cured of Acute Lymphoblastic Leukemia". *Pediatric Radiology* vol.28 no.8, p.668. USA, 1998.08.
- <P983293> **Roebuck, D.J.; J.F. Griffith; S.M. Kumta; P.C. Leung and C. Metreweli.** "Imaging Findings Following Allograft Reconstruction in Children with Malignant Bone Tumors". *Pediatric Radiology* vol.28 no.5, p.373. USA, 1998.
- <P983294> **Roebuck, D.J.; Y.L. Chan; K.Y. Lau; M.P. Yuen; C.K. Li; W. Chik and C. Metreweli.** "Neuro-Imaging in Patients Cured of Acute Lymphoblastic Leukemia (ALL)". *Pediatric Radiology* vol.28 no.5, p.368. USA, 1998.
- <P983299> **Howard, R.G.; D.J. Roebuck and C. Metreweli.** "How Sensitive is Ultrasound in the Detection of Renal Scars?". *Pediatric Radiology* vol.28 no.5, p.353. USA, 1998.
- <P983387> **Roebuck, Derek J.; Judith K. Sato and Jana Fahmy.** "Breast Metastasis in Osteosarcoma". *Australasian Radiology* vol.43, pp.108-110. Australia, 1998.
- <P983397> **Alise, Vanoyan and Derek J. Roebuck.** "Chronic Granulomatous Disease Presenting in Infancy with Abdominal Infection: Case Report". *Canadian Association of Radiologists Journal* vol.49 no.6, pp.367-369. Canada, 1998.12.
- <P983408> **Chan, Yu Leung.** "New Approach in Diagnosis of Bile Duct Disease with Ultrasound and Magnetic Resonance Imaging". *Journal of Gastroenterology and Hepatology* vol.13, p.S278-S283. USA, 1998.
- <P983491> **King, A.D.; G.T.C. Ko; V.T.F. Yeung; C.C. Chow; J. Griffith and C.S. Cockram.** "Dual Phase Spiral CT in the Detection of Small Insulinomas of the Pancreas". *British Journal of Radiology* vol.71, pp.20-23. UK, 1998.01.

- <P983913> **Griffith, J.F.; T. Rainer; A. Ching; K.L. Law; R. Cocks and C. Metreweli.** "Ultrasound Detection of Rib Fractures". *Hong Kong Academy of Medicine 1st International Congress* vol.4 no.4, p.29. Hong Kong: Hong Kong Medical Journal, 1998.11.
- <P984116> **Griffith, James F.; Shekhar M. Kumta; Ann D. King; Louis T.C. Chow and Ping Chung Leung.** "Letters to the Editor". *Clinical Orthopaedics and Related Research* vol.355, pp.328-329. USA, 1998.10.
- <P984339> **King, Ann D.; James Griffith; Anthony Rushton and Constantine Metreweli.** "Tuberculosis of the Greater Trochanter and the Trochanteric Bursa". *The Journal of Rheumatology* vol.25, no.2, pp.391-393. USA, 1998.
- <P984355> **Ahuja, A.T.; A.D. King; E.S.Y. Chan; J. Kew and W.W.M. Lam.** "Madelung's Disease: US, CT and MRI Appearances". *The British Journal of Radiology* vol.71, pp.82-83. UK, 1998.06.
- <P984382> **Roebuck, Derek J.** "What are the Risks of Diagnostic Medical Radiation?". *The Medical Journal of Australia* pp.197-198. Australia: The Subscriptions Department Medical Journal of Australia, 1998.02.16.
- <P984383> **Chan, Y.L.; S.F. Leung; A. King; W.W.M. Lam; P.H.K. Choi and C. Metreweli.** "Late Radiation Injury of the Temporal Lobes in Patients Treated with Radiotherapy for Nasopharyngeal Carcinoma - MRI Evaluation". *International Society for Magnetic Resonance in Medicine 6th Scientific Meeting Exhibition* p.322. Sydney, Australia, 1998.04.18.
- <P984384> **Chan, Y.L.; K.S. Wong; G. Cao; W.W.M. Lam; A. King; D. Yeung and C. Metreweli.** "MR Evaluation of Acute and Early Subacute Stroke - Comparison between Diffusion Weighted Imaging, Turbo Spin-Echo T2-Weighted and Fluid Attenuated Inversion Recovery Sequences". *International Society for Magnetic Resonance in Medicine 6th Scientific Meeting Exhibition*, Sydney, Australia, 1998.04.18.
- <P984385> **Yeung, D.; Y.L. Chan; S.F. Leung; W.W.M. Lam; G. Cao and C. Metreweli.** "An *in vivo* Proton MR Spectroscopy Study of Late Delayed Radiation Necrosis at the Temporal Lobes in Patients Treated for Nasopharyngeal Carcinoma". *International Society for Magnetic Resonance in Medicine 6th Scientific Meeting Exhibition* p.74. Sydney, Australia, 1998.04.18.
- <P984445> **Ahuja, A.** "Lymph Nodes Re-Visited". Paper presented in the Morriston Head and Neck Ultrasound Workshop, organized by Morriston Hospital. UK, 1998.09.
- <P984446> **Ahuja, A.** "Lumps and Bumps to Confuse You". Paper presented in the Morriston Head and Neck Ultrasound Workshop, organized by Morriston Hospital. UK, 1998.09.
- <P984447> **Ahuja, A.** "Parathyroid". Paper presented in the Morriston Head and Neck Ultrasound Workshop, organized by Morriston Hospital. UK, 1998.09.
- <P984448> **Ahuja, A.** "The Thyroid". Paper presented in the Morriston Head and Neck Ultrasound Workshop, organized by Morriston Hospital. UK, 1998.09.
- <P984478> **Ying, Micheal; Fiona Brook; Anil Ahuja and Constantine Metreweli.** "The Value of Thyroid Parenchymal Echogenicity as an Indicator of Pathology Using the Sternomastoid Muscle for Comparison". *Abstracts of the British Medical Ultrasound Society 30th Annual Meeting* p.81. Harrogate, UK, 1998.12.
- <P984500> **Ho, S.S.Y. and C. Metreweli.** "How Symmetrical is Normal Carotid Blood Flow Volume". *Abstracts of the 30th Annual Meeting of British Medical Ultrasound Society* p.86. Harrogate, UK: British Institute of Radiology, 1998.12.
- <P984795> **Loftus, W.K.; F.M. Hewitt and O. Metreweli.** "Case Report: Femoral Hernia Causing Small Bowel Obstruction-Ultrasound Diagnosis". *Clinical Radiology* vol.53, pp.618-619. London, UK, 1998.08.

- <P984906> **Griffith, J.F.; D.J. Roebuck; S.M. Kumta; P.C. Leung and C. Metreweli.** "Imaging Complications of Allograft Bone Reconstruction". *Programme and Book of the 49th Annual Scientific Meeting of the Royal Australian College of Radiologists* p.184. Australia, 1998.10.
- <P984911> **Yang, W.T.; T.N. Leung and C. Metreweli.** "Uterine Sarcoma and Bilateral Renal Angiomyolipomas". *Journal of the Hong Kong College of Radiologists* vol.1 no.2, pp.141-143. Hong Kong, 1998.10.
- <P985021> **Ying, Michael, Anil Ahuja and Constantine Metreweli.** "Diagnostic Accuracy of Sonographic Criteria for Evaluation of Cervical Lymphadenopathy". *Journal of Ultrasound Medicine* vol.17, pp.437-445. USA, 1998.
- <P990004> **Yang, W.T.; S.C. Ward and C. Metreweli.** "Decrease in Size of Daisy Chain Nodes with Age in Normal Subjects". *Journal of the Hong Kong College of Radiologists* vol.1 no.2, pp.113-117. Hong Kong, 1999.
- <P990065> **Kew, Jacqueline; Michael C.F. Tong; Ann D. King; Sing Fai Leung; Constantine Metreweli and Charles Andrew Van Hasselt.** "Magnetic Resonance Imaging and Audiologic Assessment of Middle Ear Effusions in Patients with Nasopharyngeal Carcinoma Before Radiation Therapy". *The American Journal of Otology* vol.20 no.1, pp.74-76. USA, 1999.01.
- <P990067> **Lam, W.W.M.; H. Chan; Y.L. Chan; J.W.K. Fung; N.M.C. So and C. Metreweli.** "MR Imaging in Amyopathic Dermatomyositis". *Acta Radiologica* vol.40, pp.69-72. Denmark, 1999.
- <P990114> **Yang, Wei Tse and Constantine Metreweli.** "Sonography of Nonmammary Malignancies of the Breast". *American Journal of Roentgenology* vol.172, pp.343-348. USA, 1999.02.
- <P990133> **King, A.D.; J. Kew; M. Tong; S.F. Leung; W.W.M. Lam; C. Metreweli and C.A. Van Hasselt.** "Magnetic Resonance Imaging of the Eustachian Tube in Nasopharyngeal Carcinoma: Correlation of Patterns of Spread with Middle Ear Effusion". *The American Journal of Otology* vol.20 no.1, pp.69-73. USA, 1999.
- <P990138> **Yang, W.T. and Constantine Metreweli.** "Doppler Evaluation of Axillary Lymph Nodes". *Proceedings of the International Congress on the Ultrasonic Examination of the Breast 11th Congress of Breast Imaging* p.385. Korea, 1999.05.
- <P990139> **Yang, W.T.; L.K. Chan; E. Chan and Constantine Metreweli.** "Evaluation of Breast Masses and Axillary Nodes: Effect with Microbubble Ultrasound Contrast". *Proceedings of the International Congress on the Ultrasonic Examination of the Breast 11th Congress of Breast Imaging* p.386. Korea, 1999.05.11.
- <P990140> **Metreweli, C.; Chan L.K.; Chan E. and Yang W.T.** "Effect of Microbubble Ultrasound Contrast on Breast Masses and Axillary Nodes-Preliminary Results". *Proceedings of the American Roentgen Ray Society 99th Annual Meeting* vol.172 no.3, pp.88-89. USA, 1999.05.
- <P990163> **Ahuja, A.T.; S.F. Leung; P. Teo; M. Ying; W. King and C. Metreweli.** "Submental Metastases from Nasopharyngeal Carcinoma". *Clinical Radiology* vol.54, pp.25-28. UK, 1999.
- <P990166> **Ahuja, Anil T.; Stella S.Y. Ho; Sing F. Leung; Jacqui Kew and Con Metreweli.** "Metastatic Adenopathy from Nasopharyngeal Carcinoma: Successful Response to Radiation Therapy Assessed by Color Duplex Sonography". *American Journal of Neuroradiology* vol.20, pp.151-156. USA, 1999.01.
- <P990284> **Leung, Chan Yu.** "MRI in Congenital and Developmental Disorders of the Paediatric Spine". *Proceedings of the 1999 Shanghai International Medical Imaging Symposium - Musculoskeletal Radiology and Neuroradiology* pp.60-63. Shanghai, China: Shanghai Society of Radiology, 1999.04.

- <P990285> **Leung, Chan Yu.** "MRI of the Paediatric Knee". *Proceedings of the 1999 Shanghai International Medical Imaging Symposium Musculoskeletal Radiology and Neuroradiology* pp.85-87. Shanghai, China: Shanghai Society of Radiology, 1999.04.
- <P990296> **Kew, J.; Kumta S.M.; Griffith J.F.; Metreweli C. and Leung P.C.** "Magnetic Susceptibility Artefacts Found *in-vitro* Bone Allografts". *Proceedings of the 10th International Symposium on Limb Salvage* p.115. Cairns, Australia: International Society of Limb Salvage, 1999.04.
- <P990297> **Kew, J.; Kumta S.M.; Chow T.C. and Leung P.C.** "The Limitations of MR Imaging: A Series of Unusual Benign Soft Tissue Lesions that Mimic Aggressive Soft Tissue Neoplasm". *Proceedings of the 10th International Symposium of Limb Salvage* p.110. Cairns, Australia: International Society of Limb Salvage, 1999.04.
- <P990323> **Yang, Wei Tse; Winnie Yeo and Constantine Metreweli.** "Imaging of Iliopsoas Metastasis". *Clinical Radiology* vol.54, pp.85-89. UK, 1999.
- <P990324> **Yang, W.T.** "Basics of Breast Ultrasound" *Proceedings of the Asian-Oceanian Seminars on Diagnostic and Interventional Radiology* pp.23-26. Singapore: Singapore Radiological Society, 1999.04.17.
- <P990325> **Yang, W.T.** "Breast US Advances" *Proceedings of the Asian-Oceanian Seminars on Diagnostic and International Radiology* pp.57-58. Singapore: Singapore Radiological Society, 1999.04.17.
- <P990334> **Yu, S.C.H.; Y.L. Lee and C. Metreweli.** "Percutaneous Vertebral Biopsy Through Intact Bone: A Coaxial Bone Transgressing Technique with 18 Gauge Needle". *Clinical Radiology* vol.54 no.3, pp.176-178. UK, 1999.03.
- <P990434> **Chang, J.; Yang, W.T. and Choo H.F.** "Mammography in Asian Patients with BRCA1 Mutations". *The Lancet* vol.353, pp.2070-2071. UK, 1999.06.
- <P990438> **Griffith, James F.** "Diagnostic Imaging of the Cervical Spine". *Cervical Spinal Disorders a Text Book for Rehabilitation Sciences Students* ed by Sai Wing Lee. pp.77-93. Hong Kong: Springer, 1999.
- <P990486> **King, A.D.; A.T. Ahuja; C.O. Mok and C. Metreweli.** "MR Imaging of Thyroglossal Duct Cysts in Adults". *Clinical Radiology* vol.54, pp.304-308. UK, 1999.
- <P990487> **King, A.D.; A. Ahuja; S.F. Leung; Y.L. Chan; W.W.M. Lam and C. Metreweli.** "MR Features of the Denervated Tongue in Radiation Induced Neuropathy". *The British Journal of Radiology* vol.72, pp.349-353. UK, 1999.
- <P990492> **Loftus, W.K.; C. Metreweli; J.J.Y. Sung; W.T. Yang; V.K.S. Leung and P.A.K. Set.** "Ultrasound, CT and Colonoscopy of Colonic Cancer". *The British Journal of Radiology* vol.72, pp.144-148. UK, 1999.02.
- <P990494> **King, Ann D.; Anil T. Ahuja and Constantine Metreweli.** "MRI of Tuberculous Cervical Lymphadenopathy". *Journal of Computer Assisted Tomography* vol.23 no.2, pp.244-247. USA, 1999.
- <P990507> **Ahuja, Anil T.; Ann D. King; Walter King and Con Metreweli.** "Thyroglossal Duct Cysts: Sonographic Appearances in Adults". *American Journal of Neuroradiol* vol.20, pp.579-582. USA, 1999.
- <P990524> **So, Nina M.C.; Wei Tse Yang and Constantine Metreweli.** "Imaging Features of Liposarcoma of the Pectoral Muscle". *American Journal of Roentgenology* vol.172, p.1148. USA, 1999.04.
- <P990525> **Chan, Y.L.; D. Roebuck; D. Yeung; M.P. Yuen; K.Y. Lau; C.K. Li and K.W. Chik.** "Long Term Cerebral Metabolites Changes on Proton Magnetic Resonance Spectroscopy after intrathecal Methotrexate and Cranial Irradiation". *International Society for Magnetic Resonance in Medicine 7th Scientific Meeting and Exhibition* no.1468, p.147. 1999.05.22.

- <P990526> **Yeung, D.; Y.L. Chan; S.F. Leung; G. Cao and C. Metreweli.** "Detection of an Unknown JH MRS Signal at 2.37-2.40 Ppm in Patients with Severe Late-Delayed Radiation Injuries". *International Society for Magnetic Resonance in Medicine 7th Scientific Meeting and Exhibition* no.1393, p.140. USA, 1999.05.
- <P990531> **Lam, Wynnie W.M.; Ann D. King and Chan, Yu Leung.** "Computed Tomography and Magnetic Resonance Imaging". *Nasopharyngeal Carcinoma* ed. by C Andrew Van Hasselt and Alan G Gibb. 2nd ed., pp.127-148. Hong Kong: The Chinese University Press, 1999.
- <P990532> **Chan, Yu Leung; D.J. Roebuck; D. Yeung; K.Y. Lau; P. Yuen; C. Li and C. Metreweli.** "Long-term Brain Changes in H-1 MR Spectroscopy after Intrathecal Methotrexate and Cranial Irradiation in Patients Cured of Acute Lymphoblastic Leukemia". *Proceedings of the 42nd Annual Meeting Hyatt Regency Hotel Vancouver, British Columbia, Canada* Radiological Society of North America, 1999.05.14.
- <P990601> **Roebuck, D.J.; J.F. Griffith; Y.L. Chan; J.C. Cheng; T.H. Rainer and C. Metreweli.** "MR of Elbow Injury in Children". *Proceedings of the 42nd Annual Meeting of the Society of Pediatric Radiology* p.51. Canada: Radiological Society of North America, 1999.05.14.
- <P990602> **Yuen, H.Y.; D.J. Roebuck; J. Kew; C. Metreweli; C.M. Leung and M.L. Teo.** "Nasopharyngeal Carcinoma in the 2nd Decade of Life". *Proceedings of the 42nd Annual Meeting of the Society of Pediatric Radiology* p.119. Canada: Radiological Society of North America, 1999.05.
- <P990603> **Ahuja, A.T.; P.M.L. Teo; K.F. To; A.D. King and C. Metreweli.** "Palatal Lymphoepitheliomas and a Review of Head and Neck Lymphoepitheliomas". *Clinical Radiology* vol.54, pp.289-293. UK, 1999.
- <P990655> **Chan, Y.L.; Y.T. Lee; J.Y.L. Ching; S.C.H. Yu; S.C.S. Chung and J.J.Y. Sung.** "Effect of Propranolol Treatment on the Hemodynamic Changes in the Azygous and Portal Veins in Cirrhotic Patients - Assessment on Cine Phase-Contrast MR Angiography". Paper presented in the International Society for Magnetic Resonance in Medicine 7th Scientific Meeting and Exhibition. 1999.05.
- <P990683> **Ying, M.; Ahuja A. and Metreweli C.** "Diagnostic Accuracy of Sonographic Criteria for Evaluation of Cervical Lymphadenopathy". *Journal of Ultrasound in Medicine - Official Proceedings 43rd Annual Convention* vol.18, pp.S138-S139. USA, 1999.03.
- <P990684> **Chan, S.T.; Brook F.M.; Ahuja A.; Brown B. and Metreweli C.** "Blood-Flow Characteristics in the Superior Thyroid Artery in Human Females". *Journal of Ultrasound in Medicine-Official Proceedings 43rd Annual Convention* vol.18, p.S:140. USA, 1999.03.
- <P990685> **Ahuja, A.T.; M. Ying and C. Metreweli.** "The Role of Ultrasound in Cervical Lymphadenopathy". Paper presented in the International Head & Neck Oncology Congress of the South African Head & Neck Oncology Society. South Africa, 1999.03.
- <P990686> **Ahuja, A.T.; M. Ying; S.S.Y. Ho and C. Metreweli.** "The Role of Colour Flow Ultrasound in Distinguishing Between Benign and Metastatic Cervical Lymph Nodes from Head and Neck Carcinomas". Paper presented in International Head & Neck Oncology Congress, organized by South African Head & Neck Oncology Society. 1999.03.
- <P990720> **Chan, Yu-Leung; Jack C.Y. Cheng; Xia Guo; Ann D. King; James F. Griffith and Constantine Metreweli.** "MRI Evaluation of Multifidus Muscles in Adolescent Idiopathic Scoliosis". *Pediatric Radiology* vol.29, pp.360-363. USA, 1999.
- <P991057> **Griffith J.F.; A.C.W. Chan; L.T.C. Chow; S.F. Leung; Y.H. Lam; E.Y. Liang; S.C.S. Chung and C. Metreweli.** "Assessing Chemotherapy Response of Squamous Cell Oesophageal Carcinoma with Spiral CT". *The British Journal of Radiology* vol.72, pp.678-684. UK, 1999.

- <P991068> **Wong, P.K. and Y.L. Chan.** "Contrast Bolus Arrival and Bolus Transit in the Abdominal Aorta and External Iliac Artery - Appraisal on IV Gadolinium Dynamic Magnetic Resonance Angiography". *The Hong Kong Radiographers Journal* vol.3 no.1, pp.2-4. Hong Kong, 1999.06.
- <P991117> **Yang, W.T.; Cheung T.H.; Ho S.S.Y; Yu M.Y. and Metreweli C.** "Comparison of Laparoscopic Sonography with Surgical Pathology in the Evaluation of Pelvic Lymph Nodes in Women with Cervical Cancer". *American Journal of Roertgenology* vol.172, pp.1521-1525. USA, 1999.06.
- <P991535> **Yuen, H.Y.; Roebuck D.J.; Kew J.; Metreweli C.; Leung C.M. and Teo P.M.L.** "CT Findings in Childhood Nasopharyngeal Carcinoma (NPC)". *Proceedings of the 3rd Asian and Oceanian Congress of Neuroradiology and Head and Neck Radiology* p.182. Australia: Springer-Verlag, 1999.06.18.
- <P991640> **Griffith, J.F. and M.W.N. Wong.** "The Ankle Joint". *Journal of Hong Kong College of Radiologists* vol.2 no.3, pp.237-242. Hong Kong, 1999.
- <P991751> **Kew, J.; Y.L. Lee; I.C. Davey; S.Y. Ho; K.C. Fung and C. Metreweli.** "Deep Vein Thrombosis in Elderly Hong Kong Chinese with Hip Fractures Detected with Compression Ultrasound and Doppler Imaging: Incidence and Effect of Low Molecular Weight Heparin". *Arch Orthop Trauma Surg* vol.119, pp.156-158. Germany: Springer-Verlag, 1999.
- <P991864> **Ahuja, Anil T.** "Ultrasound for Cervical Lymph Nodes Including Colour Doppler". Paper presented in the Workshop: Ultrasound of the Head and Neck, organized by University of Stellenbosch. Cape Town, 1999.03.23.
- <P991865> **Ahuja, Anil T.** "Practical Demonstrations". Paper presented in the Workshop: Ultrasound of the Head and Neck, organized by University of Stellenbosch. Cape Town, 1999.03.23.
- <P991866> **Ahuja, Anil T.** "Ultrasound for Thyroid Parathyroid Glands and Miscellaneous Bumps in the Head and Neck". Paper presented in Workshop: Ultrasound of the Head and Neck, organized by University of Stellenbosch. Cape Town, 1999.03.23.
- <P991994> **King, A.D.; K.L.K. Lei; A.T. Ahuja; W.W.M. Lam and C. Metreweli.** "Nasal T/NK Cell Lymphoma: MR and CT Imaging". Poster presentation at Radiology 1999, Organized by the British Institute of Radiology. vol.0407. UK, 1999.05.
- <P992023> **King, A.D.; W.W.M. Lam; S.F. Leung; Y.L. Chan; P. Teo and C. Metreweli.** "MRI of Local Disease in Nasopharyngeal Carcinoma: Tumour Extent vs Tumour Stage". *The British Journal of Radiology* vol.72, pp.734-741. UK, 1999.
- <P992143> **Roebuck, Derek J.** "Skeletal Complications in Pediatric Oncology Patients". *Radiographics* pp.873-885. USA, 1999.
- <P992713> **Chan, Suk-Tak, Fiona Brook, Anil Ahuja, Brian Brown and Constantine Metreweli.** "Relationship of Thyroid Blood Flow to Reproductive Events in Normal Chinese Females". *Utrasound in Medicine and Biology* vol.25 no.2, pp.233-240. USA, 1999.

see also <P964274>, <P974941>, <P974942>, <P974943>, <P974965>, <P974972>, <P974977>, <P974978>, <P982641>, <P982650>, <P982700>, <P982701>, <P982720>, <P982750>, <P982807>, <P982884>, <P983065>, <P983273>, <P983274>, <P983282>, <P983451>, <P983485>, <P983780>, <P983781>, <P983857>, <P983980>, <P984042>, <P984117>, <P984215>, <P984248>, <P984371>, <P984832>, <P984899>, <P984980>, <P990034>, <P990135>, <P990157>, <P990168>, <P990239>, <P990258>, <P990293>, <P990295>, <P990302>, <P990413>, <P990489>, <P990529>, <P990805>, <P990933>, <P991191>, <P991247>, <P991345>, <P991940>, <P992098>, <P992685>, <P992712>

RESEARCH PROJECTS

The Effect of Irbesartan on Morbidity and Mortality in Hypertensive Patients with Type II Diabetes and Diabetic Nephropathy

✉ CHAN Chung Ngor Juliana • COCKRAM Clive Stewart • CRITCHLEY Julian A J H

☐ 1 December 1998

❖ Bristol Myers Squibb (HK) Ltd

The prevalence of type 2 diabetes is reaching epidemic proportion worldwide and in our local population. In particular, diabetic nephropathy is the major cause of renal failure and accounts for 30% of patients requiring dialysis. In this multicentre study, the effect of irbesartan, an angiotensin II (AII) antagonist, is compared to amlodipine, a calcium channel blocker and placebo in a large group of type 2 diabetic patients with nephropathy. This will be a 2-year study with clinical end points defined as all cause mortality, dialysis and 2 times baseline plasma creatinine. In this multicentre study, there will be an Asian component involving centres from Hong Kong, Singapore and Taiwan. The divisions of clinical pharmacology and endocrinology of CUHK at PWH has a strong track record in the research of diabetic nephropathy and will be participating in this multi-centre study.

Data collected from this study will contribute to the overall analysis of the multi-centre database. These data will also be analysed together with that collected from similar studies conducted locally, which examine the effects of other AII antagonists and angiotensin converting enzyme inhibitor in our local Chinese type 2 diabetic patients with renal impairment. Thus, we will have unique information on the protective effects of inhibition of the renin angiotensin system on the progression of renal function and clinical end points in these high risk patients.
(MD98086)

Screening for Mutations in the Glucokinase and Hepatocyte Nuclear Factor-1 α Genes in Chinese Patients with Early-onset Type 2 Diabetes and A Positive Family History

✉ CHAN Chung Ngor Juliana • NG Chor Yin • COCKRAM Clive Stewart • CRITCHLEY Julian A J H

☐ 1 April 1999

❖ CUHK Research Committee Funding

Diabetes mellitus is a common disease occurring in about 10% of our general population, with type 2 diabetes being the predominant form. Genetic factors have been implicated in this disease as 40% of these patients have a positive family history.

Type 2 diabetes is genetically and phenotypically heterogeneous. Recently, mutations in hepatocyte nuclear factor (HNF)-4 α , HNF-1 α , HNF-1 α , glucokinase and insulin promoter factor-1 genes have been associated with maturity onset diabetes of the young (MODY), a subtype of diabetes characterized by age of onset before 25 years and autosomal dominant inheritance. HNF-1 α and glucokinase gene mutations accounted for >50% of Caucasian MODY families and 9% of Japanese early-onset type 2 diabetics. Mutation in HNF-4 α gene was rarely found. However, mutations of these genes have not been reported in Chinese.

Our previous study has found a prevalence of 10% autoimmune type 1 diabetes in 150 early-onset diabetic patients (\leq 35 years) although 50% of them have positive family history. This suggests a role of genetics in the aetiology of the disease. In this study, we aim to identify mutations/polymorphisms in the glucokinase and HNF-1 α genes by direct sequencing in 250 patients with early-onset type 2 diabetes and positive family history. Gene mutations identified will be screened in family members of the affected probands as well as in 100 age- and sex- matched healthy Chinese controls. The phenotypic characteristics in subjects with the mutations/polymorphisms will be examined. These data will significantly improve our understanding of the pathogenic mechanism of diabetes and allow early identification of high-risk individuals for prospective evaluation.
(MD98100)

Mapping Genes for Young Onset Diabetes, Obesity and Diabetic Nephropathy

✉ CHAN Chung Ngor Juliana • CRITCHLEY Julian A J H • TOMLINSON Brian • CHAN Yan Keung Thomas • COCKRAM Clive Stewart • NG Chor Yin • LEE Shao Chin • LEE Suk Kuen • THOMAS Neil G • METREWELI Constantine (Diagnostic Radiology & Organ Imaging) • WONG Wing Kin Gary (Paediatrics)

☐ 1 June 1999

❖ CUHK Strategic Research Program

The prevalence of diabetes, obesity and related diseases are reaching epidemic proportions in Hong Kong Chinese. Family history is a particularly important factor in the development of young onset diabetes (<40 years). Amongst these young patients, 58% gave a positive family history. Our preliminary findings suggest that 10% of these patients with familial diabetes had various gene mutations, which may contribute to disease manifestation. Obesity is also an important determinant for the development of diabetes. In this respect, there is a high prevalence of childhood obesity in Hong Kong. Diabetes is the leading cause of kidney failure, which is also the leading cause of death amongst our local diabetic

patients. Genetic predisposition to this complication has been demonstrated in several populations. The genetic mapping of these disease genes will lead to a more scientific approach to define diseases by their mechanisms rather than clinical appearance and to the development of drugs designed to modify the biochemical pathways involved in these diseases. The ability to intervene early in the course of the disease will shift the attention of health care to disease prevention and away from sustaining life in patients with end stage disease, the latter being costly in terms of both money and human suffering. In this collaborative project, the research team aims to use the *state-of-the-art* techniques to identify these gene markers and their interactions with environmental factors in disease manifestations.

(MD98116)

A Multicenter, Double-blind, Parallel Group Study Comparing the Efficacy and Incidence of Gastroduodenal Ulcer Associated with SC-58635 100MG BID with that of Diclofenac 50MG BID Taken for 12 Weeks in Patients with Osteoarthritis or Rheumatoid Arthritis in Hong Kong

✉ CHAN Ka Leung Francis • SUNG Joseph Jao Yiu • LI Kwok Ming Edmund • WOO Jean

☐ 1 June 1999

❖ G. D. Searle & Co

This double-blind prospective randomized study sought to test the efficacy and safety of a new class of NSAID, celecoxib, for patients with rheumatoid or degenerative arthritis.

(MD98149)

A Study on the Drug-Related Death Cases in Hong Kong

✉ CHAN Yan Keung Thomas • CRITCHLEY Julian A J H • CHAN Tai Wai David*

☐ 1 November 1998

❖ Action Committee Against Narcotics

Very little is known about the incidence and pattern of drug abuse related deaths in Hong Kong. Deaths under such circumstances are particularly tragic because mostly young people are involved and help would have been readily available from various treatment and rehabilitation programmes. This is a retrospective study of all patients who died of poisonings with drugs or substances of abuse between January 1994 and December 1998. The objectives are:

- (1) to provide an overview of drug abuse related deaths and a trend analysis of these cases;
- (2) to analyse the characteristics of the cases, which include the type of drugs involved, reasons for

taking the drugs, where such drugs were obtained, and whether the affected subjects received any treatment programmes;

- (3) to assess as far as possible whether the deaths were caused by unexpected increase in purity of heroin, suicidal attempts, lack of understanding of the properties of the drugs, or otherwise.

The research findings will provide a quantitative basis for reference in the formulation of preventive education and publicity programmes to increase the awareness of the community (including health care professionals) to the dangers of drug abuse. Also, insight may be gained as to how co-ordinated efforts among various parties involved can be carried out, taking into account the characteristics we identify. We shall also determine the best, feasible way of monitoring drug abuse related deaths in Hong Kong.

(MD98080)

Effect of Alendronate on Patients with Primary Hyperparathyroidism

✉ CHOW Chun Chung Francis • COCKRAM Clive Stewart • LI J. K. Y.* • CHAN W. B.* • KWOK Chi Yui Timothy • SO W Y*

☐ 31 January 1998

❖ Merck Sharp & Dohme (Asia) Ltd

Primary hyperparathyroidism is initially described in 1920s in patients with osteitis fibrosa cystica. While this severe form of presentation appeared rarely, other mild forms of bone disease exist and cause concern. In a community health survey, the risk of fracture was found to be raised before the diagnosis of primary hyperparathyroidism was confirmed in these patients. Primary hyperparathyroidism was found to be significantly associated with vertebral fracture. Bone mineral density studies using dual photon absorptiometry showed significant bone demineralization in patients with the disease and this bone loss appeared to be irreversible despite showing improvement after parathyroidectomy. Bisphosphonates had first been used to treat osteoporosis in 1970s. The older generation bisphosphonate, etidronate, was used initially with poor result. However, two decades later, the use of intermittent cyclical etidronate was shown to improve vertebral bone mineral content and reduce fracture rate in postmenopausal osteoporotic women. Etidronate and clodronate had both been shown to have good effect in suppressing bone resorptive activity in patients with primary hyperparathyroidism. Alendronate, being the most potent bisphosphonate, aroused great excitement recently because of its significant improvement in bone mineral density and reduction in fracture in postmenopausal osteoporosis. In postmenopausal women with primary hyperparathyroidism, the effect of bisphosphonate on bone mineral density and fracture rate has not been established. The primary objective of this project is

to determine whether oral administration of 10mg Alendronate will increase bone mineral density significantly when compared with placebo in postmenopausal women with primary hyperparathyroidism.
(MD97175C)

IND Filing and Phase I Clinical Trial of a Malaria Vaccine TBV25H - Phase I Clinical Trial Component

✉ CRITCHLEY Julian A J H • TOMLINSON Brian • THOMAS Neil G • SEPHTON Carmen L.*

☐ 1 July 1998

❖ Industrial Support Fund, Industry & Technology Development Council

This grant is to enable us to carry out the next phase of the development of a novel malarial vaccine, *TBV25H*. It will involve the filing of an Investigational New Drug (IND) application to the Department of Health and performing Phase I clinical trials in the Clinical Pharmacology Studies Unit of the Division of Clinical Pharmacology, Department of Medicine and Therapeutics. The deliverables of this Project will include:

- (1) human safety and tolerance data of a malaria vaccine which has the potential to prevent over 500 million people from contracting malaria and 2 million people from dying in a year worldwide;
- (2) the first IND application for a novel human healthcare product ever filed in Hong Kong;
- (3) the first Phase I human clinical trial of a vaccine under GCP guidelines ever performed in Hong Kong. Using vaccine produced by the Hong Kong Institute of Biotechnology's GMP pilot plant the staff of the Clinical Pharmacology Studies Unit will evaluate the pharmacokinetics pharmacodynamics and safety of TBV25H in man.

These studies will be performed in collaboration with Dr. Louis Miller of the NIH and the WHO. A final report will be produced for the HKSAR Government and we hope to help pave the way for the HKSAR to establish a globally competitive biotechnology industry.
(MD98005)

Genome-wide Search for Diabetes-associated Genes in Chinese Patients with Type 2 Diabetes Characterized by Insulin Deficient or Non-insulin Resistance in Hong Kong

✉ CRITCHLEY Julian A J H • CHAN Chung Ngor Juliana • NG Chor Yin • COCKRAM Clive Stewart • SCHERER Stephen W.* • TSUI Lap Chee*

☐ 1 April 1999

❖ CUHK Research Committee Funding

Type 2 diabetes is a disorder with complex etiology involving environmental and genetic factors. Candidate genes isolated so far account for a small percentage of affected patients with a rare form of early onset type 2 diabetes. Recently, a genetic locus contributing to type 2 diabetes has been mapped on chromosome 7 in Pima Indians. We have already analyzed the same locus in Hong Kong Chinese type 2 diabetic patients with the microsatellite markers spanning this region. In this project, we aim to assess the linkage of this locus with diabetes in 100 Chinese families with early-onset type 2 diabetes and perform DNA sequence analyses of candidate genes located in this locus. Specifically, we will investigate whether there are mutations associated with type 2 diabetes in the paraoxonase (PON2) and pyruvate dehydrogenase kinase (PDK4) genes mapped to this region. Because of the putative linkage of type 2 diabetes to chromosome 7q, we choose to analyze two candidate genes at this locus which are functionally involved in maintenance of glucose homeostasis. Gene mutations identified will be screened in family members of affected probands as well as 100 age- and sex-matched healthy Chinese controls. This work will complement previous investigations at this genetic locus in other ethnic groups, such as Pima Indians and Caucasians, with different prevalences of type 2 diabetes and our data will shed light on the interethnic distribution of type 2 diabetes candidate genes.
(MD98101)

Prevalence of Sleep-Disordered Breathing and the Effects of Nasal Continuous Positive Airway Pressure on Outcome After Ischemic Stroke

✉ HUI Shu Cheong David • WONG Ka Sing Lawrence • KAY Li Chi Richard • LUM Chor Ming Christopher • KWOK Chi Yui Timothy • WOO Jean

☐ 7 April 1999

❖ CUHK Research Committee Funding

Introduction: Several studies suggest a high prevalence of Sleep disordered breathing (SDB) in patients with acute stroke but there is little data in the Chinese population.

Methods: We have prospectively studied 21 adults (9F, 12M) following their first ischaemic stroke. Sleep and Health Questionnaire, cardiovascular risk factors, Barthel Index (B1), National Institute of Health (NIH) Stroke Scale, Cerebral Tomography and Epworth Sleepiness Scale (ESS) were assessed for the patients. Ischaemic stroke classified according to the Trial of Acute Stroke Treatment (TOAST) classification. Polysomnography (Healthdyne Alice4) was performed within one week from stroke onset. Significant SDB was defined as

Respiratory Disturbance Index (RDI) ≥ 20 /hr with results compared to a control group of 14 adults (6M, 8F).

Results: (mean \pm SD) Mean age 66 \pm 12yrs, mean BMI 25 \pm 5kg/m² and neck circumference 37.4 \pm 4.0cm. History of hypertension noted in 33.3%, hypercholesterolaemia 66.7%, diabetes mellitus 28.6%, recent alcohol drinking 38%, current smoking 24%, snoring 81% and excessive daytime sleepiness 33% of subjects. ESS 6 \pm 3, NIH 4.3 \pm 2.8 (out of 42), BI 15 \pm 4.

Aetiology of ischaemic stroke: Cardiac 4.8%, small vessel 14.3%, large vessel 14.4% and unknown 66.7%. RDI 29 \pm 17, Sleep efficiency 76 \pm 13% and minimum SaO₂ 84 \pm 7%. Significant SDB occurred in 15/21(71%) subjects with predominantly obstructive events in all subjects compared to 4/14(29%) of the control group, matched for age, BMI and ESS.

Conclusion: Our preliminary data shows a high prevalence of SDB post ischaemic stroke. Further study is needed to see if nasal CPAP will alter the outcome of these patients.
(MD98102)

The Efficacy of a Community Nurse Specialist in Preventing Hospital Readmission of Older Patients with Chronic Lung Disease and Cardiac Failure

✉ KWOK Chi Yui Timothy • WOO Jean • LAU Edith Ming Chu (Community and Family Medicine) • LEE Tze Fan Diana (Nursing) • TANG So Kum Catherine (Psychology)

□ 4 January 1999

❖ Health Services Research Fund, Hospital Authority

This is a randomised controlled trial to evaluate the effectiveness of a community nurse specialist in preventing readmissions of older chronic lung disease and cardiac failure patients. It will also investigate the causes of readmissions of these patients.

150 Residents in Shatin & Taipo areas, above 65 years old, admitted to Prince of Wales, Shatin and Taipo Nethersole Hospitals with main diagnosis of chronic lung disease and cardiac failure, having had at least one hospital admission for related problems in previous six months. They are randomised into intervention and control groups before recruitment.

The intervention group receives visits from a nurse specialist before and after hospital discharge; regular telephone contacts with nurse specialist after discharge; telephone hotline for advice, and quick access to specialist medical care; reassessment upon readmission and at six months. The control subjects have pre-discharge assessment and follow-up upon readmission and at six months.

The primary outcome measures are the proportion of subjects free of hospital admissions related to chronic

lung disease and cardiac failure within twenty-eight days and that within six months. The secondary outcomes are the total hospital days after discharge and change in functional and psychological scores. Cost effectiveness analysis will be performed.
(MD98075)

Association of Plasminogen Activator Inhibitor (PAI-1) Gene Polymorphism with Diabetic Nephropathy Among Type 2 Diabetic Patients in Chinese

✉ LI Kam Tao Philip • WONG Teresa*

□ 23 June 1999

❖ Hong Kong Society of Nephrology Ltd

Type 2 Diabetic nephropathy has imposed a major health burden in Hong Kong. The importance of strict metabolic and blood pressure control has been documented fully for prevention of development and progression of diabetic nephropathy in these patients. However, contributions of genetic factors remained to be defined.

Epidemiology studies showed that the non-whites Type 2 population including Chinese have a higher prevalence of diabetic nephropathy than the white patients. Despite a similar duration of disease, blood pressure and glycaemic control, some diabetic patients will develop renal failure while renal function remained to be preserved in others. Familial clustering of renal failure has been reported in several populations suggesting that genetic factors may play a role in the onset and progression of diabetic nephropathy. Understanding of contributory genetic factors in development and progression of diabetic nephropathy may give us insights into the pathogenesis of disease. This may help in the identification of high risk patients and hence add guidance in the management of these patients. However, data on genetic factors of type 2 Chinese diabetic patients is lacking. We have previously demonstrated the lack of association of Angiotensin converting enzyme (DD/II) and Angiotensinogen M235T gene polymorphism with renal function among type 2 diabetic patients in Chinese. Here we aim to study the relationships between plasminogen activator inhibitor-1 (PAI-1) gene polymorphisms and type 2 diabetic nephropathy with respect to renal function, clinical features and metabolic control.
(MD98126)

The Effect of Hydroxychloroquine on Serum Lipids, Apolipoproteins and Lipoprotein(a) in Patients with Systemic Lupus Erythematosus

✉ LI Kwok Ming Edmund • TOMLINSON Brian • LAM Wai Kei Christopher (Chemical Pathology) • TAM Lai Shan

□ 1 September 1998

❖ CUHK Research Committee Funding

Coronary atherosclerosis is very common in SLE patients who have been treated with corticosteroid for at least 1 year. Atherosclerotic vascular disease such as coronary artery disease (CAD) or stroke is one of the most frequent causes of death in SLE. Hyperlipidaemia and elevated levels of lipoprotein(a) have been shown to be important risk factors for CAD, stroke, and other thrombotic events in these patients. Hydroxychloroquine (HCQ) is one of the most common medications used in the treatment of systemic lupus erythematosus (SLE). Its less well known effects such as the prevention of disease or treatment-induced complications, especially hyperlipidaemia, have been recognized to some extent in the Caucasian populations.

In this cross sectional study, we will investigate the magnitude of hyperlipidaemia in a group of SLE patients without nephritis, and study the differences in the lipid profile, if any, in those who have been on treatment with HCQ and those who have never been on this drug.
(MD98039)

A Multinational, Multicentre, Randomised, Double-Blind Study to Assess the Efficacy and Tolerability of Nifedipine GITS 20 mg Compared to Placebo in Low Body Weight Patients with Mild to Moderate Hypertension

✉ SANDERSON John Elsby • TOMLINSON Brian

□ 5 May 1997

❖ Bayer China Co Ltd

Nifedipine GITS (extended release tablets) has been designed to provide a slow sustained release of nifedipine which is an antihypertensive drug. Recent trials in Canada have shown that approximately 75% of patients who take nifedipine GITS are controlled on 30 mg. In Asia patients have a lower body weight and a lower dose may suffice. A new dose strength of nifedipine GITS 20 mg has been designed to address this need. The study primary objective is to assess whether nifedipine GITS 20 mg is effective in lowering blood pressure when given to low body weight Asian patients.
(MD96219C)

The SYMPHONY Trial: A Phase III, Multicenter, International, Randomized, Double-Blind, Aspirin-Controlled Trial to Evaluate the Efficacy and Safety of Sibrafiban (Ro 48-3657), an Oral Platelet Glycoprotein IIb/IIIa Antagonist, as Therapy for the Prevention of Secondary Vascular Events in Patients after an Acute Coronary Syndrome

✉ SANDERSON John Elsby • CALIFF, Robert*

□ 26 November 1997

❖ Hoffmann-La Roche Inc.

This trial is a multicenter, international, randomized, double-blind, aspirin-controlled trial comparing sibrafiban in two dosage regimens to aspirin. Patients who have suffered an episode of Acute Coronary Syndrome within the prior 7 days, who are hemodynamically stable, without clinically unstable heart failure, and without ongoing ischemic chest pain will be considered for enrollment. Patients will be randomized to one of three treatment arms: sibrafiban, high-dose; sibrafiban, low-dose; or aspirin. The treatment duration is 90 days. The primary efficacy endpoint is the 90 day incidence of a composite of any of the following events: death (from any cause), myocardial infarction or reinfarction and severe recurrent ischemia. The primary safety/tolerability endpoints are the 90 day incidence of major or minor bleeds and the 90 day incidence of study drug discontinuations due to bleeding. Assessments for efficacy will continue past the 90 day treatment period and assessment of primary endpoint out to one year after randomization. Patients who undergo intracoronary stenting for either the index event or during the trial will receive either aspirin/ticlopidine, sibrafiban low dose/ticlopidine or sibrafiban high dose/ticlopidine placebo (double-dummy design, based on their initial randomization) for 2-4 weeks following stent placement, and thereafter continue on their previously assigned therapy.
(MD97176C)

The Paragon-B Trial

✉ SANDERSON John Elsby • CHIU C. W.* • TANG Kare Hung* • FUNG Wing Hong*

□ 9 December 1998

❖ Quintiles Pty. Ltd.

Paragon-B is an international multicentre, randomized, double-blind placebo controlled trial of Lamifiban in-patients with unstable angina/non Q-wave myocardial infarction. Lamifiban is new class of highly selective GP IIb/IIIa platelet inhibitor for intravenous use in acute coronary syndrome. The primary end point of the trial is 30-day incidence of a composite of death, myocardial infarction and severe recurrent leading to urgent/unplanned investigation.
(MD98146)

The 2nd Symphony Trial – Sibrafiban Versus Aspirin as Therapy for the Long Term Prevention of Secondary Vascular Events Post Acute Coronary Syndromes

✉ SANDERSON John Elsby

□ 28 May 1999

❖ Hoffmann-La Roche Inc.

The 2nd SYMPHONY Trial. A Phase III, multicenter, international randomized, double-blind, aspirin-controlled trial to evaluate the efficacy and safety of two regimens with XubixTM (sibrafiban; Ro 48-3657), an oral platelet glycoprotein IIb/IIIa receptor antagonist, as therapy for the long term prevention of secondary vascular events in patients after an Acute Coronary Syndrome. (MD98125C)

Does *Helicobacter Pylori* Cause Or Protect Against Gastro-Esophageal Reflux In Asia

✉ SUNG Joseph Jao Yiu • CHUNG Sheung Chee Sydney (Surgery) • NG Enders K. W. (Surgery)*
• CHAN Ka Leung Francis • WU Che Yuen Justin*

□ 1 September 1998

❖ Research Grants Council

Helicobacter pylori is widely recognized as the most important cause of chronic gastritis, peptic ulcer disease and gastric malignancies. Recently, there is evidence suggesting *H. pylori* infection may also lead to gastro-esophageal reflux disease (GERD). On the other hand, some patients received treatment for eradicating *H. pylori* was found to develop GERD subsequently. The relationships between *H. pylori* infection, gastric acid secretion, esophageal motility and gastro-esophageal acid reflux is far from clear. In Asia, the prevalence of *H. pylori* infection is higher than most Western countries. This accounts for the high incidence of peptic ulcers and gastric cancer in this locality. On the other hand, it might also contribute to the low incidence of GERD among Asian populations. Is *H. pylori* CAUSING or PROTECTING against the development of GERD? The present project aims to investigate the relationship between *H. pylori* infection, gastric acid secretion and esophageal motility in patients suffering from various gastrointestinal disorders. We will compare the prevalence of *H. pylori* infection in Chinese patients with GERD against normal control. Patients suffering from gastric or duodenal ulcers are followed up after receiving anti-helicobacter therapy to monitor changes in gastric histology, gastric, cytokines and acid secretion. Finally, patients with *H. pylori*-related duodenal ulcers will be studied for esophageal motility and acid reflux after receiving anti-helicobacter therapy. The results of these three studies may shed light on the relationship between *H. pylori* infection and GERD. (CU98260)

Effects of Homocysteine on Platelet Aggregation *in vitro*

✉ TOMLINSON Brian • CRITCHLEY Julian A J H

□ 1 September 1998

❖ CUHK Research Committee Funding

Elevated levels of homocysteine are associated with an increased risk of atherosclerosis and thrombosis through mechanisms which are not well understood and the related literature is often controversial. Elevated levels of homocysteine may be even more common than hypercholesterolaemia, the prevalence of hyperhomocysteinemia being between 20% and 40% in different populations with vascular disease. Elevated levels of homocysteine may be normalized by supplements with folate and vitamins B12 or B6. to understand. Understanding the mechanisms of the effect of homocysteine in cardiovascular diseases should prove useful in the prevention of premature vascular disease. Possible atherogenic mechanisms of homocysteine and its derivatives include changes in coagulation factors and platelet aggregation, alteration of the vasomotor regulatory and antithrombotic properties of vascular endothelium and stimulation of smooth muscle cell proliferation. Platelet function appears to play an important role in athero-genesis and thrombogenesis and it is possible that elevated homocysteine levels may influence this. Researchers shall investigate the effects of homocysteine and its derivatives on the platelet aggregation induced by ADP and collagen using the electric impedance aggregometer technique measuring platelet aggregation in whole blood *in vitro* in healthy Chinese subjects. If it appears that changes in homocysteine levels affect platelet aggregation *in vitro*, researchers will continue with further studies of platelet aggregation *ex vivo* and *in vivo* in order to investigate the mechanisms by which homocysteine contributes to vascular disease and this may help to develop strategies to treat or prevent vascular disease. (MD98040)

An Open-Label Study to Evaluate the Efficacy and Safety of 80 mg Simvastatin in Patients with Hyperlipidaemia

✉ TOMLINSON Brian • TANG Leung Sang Nelson (Chemical Pathology) • CHAN, Michael*

□ 20 October 1998

❖ Merck Sharp & Dohme (Asia) Ltd

This study will be performed to evaluate the LDL cholesterol (LDL-C)-lowering efficacy and tolerability of 80 mg/day of simvastatin in patients with severe hypercholesterolaemia over an 8-week period. It is a single centre, open-label, study in which patients will be entered into a 2-week screening / diet / placebo run-in period followed by a

12-week treatment period which includes two phases, 40 mg/day (as a single dose for 4 weeks) and 80 mg/day (as a single dose for 8 weeks). A sub-study for investigating the cholesterol sources in the body by testing the urinary mevalonate levels will also be carried out. Total cholesterol (TC), LDL-C, high density lipoprotein cholesterol (HDL-C) and triglycerides (TG) will be measured and clinical evaluation including vital signs and physical examinations and laboratory safety tests including alanine aminotransferase (ALT), gamma glutamyltransferase (gammaGT) and creatine kinase (CK) will be performed continuously during the study.
(MD98120C)

A Multicenter, Double-Blind, Randomized, Parallel, 36-week Dose Escalating Study to Evaluate the Efficacy and Safety of Simvastatin 40 and 80 mg/day Versus Atrovastatin 20, 40 and 80 mg/day in Patients with Hypercholesterolaemia (International)

- ✉ TOMLINSON Brian
- ☐ 20 October 1998
- ❖ Merck Sharp & Dohme (Asia) Ltd

This is a multicenter, randomized, double-blind, parallel, dose escalation study. This study will be conducted primarily to evaluate the comparative effects of simvastatin 40 and 80 mg/day versus atorvastatin 20, 40, and 80 mg/day, on high-density lipoprotein cholesterol (HDL-C) and apo A-1 and secondarily to evaluate the comparative effects of these drug doses on low-density lipoprotein cholesterol (LDL-C) and triglycerides (TG) and their comparative safety over 36 weeks of treatment. Patients will be stratified by baseline HDL-C levels to assure balance between treatments.
(MD98121C)

The Frequency and Significance of Microembolic Signals in Acute Stroke Patients with Middle Cerebral Artery Stenosis

- ✉ WONG Ka Sing Lawrence • LAM Wai Man Wynnie (Diagnostic Radiology & Organ Imaging) • CHAN Yu Leung (Diagnostic Radiology & Organ Imaging) • METREWELI Constantine (Diagnostic Radiology & Organ Imaging) • KAY Li Chi Richard
- ☐ 1 October 1998
- ❖ Research Grants Council

Stroke is the third leading cause of mortality and a leading cause of disability in adult in Hong Kong. In Chinese stroke patient, middle cerebral artery stenosis is the most commonly found vascular lesion in patients with acute ischemic stroke. Yet the stroke

mechanism (thromboembolic or hemodynamic) in patients with middle cerebral artery stenosis remains uncertain. Recent advances in ultrasonology enable us to monitor the occurrence of microemboli signals (MES) in the cerebral circulation. Studies of MES in patients with carotid stenosis have shown that it occurred commonly in acute stroke but much less commonly in asymptomatic patients, suggesting MES may be a marker of active thrombotic process. There have been no published data on the detection of MES in acute stroke patients with middle cerebral artery stenosis. In preparation for the submission of this grant application, we performed a pilot study of twenty acute stroke patients with middle cerebral artery stenosis and found MES occurred in 15%. We propose to perform a study on 150 acute stroke patients with middle cerebral stenosis in order to document the frequency of MES and correlate its occurrence with thrombotic markers. The prognostic value of MES in relation to recurrent ischemic events will also be investigated. The finding of this study may guide us towards a better strategy in secondary stroke prevention in these high-risk patients.
(CU98341)

Clinical Trial for GLYB 3001 in Acute Stroke

- ✉ WONG Ka Sing Lawrence
- ☐ 1 November 1998
- ❖ Glaxo Group Research Limited

Stroke is a leading cause of mortality and morbidity worldwide. Traditional treatment strategy composed mainly of antithrombotic and thrombolytic therapies. Recent advent in animal studies shows the benefit of neuroprotection to limit secondary brain injury after cerebral ischemia. However, early clinical trials of neuroprotection fail to confirm this benefit to human being. Glycine antagonist is one of the most potent neuroprotant studied. In this randomized, double-blind, placebo-controlled trial, we aim to participate in this multinational clinical trial to test the hypothesis that the use of a glycine antagonist prevent poor outcome for patients with stroke who received treatment within 6 hours of onset of symptoms.
(MD98145)

Pramipexole: Efficacy, Safety and Tolerability Study in Parkinson's Disease patients, a Multinational Study

- ✉ WONG Ka Sing Lawrence • KAY Li Chi Richard
- ☐ 1 December 1998
- ❖ Pharmacia and Upjohn Limited

Parkinson's Disease is a major cause of disability in the elderly population in Hong Kong. Current trend

in therapy emphasises on the importance of adjunct therapy, especially dopamine agonist, in the treatment of Parkinson's disease. Pramipexole is a newly developed dopamine agonist with D3-preferring property. In overseas studies, pramipexole has been shown to reduce the motor fluctuation complication of Parkinson's disease in Western countries. However, the efficacy and tolerability in Asian populations have not been established. The proposed study is a multicentered, study in Hong Kong and Taiwan. It aims to study the safety and tolerability of pramipexole in patients with Parkinson's disease. The primary endpoint is measured by the change from the beginning of the study in Unified Parkinson's Disease Rating Scale II and III, compared to the baseline visit. A maximum of 150 patients will be recruited from Hong Kong and Taiwan. This study will take 10-12 months for the recruitment and follow-up phase and another 6 months for analysis. (MD98085)

Quality of Life Assessment for Palliative Care

- ✉ WOO Jean • LO See Kit Raymond*
- 1 July 1998
- ❖ Society for the Promotion of Hospice Care Limited

The project is an extension of a successful pilot study of quality of life of palliative care patients in Shatin Hospital. The present proposed project is a longitudinal study, aiming to assess quality of life of palliative care patients in Shatin Hospital from admission to death, or from admission to discharge and post discharge in community depending on their survival. The assessment tool will be translated version of McGill Quality of Life questionnaire, which was designed and validated specially for palliative care patients. The project will provide very informative data of QOL of palliative care patients, and the changes as their illness proceeds. It will also highlight different perceptions of different patient groups. It will evaluate the practicability and suitability of routine application of a QOL questionnaire. Deficiencies in current care can be identified for continuous quality improvement and auditing. Staff awareness of importance of QOL as main goal in palliative care will be heightened, and further research can be promoted locally. (MD98003)

A Multicenter, Double-Blind, Randomized, Parallel Group Study to Compare the Antihypertensive Efficacy of Losartan Versus Candesartan Cilxetil in Patients with Mild to Moderate Hypertension

- ✉ WOO Kam Sang • SANDERSON John Elsby • CHIU C. W.* • YIP Thomas* • KWONG S. K.*
- 1 October 1998

❖ Merck Sharp & Dohme (Asia) Ltd

Hypertension is one of the most common adult disease. It is a major determinant of stroke and coronary artery disease and blood pressure reduction has been clearly demonstrated to significantly reduce the incidence of these disorder as well as total mortality.

The renin angiotension system (RAS) plays an important role in the regulation of blood pressure and volume homeostasis, and angiotension (AII) is the active mediator, mostly through its interaction with the AT-1 isoform of the angiotension II receptor. Blockage of this RAS can be achieved by angiotensin converting enzyme inhibitor or by inhibition at the angiotension II receptor site. The former has been useful in treatment of hypertension, but its utilization is often limited by high incidence of drug induced cough, necessitating drug withdrawal. A new class of specific, selective and orally active AT-1 receptor antagonists has been developed; Losartan and Candesartan Cilxetil are the two agents demonstrated to have a potent antihypertensive effect and good side effect profile in preliminary trials.

The current study is designed to evaluate the antihypertensive efficacy of Losartan either as monotherapy 50-100mg daily, or in combination with hydro-chlorothiazide (12.5mg) versus Candesartan monotherapy 8-16mg daily in patients with mild to moderate essential hypertension. Patients with diastolic blood pressure (DBP) (95-115) mmHg and systolic blood pressure <170 mmHg after 4 weeks' placebo washout will be randomized to take either losartan 50 mg or Candesartan Cilxetil 8 mg on double blind parallel fashion, allowing titration up to Losartan 100mg daily, Candesartan 16mg daily or Losartan 50mg + hydrochlorothiazide 12.5 mg daily if DBP > 90mmHg after 6 weeks. The total treatment period is 12 weeks. Routine biochemistry profile will be closely monitored, as well as drug-related adverse experiences, and the numbers of patients discontinuing between the treatment arms after 12 weeks of double-blind therapy will be compared. (MD98088)

Please refer to previous issues of this publication for more details of the following ongoing research at the department:

<u>Edition</u>	<u>Title/Investigators</u>
1997-98	Cost-effective Approaches to Gastro-intestinal and Antihypertensive Drug Prescribing: An Economic Impact Study of Intervention Mechanisms in the In-patient and Out-patient Setting (MD96023)
	✉ CHAN Chung Ngor Juliana • LEE Shing Cheung (Pharmacy) •

- CHANG Sophie (Pharmacy)# •
CRITCHLEY Julian A J H
- 1997-98 A Multicentre Study to Examine the Renoprotective Effects of Losartan, an Angiotensin II Antagonist Versus Placebo in Type 2 Diabetic Patients (MD97168)
✍ CHAN Chung Ngor Juliana • COCKRAM Clive Stewart • CRITCHLEY Julian A J H
- 1997-98 Phenotypic and Genotypic Characterisation of NIDDM (Type 2 Diabetes Mellitus) and their Interactions with Environmental Factors (CU97682)
✍ CHAN Chung Ngor Juliana • YEUNG Tok Fai Vincent • CHOW Chun Chung Francis • COCKRAM Clive Stewart • CRITCHLEY Julian A J H
- 1997-98 NSAID-Induced Peptic Ulcer Bleeding: Protection at a Lower Cost? (MD97004)
✍ CHAN Ka Leung Francis • SUNG Joseph Jao Yiu
- 1997-98 *Helicobacter Pylori* Infection, Cyclo-Oxygenase, and Gastric Carcinogenesis (MD97116)
✍ CHAN Ka Leung Francis • SUNG Joseph Jao Yiu • LEUNG W. K.* • TO Ka Fai (Anatomical & Cellular Pathology)
- 1996-97 The Role of the Renal Kallikrein-kinin System in the Regulation of Sodium Balance and Blood Pressure in Chinese Subjects in Relation to a Family History of Hypertension, Low/Normal Renin Hypertension or NIDDM Albuminuric Status (CU96675)
✍ CHAN Yan Keung Thomas • CHAN Chung Ngor Juliana • YOUNG Robert Peter# • TOMLINSON Brian • CRITCHLEY Julian A J H
- 1997-98 Matrix-Metalloproteinases (MMPs) and their Specific Inhibitors (TIMPs) in Tuberculous Pleural Effusions (MD97132)
✍ HUI Shu Cheong David • LAI Kei Wai Christopher • HOHEISEL Gerhard*
- 1996-97 Pilot Study of Clomethiazole in the Treatment of Intracerebral Haemorrhage (MD96055)
✍ KAY Li Chi Richard • WONG Ka Sing Lawrence • AHUJA Anil
- 1996-97 Relationship between Air Quality and Hospital Admissions for Respiratory Disease in Hong Kong (MD96056)
✍ LAI Kei Wai Christopher • LAU Tai Shing (Statistics) • LEUNG Chung Chuen Roland • WONG Wing Kin Gary (Paediatrics) • YAM Loretta*
- 1997-98 The Effects of an Education Programme on the Compliance with Nasal CPAP in the Treatment of Obstructive Sleep Apnoea (MD97006)
✍ LAI Kei Wai Christopher • HUI Shu Cheong David • LEUNG Chung Chuen Roland • CHAN Ka Wing, Joseph*
- 1996-97 Prevalence of Sleep Disorder Breathing in Young Adults in Hong Kong (MD96057)
✍ LEUNG Chung Chuen Roland • LAI Kei Wai Christopher
- 1996-97 The Role of Cytokine Growth Factors in the Control of Myocardial Collagen Turnover and the Development of Left Ventricular Diastolic Dysfunction in Patients with Heart Failure (CU96670)
✍ SANDERSON John Elsby • CHOW Tsun Cheung Louis (Anatomical & Cellular Pathology) • WOO Kam Sang
- 1997-98 The Non-Invasive Assessment of Left and Right Ventricular Diastolic Function with Two Dimensional and Doppler Echocardiography. Colour Doppler Myocardial Imaging (CDMI) and Atrio-Ventricular Plane Displacement (MD97117)
✍ SANDERSON John Elsby • YIP Gabriel*
- 1995-96 A Follow-On Study to Determine the Safety and Efficacy of Long Term Lamivudine Treatment in Patients with Chronic Hepatitis B Infection (NUCB 3018) (MD95267)
✍ SUNG Joseph Jao Yiu • LEE Yuk Tong • TSANG Woon Choy Steven • Leung Wai Yee Nancy*
- 1995-96 *Helicobacter pylori*: Mode of Transmission and Carcinogenesis (MD95255)
✍ SUNG Joseph Jao Yiu • CHUNG Sheung Chee Sydney (Surgery) • TO

- Ka Fai (Anatomical & Cellular Pathology) • CHENG Fun Bun Augustine (Microbiology) • LIN Sar-ren*
- 1996-97 A Double-blind, Parallel Group, Placebo Controlled, Multi-center, Phase IIIA Study to Assess the Safety and Efficacy of Oral Famciclovir (Three Times a Day) for the Treatment of Chronic Hepatitis B in Asian Population (MD96222)
 ✍ SUNG Joseph Jao Yiu • LEUNG Wai Yee Nancy • TSANG Woon Choy Steven
- 1996-97 Does Eradication of *Helicobacter pylori* Prevents NSAID-related Ulcers and Complications (CU96604)
 ✍ SUNG Joseph Jao Yiu • CHAN Ka Leung Francis • CHUNG Sheung Chee Sydney (Surgery) • LING Kin Wah Thomas (Microbiology) • CHENG Fun Bun Augustine (Microbiology)
- 1997-98 The Use of Endosonography and MR Angiography in Predicting the Risk of Variceal Bleeding in Portal Hypertension (CU97657)
 ✍ SUNG Joseph Jao Yiu • CHAN Yu Leung (Diagnostic Radiology & Organ Imaging) • CHUNG Sheung Chee Sydney (Surgery) • LAM Wai Man Wynn (Diagnostic Radiology & Organ Imaging) • LEE Y. T.*
- 1995-96 Identification of Risk Factors for Atheroma in Chinese Patients with Overt Peripheral Vascular Disease and Diabetic Patients with Asymptomatic Peripheral Vascular Disease (CU95649)
 ✍ TOMLINSON Brian • KING Wing Keung Walter (Surgery) • LI Arthur K. C. (Surgery) • LAM Wai Kei Christopher (Chemical Pathology) • LOLIN Yvette Ivanka (Chemical Pathology)# • CHAN Chung Ngor Juliana • CRITCHLEY Julian A J H • YOUNG Robert Peter# • COCKRAM Clive Stewart
- 1996-97 Investigation of the Genetic Region of the Lipoprotein Lipase Gene in Families of Dyslipidaemic Patients and Relation to Blood Pressure and Insulin Resistance (MD96050)
 ✍ TOMLINSON Brian • CHENG Shuk Han (Orthopaedics & Traumatology) • CRITCHLEY Julian A J H • YOUNG Robert Peter#
- 1996-97 Study of the Metabolic Syndrome in Hong Kong Chinese: Investigations of the Phenotypic Characteristics and Underlying Genotypes in Patients with the Metabolic Syndrome Presenting with Dyslipidaemia, Non-insulin Dependent Diabetes Mellitus, Hypertension or Atheromatous Vascular Disease (MD96027)
 ✍ TOMLINSON Brian • CHAN Chung Ngor Juliana • CRITCHLEY Julian A J H • YOUNG Robert Peter# • PANG Chi Pui Calvin (Ophthalmology and Visual Sciences) • ARUMANAYAGAM Manoharan (Chemical Pathology) • CHAN Yu Leung (Diagnostic Radiology & Organ Imaging) • CHAN Yan Keung Thomas • SANDERSON John Elsby • COCKRAM Clive Stewart • YEUNG Tok Fai Vincent • CHOW C. C.*
- 1997-98 The Effects of Different Doses of Vitamin E on Atheroma Formation and Indices of antioxidant Activity and Oxidative Stress in Cholesterol-Fed Rabbits (MD97047)
 ✍ TOMLINSON Brian • JAMES Anthony Edward (Laboratory Animal Services Centre) • BENZIE Iris F. F.* • ARUMANAYAGAM Manoharan (Chemical Pathology) • SAHOTA Daljit Singh (Obstetrics & Gynaecology) • CRITCHLEY Julian A J H • HAINES Christopher John (Obstetrics & Gynaecology)
- 1995-96 Regress of Cerebral Artery Stenosis Study (MD95268)
 ✍ WONG Ka Sing Lawrence • KAY Li Chi Richard • LAM Wai Man Wynn (Diagnostic Radiology & Organ Imaging) • CHAN Yu Leung (Diagnostic Radiology & Organ Imaging)
- 1996-97 A Prospective Study of Patients with Middle Cerebral Artery Stenosis Diagnosed After First Ever Ischemic Stroke (CU96605)
 ✍ WONG Ka Sing Lawrence • KAY Li Chi Richard • AHUJA Anil Tejbhan (Diagnostic Radiology & Organ Imaging)

- 1996-97 Regress of Cerebral Artery Stenosis Study (MD96059)
 ✎ WONG Ka Sing Lawrence • LAM Wai Man Wynn (Diagnostic Radiology & Organ Imaging) • CHAN Yu Leung (Diagnostic Radiology & Organ Imaging) • KAY Li Chi Richard
- 1997-98 A Prospective Study of Asymptomatic Patients with Middle Cerebral Artery Stenosis (CU97673)
 ✎ WONG Ka Sing Lawrence • LAM Wai Man Wynn (Diagnostic Radiology & Organ Imaging) • YEUNG Tok Fai Vincent • CHAN Yu Leung (Diagnostic Radiology & Organ Imaging) • KAY Li Chi Richard
- 1996-97 Domiciliary Pulmonary Rehabilitation Program: A Randomised Controlled Clinical Trial (MD96017)
 ✎ WOO Jean • LUM Christopher* • HUI E.* • LEUNG Chung Chuen Roland
- 1997-98 Provision of Health Services - Elderly Residents in Nursing Homes Using Telemedicine (MD97005)
- ✎ WOO Jean • HJELM Nils Magnus (Chemical Pathology) • TSUI Hung Tat (Electronic Engineering) • ZHANG Yuaning (Electronic Engineering)
- 1997-98 A Nutrition Manual for Carers in Elderly Residential Homes (MD97026)
 ✎ WOO Jean • GULDAN Georgia Sue (Biochemistry)
- 1997-98 An Investigation of the Roles of C-Type Natriuretic Peptide in Central Haemodynamic and Endocrine Control Using a Gene-Targeting Approach (MD97048)
 ✎ YEUNG Tok Fai Vincent • CHUI Yiu Loon (Clinical Immunology Unit) • LEE Sau Tuen Susanna (Biochemistry) • COCKRAM Clive Stewart
- 1996-97 Biocompatibility of 1-Lactate/Pyruvate Buffered PDS: Its Effects on the Host Defense Mechanism and Viability of the Peritoneal Mesothelial Cells (CU96621)
 ✎ YU Wai Yin Alex • LAI Kar Neng#

RESEARCH OUTPUTS AND PUBLICATIONS

- <P974965> **Woo, K.S.; P. Chook; Y.I. Lolin; A.S.P. Cheung; L.T. Chan; Y.Y. Sun; J.E. Sanderson; C. Metreweli and D.S. Celermajer.** "Hyperhomocyst(e)inemia Is a Risk Factor for Arterial Endothelial Dysfunction in Humans". *Circulation* vol.96 no.8, pp.2542-2544. New York, USA, 1997.10.21.
- <P974966> **Woo, Kam S.; Jacqui T.C. Robinson; Ping Chook; Mark R. Adams; Gabriel Yip; Z.J. Mai; Chris W.K. Lam; Keld E. Sorensen; John E. Deanfield and David S. Celermajer.** "Differences in the Effect of Cigarette Smoking on Endothelial Function in Chinese and White Adults". *Annals of Internal Medicine* vol.127 no.5, pp.372-375. New York, USA, 1997.09.01.
- <P974967> **Woo, Kam S.; Jane A. McCrohon; Ping Chook; Mark R. Adams; Jacqui T.C. Robinson; Robyn J. McCredie; Christopher W.K. Lam; Jian Z. Feng and David S. Celermajer.** "Chinese Adults Are Less Susceptible Than Whites to Age-Related Endothelial Dysfunction". *Journal of the American College of Cardiology* vol.30 no.1, pp.113-118. New York, USA, 1997.
- <P974968> **Sanderson, John E.; Kam S. Woo; H.K. Chung; Wilson M. Chan; K.K. Tse and Harvey D. White.** "Endothelium-Dependent Dilation of the Coronary Arteries in Syndrome X: Effects of the Cold Pressor Test". *Cardiology* vol.88, pp.414-417. 1997.08.
- <P974969> **Tomlinson, B.; S.Y. Wong; W. Lan; Jajh Critchley; T.W.L. Maki; M. Arumanayagami; C.W.K. Lam; K.S. Woo and J.E. Sanderson.** "Effects of Fluvastatin Alone and in Combination with Gemfibrozil on Lipids and Glucose Tolerance". *Abstracts of the Joint Conference of the Hong Kong Pharmacology Society and the Shaanxi Pharmacology Societies* Abs.13. Hong Kong, 1997.

- <P974970> **Tomlinson, B.; W. Lan; Y.M. Chau; T.K. Say; K.K.C. Lee; T.W.L. Mak; C.W.K. Lam and J.A.J.H. Critchley.** "The Response to Fibrate Treatment in Chinese Patients with Combined Hyperlipidaemia". *Abstracts of the Joint Conference of the Hong Kong Pharmacology Society and the Shaanxi Pharmacology Societies* Abs.12. Hong Kong, 1997.
- <P974971> **Tomlinson, B.; S.Y. Wong; W. Lan; Jajh Critchley; T.W.L. Mak; C.W.K. Lam; M. Arumanayagam; K.S. Woo and J.E. Sanderson.** "Treatment of Resistant Hyperlipidaemia with a Combination of Statin and Fibrate". *Abstracts of the 11th Annual Scientific Meeting of the Society for the Study of Endocrinology Metabolism and Reproduction* publication no.11, Abs.E8. Hong Kong, 1997.
- <P974972> **Anderson, P.J.; R.P. Young; G.N. Thomas; J.C.N. Chan; Y.L. Chan; B. Tomlinson; Z.S.K. Lee; C.S. Cockram; C. Metreweli and J.A.J.H. Critchley.** "Insulin Resistance, Body Morphology and Hypertension in Hong Kong Chinese". Paper presented in the Joint Conference of the HK Pharmacology Society and the Shaanxi Pharmacology Societies. Hong Kong, 1997.11.
- <P974973> **Thomas, Neil; Olaf Scheel; Ann P. Koehler; David C.J. Bassett and Augustine F.B. Cheng.** "Respiratory Chlamydial Infections in a Hong Kong Teaching Hospital and Association with Coronary Heart Disease". *Scand J Infect Dis* Suppl.104, pp.30-33. 1997.
- <P974974> **Hill, David J.; Clifford S. Hosking; Chen Yu Zhie; Roland Leung; Karnen Baratwidjaja; Yoji Likura; N. Iyngkaran; Anges Gonzalez-Andaya; Lee Bee Wah and Kue Hsiung Hsieh.** "The Frequency of Food Allergy in Australia and Asia". *Environmental Toxicology and Pharmacology* vol.4, pp.101-110. 1997.
- <P974975> **Lo, Raymond S.K.; K.H. Or; F.P. Chow; K.H. Sze and J. Woo.** "Risk Factors of Developing Pneumonia in Post Stroke Dysphagia". Paper presented in the Hong Kong Rehab Symposium 1997, organized by Hospital Authority. 1997.12.
- <P974976> **Leung, Roland; Philip Ho; Christopher W.K. Lam and Christopher K.W. Lai.** "Sensitization to Inhaled Allergens as a Risk Factor for Asthma and Allergic Diseases in Chinese Population". *Journal of Allergy and Clinical Immunology* vol.99 no.5, pp.594-599. 1997.
- <P974977> **Anderson, Patricia J.; Juliana C.N. Chan; Y.L. Chan; Brian Tomlinson; Robert P. Young; Zoe S.K. Lee; Kenneth K.C. Lee; Constantine Metreweli; Clive S. Cockram and Julian A.J.H. Critchley.** "Visceral Fat and Cardiovascular Risk Factors in Chinese NIDDM Patients". *Diabetes Care* vol.20 no.12, pp.1854-1858. USA, 1997.12.
- <P974978> **Anderson, P.J.; J.C.N. Chan; Y.L. Chan; B. Tomlinson; R.P. Young; Z.S.K. Lee; K.K.C. Lee; C. Metreweli; C.S. Cockram and J.A.J.H. Critchley.** "Visceral Fat and Cardiovascular Risk Factors in Chinese NIDDM Patients". *Journal of Hong Kong College of Cardiology* vol.5, Ab.68. Hong Kong, 1997.04.25.
- <P974979> **Woo, K.S.; P. Chook; R.P. Young and J.E. Sanderson.** "New Risk Factors for Coronary Heart Disease in Asia". *International Journal of Cardiology* vol.62 Suppl.1, p.S39-S42. Ireland, UK, 1997.12.
- <P974982> **Chan, L.Y. and J.C.N. Chan.** "Mycoplasma Pneumoniae Infection Presenting as Haemolytic Anaemia" *British Journal of Hospital Medicine* vol.58 no.4, p.170. 1998.
- <P974983> **Ko, Gary T.C.; Juliana C.N. Chan; Jean Woo; Vincent T.F. Yeung; C.C. Chow and Clive S. Cockram.** "The Prevalence of Obesity in Hong Kong Chinese". *Annual Scientific Meeting, Hong Kong College of Physicians* Abs.5. Hong Kong, 1997.11.08.
- <P975032> **Luk, James Ka-Hay; Gregory Cheng and Jean Woo.** "Prolonged Activated Partial Thromboplastin (APTT) in an 86-Year-Old Patient". *Journal of the Hong Kong Geriatrics Society* vol.8 no.1, pp.58-59. Hong Kong, 1997.12.
- <P975050> **Kwok, T.; J. Woo; H.H.L. Chan and E. Lau.** "The Reliability of Upper Limb Anthropometry in Older Chinese People". *International Journal of Obesity* vol.21, pp.542-547. 1997.

- <P975053> **Woo, J.; T. Kwok; E. Lau; M. Li and L.M. Yu.** "Body Composition in Chinese Subjects: Relationship with Age and Disease". *Archives of Gerontology and Geriatrics* vol.26, pp.23-32. 1997.
- <P980713> **Li, Philip K.T.; C.K. Lin; P.K.W. Lam; J.T.F. Lau; L. Cheung; M. Wong and Y.T. Chan.** "Comparisons of Organ Donation Attitudes Among General Public and Blood Donors in Hong Kong". Paper presented in the 17th World Congress of Transplantation Society. Canada, 1998.07.12.
- <P980715> **Chan, T.Y.K.** "Drug Interactions as a Cause of Overanticoagulation and Bleedings in Chinese Patients Receiving Warfarin". *International Journal of Clinical Pharmacology and Therapeutics* vol.36 no.7, pp.403-405. Germany, 1998.07.
- <P980716> **Chan, T.Y.K.** "Food Poisoning Following the Consumption of Clenbuterol-Treated Livestock". *The Hong Kong Practitioner* vol.20, pp.366-369. Hong Kong, 1998.07.
- <P980717> **Chan, Thomas Y.K. and Julian A.J.H. Critchley.** "Pesticides Hazards - An Overview". *The Hong Kong Medical Diary* vol.3 no.5, pp.18-19. Hong Kong, 1998.07.
- <P980822> **Chan, Juliana C.N.; Kin-Wei A. Chan; Larry L.T. Ho; Martin M.C. Fuh; Lee Chung Horn; Richard Sheaves; Araceli A. Panelo; Duk-Kyu Kim and Mustaffa Embong.** "An Asian Multicenter Clinical Trial to Assess the Efficacy and Tolerability of Acarbose Compared with Placebo in Type 2 Diabetic Patients Previously Treated with Diet". *Diabetes Care* vol.21 no.7, pp.1058-1061. USA, 1998.07.
- <P981941> **Woo, Jean; Suzanne C. Ho and Edith Lau.** "Care of the Older Hong Kong Chinese Population". *Age and Ageing* vol.27, pp.423-426. UK, 1998.07.
- <P981942> **Woo, Jean; Timothy Kwok; Suzanne C. Ho; Aprille Sham and Edith Lau.** "Nutritional Status of Elderly Chinese Vegetarians". *Age and Ageing* vol.27, pp.455-461. UK, 1998.07.
- <P982141> **Tam, L.S.; E.K. Li; C.B. Leung; K.C. Wong; F.M.M. Lai; A. Wang; C.C. Szeto and S.F. Lui.** "Long-Term Treatment of Lupus Nephritis with Cyclosporin A". *Quarterly Journal of Medicine* vol.91, pp.573-580. Oxford, UK, 1998.08.
- <P982199> **Sanderson, John E.** "Heart Rate Variability in Heart Failure". *Heart Failure Reviews* vol.2, pp.235-244. Boston, USA, 1998.08.
- <P982394> 陳恩強. <香港 1986-1998 年藥物不良反應監察>. 《藥物流行病學雜誌》 第 7 卷 第 3 期, 頁 131-134. 中國, 1998.08.
- <P982395> **Chan, Thomas Y.K.; Richard Kay and Julian A.J.H. Critchley.** "Osteomalacia During Anticonvulsant Therapy is Rare in Hong Kong". *Pharmacoepidemiology and Drug Safety* vol.7 suppl.2, p.S91. West Sussex, UK, 1998.08.
- <P982396> **Chan, Thomas Y.K.** "Drug Interactions as a Cause of Bleeding Complications in Patients Receiving Warfarin". *Pharmacoepidemiology and Drug Safety* vol.7 suppl.2, p.S92. West Sussex, UK, 1998.08.
- <P982523> **Tam, L-S and E.K. Li.** "Successful Treatment with Immunosuppression, Anticoagulation and Vasodilator Therapy of Pulmonary Hypertension in SLE Associated with Secondary Antiphospholipid Syndrome". *Lupus* vol.7, pp.495-497. UK, 1998.09.
- <P982524> **Woo, J.; S.S.F. Leung; S.C. Ho; T.H. Lam and E.D. Janus.** "Dietary Intake and Practices in the Hong Kong Chinese Population". *Journal of Epidemiology and Community Health* vol.52 no.10, pp.631-637. UK, 1998.10.
- <P982541> **Ko, Gary T.C.; Juliana C.N. Chan; Jean Woo and Clive S. Cockram.** "Use of the 1997 American Diabetes Association Diagnostic Criteria for Diabetes in a Hong Kong Chinese Population". *Diabetes Care* vol.21 no.12, pp.2094-2097. USA, 1998.

- <P982552> **Leung, W.K.; Joseph J.Y. Sung; Kris L.K. Siu; Francis K.L. Chan; Thomas K.W. Ling and Augustine F.B. Cheng.** "False-Negative Biopsy Urease Test in Bleeding Ulcers Caused By the Buffering Effects of Blood". *American Journal of Gastroenterology* vol.93 no.10, pp.1914-1918. USA, 1998.
- <P982564> **Ko, Gary T.C.; Juliana C.N. Chan; Vincent T.F. Yeung; Chun-Chung Chow; June K.Y. Li; Maggie S.W. Lau; Ian R. Mackay; Merrill J. Rowley; Paul Zimmet and Clive S. Cockram.** "Antibodies to Glutamic Acid Decarboxylase in Young Chinese Diabetic Patients". *Annals of Clinical Biochemistry* vol.35, pp.761-767. UK, 1998.
- <P982574> **Ko, Gary T.C.; Juliana C.N. Chan and Clive S. Cockram.** "Supplement to the Use of a Paired Value of Fasting Plasma Glucose and Glycated Hemoglobin in Predicting the Likelihood of Having Diabetes". *Diabetes Care* vol.21, pp.2032-2033. USA, 1998.11.
- <P982636> **Tse, Lawrence K.K.; H.K. Chung; W.M. Chan; K.S. Woo; W.S. Leung and J.E. Sanderson.** "Primary Stenting in Noncalcified Coronary Artery Ostial Stenoses". *Journal of the Hong Kong College of Cardiology* vol.6, p.44. Hong Kong, 1998.04.
- <P982637> **Young, R.P.; G.N. Thomas; P.J. Anderson; K.S. Woo; J.E. Sanderson; B. Tomlinson and J.A.J.H Critchley.** "Sibling Pair Analysis of Anthropomorphic Measurements and Their Relationship to Hypertension". *Journal of the Hong Kong College of Cardiology* vol.6, p.37. Hong Kong, 1998.06.
- <P982638> **Lai, K.B.; S. Wei; L.T.C. Chow and J.E. Sanderson.** "Myocardial Gene Expression of Transforming Growth Factor- in Idiopathic Dilated Cardiomyopathy". *Journal of the Hong Kong College of Cardiology* vol.6, p.38. Hong Kong, 1998.04.
- <P982639> **Yu, Cheuk M.; Irene O.L. Shum and John E. Sanderson.** "Plasma Brain Natriuretic Peptide- An Independent Predictor of Cardiovascular Mortality in Acute Congestive Heart Failure". *Journal of the Hong Kong College of Cardiology* vol.6, p.38. Hong Kong, 1998.04.
- <P982640> **Yip, G.; Pearl Ho; K.H. Tang; W. Chan; K.K. Tse; H.K. Chung; K.S. Woo and J.E. Sanderson.** "High Prevalence of Heart Failure with Normal Systolic Left Ventricular Function in Hong Kong". *Journal of the Hong Kong College of Cardiology* vol.6, p.39. Hong Kong, 1998.04.
- <P982650> **Fu, Michael; K.S. Wong; Wynnie W.M. Lam and Gary W.K. Wong.** "Middle Cerebral Artery Occlusion After Recent *Mycoplasma Pneumoniae* Infection" *Journal of Neurological Sciences* vol.157, pp.113-115. USA, 1998.
- <P982715> **Chan, D.K.Y.; J. Woo; S.C. Ho; C.P. Pang; L.K. Law; P.W. Ng; W.T. Hung; T. Kwok; E. Hui; K. Orr; M.F. Leung and R. Kay.** "Genetic and Environmental Risk Factors for Parkinson's Disease in a Chinese Population". *Journal of Neurology, Neurosurgery and Psychiatry* vol.65, pp.781-784. UK, 1998.
- <P982758> **Chan, Lik-Yuen; Joseph J.Y. Sung; Francis K.L. Chan; Ka-Fai To; James Y.W. Lau and S.C. Sydney Chung.** "Tissue Injury of Injection Gold Probe". *Gastrointestinal Endoscopy* vol.48 no.3, pp.291-295. USA, 1998.
- <P982928> **Sanderson, John E.** "Angiotensin-Converting Enzyme Gene Polymorphisms". *American Heart Journal* vol.136, p.562. USA, 1998.09.
- <P982953> **Wei, S.; I.O.L. Shum; L. Quin; L.T.C. Chow and J.E. Sanderson.** "Collagen Type I/III Ratios, Remodeling, and Haemodynamic Correlates Post Myocardial Infarction". *Journal of the Hong Kong College of Cardiology* vol.6, p.65. Hong Kong, 1998.04.
- <P982960> **Leong, H.C.; K.S. Woo; W.H. Poon; P. Chook; J.E. Sanderson and M.F. O'Rourke.** "Increased Arterial Wall Stiffness in Normotensive Subjects with Family History of Hypertension". *Journal of the Hong Kong College of Cardiology* vol.6, p.37. Hong Kong, 1998.04.

- <P982962> **Tse, Lawrence K.K.; H.K. Chung; W.M. Chan; K.S. Woo; W.S. Leung and J.E. Sanderson.** "Non-Q-Wave Myocardial Infarction after Intracoronary Stenting". *Journal of the Hong Kong College of Cardiology* vol.6, p.67. Hong Kong, 1998.04.
- <P982963> **Tomlinson, B.; S.Y. Wong; W. Lan; J.A.J.H. Critchley; T.W.L. Mak; C.W.K. Lam; M. Arumanayagam; K.S. Woo and J.E. Sanderson.** "Efficacy and Safety of Combination Therapy with Fluvastatin and Gemfibrozil in Resistant Hyperlipidaemia". *Journal of the Hong Kong College of Cardiology* (Abstracts of the 6th Annual Scientific Congress of Hong Kong College of Cardiology) vol.6, p.51. Hong Kong, 1998.04.17.
- <P982964> **Young, R.P.; P. Chook; G.N. Thomas; Y.I. Lolin; A.S.P. Cheung; L.L.T. Chan; J.E. Sanderson; J.A.J.H. Critchley and K.S. Woo.** "Methylenetetrahydrofolate Reductase (MTHFR) Gene 677T Variant Increases Fasting Total Homocysteine Levels in Hong Kong Chinese". *Journal of the Hong Kong College of Cardiology* vol.6, p.60. Hong Kong, 1998.04.
- <P982968> **Sanderson, J.E.; C.M. Yu; R.P. Young; I.O.L. Shum; S. Wei; M. Arumanayagam and K.S. Woo.** "Genetic Polymorphism of the Renin-Angiotensin System and Clinical Outcome in Congestive Heart Failure". *Journal of American College of Cardiology* vol.31, p.111C. USA, 1998.04.
- <P982969> **Wei, S.; I.O.L. Shum; L. Qin; L.T. Chow and J.E. Sanderson.** "Type I and III Collagen in the Left and Right Ventricle Post Myocardial Infarction". *Journal of the American College of Cardiology* vol.31, p.111C. USA, 1998.04.
- <P983015> **Woo, K.S. and J.E. Sanderson.** "Introduction to Cardiology". *Textbook of Clinical Medicine for Asia* ed. by Joseph J.Y. Sung, Philip K.T. Li, John E. Sanderson and Jean Woo. pp.3-4. Hong Kong: The Chinese University Press, 1998.
- <P983016> **Sanderson, J.E. and K.S. Woo.** "Cardiac Investigations and Interventions". *Textbook of Clinical Medicine for Asia* ed. by John E. Sanderson. pp.5-16. Hong Kong: The Chinese University Press, 1998.
- <P983017> **Sanderson, J.E. and B. Tomlinson.** "Hypertension". *Textbook of Clinical Medicine for Asia* ed. by John E. Sanderson. pp.17-35. Hong Kong: The Chinese University Press, 1998.
- <P983018> **Woo, K.S. and J.E. Sanderson.** "Rheumatic Fever, Valvular Heart Disease and Infective Endocarditis". *Textbook of Clinical Medicine for Asia* ed. by Joseph J.Y. Sung, Philip K.T. Li, John E. Sanderson and Jean Woo. pp.45-53. Hong Kong: The Chinese University Press, 1998.
- <P983019> **Woo, K.S. and J.E. Sanderson.** "Coronary Artery Disease". *Textbook of Clinical Medicine for Asia* ed. by Joseph J.Y. Sung, Philip K.T. Li, John E. Sanderson and Jean Woo. pp.37-44. Hong Kong: The Chinese University Press, 1998.
- <P983020> **Chan, W.W.M. and J.E. Sanderson.** "Pulmonary Hypertension and Pulmonary Thromboembolism". *Textbook of Clinical Medicine for Asia* ed. by John E. Sanderson. pp.93-100. Hong Kong: The Chinese University Press, 1998.
- <P983021> **Sanderson, J.E.** "Diseases of the Aorta". *Textbook of Clinical Medicine for Asia* ed. by John E. Sanderson. pp.87-91. Hong Kong: The Chinese University Press, 1998.
- <P983022> **Sanderson, J.E. and K.S. Woo.** "Heart Failure and Cardiomyopathies". *Textbook of Clinical Medicine for Asia* ed. by John E. Sanderson. pp.55-63. Hong Kong: The Chinese University Press, 1998.
- <P983023> **Chung, H.K. and J.E. Sanderson.** "Cardiac Arrhythmias and Pacemakers". *Textbook of Clinical Medicine for Asia* ed. by John E. Sanderson. pp.65-78. Hong Kong: The Chinese University Press, 1998.
- <P983071> **Woo, K.S.; L.L.T. Chan; A.S.P. Cheung; P. Poon; P. Chook; C. Lai and J.E. Sanderson.** "Losartan Versus Enalapril in Antihypertensive Treatment of Patients with History of ACE

Inhibitor-Induced Cough". *Journal of American College of Cardiology* vol.31, p.388C. USA: Elsevier Science Inc., 1998.04.

- <P983450> **Mok, Philip H.K.; Brian Tomlinson; Wei Lan; John E. Sanderson and Kam S. Woo.** "Lipid Abnormalities and Their Treatment in Patients with Acute Myocardial Infarction in Hong Kong". *Atherosclerosis(Abstracts of the 1st Congress of the Asian-Pacific Society of Atherosclerosis and Vascular Disease)* vol.136, S72 Abs.P094. Taipei, 1998.03.14.
- <P983452> **Sanderson, J.E.; S.K.W. Chan; C.M. Yu; L.Y.C. Yeung; W.M. Chan; K. Raymond and K.S. Woo.** "Blockers in Heart Failure: A Comparison of a Vasodilating Blocker with Metoprolol". *Heart* vol.79 no.1, pp.86-92. London, UK, 1998.01.
- <P983453> **Szeto, Yim-Tong; Iris F.F. Benzie and Brian Tomlinson.** "In vitro Antioxidant Activities of Various Types of Chinese Tea". *Atherosclerosis(Abstracts of the 1st Congress of the Asian-Pacific Society of Atherosclerosis and Vascular Disease)* vol.136, S77 Abs.114. Taipei, 1998.03.14.
- <P983454> **Chung, Wai-Yuen; Iris F.F. Benzie and Brian Tomlinson.** "Total Antioxidant Power of Plasma: Male-Female and Anticoagulant Related Differences". *Atherosclerosis(Abstracts of the 1st Congress of the Asian-Pacific Society of Atherosclerosis and Vascular Disease)* vol.136(Suppl.), S78 Abs.P116. Taipei, 1998.03.14.
- <P983455> **Tomlinson, B.; W. Lan; P.J. Anderson; Z.S.K. Lee; G.N. Thomas; Y.Q. Ma; J.C.N. Chan; R.P. Young and J.A.J.H. Critchley.** "Obesity: Assessment, Associations and Causes". *Advances in Medicine.* Hong Kong, 1998.05.30.
- <P983456> **Thomas, Neil; R.P. Young; P.J. Anderson; B. Tomlinson; K.S. Woo; J.E. Sanderson and J.A.J.H. Critchley.** "Anthropometric Measurements and Their Relationship to Hypertension - A Sibling Pair Analysis". *Journal of Hypertension* vol.16 Suppl.2, p.S269. 1998.06.
- <P983457> **Benzie, I.F.F.; Y.T. Szeto; B. Tomlinson and J.J. Strain.** "Drinking Green Tea Leads to a Rapid Increase in Plasma Antioxidant Potential". *Abstracts of the 2nd International Conference on Natural Antioxidants and Anticarcinogens in Nutrition, Health and Disease* Abs.SII/3. Finland, 1998.06.24.
- <P983458> **Benzie, I.F.F.; W.Y. Chung and B. Tomlinson.** "Plasma Allantoin as a Potential Biomarker of Oxidative Stress in Diabetes Mellitus". *Abstracts of the 2nd International Conference on Natural Antioxidants and Anticarcinogens in Nutrition, Health and Disease, Helsinki* Abs.WV/2. Finland, 1998.06.24.
- <P983459> **Tomlinson, B.; S.Y. Wong; W. Lan; J.A.J.H. Critchley; T.W.L. Mak; C.W.K. Lam; M. Arumanayagam; K.S. Woo and J.E. Sanderson.** "No Adverse Drug Interaction Between Fluvastatin and Gemfibrozil During Short Term Therapy in Chinese Patients with Resistant Hyperlipidaemia". *Abstracts of the 13th Scientific Meeting of the Malaysian Society of Pharmacology and Physiology and 9th Southeast Asian Drug Metabolism Workshop*, Abstracts 0-3. Malaysia, 1998.04.13.
- <P983460> **Lee, C.W.; B. Tomlinson; J.H.K. Yeung; G. Lin and L.A. Damani.** "Trimethylamine N-Oxidation in a Chinese Population: Effects of Diet and Disease". *Abstracts of the 13th Scientific Meeting of the Malaysian Society of Pharmacology and Physiology and IXth Southeast Asian Drug Metabolism Workshop* Abs.PW3. Malaysia, 1998.04.13.
- <P983461> **Mok, P.H.K.; B. Tomlinson; W. Lan; J.E. Sanderson and K.S. Woo.** "Lipid Levels and the Usage of Lipid-Lowering Drugs in Patients with Acute Myocardial Infarction at the Prince of Wales Hospital". *Journal of Hong Kong College of Cardiology (Abstracts of 6th Annual Scientific Congress of HK College of Cardiology)* 1998.04.17.
- <P983462> **Benzie, I.F.F.; Y.T. Szeto; B. Tomlinson and J.J. Strain.** "Plasma Antioxidant Power Increases After Ingestion of Green Tea". *Journal of Hong Kong College of Cardiology (Abstracts of 6th Annual Scientific Congress of HK College of Cardiology)* vol.6, p.63. Hong Kong, 1998.04.17.

- <P983463> **Benzie, I.F.F.; Y.T. Szeto and B Tomlinson.** "Antioxidant Potential of Lipid Lowering Drugs *in vitro*". *Journal of Hong Kong College of Cardiology (Abstracts of 6th Annual Scientific Congress of HK College of Cardiology)* vol.6, p.51. Hong Kong, 1998.04.17.
- <P983464> **Lee, Zoe S.K.; Brian Tomlinson; Juliana C.N. Chan; Robert P. Young; G. Neil Thomas and Julian A.J.H. Critchley.** "Relationships of Urinary Noradrenaline and Adrenaline Excretion to Obesity and Lipid Profiles in Hong Kong Chinese". *Journal of Hong Kong College of Cardiology (Abstracts of 6th Annual Scientific Congress HK College of Cardiology)* vol.6, p.49. 1998.04.17.
- <P983465> **Ma, Y.Q.; N. Thomas; B. Tomlinson; R.P. Young; J.C.N. Chan; Z.S.K. Lee; P.J. Anderson and J.A.J.H. Critchley.** "Genetic Analysis of Two Apo-A-1 Gene Polymorphisms in Hypertensive and Dyslipidaemic Chinese". *Journal of Hong Kong College of Cardiology (Abstracts of 6th Annual Scientific Congress HK College of Cardiology)* vol.6, p.41. Hong Kong, 1998.04.17.
- <P983466> **Tomlinson, Brian; Sau-Ying Wong; Wei Lan; Julian A.J.H. Critchley; Tony W.L. Mak; Christopher W.K. Lam; Kam S. Woo and John E. Sanderson.** "Combination Treatment with Fluvastatin and Gemfibrozil in Resistant Hyperlipidaemia". *Atherosclerosis (Abstracts of the 1st Congress of the Asian-Pacific Society of Atherosclerosis and Vascular Disease)* vol.136, S56 Abs.F038. Taipei, Taiwan, 1998.03.14.
- <P983467> **Lan, Wei; Brian Tomlinson; Yee-Man Chau; Tung-Kun Say; Kenneth K.C. Lee; Julian A.J.H. Critchley; Tony W.L. Mak and Christopher W.K. Lam.** "Response to Bezafibrate in Combined Hyperlipidaemia". *Abstracts of the 1st Congress of the Asian-Pacific Society of Atherosclerosis and Vascular Disease* vol.136, S55 Abs.F036. Taipei, Taiwan, 1998.03.14.
- <P983468> **Benzie, Iris F.F.; Yim-Tong Szeto; J.J. Strain and Brian Tomlinson.** "Bioavailability of Antioxidant Power in Green Tea". *Atherosclerosis (Abstracts of the 1st Congress of the Asian-Pacific Society of Atherosclerosis and Vascular Disease)* vol.136(Suppl.), S35 Abs.S44. Taipei, Taiwan, 1998.03.14.
- <P983470> **Sung, Joseph J.Y.** "Variceal Haemorrhage: An Update on Treatment". *Journal of Gastroenterology and Hepatology* vol.13(Suppl.), p.S161-S165. 1998.
- <P983471> **Leung, Wai Keung; Francis K.L. Chan; Matthew S. Falk; Roamy Suen and Joseph J.Y. Sung.** "Comparison of Two Rapid Whole-Blood Tests for *Helicobacter Pylori* Infection in Chinese Patients" *Journal of Clinical Microbiology* vol.36 no.11, pp.3441-3442. 1998.11.
- <P983474> **Lee, Y.T.; J.J.Y. Sung; P. Poon; K.N. Lai and P.K.T. Li.** "Association of HLA Class-II Genes and Anti-Neutrophil Cytoplasmic Antibodies in Chinese Patients with Inflammatory Bowel Disease". *Scandinavian Journal of Gastroenterology* vol.33, pp.623-627. 1998.
- <P983477> **Lee, Y.T.; Joseph J.Y. Sung; C.L. Choi; Francis K.L. Chan; Enders K.W. Ng; Jessica Y.L. Ching; W.K. Leung and S.C. Sydney Chung.** "Ulcer Recurrence after Gastric Surgery: Is *Helicobacter Pylori* the Culprit?" *American Journal of Gastroenterology* vol.93 no.6, pp.928-931. 1998.
- <P983478> **Leung, W.K.; Y.T. Lee; C.L. Choi; F.K.L. Chan; J. Ching and J.J.Y. Sung.** "Diagnosis of *Helicobacter Pylori* Infection after Gastric Surgery for Peptic Ulcer: Is the Rapid Urease Test Useful?" *Scandinavian Journal of Gastroenterology* vol.33, pp.586-589. 1998.
- <P983479> **Chan, F.K.L.; M. Suen; J.Y.W. Li and J.J.Y. Sung.** "Bile Immunoglobulins and Blockage of Biliary Endoprosthesis: An Immunohistochemical Study". *Biomed & Pharmacother* vol.52, pp.403-407. Paris, France, 1998.
- <P983480> **Chan, L.Y.; Francis K.L. Chan and Joseph J.Y. Sung.** "Case Reports: A Case of Pseudomembranous Colitis Associated with Rifampicin". *Chinese Medical Journal* vol.111 no.1, pp.90-91. 1998.

- <P983481> **Ho, K.K.L.; A.S.S. Ho; R.C.C. Leung; C.K.W. Lai and K.N. Lai.** "The Interleukin-5 Messenger RNA Expression in a Patient with Idiopathic Hypereosinophilic Syndrome". *Clinical and Experimental Allergy* vol.28, pp.889-892. 1998.
- <P983482> **Lee, Zoe S.K. and Julian A.J.H. Critchley.** "Simultaneous Measurement of Catecholamines and Kallikrein in Urine Using Boric Acid Preservative". *Clinica Chimica Acta* vol.276, pp.89-102. Ireland, 1998.07.
- <P983483> **Lee, S.C.; J.C.N. Chan; K.Y. Li; Z.S.K. Lee; G.N. Thomas; P.J. Anderson; R. Turner; V. Yeung; C.C. Chow; W.Y. So; W.B. Chan; C.Y. Ng; C.S. Cockram and J.A.J.H. Critchley.** "Missense Mutation in the Amylin Gene (S20G) in Hong Kong Chinese NIDDM Patients". *Archives of Pharmacology, 13th International Congress of Pharmacology* Supplement Abstract book, p.AP32.11. Germany, 1998.07.
- <P983484> **Ma, Y.Q.; N. Thomas; B. Tomlinson; R.P. Young; J.C.N. Chan; Z.S.K. Lee; P.J. Anderson and J.A.J.H. Critchley.** "Genetic Analysis of Two ApoA-I Gene Polymorphisms in Hypertensive and Dyslipidaemic Chinese". *Journal of Hong Kong College of Cardiology* vol.6, Abs.18. Hong Kong, 1998.04.
- <P983485> **Anderson, P.J.; J.A.J.H. Critchley; Y.L. Chan; Brian Tomlinson; J.C.N. Chan; C.S. Cockram; R.P. Young; G.N. Thomas; Z.S.K. Lee and C. Metreweli.** "Waist-To-Height Versus Waist-To-Hip Ratio or Waist Circumference in Cardiovascular Risk: Sex Differences and Correlations with Visceral and Subcutaneous Fat Areas from Magnetic Resonance Imaging". *Journal of Hong Kong College of Cardiology* vol.5, Abs.92. Hong Kong, 1998.04.
- <P983486> **Lee, Y.T.; J.J.Y. Sung; E.K.W. Ng; V.K.S. Leung and S.C.S. Chung.** "Endosonography-Guided Histoacryl Injection for Gastric Varices(GV)". *Proceedings of 11th International Symposium on Endoscopic Ultrasonography* Japan: Committee of the Conference Stated, 1998.01.10.
- <P983487> **Lee, Z.S.K.; J.C.N. Chan; V.T.F. Yeung; C.C. Chow; C.S. Cockram and J.A.J.H. Critchley.** "Reduced Growth Hormone in Young Chinese Type 2 Diabetic Patients". *Archives of Pharmacology* vol.358, Suppl.2, p.R552 (Abs.19-32). Germany: Springer, 1998.07.
- <P983490> **Anderson, P.J.; J.A.J.H. Critchley; B. Tomlinson; J.C.N. Chan; Z.S.K. Lee; G.N. Thomas and C. Cockram.** "No Relationship Between Insulin Resistance and Blood Pressure in Hong Kong Chinese". *Journal of Hong Kong College of Cardiology* vol.6, p.37(Abs.2). Hong Kong, 1998.04.
- <P983492> **Ko, Gary T.C.; Juliana C.N. Chan; Jean Woo; Edith Lau; Vincent T.F. Yeung; Chun-Chung Chow and Clive S. Cockram.** "The Reproducibility and Usefulness of the Oral Glucose Tolerance Test in Screening for Diabetes and other Cardiovascular Risk Factors". *Annals of Clinical Biochemistry* vol.35, pp.62-67. UK, 1998.01.
- <P983501> **Chan, Juliana C.N.; Asif Butt; C.S. Ho; Clive Cockram and R. Swaminathan.** "Relation Between Blood Pressure and Serum Concentration of Ouabain-Like Substance in Non-Insulin-Dependent Diabetes Mellitus". *The Lancet* vol.351, p.266. UK, 1998.
- <P983770> **Chan, Yuen-Shan; Brian Tomlinson; Ying-Tat Mak; Tony W.L. Mak and Chi-Pui Pang.** "Investigation of Mutations and Polymorphisms in the Lipoprotein Lipase Gene". *Atherosclerosis(Abstracts of the 1st Congress of the Asian-Pacific Society of Atherosclerosis and Vascular Disease)* vol.136(suppl.), p.S67AbsFO82. Taipei, 1998.03.14.
- <P983771> **Leung, R.; C.W.K. Lam; A. Chan; M. Lee; I.H.S. Chan; S.W. Pang and C.K.W. Lai.** "Indoor Environment of Residential Homes in Hong Kong - Relevance to Asthma and Allergic Disease". *Clinical and Experimental Allergy* vol.28, pp.585-590. 1998.05.
- <P983792> **Critchley, Julian A.J.H.; G. Neil Thomas; Zoe S.K. Lee; Candy K.L. Chong and Brian Tomlinson.** "The Role of Angiotensin II Receptor Blockers to Fight Hypertensive Heart Disease". *Abstracts of the 10th Weekend Course on Cardiology* p.42. Jakarta, Indonesia, 1998.10.

- <P983793> **Thomas, N.** "The Genetic Basis of Hypertension". Paper presented in the Symposia of Recent Developments in Clinical Pharmacology, Medicine & Molecular Genetics. Hong Kong, 1998.12.11.
- <P983794> **Critchley, J.A.J.H.; G.N. Thomas; R.P. Young and B. Tomlinson.** "Blood Pressure Modulation by the Dopamine D2 Receptor TAQI Polymorphism". *Clin Invest Med* vol.38, p.S15. 1998.
- <P983795> **Critchley, J.A.J.H.; G.N. Thomas; R.P. Young and B. Tomlinson.** "Blood Pressure Modulation by the Dopamine D2 Receptor TAQI Polymorphism". *J. Clin Pharmacol* vol.38, p.864. 1998.
- <P983796> **Ma, Y.Q.; G.N. Thomas; B. Tomlinson; R.P. Young; J.C.N. Chan; Z.S.K. Lee; P.J. Anderson and J.A.J.H. Critchley.** "APOA1/MSP1 Gene Polymorphisms in Cohorts of Hypertensive and Dyslipidaemic Hong Kong Chinese". *Naunyn-Schmiedeberg's Archives of Pharmacology* vol.358 no.1 (suppl.1), p.R278. Berlin, Germany: Springer-Verlag 1998, 1998.
- <P983797> **Lee, Z.S.K.; J.A.J.H. Critchley; P.J. Anderson; G.N. Thomas; J.C.N. Chan; R.P. Young and B. Tomlinson.** "Waist to Height Ratio Eliminates Sex Differences Associated with Waist to Hip Ratio or Waist Circumference Alone and is a Better Predictor of Insulin Resistance". *Naunyn-Schmiedeberg's Archives of Pharmacology* suppl.1, vol.358 no.1, p.R278. Berlin, Germany: Springer-Verlag 1998, 1998.
- <P983798> **Lee, S.C.; J. Chan; G.N. Thomas; M. Ng; R.P. Young; B. Tomlinson; C.S. Cockram and J.A.J.H. Critchley.** "The Tumor Necrosis Factor- Gene *Nco* I Polymorphism in Chinese Patients with Different Components of the Metabolic Syndrome". Paper presented in the 13th International Congress of Pharmacology, organized by International Union of Pharmacology. M, 1998.07.
- <P983799> **Thomas, N.; P. Chook; R.P. Young; Y.I. Lolin; A.S.P. Cheung; L.L.T. Chan; J.E. Sanderson; J.A.J.H. Critchley and K.S. Woo.** "Methylenetetrahydrofolate Reductase (MTHFR) Gene 677T Variant Increases Fasting Total Homocysteine Levels in Chinese". *Naunyn-Schmiedeberg's Archives of Pharmacology* vol.358 no.1(suppl.), p.R259. Berlin, Germany: Springer-Verlag 1998, 1998.
- <P983846> **Critchley, J.A.J.H.; Z.S.K. Lee; B. Tomlinson; J.C.N. Chan; R.P. Young and G.N. Thomas.** "Relationships between Urinary Catecholamines, Obesity and Lipid Profiles in Hong Kong Chinese". *J. Clin Pharmacol* vol.38, p.864. 1998.
- <P983847> **Critchley, J.A.J.H.; Z.S.K. Lee; B. Tomlinson; J.C.N. Chan; R.P. Young and G.N. Thomas.** "Relationships between Urinary Catecholamines, Obesity and Lipid Profiles in Hong Kong Chinese". *Clin Invest Med* suppl, p.S10. 1998.
- <P983852> **Chan, Thomas Y.K.** "Lengthy Persistence of Ciguatoxin in the Body". *Transactions of the Royal Society of Tropical Medicine and Hygiene* vol.92, p.662. London, UK, 1998.
- <P983865> **Chan, Thomas Y.K.** "An Assessment of the Delayed effects Associated with Valerian Overdose". *International Journal of Clinical Pharmacology and Therapeutics* vol.36 no.10, p.569. Germany, 1998.
- <P983866> **Chan, Thomas Y.K.** "Childhood Poisoning: The Scope for Prevention". *Veterinary and Human Toxicology* vol.40 no.6, pp.361-363. Manhattan, KS, USA, 1998.12.
- <P983868> **Chan, T.Y.K. and J.A.J.H. Critchley.** "Insecticide Poisoning with Organophosphates and Carbamates". *The Hong Kong Practitioner* vol.20 no.11, pp.604-613. Hong Kong, 1998.11.
- <P983889> **Chan, Thomas Y.K.** "Shellfish Poisoning". *The Hong Kong Medical Diary* vol.4 no.4, pp.4-5. Hong Kong, 1998.06.

- <P983940> **So, W.Y.; Yeung V.T.; Chow C.C.; Ko G.T.; Szeto C.C. and Cockram C.S.** "TSH Secreting Pituitary Adenoma a Rare Cause of Thyrotoxicosis". *International Journal of Clinical Practice* vol.52 no.1, pp.62-64. 1998.
- <P983941> **Allahabadia A.; Heward J.M.; Mijovic C.; Carr-Smith J.; Daykin J.; Cockram C.; Barnett A.H.; Sheppard M.C.; Franklyn J.A. and Gough S.C.** "Lack of Association between Polymorphism of the Thyrotropin Receptor Gene and Graves' Disease in United Kingdom and Hong Kong Chinese Patients: Case Control and Family-Based Studies". *Thyroid* vol.8 no.9, pp.777-780. 1998.
- <P983942> **Heward, J.M.; Allahabadia A.; Carr-Smith, J.; Daykin J.; Cockram C.S.; Gordon C.; Barnett A.H.; Franklyn J.A. and Gough S.C.L.** "No Evidence for Allelic Association of a Human *CTLA-4* Promoter Polymorphism with Autoimmune Thyroid Disease in Either Population-Based Case-Control or Family-Based Studies" *Clinical Endocrinology* vol.49 no.3, pp.331-334. 1998.
- <P983947> **Young, Robert P.; G. Neil Thomas; Julian A.J.H. Critchley; Brian Tomlinson; Kam Sang Woo and John E. Sanderson.** "Interethnic Differences in Coronary Heart Disease Mortality in 25 Populations: Association with the Angiotensin-Converting Enzyme DD Genotype Frequency". *Journal of Cardiovascular Risk* vol.5 no.5/6, pp.303-307. USA, 1998.12.01.
- <P983954> **Tse, S.L.S. and Chan T.Y.K.** "Vitamin D Deficiency: A Possible Explanation for the More Common Occurrence of Tuberculosis in Winter Months and the Elderly". *Proceedings of the 4th Congress of Parenteral and Enteral Nutrition Society of Asia*, Abstract no.A11. Hong Kong, 1998.12.09.
- <P983955> **Tse, S.L.S.; Chan T.Y.K.; Cheung A.Y.K. and Kwok T.C.Y.** "Deficient Dietary Vitamin K Intake: A Possible Contributing Factor to Osteoporosis in Elderly Women in Hong Kong". *Proceedings of the 4th Congress of Parenteral and Enteral Nutrition Society of Asia*, Abstract no.A14. Hong Kong, 1998.12.09.
- <P983956> **Perry, C.L.; C.H. Mijovic; C.S. Cockram; V.T.F. Yeung; D. Jenkins and A.H. Barnett.** "A Novel PCR-Based Methodology to Determine TAP Allele Frequencies in Population Studies". *Tissue Antigens* vol.52, pp.88-91. Denmark, 1998.
- <P984015> **Chan, Wai-Man; C.P. Pang; Arthur C.K. Cheng; Alfred T.S. Leung; Dorothy S.P. Fan and Dennis S.C. Lam.** "Risk Factors for Age-Related Macular Degeneration". *Hong Kong Journal of Ophthalmology* vol.2 no.1, pp.8-12. Hong Kong, 1998.10.
- <P984021> **Kwok, T.; C. Tang; J. Woo; W.K. Lai; L.K. Law and C.P. Pang.** "Randomized Trial of the Effect of Supplementation on the Cognitive Function of Older People with Subnormal Cobalamin Levels". *International Journal of Geriatric Psychiatry* vol.13, pp.611-616. USA, 1998.
- <P984031> **Tomlinson, Brian; Calvin C.P. Pang and Paul Chan.** "Hyperlipidaemia in Chinese Populations". *Hospital Medicine* vol.59 no.7, pp.549-552. UK, 1998.
- <P984075> **Kwok, T.; J.K.H. Luk; E. Lau and J. Woo.** "Attitudes of Old People Towards Old Age Homes in Hong Kong". *Archives of Gerontology and Geriatrics* vol.27, pp.89-96. 1998.
- <P984076> **Kwok, T.; Lau E.; Woo J.; Luk J. and Ho K.M.** "Hospital Readmission Rates Defined at Different Time Intervals Had Different Predictors in Older Medical Patients-A Cohort Study". Oral Presentation in the Hospital Authority Convention, Hong Kong, 1998.
- <P984128> **Ko, Gary T.C.; Tony W.L. Mak; Vincent T.F. Yeung; Dick C.F. Chan; Christopher W.K. Lam; Lynn W.W. Tsang; Chun-Chung Chow and Clive S. Cockram.** "Short-Term Efficacy and Tolerability of Combination Therapy with Lovastatin and Acipimox in Chinese Patients with Type 2 Diabetes Mellitus and Mixed Dyslipidemia". *J. Clin Pharmacol* vol.38, pp.912-917. 1998.

- <P984129> **Ko, G.T.C.; J.C.N. Chan; J. Woo; E. Lau; V.T.F. Yeung; C.C. Chow; J.K.Y. Li; W.-Y. So; W.-B. Chan and C.S. Cockram.** "Glycated Haemoglobin and Cardiovascular Risk Factors in Chinese Subjects with Normal Glucose Tolerance". *Diabetic Medicine* vol.15, pp.573-578. 1998.
- <P984130> **Chow, C.C.; W.B. Chan; V.T.F. Yeung; J.C.N. Chan; W.Y. So and C.S. Cockram.** "Fibrinogen is Closely Related to Various Metabolic Parameters and Microvascular Complications in Chinese Type II Diabetes". *34th Annual Meeting Barcelona, Abstracts Books* p.1283, A332. USA, 1998.09.
- <P984132> **Woo, Kam S.; Ping Chook; Olli T. Raitakari; Brendan McQuillan; Jian Z. Feng and David S. Celermajer.** "Westernization of Chinese Adults is Associated with Increased Subclinical Atherosclerosis". *Circulation* vol.98, p.1581. Maryland, USA, 1998.10.27.
- <P984133> **Woo, K.S.** "Hypertension: A Major Health Problem in Asia". Paper presented in the Symposium Highlights from "Angiotensin II Antagonism in the Management of Cardiovascular Disease", organized by Excerpta Medica Asia Ltd (Hong Kong). Beijing, China, 1998.07.
- <P984134> **Leong, Hok C.; K.S. Woo; Ping Chook; Wing H. Poon; John E. Sanderson and Michael F.O. Rourke.** "Increased Arterial Wall Stiffness in Normotensive Subjects with Family History of Hypertension". *Circulation* vol.98, p.1864. Maryland, USA, 1998.10.27.
- <P984135> **Woo, K.S.; P. Chook; H.C. Leong; X.S. Hwang and D.S. Celermajer.** "Heavy Passive Smoking in Casino is Associated with Arterial Endothelial Dysfunction". *Proceedings of New Zealand Regional Scientific Meeting of Cardiac Society of Australia & New Zealand* Christchurch, 1998.05.
- <P984137> **Szeto, Cheuk-Chun; Philip Kam-Tao Li; Teresa Yuk-Hwa Wong; Chi-Bon Leung and Siu-Fai Lui.** "Factors Associated with Active Systemic Lupus Erythematosus after Endstage Renal Disease". *Journal of Rheumatology* vol.25 no.8, pp.1520-1528. Toronto, Canada, 1998.08.
- <P984138> **Li, Philip Kam Tao; Kent Tsang; Cheuk Chun Szeto; Teresa Y.H. Wong; Ka Fai To; Chi Bon Leung; Siu Fai Lui; Simon Yu and Fernand M.M. Lai.** "Effective Treatment of High-Grade Lymphoproliferative Disorder after Renal Transplantation Using Autologous Lymphocyte Activated Killer Cell Therapy". *American Journal of Kidney Diseases* vol.32 no.5, pp.813-819. USA, 1998.11.
- <P984161> **Tomlinson, B.; Lan W.; Wong S.Y.; Critchley J.A.J.H.; Mak T.W.L. and Lam C.W.K.** "Safety and Efficacy of Atorvastatin Therapy in Patients with Resistant Hyperlipidaemia". *Abstracts of the 3rd International Heart Health Conference* Abs p87, pp021. Singapore: Singapore National Heart Association, 1998.08.29.
- <P984162> **Tomlinson, B.; S.Y. Wong; W. Lan; J.A.J.H. Critchley; T.W.L. Mak; C.W.K. Lam; M. Arumanayagam; K.S. Woo and J.E. Sanderson.** "Effects on Insulin Resistance of Fluvastatin Alone or in Combination with Gemfibrozil". *Journal of Clinical Pharmacology (Abstracts of the Joint Meeting of RCPSC and ACCP)* vol.38, p.877 Abstracts 599. Toronto, Canada, 1998.09.24.
- <P984195> **Benziel, I.F.F.; Y.T. Szetol and B. Tomlinson.** "Antioxidant Effects of Lipid-Lowering Drugs *in vitro*". *Abstracts of the 70th European Atherosclerosis Society Congress* Abs. p.91. Geneva, Switzerland, 1998.09.
- <P984196> **Tomlinson, Brian; Jean Woo; Yee-Man Chau and Julian A.J.H. Critchley.** "Antihypertensive Effects Persist after Missed Doses of Amlodipine But not Enalapril". *ASEAN Heart Journal* vol.6 no.2, Supplement S85 Abs P36. The Philippines: ASEAN Society of Cardiology, 1998.12.
- <P984198> **Chan, F.K.L.; J.J.Y. Sung; R. Suen; Y.T. Lee; J.C.Y. Wu; W.K. Leung; H.L.Y. Chan; A.C.W. Lai; J.Y.W. Lau; E.K.W. Ng and S.C.S. Chung.** "Does Eradication of Helicobacter Pylori Impair Healing of Nonsteroidal Anti-Inflammatory Drug Associated Bleeding peptic Ulcers? A Prospective Randomized Study" *Alimentary Pharmacology & Therapeutics* vol.12, pp.1201-1205. UK, 1998.

- <P984213> **Szeto, C.C.; Wong T.Y.H.; Law M.C.; Leung C.B.; Wang A.Y.M.; Lui S.F. and Li P.K.T.** "Predicted Weekly Creatinine Clearance by Plasma Creatinine Level is not a Reliable Measurement of Dialysis Adequacy in CAPD". Paper presented in the Annual Scientific Meeting of Hong Kong Society of Nephrology. Hong Kong, 1998.11.08.
- <P984215> **Chan, H.H.L.; J.W.K. Fung; W.M. Lam and P. Choi.** "The Clinical Spectrum of Rudimentary Meningocele". *Pediatric Dermatology* vol.15 no.5, pp.388-389. 1998.
- <P984219> **Sung, J.J.Y.; W.K. Leung; T.K.W. Ling; M.Y. Yung; F.K.L. Chan; Y.T. Lee; A.F.B. Cheng and S.C.S. Chung.** "One-week Use of Ranitidine Bismuth Citrate, Amoxicillin and Clarithromycin for the Treatment of Helicobacter Pylori-related Duodenal Ulcer". *Aliment Pharmacol Ther* vol.12, pp.725-730. USA, 1998.04.14.
- <P984238> **Tam, L.S. and Li E.K.** "A Review of 18 Chinese Patients with Primary Pulmonary Hypertension in Systemic Lupus Erythematosus". *Arthritis Rheum* vol.41, p.9S1786. 1998.09.
- <P984239> **Tam, L.S. and Li E.K.** "Survival and Predictor Variables for Mortality in Systemic Lupus Erythematosus in Chinese". *Arthritis Rheum* vol.41, p.9 S1126. 1998.09.
- <P984240> **Chan, T.H.; Tam L.S. and Li E.K.** "Salmonella Infection in Chinese Systemic Lupus Erythematosus (SLE) Patients". *Arthritis Rheum* vol.41, p.9 S1791. 1998.09.
- <P984243> **Roach, V.J.; Fung H.; Cockram C.S.; Lau T.K. and Rogers M.S.** "Evaluation of Glucose Intolerance in Pregnancy Using Biochemical Markers of Fetal Hyperinsulinemia". *Gynecologic & Obstetric Investigation* vol.45 no.3, pp.174-176. 1998.
- <P984244> **Ko, G.T.; Chan J.C. and Cockram C.S.** "The Association between Dyslipidaemia and Obesity in Chinese Men after Adjustment for Insulin Resistance". *Atherosclerosis* vol.138 no.1, pp.153-161. 1998.
- <P984246> **Wong, K.S.; V. Mok and R. Kay.** "Hemiballism Associated with Subthalamic Petechial Hemorrhage". *Movement Disorders* vol.13 suppl.2, p.27. Lippincott Williams & Wilkins, 1998.10.
- <P984250> **Wong, Teresa Y.H.; C.C. Szeto; Fernand F.M. Lai; C.K. Mak and Philip K.T. Li.** "Nephrotic Syndrome in Strongyloidiasis: Remission after Eradication with Anthelmintic Agents". *Nephron* vol.79 no.3, pp.333-336. 1998.
- <P984251> **Wang, Angela Yee Moon; Philip Kam Tao Li; Ka Fai To; Fernand Macmound Lai and Kar Neng Lai.** "Coexistence of Kaposi's Sarcoma and Tuberculosis in a Renal Transplant Recipient". *Transplantation* vol.66 no.1, pp.115-118. 1998.07.
- <P984252> **Chan, Thomas Y.K.** "Poisoning - A Hong Kong Perspective". *Proceedings of the Advances in Medicine 1998*, p.50. Hong Kong: The Chinese University of Hong Kong, 1998.05.
- <P984253> **Freedman, S.B. and C.K. Wong.** "Triggers of Daily Life Ischaemia". *Heart* vol.80, pp.489-492. 1998.11.
- <P984254> **Lee, Zoe S.K.; Juliana C.N. Chan; Vincent T.F. Yeung; Chun-Chung Chow; Maggie S.W. Lau; Clive S. Cockram and Julian A.J.H. Critchley.** "Plasma Insulin, Growth Hormone, Cortisol and Central Obesity Among Young Chinese Type 2 Diabetes Mellitus". *Proceedings of the 12th Annual Scientific Meeting of Society for the Study of Endocrinology, Metabolism and Reproduction* p.19. Hong Kong, 1998.11.14.
- <P984255> **Chan, F.K.L. and J.J.Y. Sung.** "Can Healing of Esophagitis without Acid Suppression be Envisaged by Eradication of Helicobacter Pylori?" *O.E.S.O.* pp.650-653. France, 1998.
- <P984259> **Li, Michael K.K.; C.P. Tsui; Joseph J.Y. Sung; Oscar U. Scremin and Felix W. Leung.** "Potassium Channels Participate in Gastric Mucosal Protection in Rats with Partial Portal Vein Ligation". *Hepatology* vol.27 no.6, pp.1530-1535. USA, 1998.

- <P984260> **Sung, Joseph J.Y. and S.C. Sydney Chung.** "Gallbladder and Bile Duct Stones". *Annual of Gastrointestinal Endoscopy* pp.75-87. USA, 1998.
- <P984264> **Sung, J.J.Y.** "The Use of Color Doppler EUS in Gastrointestinal Diseases". *Endoscopy* vol.30 suppl.1, pp.A149-A151. New York, USA, 1998.
- <P984265> **Chan, Francis K.L. and Joseph J.Y. Sung.** "Therapies for Ulcers Associated with Nonsteroidal Antiinflammatory Drugs". *New England Journal of Medicine* vol.339 no.5, pp.349-351. USA, 1998.
- <P984267> **Chan, Francis K.L. and Joseph J.Y. Sung.** "*Helicobacter Pylori* Eradication in Long-Term Users of Non-Steroidal Anti-Inflammatory Drugs" *The Lancet* vol.352, pp.2016-2017. London, UK, 1998.01.
- <P984278> **Chan, F.K.L.; J.Y. Sung; R. Suen; Y.T. Lee; W.K. Leung; V.K.S. Leung; J.C.Y. Wu and S.C.S. Chung.** "Eradication of *H. Pylori* Prevents Recurrent Gastroduodenal Hemorrhage in High Risk Aspirin But Not Non-Aspirin NSAID Users" *Gut* vol.43 suppl.2, p.A3. Budapest, Hungary: BMJ Publishing Group, 1998.09.05.
- <P984341> **Chan, Paul; De-Yi Xu; Ju-Chi Liu; Yi-Jen Chen; Brian Tomlinson; Wen-Pin Huang and Juei-Tang Cheng.** "The Effect of Stevioside on Blood Pressure and Plasma Catecholamines in Spontaneously Hypertensive Rats". *Life Sciences* vol.63 no.19, pp.1679-1684. USA, 1998.
- <P984357> **Chan, F.K.L.; M.Y. Yung; T.K.W. Ling; W.K. Leung; S.C.S. Chung and J.Y. Sung.** "What is the True Impact of Metronidazole Resistance on the Efficacy of Bismuth-Triple Therapy?". *Gut* vol.43 no.2, p.A84. Budapest, Hungary: BMJ Publishing Group, 1998.09.04.
- <P984358> **Sung, J.Y.; F.K.L. Chan; W.K. Leung; J.C.Y. Wu; R. Suen; T.K.W. Ling; A.F.B. Cheng and S.C.S. Chung.** "One-Week Therapy of Ranitidine Bismuth Citrate (RBC) with Different Combinations of Antimicrobial for *H. Pylori* Infection: Which is the Best Regimen?". *Gut* vol.43 no.2, p.A81. Budapest, Hungary: BMJ Publishing Group, 1998.09.04.
- <P984359> **Wu, J.C.Y.; W.K. Leung; F.K.L. Chan; C.W. Lai and J.Y. Sung.** "*H. Pylori* Infection Protects Gerd Patients Against Severe Esophagitis". *Gut* vol.43 no.2, p.A112. Budapest, Hungary: BMJ Publishing Group, 1998.09.03.
- <P984371> **Fung, Wai Kit Joseph; Hin Lee Henry Chan and Wai Man Wynnne Lam.** "Amyopathic Dermatomyositis in Hong Kong - Association with Nasopharyngeal Carcinoma". *International Journal of Dermatology* vol.37, pp.659-663. UK, 1998.
- <P984576> **Ang, L.; L.N. Jorgensen; L.H. Le; B.E. Mustaffa; P. Supartondo and C.S. Cockram Et Al.** "Current Management of Diabetes in Asia". *European Association for the Study of Diabetes* p.A252, 977. Barcelona, Spain, 1998.
- <P984603> **Kwok, C.Y. Timothy.** "Prediction of Body Fat by Anthropometry in Older Chinese People". Paper presented in the Seminar on Gerontology in 1998 of Sichuan, organized by West China University of Medical Sciences. Cheugdu, China, 1998.10.07.
- <P984801> **Kay, Richard and Ka Sing Wong.** "Epidemiology of Stroke Among the Chinese". *Neurological Journal of South East Asia* vol.3, pp.1-4. 1998.
- <P984802> **Pang, Chi P.; Jun Zhang; Jean Woo; Daniel Chan; Lap K. Law; Shirley F. Tong; Timothy Kwok and Richard Kay.** "Rarity of Debrisoquine Hydroxylase Gene Polymorphism in Chinese Patients with Parkinson's Disease". *Movement Disorders* vol.13 no.3, pp.529-532. 1998.
- <P984803> **Hsiang, John N.K.; Lawrence K.S. Wong; Richard Kay and Wai S. Poon.** "Vagus Nerve Stimulation for Seizure Control: Local Experience". *Journal of Clinical Neuroscience 1998* vol.5 no.3, pp.294-297. 1998.

- <P984884> **Yip, G.; Pearl Ho and J.E. Sanderson.** "High Prevalence of Heart Failure with Normal Systolic Left Ventricular Function in Hong Kong". *Hjerteforum - the 2nd European Diastology Meeting: Mechanisms and Management of Diastolic Heart Failure* vol.11 suppl.2, p.79. European Heart House, 1998.09.
- <P984885> **Sanderson, John.** "Technological Advances in Pre-op Cardiac Assessment". Paper presented in the Annual Scientific Meeting in Anaesthesiology, organized by the Society of Anaesthetists of Hong Kong, Hong Kong College of Anaesthesiologists. Hong Kong, 1998.12.05.
- <P990143> **Choy, D.K.L.; M. Tong; F. Ko; S.T. Li; A. Ho; J. Chan; R. Leung and C.K.W. Lai.** "Evaluation of the Efficacy of a Hospital-Based Asthma Education Programme in Patients of Low Socioeconomic Status in Hong Kong". *Clinical and Experimental Allergy* vol.29, pp.84-90. 1999.
- <P990235> **Forster, Anne; John Young; Peter Langhorne and The Day Hospital Group.** "Systematic Review of Day Hospital Care for Elderly People". *British Medical Journal* vol.318, pp.837-841. UK, 1999.03.27.
- <P990408> 胡令芳、喬治婭 戈登、盛玉燕、劉倩芳、許聞宇. 《老有所「養」》. 82 頁. 香港: 中文大學出版社, 1999.04.
- <P990417> **Thomas, Neil; Brian Tomlinson; Robert P. Young; Juliana C.N. Chan; Zoe S.K. Lee and Julian A.J.H. Critchley.** "Obesity and the α_3 -Adrenergic Receptor Gene". Paper presented in the Insulin Resistance Syndrome Symposium, organized by South Kline Beecham. Cambridge, UK, 1999.04.14.
- <P990418> **Lee, Zoe S.K.; Julian A.J.H. Critchley; Juliana C.N. Chan; Brian Tomlinson; G. Neil Thomas and Robert P. Young.** "Relationships between Insulin Resistance, Hyperinsulinaemia and Obesity in Hong Kong Chinese". Paper presented in the Insulin Resistance Syndrome Symposium, organized by South Kline Beecham. Cambridge, UK, 1999.04.
- <P990420> **Lee, Zoe S.K.; Julian A.J.H. Critchley; Julian C.N. Chan; Brian Tomlinson; G. Neil Thomas and Robert P. Young.** "Insulin Resistance, Hyperinsulinaemia and Obesity in the Metabolic Syndrome". *Journal of the Hong Kong College of Cardiology* vol.7, Abstracts no.64. Hong Kong, 1999.04.
- <P990421> **Lee, Zoe S.K.; Julian A.J.H. Critchley; Thomas Y.K. Chan; Juliana C.N. Chan; G. Neil Thomas; Robert P. Young and Brian Tomlinson.** "Does Kallikrein have a Role in the Metabolic Syndrome?". *Journal of the Hong Kong College of Cardiology* vol.7, Abstracts no.65. Hong Kong, 1999.04.
- <P990422> **Ma, Y.Q.; G.N. Thomas; B. Tomlinson; R.P. Young; J.C.N. Chan; Z.S.K. Lee; P.J. Anderson and J.A.J.H. Critchley.** "The Relationship between APOA-I Gene Polymorphisms and Dyslipidaemia in Chinese". *Journal of the Hong Kong College of Cardiology* vol.7, Abstracts no.83. Hong Kong, 1999.04.
- <P990423> **Thomas, Neil; Yan Qing Ma; Brian Tomlinson; Robert P. Young; Juliana C.N. Chan; Zoe S.K. Lee and Julian A.J.H. Critchley.** "The Trp64Arg Polymorphism of the α_3 -Adrenergic Receptor Gene Modulates Obesity in Chinese Subjects with Components of the Metabolic Syndrome". *Journal of the Hong Kong College of Cardiology* vol.7, p.61. Hong Kong, 1999.04.
- <P990470> **Chan, Thomas Y.K.** "Seasonal Variations in Vitamin-D Status and the Incidence of Tuberculosis in Different Countries". *Respiration* vol.66, p.196. Basel, Switzerland, 1999.
- <P990498> 陳恩強、李炯前、李成章. <香港一個綜合性教學醫院的抗菌藥物利用及消費>. 《藥物流行病學雜誌》第 8 卷 第 1 期, 頁 19-22. 中國, 1999.02.
- <P990499> **Chan, T.Y.K.** "Isoniazid and Rifampicin Rarely Cause Acute Pancreatitis in Patients with Tuberculosis". *International Journal of Clinical Pharmacology and Therapeutics* vol.37 no.2, p.109. Germany, 1999.

- <P990500> **Chan, T.Y.K.** "Interactions of Food with Warfarin". *The Hong Kong Practitioner* vol.21 no.1, pp.11-16. Hong Kong, 1999.01.
- <P990520> **Lam, T.P. and T.Y.K. Chan.** "Management of NIDDM by Family Doctors in Hong Kong: A Questionnaire Survey". *International Journal of Clinical Practice* vol.53 no.2, pp.89-92. London, 1999.03.
- <P990528> **Ko, Gary T.C.; Juliana C.N. Chan and Clive S. Cockram.** "Age, Body Mass Index and 2-Hour Plasma Glucose are the Major Determinants of Blood Pressure in Chinese Women Newly Diagnosed to have Glucose Intolerance". *International Journal of Cardiology* vol.69, pp.33-39. UK, 1999.
- <P990607> **Woo, Jean.** "Age-related Changes in Protein Binding of Drugs: Implications for Therapy". *Journal of the Hong Kong Geriatrics Society* vol.9 no.1, pp.14-17. Hong Kong, 1999.05.
- <P990609> **Cheuk, M. Yu and John E. Sanderson.** "Plasma Brain Natriuretic Peptide - An Independent Predictor of Cardiovascular Mortality in Acute Heart Failure". *The European Journal of Heart Failure* vol.1, pp.59-65. 1999.02.
- <P990610> **Sanderson, John, E.; Cheuk M. Yu; Robert P. Young; Irene O.L. Shum; Shan Wei; Mano Arumanayagam and Kam S. Woo.** "Influence of Gene Polymorphisms of the Renin-angiotensin System on Clinical Outcome in Heart Failure Among the Chinese". *American Heart Journal* vol.137, pp.653-657. USA, 1999.04.
- <P990626> **Kwok, T.; E. Lau; J. Woo; J.K.H. Luk; E. Wong; A. Sham and S.H. Lee.** "Hospital Readmission Among Older Medical Patients in Hong Kong". *Journal of the Royal College of Physicians of London* vol.33 no.2, pp.153-156. London, 1999.
- <P990646> **Renneberg, Reinhard; Cheng Shong; Helma Kaptein; Calum J. McNeil; Judith Rishpon; Bernd Grundig; John Sanderson; Albert Chu and Jan F.C. Glatz.** "Novel Immunosensors for Rapid Diagnosis of Acute Myocardial Infarction: A Case Report". *Advances in Biosensors* vol.4, pp.241-272. London, England, 1999.
- <P990658> **Woo, Jean.** "Strategies to Promote Successful Ageing of Populations". Paper presented in the Asia Pacific Regional Conference for the International Year of Older Persons, organized by SWD/HK Council of Social Services. Hong Kong, 1999.04.29.
- <P990659> **Woo, Jean.** "Importance of Physical Activity in the Older Adult". Paper presented in the Asia Pacific Regional Conference for the International Year of Older Persons, organized by Social Welfare Dept/HK Council of Social Services. Hong Kong, 1999.04.28.
- <P990660> **Hui, E.; N. J. Hjelm and J. Woo.** "Evaluation of a Geriatric Outreach Service Using Telemedicine". Paper presented in the Hospital Authority Convention 99, organized by Hospital Authority. Hong Kong, 1999.04.18.
- <P990696> **Cockram, Clive S.** "Fasting Glucose and Progression of Impaired Glucose Tolerance". *Diabetes Care* vol.22 no.2, pp.369-370. USA, 1999.
- <P990698> **Chan, W.B.; V.T.F. Yeung; C.C. Chow; W.Y. So and C.S. Cockram.** "Gynaecomastia as a Presenting Feature of Thyrotoxicosis". *Postgraduate Medical Journal* vol.75 no.822, pp.229-231. 1999.
- <P990707> **Wei, Shan; Louis T.C. Chow; O.L. Shum; Ling Qin and John E. Sanderson.** "Left and Right Ventricular Collagen Type I/III Ratios and Remodeling Post-Myocardial Infarction". *Journal of Cardiac Failure* vol.5 no.2, pp.117-126. USA, 1999.06.01.
- <P990708> **John, E. Sanderson; Leata Y. Yeung; Skiva Chan; Brian Tomlinson; Richard Kay; Kam S. Woo and Luciano Bernardi.** "Effect of β -Blockade on Baroreceptor and Autonomic Function in Heart Failure". *Clinical Science* vol.96, pp.137-146. UK, 1999.02.

- <P990714> **Woo, J.; S.S.F. Leung; S.C. Ho; A. Sham; T.H. Lam and E.D. Janus.** "Influence of Educational Level and Marital Status on Dietary Intake, Obesity and other Cardiovascular Risk Factors in a Hong Kong Chinese Population". *European Journal of Clinical Nutrition* vol.53, pp.461-467. UK, 1999.
- <P990717> **Lo, R.; J. Woo; K. Zhoc; W. Yeo; P. Johnson; Y. Mak and J. Lee.** "Multi-Centre Study on Palliative Care Patients' Quality of Life - Preliminary Results". Paper presented in Asia Pacific Hospice Conference 1999, organized by Society for the Promotion of Hospice Care Ltd. Hong Kong, 1999.06.
- <P990773> **Luk, J.K.H.; T. Kwok and J. Woo.** "Geriatric Screening in Acute Care Wards - A Novel Method of Providing Care to Elderly Patients". *The Hong Kong Medical Journal* vol.5 no.1, pp.34-38. Hong Kong, 1999.06.
- <P990774> **Yeung, V.T.F.; C.C. Chow; G.T.C. Ko; T.K. Lau and C.S. Cockram.** "Hyperemesis Gravidarum, Transient Hyperthyroxinaemia and Primary Hyperparathyroidism in a Chinese Woman". *Australian & New Zealand Journal of Medicine* vol.29 no.3, pp.379-380. Australia/New Zealand, 1999.
- <P990776> **Ko, Gary T.C.; Vincent T.F. Yeung; Chun-Chung Chow and Clive S. Cockram.** "Clinical Characteristics of Acromegaly in Hong Kong". *Endocrine Research* vol.25 no.2, pp.195-206. 1999.
- <P990797> **Chan, J.C.N. and G.T.C. Ko.** "Clinical Challenge-Diabetes Screening". *Hong Kong Practitioner* vol.21, pp.233-235. Hong Kong, 1999.
- <P990798> **Wong, Teresa Y.H.; Julianna C.N. Chan; Emily Poon and Philip K.T. Li.** "Lack of Association of Angiotensin-Converting Enzyme (DD/II) and Angiotensinogen M235T Gene Polymorphism with Renal Function Among Chinese Patients With Type II Diabetes". *American Journal of Kidney Diseases* vol.33 no.6, pp.1064-1070. USA, 1999.
- <P990890> **Chan, W.M.; D.S.C. Lam; G.W.K. Wong; D.S.P. Fan and A.C.K. Cheng.** "Ophthalmic Manifestations of Graves' Disease in Pediatric Patients". *IOVS* vol.40 no.4, p.S692. 1999.
- <P990921> **Lai, Kar Neng; Cheuk Chun Szeto; Ka Bik Lai; Christopher W.K. Lam; Daniel T.M. Chan and Joseph C.K. Leung.** "Increased Production of Hyaluronan by Peritoneal Cells and its Significance in Patients on CAPD". *American Journal of Kidney Diseases* vol.33 no.2, pp.318-324. USA, 1999.02.
- <P990922> **Li, Philip Kam Tao; Cheuk Chun Szeto; Man Ching Law; Ka Foon Chau; Ka Shun Fung; Chi Bon Leung; Chun Sang Li; Siu Fai Lui; Kwok Lung Tong; Wai Kei Tsang; Kim Ming Wong and Kar Neng Lai.** "Comparison of Double-Bag and Y-Set Disconnect Systems in Continuous Ambulatory Peritoneal Dialysis: A Randomized Prospective Multicenter Study". *American Journal of Kidney Diseases* vol.33 no.3, pp.535-540. 1999.03.
- <P990929> **Tomlinson, Brian; Irene W. Lan; Lisa Y.S. Chan; Ying-Tat Mak and Chi-Pui Pang.** "Gene-Environment Interactions in Hyperlipidaemia in Chinese". *Abstracts of the Asian Pacific Society of Atherosclerosis and Vasular Diseases Workshop* Abs. p.14. Japan, 1999.04.23.
- <P990938> **Sanderson, J.E.** "Echocardiographic Evaluation of Diseases of the Aorta". *Echocardiography in Adult Cardiac Surgery* ed. by Mohammad Bashir Izzat, John E. Sanderson and Martin G. St. John Sutton. pp.139-142. England, UK: ISIS Medical Media Ltd, 1999.
- <P990939> **Sanderson, J.E.** "Assessment of Ventricular Function". *Echocardiography in Adult Cardiac Surgery* ed. by Mohammad Bashir Izzat, John E. Sanderson and Martin G. St John Sutton. pp.43-50. UK: ISIS Medical Media Ltd, 1999.
- <P990945> **Critchley, J.A.J.H.; G.M.C. Chan; G.N. Thomas; Z.S.K. Lee; B. Tomlinson and J.C.N. Chan.** "Hong Kong Perspectives on the Blockade of the Renin-Angiotensin-Alodsterone System:

Pathophysiological, Genetic and Compliance Aspects". Poster presented in the International Forum on Angiotensin II Receptor Antagonism. Monte-Carlo, 1999.06.

- <P991016> **Cockram, C.S. and J.C.N. Chan.** "Diabetes in China and Chinese Populations". *The Diabetes Annual* vol.12, pp.87-109. 1999.
- <P991086> **So, Wing-Yee; C.N. Juliana Chan; Julian A.J.H. Critchley; Maggie C.Y. Ng; Shao C. Lee and Clive S. Cockram.** "Effects of Provision of Structured Care on Mortality in Type 2 Diabetic Patients". *Diabetes: A Journal of the American Diabetes Association Abstracts Book* vol.48, p.0369, a86. 1999.
- <P991087> **Sanderson, John E.; Cheuk M. Yu; Robert P. Young; Irene O.L. Shum; Shan Wei; Mano Arumanayagam and Kam S. Woo.** "Influence of Gene Polymorphisms of the Renin-Angiotensin System on Clinical Outcome in Heart Failure Among the Chinese". *American Heart Journal* vol.137, pp.653-657. Maryland, USA, 1999.04.
- <P991089> **Ng, Maggie C.Y.; Shao C. Lee; Gary T.C. Ko; Clive S. Cockram; Julian A.J.H. Critchley and C.N. Juliana Chan.** "Genetic Factors and Autoimmunity in Chinese Patients with Early Onset Type 2 Diabetes Mellitus". *Diabetes: A Journal of the American Diabetes Association Abstracts Book* vol.48, (Suppl 1) p.A403, Abstracts 1780. 1999.
- <P991090> **Woo, K.S.; S.P. Wong; C.W. Lam; T.F. Tse; C.O. Pun; C.P. Lau; Y.T. Tai; P.T.H. Ko; P.C.Y. Wong and C.H. Cheng.** "Hong Kong AMI Registry Report (I): Demographic and Clinical Patterns of Acute Myocardial Infarction in Hong Kong". *Journal of Hong Kong College of Cardiology* vol.7, p.40. Hong Kong, 1999.04.
- <P991092> **Woo, K.S.; S.P. Wong; W.H. Fung; W.K. Wong; S.K. Leung; S.K. Li; C.K. Leung; H.K. Chung; Y.C. Choi; K.C. Ho; C.C. Chan; K.F. Tse; W.K. Chan; T.C. Law and C.C. Chan.** "Hong Kong AMI Registry Report (II): Management of Acute Myocardial Infarction in Hospitals in Hong Kong". *Journal of Hong Kong College of Cardiology* vol.7, p.48. Hong Kong, 1999.04.
- <P991093> **Woo, K.S.; P. Chook; B.T.Y. Liu; S.F. Leung; J.L.F. Woo; J.Z. Feng; S.W. Chan and D.S. Celermajer.** "Modernization is Associated with More Atherogenic Dietary Patterns in the Chinese: A East to West Dialogue in the 'Chinese Atherosclerosis Study in the Aged and Young'". *Journal of Hong Kong College of Cardiology* vol.1, p.60. Hong Kong, 1999.04.
- <P991095> **Yip, W.C.; K.H. Tang; G. Yip; T.C. Law and K.S. Woo.** "Tolerability and Efficacy of Angiotensin II Receptor Antagonist (Valsartan) in Treatment of Mild to Moderate Essential Hypertension in Hong Kong". *Journal of Hong Kong College of Cardiology* vol.7 no.1, p.55. Hong Kong, 1999.04.
- <P991096> **Lei, S.M.; H.C. Leong; W.H. Pun; P. Chook; X.S. Huang and K.S. Woo.** "A Community-Based Cardiovascular Health Screening Programme in Macau: Hypertension and Atherosclerosis in the Aged and Young". *Journal of Hong Kong College of Cardiology* vol.7 no.1, p.54. Hong Kong, 1999.04.
- <P991098> **Sanderson, John E.; Skiva Chan; Gabriel Yip; Leata Yeung; Kenneth Raymond; Kam W. Chan and Kam S. Woo.** " -Blockers in Heart Failure: A Randomized Double Blind Trial of Carvedilol and Metoprolol". *Journal of American College of Cardiology* vol.33 no.2, p.183A. New York, USA, 1999.02.
- <P991099> **Yip, G.; S.K.W. Chan; L. Yeung; W.H. Fung; K. Raymond; K.W. Chan; K.S. Woo and J.E. Sanderson.** " -Blockers in Heart Failure: A Randomized Double Blind Trial of Carvedilol and Metoprolol". *Journal of Hong Kong College of Cardiology* vol.7 no.1, p.66. Hong Kong, 1999.04.
- <P991101> **Ng, L.; P. Ng; S. Chan; W.N. Hui; F. Lai; E. Ng; W.M. Chan and K.S. Woo.** "Cost Analysis and Logistic Model to Optimize Utilization of Cardiac Catheterization Laboratory". *Journal of Hong Kong College of Cardiology* vol.7 no.1, p.71. Hong Kong, 1999.04.

- <P991104> **Tse, Lawrence K.K.; H.K. Chung; W.M. Chan; K.S. Woo; C.K. Wong; K. Tang; R. Chiu; G. Yip; W.H. Fung and J.E. Sanderson.** "Efficacy and Safety of Abciximab in High Risk Coronary Intervention". *Journal of Hong Kong College of Cardiology* vol.7 no.1, p.65. Hong Kong, 1999.04.
- <P991106> **Woo, K.S.; P. Chook; J.Z. Feng; H.C. Leong; S.W. Chan; W.C. Yip and D.S. Celermajer.** "The Impact of Westernization (Modernization) on Atherosclerosis Risk Factors in the Chinese: A Multicentres Community-Based Atherosclerosis Study in the Aged and Young". *Journal of Hong Kong College of Cardiology* vol.7 no.1, p.60. Hong Kong, 1999.04.
- <P991107> **Woo, K.S.; P. Chook; X.S. Huang; H.C. Leong and D.S. Celermajer.** "The Impact of Heavy Passive Smoking on Arterial Endothelial Function in Westernized Chinese". *Australian & New Zealand Journal of Medicine* vol.29 no.1, p.133. Australia, 1999.02.
- <P991115> **Lee, Shao C.; C.N. Juliana Chan; Maggie C.Y. Ng; Yong B. Pu; Clive S. Cockram and Julian A.J.H. Critchley.** "Familial Segregation of Diabetes in Chinese-Indirect Evidence of a Preferred Mother to Daughter Transmission Mode in Some Families". *Diabetes: A Journal of the American Diabetes Association Abstracts Book* vol.48, p.1723, A390. 1999.
- <P991132> **Lan, W.; B. Tomlinson; S.Y. Wong; T.W.L. Mak; C.W.K. Lam; M. Arumanayagam; I.F.F. Benzie and J.A.J.H. Critchley.** "Effects of Atorvastatin on Lipids and Apolipoproteins in Chinese Patients with Resistant Hypercholesterolaemia". *Journal of Hong Kong College of Cardiology(Abstracts of the HK College of Cardiology 7th Annual Congress)* vol.7, pp57 Abs.70. Hong Kong, 1999.04.16.
- <P991185> **Wong, William C.F. and Brian Tombuson.** "Utilization of Lipid Lowering Drugs Used in Hong Kong Hospital Specialist Clinics". *Abstracts of the ACCP/ESCP International Congress on Clinical Pharmacy Abstracts* P314 Abs.39. Orlando, USA, 1999.04.11.
- <P991186> **Benzie, I.F.F.; B. Tomlinson; W.Y. Chung and Y.T. Szeto.** "Atorvastatin Treatment-Related Changes to *in vivo* Oxidant: Antioxidant Balance as Assessed by Plasma Allantoin and Lipid Standardised Vitamin E Levels" *Atherosclerosis(Abstracts of the 71st Congress of the European Atherosclerosis Society)* vol.144, pp.25-26. Athens, Greece, 1999.05.26.
- <P991187> **Fan, B.; B. Tomlinson and J.A.J.H. Critchley.** "Effects of Atorvastatin on Platelet Aggregation in Whole Blood". *Atherosclerosis(Abstracts of the 71st Congress of the European Atherosclerosis Society)* vol.144 Suppl.1, p.35. Athens, Greece, 1999.05.26.
- <P991189> **Wong, C.F.W. and B. Tomlinson.** "Utilization of Lipid-Lowering Drugs in Some Hong Kong Hospital Specialist Clinics". *Journal of Hong Kong College of Cardiology(Abstracts of the 6th Annual Scientific Congress of HK College of Cardiology)* vol.7, p.57 Abs. 68. Hong Kong, 1999.04.07.
- <P991207> **Wong, Teresa Y.H.; Cheuk Chun Szeto; Kelvin K.L. Ho; Chi Bon Leung and Philip K.T. Li.** "Successful Medical Eradication of Tuberculous Paraneuritic Abscess in Renal Transplantation". *Nephrology Dialysis Transplantation* vol.14, pp.1288-1290. UK, 1999.
- <P991218> **Szeto C.C.; Law M.C.; Leung C.B.; Lui S.F. and Li P.K.** "Favorable Outcome of Chinese Capd Patients with Apparently 'Borderline' Dialysis Adequacy Result of a Two-Year Prospective Study". Paper presented in the 15th International Congress of Nephrology, organized by International Society of Nephrology. 1999.05.
- <P991222> **Chan, Francis K.L.; Joseph J.Y. Sung; K.M. Ma; Y.L. Leung and Vincent T.F. Yeung.** "Protein-Losing Enteropathy in Congestive Heart Failure: Diagnosis by Means of a Simple Method". *Hepato-Gastroenterology* vol.46, pp.1816-1818. Athens, Greece, 1999.
- <P991226> **Szeto, C.C.; K.M. Gillespie and P.W. Mathieson.** "Low Dose Mercuric Chloride (HgCl₂) Induces Resistance in Brown-Norway (BN) Rats to Full Dose HgCl₂ by Up-Regulation of Interferon-Gamma" *Kidney International* ed. by Saulo Klahr. vol.55, p.2554. UK: Blackwell Science Inc, 1999.06.

- <P991227> **Szeto, C.C. and P.W. Mathieson.** "Levamisole Acts by Altering Th1.Th2 Cytokine Balance". *Kidney International* ed. by Saulo Klahr. vol.55, p.2588. UK: Blackwell Science Inc, 1999.06.
- <P991245> **Ko, Gary T.C.; Juliana C.N. Chan and Clive S. Cockram.** "Age, Body Mass Index and 2-Hour Plasma Glucose are the Major Determinants of Blood Pressure in Chinese Women Newly Diagnosed to Have Glucose Intolerance". *International Journal of Cardiology* vol.69, pp.33-39. 1999.
- <P991246> **Wong, K.S.; H. Li and R. Kay.** "Natural History of Symptomatic MCA Occlusive Diseases". *Cerebrovasc Disease* vol.9 Suppl.2, p.2. Switzerland: Karger, 1999.04.
- <P991247> **Lam, W.W.M.; Chan H.; Chan Y.L.; Fung J.W.K.; So N.M.C. and Metreweli C.** "MR Imaging in Amyopathic Dermatomyositis". *Acta Radiologica* vol.40, pp.69-72. 1999.
- <P991248> **Chan, Henry H.L.; Walter W.K. King; Eric S.Y. Chan; Chun On Mok; Wai Sun Ho; Charlotte Van Krevel and Lau W.Y.** "In vivo Trial Comparing Patients' Tolerance of Q-Switched Alexandrite (QS Alex) and Q-Switched Neodymium: Yttrium-Aluminum-Garnet (QS Nd: YAG) Lasers in the Treatment of Nevus of Ota" *Lasers in Surgery and Medicine* vol.24, pp.24-28. 1999.
- <P991249> **Chan, Thomas and T.W. Wong.** "Air Pollution and Health Risk". *Proceedings of the Advances in Medicine 1999*, p.54. Hong Kong: The Chinese University of Hong Kong, 1999.05.
- <P991250> **Chan, W.L.; C.H.S. Chan and T.Y.K. Chan.** "Vibrio Vulnificus Septicaemia and Necrotizing Fasciitis after a Prick from the Dorsal Fin of a Tilapia" *Transactions of the Royal Society of Tropical Medicine and Hygiene* vol.93, p.174. London, UK, 1999.
- <P991253> **Wong, Cheuk-Kit; John K. French; Philip E. Aylward; Martin J. Frey; A.A. Jennifer Adgey and Harvey D. White.** "Usefulness of the Presenting Electrocardiogram in Predicting Successful Reperfusion with Streptokinase in Acute Myocardial Infarction". *American Journal of Cardiology* vol.83, pp.164-168. 1999.01.15.
- <P991254> **Benzie, I.F.F.; Y.T. Szeto; J.J. Strain and B. Tomlinson.** "Consumption of Green Tea Causes Rapid Increase in Plasma Antioxidant Power in Humans". *Nutrition and Cancer* vol.34 no.1, pp.83-87. New Jersey, USA, 1999.
- <P991255> **Hui, D.S.C.; Jkw Chan; Dkl Choy; F. Ko; S.T. Li; Leung R. and C.K.W. Lai.** "CPAP Compliance in an Oriental Population". *American Journal of Respiratory and Critical Care Medicine/1999 American Lung Association/American Thoracic Society International Conference* vol.159 no.3, p.A425. San Diego, USA: American Lung Association/American Thoracic Society, 1999.04.26.
- <P991256> **Williams, H.; Robertson C. and Lai C.** "Worldwide Variations in the Prevalence of Symptoms of Atopic Eczema in the International Study of Asthma and Allergies in Childhood". *J. Allergy Clin Immunol* vol.103, pp.125-138. 1999.01.
- <P991257> **Lai, C.K.W.; G. Wong; D Hui; D. Choy; T. Li; F. Ko; L.S. Ip and R. Leung.** "Risk Factors for Asthma in Hong Kong School Children". *Abstracts of the American Journal of Respiratory and Critical Care Medicine/1999 American Lung Association/American Thoracic Society International Conference* vol.159 no.3, p.A143. San Diego: American Lung Association/American Thoracic Society, 1999.04.25.
- <P991259> **Hui, D.S.C.** "Symposium on Sleep Related Breathing Disorders: Nasal Cpap Treatment in Obstructive Sleep Apnoea". Paper presented in the 20th Eastern Region Conference of the International Union Against Tuberculosis & Lung Disease, organized by HK Thoracic Society 1999.06.05.
- <P991260> **Hui, D.S.C.** "Non-Invasive Ventilation in Acute and Chronic Respiratory Failure (Post-Graduate Course)". Paper presented in the 20th Eastern Region Conference of the International Union Against Tuberculosis & Lung Disease, organized by the HK TB, Chest and Heart 1999.06.04.

- <P991261> **Lee, Zoe S.K.; Julian A.J.H. Critchley; Juliana C.N. Chan; G. Neil Thomas; Brian Tomlinson; Thomas Y.K. Chan; Robert P. Young and Patricia J. Anderson.** "Relationships Between Obesity and Various Cardiovascular Risks Factors in Hong Kong Chinese". *MASO 99 3rd Scientific Meeting on Obesity* p.31. Kuala Lumpur: Malaysian Society for the Study of Obesity, 1999.06.
- <P991262> **Lee, Zoe S.K.; Julian A.J.H. Critchley; Juliana C.N. Chan; G. Neil Thomas; Brian Tomlinson; Thomas Y.K. Chan; Robert P. Young and Patricia J. Anderson.** "Roles of Obesity Hyperinsulinemia and Insulin Resistance in the Metabolic Syndrome in Hong Kong Chinese". *MASO 99 3rd Scientific Meeting on Obesity* p.38. Kuala Lumpur: Malaysian Society for the Study of Obesity, 1999.06.
- <P991264> **Lee, Zoe S.K.; Julian A.J.H. Critchley; Juliana C.N. Chan; Brian Tomlinson; G. Neil Thomas and Robert P. Young.** "Disturbances of Hormonal Systems in Hong Kong Chinese Hypertensive Patients: Relationships Between Plasma Insulin, Cortisol and Growth Hormone, 24-Hour Urinary Noradrenaline and Adrenaline Excretions". Paper presented in the Smithkline Beecham Resear 1999.04.14.
- <P991269> **Kung, Nelson N.S.; Joseph J.Y. Sung; Nancy W.F. Yuen; T.H. Li; P.W. Ng; W.M.Lai; Y.H. Lui; K.N. Lam and C.H. Choi.** "One-Week Ranitidine Bismuth Citrate Versus Colloidal Bismuth Subcitrate-Based Anti-*Helicobacter* Triple Therapy: A Prospective Randomized Controlled Trial" *American Journal of Gastroenterology* vol.94 no.3, pp.721-724. USA, 1999.03.
- <P991271> **Sung, Joseph J.Y. and Minnie Y.Y. Go.** "Reversible Kupffer Cell Suppression in Biliary Obstruction is Caused by Hydrophobic Bile Acids". *Journal of Hepatology* vol.30, pp.413-418. Denmark, 1999.
- <P991272> **Leung, Wai-Keung; Joseph J.Y. Sung; Thomas K.W. Ling; Kris L.K. Siu and Augustine F.B. Cheng.** "Use of Chopsticks for Eating and *Helicobacter Pylori* Infection" *Digestive Diseases and Sciences* vol.44 no.6, pp.1173-1176. UK, 1999.06.
- <P991274> **Sung, Joseph J.Y.** "Tumors of the Biliary Tree". *Atlas of Gastroenterology* ed.by Tadataka Yamada, David H. Alpers, Loren Laine, Chung Owyang and Don W. Powell. 2nd ed., pp.493-502. USA: Lippincott Williams & Wilkins, 1999.
- <P991275> **Leung, Wai Keung; Enders K.W. Ng; Francis K.L. Chan; S.C.Sydney Sydney Chung and Joseph J.Y. Sung.** "Evaluation of Three Commercial Enzyme-Linked Immunosorbent Assay Kits for Diagnosis of *Helicobacter Pylori* in Chinese Patients" *Diagnostic Microbiology & Infectious Disease* vol.34, pp.13-17. USA, 1999.
- <P991309> **Lee, Yuk Tong; Joseph J.Y. Sung; Man Yee Yung; Ashley L.M. Yu and S.C. Sydney Chung.** "Use of Color Doppler EUS in Assessing Azygos Blood Flow for Patients with Portal Hypertension". *Gastrointestinal Endoscopy* vol.50 no.1, pp.47-52. USA, 1999.
- <P991340> 郭志銳. <香港的老人醫療服務>. 論文發表於中華醫學會第六次全國老年醫學學術會議. 中國江蘇, 1999.05.18.
- <P991346> **Kwok, T.; J. Woo; S.C. Ho and A. Sham.** "Is Vegetarianism an Independent Protective Factor Against Ischameic Heart Disease in Older Chinese?". *Abstracts of the 6th Asia Pacific Regional Congress of Gerontology* p.64. Seoul, Korea, 1999.06.09.
- <P991542> **Chan, Henry H.L.; Yun-Kwok Wing; Robin Su; Charlotte Van Krevet and Sing Lee.** "A Control Study of the Cutaneous Side Effects of Chronic Lithium Therapy". *Journal of Affective Disorders* vol.4 no.59. 1999.05.
- <P991544> **Chung, H.K.; C.K. Chan; W.H. Fung; K. Tang; G. Yip; R. Chiu; K.S. Woo and J.E. Sanderson.** "Radiofrequency Ablation of Cardiac Arrhythmia-Local Experience in a Single Centre". *Journal of Hong Kong College of Cardiology* vol.7 no.1, p.82. Hong Kong, 1999.04.

- <P991554> **Sung, Joseph J.Y.; Minnie Y.Y. Go; Francis K.L. Chan; W.K. Leung; Alfred S.L. Cheng; Y.P. Ng and K.F. To.** "COX-2 Expression in H. Pylori-Associated Premalignant and Malignant Gastric Lesions". *Gastroenterology* vol.116, p.A321. Orlando, USA: WB Saunders, 1999.05.21.
- <P991580> **Chan, Francis K.L.; Joseph J.Y. Sung; Jessica Y.L. Ching; Justin C.Y. Wu; Y.T. Lee; W.K. Leung; H.L.Y. Chan; A.C.W. Lai and S.C.S. Chung.** "Prospective Randomized Trial of Misoprostol Plus Naproxen Versus Nabumetone to Prevent Recurrent Ulcer Hemorrhage in High-Risk NSAID Users". *Gastroenterology* vol.116 no.4, p.A134. Orlando, USA: WB Saunders, 1999.05.20.
- <P991581> **Chan, Henry L.Y.; Justin C.Y. Wu; Jessica Y.L. Ching; Francis K.L. Chan; James W.Y. Lau; S.C.S. Chung and Joseph J.Y. Sung.** "Non-H. Pylori, Non-Nsaid Peptic Ulcer is a Rare Cause of Gastrointestinal Bleeding. A Prosective Study of 977 Chinese Patients" *Gastroenterology* vol.116 no.4, p.A134. Orlando, USA: WB Saunders, 1999.05.21.
- <P991582> **Wu, Justin C.Y.; Alex C.W. Lai; K.H. Wong; Enders K.W. Ng; Francis K.L. Chan and Joseph J.Y. Sung.** "*H. Pylori Infection Alters Esophageal Motility and Intraesophageal Acid Exposure in Gastro-Esopha-Geal Reflux Disease (Gerd)*" *Gastroenterology* vol.116 no.4, p.A358. Orlando, USA: WB Saunders, 1999.05.21.
- <P991598> **Lo, R.S.K.; A. Ding; T.K. Chung and J. Woo.** "Prospective Study of Symptom Control in 133 Cases of Palliative Care Inpatients in Shatin Hospital". *Palliative Medicine* vol.13, pp.335-340. UK, 1999.
- <P991631> 沈祖堯. <潰瘍病的併發症>. 《現代消化性潰瘍病學》汪鴻志、曹世植編.頁 209-214. 北京, 中國: 人民軍醫出版社, 1991.04.
- <P991632> 沈祖堯. <潰瘍病出血內鏡治療>. 《現代消化性潰瘍病學》汪鴻志、曹世植編.頁 235-7. 中國北京: 人民軍醫出版社, 1999.04.
- <P991660> **Benzie, Iris F.F.; Wai-Yuen Chung and Brian Tomlinson.** "Simultaneous Measurement of Allantoin and Urate in Plasma: Analytical Evaluation and Potential Clinical Application in Oxidant: Antioxidant Balance Studies". *Clinical Chemistry* vol.45 no.6, pp.901-904. 1999.
- <P991696> **Sung, Joseph J.Y.; M.S. Lai; W. Lao; T.H. Li; Francis K.L. Chan; Vincent K.S. Leung; Y. Luk; Nelson N.S. Kung; Jessica Y.L. Ching; Justin C.Y. Wu; James Y.W. Lau and S.C.S. Chung.** "The 'Test-and-Treat' Strategy for H. Pylori and Dyspepsia is Unsafe". *Gastroenterology* vol.116, p.A321. Orlando, USA: WB Saunders, 1999.05.20.
- <P991697> **Sung, Joseph J.Y.; Francis K.L. Chan; W.K. Leung; Justin C.Y. Wu; Roamy Suen; Thomas K.W. Ling; Y.T. Lee; Augustine F.B. Cheng and S.C.S. Chung.** "A Prospective Randomized Trial of One-Week Bismuth Ranitidine Citrate (RBC) Triple Therapies for *H. Pylori* Infection" *Gastroenterology* vol.116, p.A321. Orlando, USA: WB Saunders, 1999.05.21.
- <P991698> **Wu, Justin C.Y.; K.H. Wong; K.F. To; M.Y.Y. Go; F.K.L. Chan; J.Y. Sung; C.L. Choi and E.K.W. Ng.** "Pattern of *H. Pylori*-Associated Gastritis in Patients Suffering from Gastro-Esophageal Reflux Disease (GERD)" *Gastroenterology* vol.116 no.4, p.A358. Orlando, USA: WB Saunders, 1999.05.21.
- <P991699> **Wu, Justin C.Y.; Joseph J.Y. Sung; F.K.L. Chan; E.K.W. Ng; K.H. Wong and S.C.S. Chung.** "*H. Pylori* Ameliorates Esophagitis in Patients with Gastro-Esophageal Reflux Disease (GERD)" *Gastroenterology* vol.116 no.4, p.A358. Orlando, USA: WB Saunders, 1999.05.22.
- <P991700> **Chan, Henry L.Y.; Yui Hui; J.Y.L. Ching; Nancy W.Y. Leung; Francis K.L. Chan and J.Y. Sung.** "Can We Predict Disease Activity in Chronic Hepatitis B Virus (CHB) Infected Patients with Negative HBeAg?". *Gastroenterology* vol.116, p.A1195. Orlands, USA: WB Saunders, 1999.05.22.

- <P991900> **Sanderson, J.E.** "Auscultation of the Heart. A Cardiophonetic Approach". *Hong Kong Medical Journal* vol.5 no.2, p.5. ChiuChau Lingstine, 1999.06.
- <P992015> **Hashim, Yasmeen; Dawn Shepherd; June Li; Juliana Chan; Ziyah Mehta and Robert Turner.** "Hepatocyte Nuclear Factor-1alpha (MODY 3) Gene Mutations in Afrocaribbean, Asian-Indian and Chinese Late Onset Type 2 Diabetes". *Diabetes* vol.48, p.A185. 1999.
- <P992019> **Ko, G.T.C.; W.B. Chan; J.C.N. Chan; L.W.W. Tsang and C.S. Cockram.** "Gastrointestinal Symptoms in Chinese Patients with Type 2 Diabetes Mellitus". *Diabetic Medicine* vol.16, pp.670-674. 1999.
- <P992020> **Ko, Gary T.C.; Clive S. Cockram; Julian A.J.H. Critchley and Juliana C.N. Chan.** "Obesity-Definition, Aetiology and Complications". *Medical Progress* vol.26 no.8, pp.10-14. 1999.
- <P992036> 胡令芳、喬治姪 戈登、盛玉燕、劉倩芳、許聞宇。〈老有所「養」老年人營養飲食之道〉。頁 82。香港：中文大學出版社，1999.05。
- <P992148> **Cockram, Clive S. and Juliana C.N. Chan.** "The Epidemiology of Diabetes in the Western Pacific Region (Excluding Japan)". *Diabetes in the New Millennium* ed. by Turtle, Kanako and Osata pp.11-21. Australia: The Endocrinology and Diabetes Research Foundation of the University of Sydney, 1999.
- <P992355> **Wei, S.; L.T.C. Chow; K.B. Lai and J.E. Sanderson.** "Effects of Carvedilol in Comparison with Metoprolol on Myocardial Collagen and Remodeling Post Infarction". *Journal of the Hong Kong College of Cardiology* vol.7, p.66. Hong Kong: Medcom Limited, 1999.04.
- <P992357> **Yip, G.; S.K.W. Chan; L. Yeung; W.H. Fung; K. Raymond; K.W. Chan; K.S. Woo and J.E. Sanderson.** "Blockers in Heart Failure: A Randomized Double Blind Trial of Carvedilol and Metoprolol". *Journal of the Hong Kong College of Cardiology* vol.7, p.66. Hong Kong: Medcom Limited, 1999.04.
- <P992358> **Fung, W.H.; G. Yip; W. Chan; P. Ho; K.S. Woo and J.E. Sanderson.** "Evaluation of Left Atrium and Left Atrial Appendage Anatomy and Function in Recent-Onset Atrial Fibrillation by Transoesophageal Echocardiography". *Journal of the Hong Kong College of Cardiology* vol.7, p.54. Hong Kong: Medcom Limited, 1999.04.
- <P992359> **Chiu, C.W.; W.M. Chan; K.H. Tang; W.K. Yip; K.K. Tse; K.S. Woo; H.K. Chung; W.H. Fung; C.K. Wong and J. Sanderson.** "Incidence of Renal Artery Stenosis in Chinese Patients with Coronary Artery Disease and its Correlation with Severity of Coronary Stenosis". *Journal of the Hong Kong College of Cardiology* vol.7, p.48. Hong Kong: Medcom Limited, 1999.04.
- <P992360> **Yip, G.W.K.; C. Haines; L. Yeung; K. Tang; S.F. Yim; W.W.M. Chan; W.H. Fung; L.N. Jorgensen; J. Woo and J.E. Sanderson.** "Anti-Ischaemic Action of Oestrogen/Progestogen Continuous Combined Hormone Replacement Therapy in Chinese Postmenopausal Women with Established Angina Pectoris". *Journal of the Hong Kong College of Cardiology* vol.7, p.41. Hong Kong: Medcom Limited, 1999.04.
- <P992361> **Woo, K.S.; C.K. Wong and J.E. Sanderson.** "Clinical Patterns of Acute Myocardial Infarction in Hong Kong Chinese: Are There any Changes in the Past 20 Years?". *Journal of the Hong Kong College of Cardiology* vol.7, p.40. Hong Kong: Medcom Limited, 1999.04.
- <P992362> **Tse, Lawrence K.K.; H.K. Chung; Philip Wong; W.M. Chan; K.S. Woo; C.K. Wong; Albert Leung and J.E. Sanderson.** "Initial Experience with the Cutting Balloon". *Journal of the Hong Kong College of Cardiology* vol.7, p.69 Abstracts no.118. Hong Kong: Medcom Limited, 1999.04.
- <P992363> **Fung, W.H.; W. Chan; K.S. Woo; K.K. Tse; H.K. Chung; P. Ho and J.E. Sanderson.** "Long-Term Results of Successful Percutaneous Transvenous Mitral Commissurotomy". *Journal of the Hong Kong College of Cardiology* vol.7, p.68 Abstracts no.114. Hong Kong: Medcom Limited, 1999.04.

- <P992364> **Tang, K.H.; W. Chan; K.K. Tse; H.K. Chung; K.S. Woo; G. Yip; R. Chiu; W.H. Fung and J.E. Sanderson.** "Post Coronary Stenting Restenosis in Hong Kong Chinese: A Single Centre Experience". *Journal of the Hong Kong College of Cardiology* vol.7, p.70 Abstracts no.121. Hong Kong: Medcom Limited, 1999.04.
- <P992365> **Chan, Wilson; Wong P.; Woo K.S.; Tang K.; Chiu C.W.; Yip G.; Fung W.H.; Tse K.K.; Chung H.K. and Sanderson J.** "Initial Experience Using a Percutaneous Suture-Mediated Vascular Closure Device after Coronary and Vascular Interventions". *Journal of the Hong Kong College of Cardiology* vol.7, p.70 Abstracts no.119. Hong Kong: Medcom Limited, 1999.04.
- <P992367> **John, Sanderson.** "Current Research in Heart Failure". Paper presented in the International Symposium on 2nd Anniversary of Taipei Wan Fang Hospital/Taipei Medical College, organized by Society of Atherosclerosis, R.O.C. - Division of Cardiovascular Medicine, Taipei Medical College. Taipei, 1999.01.23.
- <P992550> **Sanderson, John.** "Commentary: Prognosis Following Diagnosis of CHF is Poor and Frequently Occurs in the Presence of Preserved Systolic Function". *Evidence Based Cardiovascular Medicine* vol.3 no.42, p.42. UK, 1999.06.

see also <P974934>, <P975043>, <P980997>, <P980999>, <P981935>, <P982192>, <P982557>, <P982563>, <P982664>, <P982748>, <P982959>, <P982998>, <P983049>, <P983091>, <P983092>, <P983093>, <P983167>, <P983174>, <P983176>, <P983188>, <P983451>, <P983491>, <P983617>, <P983641>, <P983688>, <P983741>, <P983768>, <P983769>, <P983772>, <P983782>, <P983802>, <P983924>, <P983926>, <P983929>, <P983943>, <P984024>, <P984026>, <P984027>, <P984028>, <P984038>, <P984248>, <P984450>, <P984898>, <P984902>, <P984941>, <P990001>, <P990067>, <P990168>, <P990259>, <P990268>, <P990394>, <P990492>, <P990547>, <P990586>, <P990650>, <P990655>, <P990706>, <P990718>, <P990884>, <P990956>, <P991273>, <P991325>, <P991546>, <P991583>, <P991695>, <P991748>, <P992004>, <P992198>, <P992356>, <P992529>, <P992530>, <P992652>

RESEARCH PROJECTS

Mechanisms of aminoglycoside/aminocyclitol resistance in mycobacteria

✉ CHAN Chiu Yeung Raphael

☐ 1 August 1998

❖ Research Grants Council

Tuberculosis, especially those caused by multi-drug resistant isolates of *Mycobacterium tuberculosis*, and infections caused by mycobacteria other than tuberculosis (MOTT), have become important uprising problems in infectious diseases worldwide. Aminoglycosides/aminocyclitols, including streptomycin, kanamycin and amikacin, have been the key drugs in the first-, second-, and third-line therapeutic regimens for these infections. Numerous reports have recently been published concerning clinical isolates of mycobacteria resistant to aminoglycosides. Although the aminoglycoside resistance mechanisms involving the production of aminoglycoside modifying enzymes (AME), barrier effect and target site modification have been elucidated in Gram-negative bacteria, studies on such mechanisms in mycobacteria have been scarce. Our research laboratory, having received support from a UGC-direct grant three years ago, has started pioneer work on the screening of aminoglycoside modifying enzymes in mycobacteria and to elucidate the *in vitro* enzyme activities in relation to resistance. Since the results from our preliminary study pointed out that the resistance mechanisms may not be solely due to the presence of AMEs, in this proposal we intend to:

- (1) examine for ribosomal resistance to aminoglycoside-aminocyclitols in mycobacteria;
- (2) examine for resistance arising from reduced drug uptake in mycobacteria;
- (3) further study the relative role of aminoglycoside-modifying enzymes (AMEs) and uptake barrier in aminoglycoside resistance in mycobacteria;
- (4) determine the genetic determinants of aminoglycoside-modifying enzymes in; and
- (5) identify the mutations in ribosomal resistant strains. An understanding on the resistance mechanisms in mycobacteria against aminoglycosides will allow us to improve our present therapeutic regimens in the battle against tuberculosis and other mycobacterial infections. (CU98237)

TT Virus Infection in Patients with Haemophilia and Transfusion-Dependent Thalassaemia

✉ CHAN Kay Sheung Paul • CHIK Ki Wai (Paediatrics) • CHENG Fun Bun Augustine • LI Chi Kong (Paediatrics)

☐ 1 April 1999

❖ CUHK Research Committee Funding

Background: In 1997, a novel virus, TT virus (TTV), was identified from a patient with post-transfusion non-A, B, C hepatitis. TTV has a wide range of sequence divergence allowing classification into genotypes 1 and 2, subtypes a and b. Blood-borne transmission has been suggested based on the higher prevalence among intravenous drug users, patients with haemophilia or on maintenance haemodialysis. The limited available data also suggest TTV infection may account for a portion of acute and chronic hepatitis of unknown aetiology. While the presence of TTV viraemia in about 10% of the general population suggests a carrier stage exists, the consequences of which have not been elucidated.

Study design: We propose a retrospective study on patients with haemophilia and transfusion-dependent thalassaemia. Their stored blood samples that have been obtained at intervals of 6-12 months will be sought for the presence of TTV viraemia by polymerase chain reaction. The DNA sequence will be determined by direct sequencing. Clinical data including hepatitis B, C and HIV statuses, liver function profile, use of blood and blood products will be correlated with results of TTV detection.

Objectives:

- (1) To define the prevalence and genotypic distribution of TTV infection among patients with haemophilia and transfusion-dependent thalassaemia;
- (2) To analysis the phylogenetic relationship between isolates obtained from local patients and that from Japan, Europe and Thailand;
- (3) To elucidate the clinical course of TTV infection, in particular the duration of viraemia, proportion of chronicity, effects on liver function during the acute and chronic stages of infection.

(MD98103)

Studies on the Production of Proinflammatory Cytokines in Human Macrophages Induced by Microbial Pathogens and in Cerebrospinal Fluids from Patients with Meningitis – a Search for Interleukin 1-a

✉ CHENG Fun Bun Augustine • CHAN Chiu Yeung Raphael

☐ 1 October 1998

❖ CUHK Research Committee Funding

Meningitis is a serious infectious disease with high morbidity and mortality. Traditionally, therapy for the disease is mainly on appropriate targeting of the infectious agents after rapid diagnosis has been made. However, since inflammation of the central nervous system (CNS) usually occurs after the infectious process, understanding of the pathogenic and pathophysiologic mechanisms underlying the disease is essential, and studies on the immune responses by cells in the cerebrospinal fluid after encountering the infectious agents or their products are necessary.

Cytokines, especially the proinflammatory factors, are known to play an important role in regulating the inflammatory process by maintaining a balanced homeostatic environment in the CNS so as to reduce the harmful effects on the target cells, however, the effects contributed by these compounds may become disastrous resulting in damages when they are over-evoked. In this proposal researchers intend to study the expression of a cytokine (interleukin 1- α) in human macrophages (THP-1 cells) after exposure to micro-organisms and to products produced by these organisms isolated from patients with meningitis, and to study the content and levels of this cytokine in clinical specimens of cerebrospinal fluids (CSF) from patients with meningitis due to different aetiology before and after treatment. As it is likely that cytokines would be produced early in an inflammatory process, studies on the time course cytokines expressed by human macrophages to those of CSF may identify the earliest existence of the cytokines which may serve as a marker for meningitis and allow the possible development of a rapid diagnostic test for meningitis, and the late production of cytokines after infection and treatment may also serve as prognostic markers.
(MD98041)

The Role of Skin Fatty Acid Profiles in the Carriage of *Acinetobacter* spp

- ✉ HOUANG Ting Sou Elizabeth • CHU Yiu Wai • CHEUNG S. W.*
- ☐ 1 October 1998
- ❖ CUHK Research Committee Funding

Since 1986, *Acinetobacter* spp have been classified into 19 genomic species. *Acinetobacter baumannii* is the commonest species associated with nosocomial infections and hospital outbreaks in different parts of the world, particularly in Hong Kong. Researchers recent research shows that *A. lwoffii* is the commonest species (60%) recovered from skin of healthy subjects in Europe and *A. baumannii* is uncommon (1%). Whereas, in Hong Kong, 60% of isolates are *A. baumannii*. Factors that may explain the differences in our findings include Hong Kong's hot, humid climate, racial differences (e.g. patterns of skin free fatty acids (FFA)), diets, or the natural distribution of different genotypes in different geographical areas. On the other hand, researchers' work on vegetable isolates from London and Hong Kong showed the range of genospecies harboured are similar. They have also showed that different genospecies have different profiles of tolerance to different fatty acids. Researchers therefore propose to correlate skin FFA profiles with the carriage of different genospecies of acinetobacters in Londoners, Hong Kong Chinese and Hong Kong Caucasian subjects. On the forehead of each healthy volunteer, a swab for the isolation of *Acinetobacter* spp and 2

alcohol-soaked filter paper discs will be applied. The genospecies of acinetobacters will be determined by amplified ribosomal DNA restriction analysis together with their susceptibilities to 11 FFA. Skin FFA profiles will be obtained by gas liquid chromatography using a flame ionization or mass selective detector. Results of the study should contribute to our understanding of the natural habitat of *A. baumannii* in humans and its acquisition as a noscomial pathogen.
(MD98042)

Rapid Detection and Identification of Medically Important Fungi by Molecular Methods

- ✉ HUI Mamie • IP Margaret • CHAN Kay Sheung Paul • CHENG Fun Bun Augustine
- ☐ 1 November 1998
- ❖ CUHK Research Committee Funding

Invasive fungal infection is an important complication in immunocompromised patients. Due to the vast range of etiological organisms which stretches from yeast to filamentous fungi, the use of conventional methods for detection and identification have been difficult and time consuming. Often, clinicians face the dilemma on initiation of empiric antifungal therapy which is often toxic and requires prolonged therapy without an established diagnosis. The objective of this study is to establish a rapid diagnostic molecular method applicable to routine clinical laboratory and to evaluate its feasibility and value in the clinical settings. The target organisms involve medically important fungi which are commonly found in immunocompromised host. Several known methods for extraction of DNA in fungal cells will be evaluated. Extracted DNA from fungal cells will be amplified by polymerase chain reaction using conserved primer sets based on the 18S ribosomal RNA sequence. Various methods including restriction fragment length polymorphism, hybridization and Southern blot will be explored for the identification of the organism to species level. Study on simulated blood will also be performed by spiking known quantity of fungi into EDTA blood in order to evaluate its use in the clinical setting and for the monitoring of antifungal therapy.
(MD98043)

Please refer to previous issues of this publication for more details of the following ongoing research at the department:

<u>Edition</u>	<u>Title/Investigators</u>
1997-98	Association of Human Herpesvirus Types 6 and 7 with Cervical Cancer (MD97050) ✉ CHAN Kay Sheung Paul • CHAN May* • LI W. H.* • CHENG Fun Bun Augustine

- 1997-98 *In-vitro* Activity of Tazocin in Comparison with Other Commonly Used Antibiotics against Clinical Isolates (MD97147)
 ✎ CHENG Fun Bun Augustine • LING Kin Wah Thomas
- 1996-97 A Comparison of *Acinetobacter spp* Distribution in Humans and in Raw Vegetables in Hong Kong and London (MD96062)
 ✎ HOUANG Ting Sou Elizabeth • CHU Yiu Wai • CHENG Fun Bun Augustine
- 1996-97 Ulcerative Keratitis and Contact Lens Related Infection in Hong Kong (MD96015)
 ✎ HOUANG Ting Sou Elizabeth • LAM Shun Chiu Dennis (Ophthalmology and Visual Sciences) • TSO Mark On Man (Ophthalmology and Visual Sciences)# • CHENG Fun Bun Augustine • LYON Donald James
- 1996-97 A Comparison of *Acinetobacter spp* Distribution in Humans and in Raw Vegetables in Hong Kong and London (MD96019)
 ✎ HOUANG Ting Sou Elizabeth • PITT Tyrone Leslie*
- 1997-98 *Acinetobacter* Genospecies: Their Distribution in Hong Kong and Evaluation of PCR Identification Methods (CU97625)
 ✎ HOUANG Ting Sou Elizabeth • CHU Yiu Wai • PITT Tyrone Leslie*
- 1997-98 The Study of Antimicrobial Resistance in *Acinetobacter* (MD97010)
- ✎ HOUANG Ting Sou Elizabeth • IP Margaret • CHU Yiu Wai
- 1997-98 Molecular Epidemiology of Penicillin- and Multidrug-Resistant *Streptococcus pneumoniae* (CU97607)
 ✎ IP Margaret • LYON Donald James • CHENG Fun Bun Augustine
- 1997-98 Study of the Colonisation and Role of Spread of (Drug-Resistant) *Streptococcus pneumoniae* in Elderly Day Care Centres and Residential Homes (MD97017)
 ✎ IP Margaret • HUI Elsie (Medicine & Therapeutics) • LYON Donald James • WOO Jean (Medicine & Therapeutics) • CHENG Fun Bun Augustine
- 1997-98 Identification of Genes of Extended-Spectrum β -Lactamases by Polymerase Chain Reaction and Oligotyping (MD97118)
 ✎ LING Mei Lun Julia
- 1996-97 A Multicentre Study to Determine the Efficacy of High-Dose Interferon Alpha-2b in the Treatment of Chronic Hepatitis B Virus Infection in Asia (MD96180)
 ✎ TAM Siu Lun John • CHENG Fun Bun Augustine • LEUNG Nancy*
- 1997-98 Cloning and Characterization of Epstein-Barr Virus (EBV) Latent Membrane Antigen 2 (LMP-2) Genes Associated with Nasopharyngeal Carcinoma (MD97049)
 ✎ TAM Siu Lun John • CHAN Kay Sheung Paul • CHENG Fun Bun Augustine

RESEARCH OUTPUTS AND PUBLICATIONS

- <P982136> **Chan, Paul K.S.; W.H. Li; May Chan and Augustine Cheng.** "High Prevalence of HPV 58 among Chinese Women with Cervical Cancer and Pre-Cancerous Lesions". Paper presented in the Progress in Clinical Virology IV, European Society for Clinical Virology. Germany, 1998.08.
- <P982551> **Chu, Y.W.; E.T.S. Houang and A.F.B. Cheng.** "Novel Combination of Mutations in the DNA Gyrase and Topoisomerase IV Genes in Laboratory-Grown Fluoroquinolone-Resistant *Shigella flexneri* Mutants". *Antimicrobial Agents and Chemotherapy* vol.42 no.11, pp.3051-3052. USA, 1998.

- <P982553> **Saw, T.A.; W. Lim; K. Shortridge; J. Tam; K.K. Liu; K.H. Mak; T. Tsang; T.K. Au; Y.Y. Ho; T.Y. Lee and H. Kwong.** "Update: Isolation of Avian Influenza A(H5N1) Viruses from Humans - Hong Kong, 1997-1998". *Morbidity & Mortality Weekly Report* vol.46 no.52, pp.1245-1247. USA, 1998.
- <P982571> **Houang, E.T.S.; Y.W. Chu; T.K. Ng and A.F.B. Cheng.** "Study of the Relatedness of Isolates of *Shigella flexneri* and *Shigella sonnei* Obtained in 1986 and 1987 and in 1994 and 1995 from Hong Kong" *Journal of Clinical Microbiology* vol.36 no.9 pp.2404-2407. USA, 1998.
- <P982585> **Ip, M.; D.J. Lyon; R.W.H. Yung; C. Chan and A.F. Cheng.** "Molecular Epidemiology of Penicillin-and Multidrug-Resistant *Streptococcus Pneumoniae* in Hong Kong". Paper presented in the 38th Interscience Conference on Antimicrobial Agents and Chemotherapy, organized by American Society of Microbiology. San Francisco, USA, 1998.09.
- <P982959> **Siu, L.K.; W.K. Leung; A.F.B. Cheng; J.Y. Sung; T.K.W. Ling; J.M.L. Ling; E.K.W. Ng; J.Y.W. Lau and S.C.S. Chung.** "Evaluation of a Selective Transport Medium for Gastric Biopsy Specimens to be Cultured for *Helicobacter pylori*". *Journal of Clinical Microbiology* vol.36 no.10, pp.3048-3050. USA, 1998.10.
- <P983014> **Shannon, K.; K. Fung; P. Stapleton; R. Anthony; E. Power and G. French.** "A Hospital Outbreak of Extended-spectrum β -Lactamase-Producing *Klebsiella Pneumoniae* Investigated by RAPD Typing and Analysis of the Genetics and Mechanisms of Resistance" *Journal of Hospital Infection* vol.39, pp.291-300. UK, 1998.
- <P983061> **Chan, P.K.S.; K.F. To; S.K. Yip; J.S.L. Tam and A.F.B. Cheng.** "Parvovirus B19-Associated Hydrops Foetalis: The First Confirmed Case in Hong Kong". *Hong Kong Medical Journal* vol.4 no.3, pp.321-323. Hong Kong, 1998.09.03.
- <P983062> **Houang, E.T.S.; Y.W. Chu; T.K.C. Ng; A.F.B. Cheng and L.J.V. Piddock.** "Typing and Mechanism(s) of Resistance of 23 Ciprofloxacin-Resistant *Acinetobacter Baumannii* Isolates from 8 Patients from Hong Kong". Paper presented in the 38th Interscience Conference on Antimicrobial Agents and Chemotherapy. 1998.09.
- <P983176> **Ip, M.; E. Hui; D.J. Lyon; R. Lam; J. Woo and A.F. Cheng.** "Study of the Colonisation and Role of Spread of *Streptococcus Pneumoniae* in Elderly Day Care Centres and Residential Homes". Paper presented in the Hong Kong Academy of Medicine 1st International Congress. Hong Kong, 1998.11.
- <P983184> **Tam, J.S.; M. Ip; E. Char; C. Luu; I. Chu; L.Y. Lam; P. Chan and A.F. Cheng.** "Genomic Variability of Hepatitis C Virus Genotypes Prevalent in Hong Kong". Paper presented in the 66th Conjoint Meeting on Infectious Diseases, organized by Canadian Association for Clinical Microbiology and Infectious Diseases. Canada, 1998.11.
- <P983228> **Bridges, C.B.; Katz J.M.; Tsang D.; Chan P.K.S.; Seto W.H.; Ho W.; Mak K.H.; Lim W.; Tam J.; Clarke M.J.; Williams S.G.; Mounts A.W.; Bresee J.S.; Conn L.A.; Rowe T.; Hu-Primmer J.; Abernathy R.A.; Lu X.; Cox N.J. and Fukuda K.** "Risk for Influenza A (H5N1) Infection Among Health-Care Workers Exposed to Patients with Influenza A(H5N1)". *Abstracts of the Infectious Diseases Society of America 36th Annual Meeting* p.133 Abstracts no.304Sa. USA, 1998.11.
- <P983782> **Adeyemi-Doro, F.A.B.; A.C.F. Hui; F.N.Y. Ho and M. Ip.** "Haemophilus Aphrophilus Meningitis Complicated by Hydrocephalus in an Immunocompetent Adult" *Infection* vol.26 no.6, pp.405-407. Germany, 1998.
- <P990098> **Koehler, Ann P.; Kai-Cheong Chu; Elizabeth T.S. Houang and Augustine F.B. Cheng.** "Simple, Reliable, and Cost-Effective Yeast Identification Scheme for the Clinical Laboratory". *Journal of Clinical Microbiology* vol.37 no.2, pp.422-426. USA, 1999.02.

- <P990099> **Ling, T.K.W.; E.Y.M. Liu and A.F.B. Cheng.** "In vitro Activity of Trovafloxacin (CP 99, 219), a New Fluoroquinolone Against Hospital Isolates" *Chemotherapy* vol.45, pp.22-27. Switzerland, 1999.
- <P991058> **Yew, W.W.; P.C. Wong; J. Lee; S.L. Fung; C.F. Wong and C.Y. Chan.** "Report of Eight Cases of Pulmonary Actinomycosis and Their Treatment with Imipenem-Cilastatin". *Monaldi Arch Chest Dis* vol.54 no.2, pp.126-129. 1999.
- <P991648> **Chan, Paul K.S.; H.K. Ng and Augustine F.B. Cheng.** "Detection of Human Herpesviruses 6 and 7 Genomic Sequences in Brain Tumours". *Journal of Clinical Pathology* vol.52 no.8, pp.620-623. UK, 1999.
- <P992161> **Chan, P.K.S.; C.Y. Li; J.S. Tam and A.F. Cheng.** "Rubella Immune Status Among Healthcare Workers in the Department of Obstetrics and Gynaecology of a Regional Hospital in Hong Kong: The Need for a Vaccination Policy". *Journal of Hospital Infection* vol.42, pp.239-242. UK, 1999.

see also <P974973>, <P975031>, <P982507>, <P982513>, <P982552>, <P982563>, <P982586>, <P982871>, <P984219>, <P984358>, <P990411>, <P990441>, <P990443>, <P990825>, <P991272>, <P991697>

RESEARCH PROJECTS

Decision-Making Preferences of Hong Kong Chinese People

- ✍ HENDERSON Amanda Jane • CHIEN Wai Tong
- ☐ 1 January 1999
- ❖ CUHK Departmental Funding

Economic, Social, ethical and legal concerns are motivating changes in western type health practise to encourage patients in decisions made about their health care. This study explored the degree to which H.K. Chinese patients desire participation in decision making of their treatment. Decision-making choice would be determined by asking patients to select a card from 4 picture cards from the doctor having full control to the patient having full control. Interviews were conducted to ask about why they chose a particular card. The findings are now going to be analysed.
(MD98130)

The Relationship Between Women's Childbirth Expectations and Their Feelings of Control During Labour

- ✍ IP Wan Yim
- ☐ 1 July 1998
- ❖ CUHK Departmental Funding

Research strongly suggests that congruence between a woman's expectation for childbirth and the actual experience play an important role in influencing her perception and evaluation of the birth process. Bramadat (1990) suggested that perception of control during labour might contribute to childbirth. The purpose of this study is to explore the Chinese first-time pregnant women's childbirth expectation, and its relationship with women's feelings of control during labour. A prospective, correctional descriptive design will be employed for this study. All Chinese first-time pregnant women during their last four weeks of pregnancy will be invited to participate in the study. Childbirth expectation Questionnaire and Labour Agency Scale will be used to measure women's childbirth expectations and feeling of control during labour. The results of the finding will provide information on Chinese women's childbirth expectation which will address the type of childbirth preparation needed to be provided by health professional.
(MD98131)

Umbilical Cord Coiling Index and Entanglement

- ✍ IP Wan Yim • ROGERS Michael Scott (Obstetrics & Gynaecology) • SAHOTA Daljit Singh (Obstetrics & Gynaecology)
- ☐ 27 October 1998
- ❖ CUHK Departmental Funding

To establish the relationship between umbilical cord coiling index, Wharton's jelly thickness and fetal distress due to cord entanglement.
(MD98013)

Evaluating the Morse Fall Scale in Medical and Geriatric Units

- ✍ LEE Fung Kam • MACKENZIE Ann Elizabeth
- ☐ 1 September 1998
- ❖ CUHK Departmental Funding

Patients falls are a significant issue in patient safety as it constitutes the largest single category of patient accidents in hospitals. Falls produce adverse effects on the recovery of patients in both physiological and psychosocial aspects. Falls also increase the healthcare cost in terms of care and treatment. Therefore, prevention of falls is of utmost importance to quality care and healthcare cost-containment. Fall prevention starts with fall risk assessment. The accuracy of a fall risk assessment is basic and important for the success of a fall prevention program. The Morse Fall Scale (MFS) has been identified as a valid fall risk assessment tool in the previous literature, but it has not been validated in Hong Kong. Therefore, the purpose of the study is to evaluate the MFS in Hong Kong. A prospective - descriptive research design was employed. Samples were recruited from medical units in an acute hospital. Sensitivity and specificity of the MFS were determined. Results of the MFS were compared with nurses' clinical judgements. Cutoff point for the MFS was also discussed.
(MD98132)

A Care Protocol to Reduce Hospital Readmissions of Elderly Residential Care Home Patients with Chronic Obstructive Pulmonary Disease (COPD)

- ✍ LEE Tze Fan Diana • MACKENZIE Ann Elizabeth • LEE Fung Kam • LAI Shuet Fun, Adela* • LO Lai Fong, Tammi*
- ☐ 1 November 1998
- ❖ Health Services Research Fund, Hospital Authority

The aim of this project is to evaluate the effectiveness of an experimental care protocol used by community nurses to support residential care home staff in taking care of patients with chronic obstructive pulmonary disease. A matched, randomized pretest-posttest case control design is used. The main measure outcomes

include patients' functional, respiratory and psychological well-being and hospital services utilization. Cost-effectiveness analysis will also be conducted. Results of this study will have implications for the development of an effective and practical approach for preventing the return of residential care home patients to the hospital. (MD98073)

The Qualitative Experiences of Postnatal Depression in Hong Kong Chinese Women

✉ LEVY Valerie Anne • CHAN Wai Chi Sally • LEE Tak Shing Dominic (Psychiatry) • CHUNG Kwok Hung Tony (Obstetrics & Gynaecology)

□ 2 November 1998

❖ Health Services Research Fund, Hospital Authority

Objectives: To examine the qualitative experience of postnatal depression in a group of Hong Kong Chinese women diagnosed as suffering from postnatal depression, to investigate the factors perceived by the women as contributing to their depression, to identify their help-seeking behaviours and to compare their experiences with a group of women diagnosed with non-postnatal depression.

Design: Qualitative descriptive survey, using in-depth interviews

Setting: In psychiatric clinic or participant's home

Participants: 50 Hong Kong Chinese women diagnosed as experiencing minor or major postnatal depression, 20 Hong Kong Chinese women diagnosed with non-postnatal depression.

Conclusions: Themes identified from the data will be used to illuminate the lived experience of postnatal depression in this group of women and will contribute to the development of guidelines for nurses and other health professionals in identifying and caring for Chinese women in Hong Kong with postnatal depression. (MD98066)

The Clinical Management of Chemotherapy-Induced Nausea and Vomiting with Adjuvant Progressive Muscle Relaxation Training and Imagery Techniques in Breast Cancer patients

✉ MOLASIOTIS Alexandros • YUNG Ha Ping Hilary • MOK Shu Kam Tony (Clinical Oncology) • YAM Bernard Man Chung

□ 6 July 1998

❖ Health Services Research Fund, Hospital Authority

This study is designed to assess the effectiveness of progressive muscle relaxation training (PMRT) in the clinical management of chemotherapy-related nausea

and vomiting as adjuvant intervention to standard antiemetic treatment.

Design: Randomised controlled trial.

Subjects / setting: 92 breast cancer chemotherapy naïve patients in the outpatient oncology unit of a university hospital in Hong Kong.

Intervention: PMRT 1 hour prior to chemotherapy administration and daily thereafter for another 5 days (total of 6 PMRT sessions). Each session lasts for 25 minutes followed by 5 minutes of imagery techniques.

Main outcome measures: Chinese versions of Profile of Mood States, State-Trait Anxiety inventory, Morrow Assessment of Nausea and Vomiting scale, short structured interview. Conclusion: It is anticipated that the findings will provide a better understanding of the role of PMRT in the control of nausea and vomiting in cancer patients after chemotherapy, and will enhance the care of cancer patients who experience chemotherapy, side-effects. (MD98006)

Nursing Management of Peripheral Intravascular Access Devices

✉ NAHAS Violeta • CHANG Anne Marie • MOLASIOTIS Alexandros • LEE David Shui Kong# • CHAN David* • TONG Wah Kun*

□ 22 February 1999

❖ Health Services Research Fund, Hospital Authority

Peripheral intravascular access devices (PIVAD) are commonly used in Hong Kong for the delivery of medical therapeutics. It is an important part of hospital practice for the administration of fluids, nutrients, medications, blood products, and to monitor haemodynamic status of patients. Their use can be complicated by a variety of local and systemic causes. Maintenance of these devices by use of specific guidelines can improve both patient and hospital outcomes. The purposes of this study are to introduce a nursing guideline for the management of PIVAD and to identify changes in nursing knowledge and practice after the implementation of the guideline. A pre and post-intervention design will be used to compare the approach to the nursing management of PIVAD. The study will be conducted in two major hospitals in the New Territories. A total sample of 1572 (786 control and 786 cases) adult in-patients with PIVAD will be asked to participate in this study. Data will be collected using the Intravascular Device survey Tool (IVST) which assesses main outcomes measures such as insertion site and vessel condition. The findings of this study will enable the development of a sound practice protocol for use in health care settings across Hong Kong that is based on scientific evidence. The study will also serve as an impetus for further testing of nursing practice guidelines in other areas of patient care. (MD98077)

The Influence of Extrinsic and Intrinsic Factors on Uptake Rates for Cervical Screening: A Comparison of Perceptions of Hong Kong Chinese Women and Practitioners

- ✉ TWINN Sheila Frances • HOLROYD Eleanor • ADAB Peymane*
- 1 November 1998
- ❖ Health Services Research Fund, Hospital Authority

This study aims to investigate the influence of extrinsic and intrinsic factors on the uptake of cervical screening by Hong Kong Chinese women and to investigate the extent to which these factors compare with the perceptions of practitioners. A comparative survey consisting of two phases has been selected as the research design. Phase I will involve a survey of cervical screening provision in Hong Kong. A random survey of practitioners will be undertaken to investigate the organization of screening programmes and practitioners' perceptions of factors influencing women's attendance for screening. A semi structured interview will be undertaken with a purposive sample of respondents to examine their perception of the extent to which service factors contribute to women's reattendance for screening. Phase II of the study will consist of focus group interviews with women who have participated in a large telephone interview survey currently being completed with HSRC funding. The data obtained from the interviews will be used to compare with that obtained from practitioners in the present study. The focus groups will undertake an in-depth examination of factors influencing women's uptake of cervical screening, in particular their perception and assessment of level of risk and factors influencing reattendance patterns. The findings will be used to validate those obtained from the telephone survey. It is anticipated that the results of the survey will provide comprehensive baseline data of extrinsic and intrinsic factors influencing uptake of cervical cancer screening. (MD98010)

Comparative Analysis of Patient-Controlled Analgesia Versus Traditional Intramuscular Injection in Chinese Women Undergoing Elective Gynaecological Surgery

- ✉ WOOTTON LAW Siu Yin • WILLS Shuc Han Betty# • CHANG Anne Marie • IP Wan Yim • CHEUNG Tak Hong (Obstetrics & Gynaecology)
- 1 November 1998
- ❖ Health Services Research Fund, Hospital Authority

Objective: The purpose of this study is to examine the efficacy of the intravenous patient-controlled analgesia (PCA) for post-operative pain management using opioids for Chinese women undergoing elective gynaecological surgery as compare to traditional intramuscular injection of analgesics.

Design: A randomised control trail will be used in this study. Patients in the experimental group will administer the post-operative opioids to themselves with a PCA device whereas for those in the control group, the post-operative opioids will be injected intramuscularly by nurses. The independent variable is the method of opiate administration, either PCA (experimental) or IM method (control group). Dependent variables are patients' level of pain and satisfaction, and the amount of analgesia used.

Setting: This proposed study will be conducted in two gynaecological wards within a teaching hospital.

Subjects: 150 patients scheduled for elective total abdominal hysterectomy (TAH) and TAH with salpingo-oophorectomy will be recruited base on a medium effect size, an alpha of 0.05, and 15% attrition rate.

Interventions:

- (1) Standard pre-operative teaching for surgery and the use of PCA for the experimental group;
- (2) Standard pre-operative teaching and IMI for the control group.

Main outcome measures: Three instruments: Pain Visual Analogue Scale (VAS), Patient Satisfaction Questionnaire (PSQ) and the Multidimensional Health Locus of Control (MHLC) will be used to assess the patients' level of pain, their satisfaction with the mode of pain management and their health locus of control. The costs related to both types of pain management will be identified and assessed.

Data analysis: Group comparability on demographic data and MHLC. Differences in outcome variables will be analysed using t-test and chi-square analyses.

Results: Will be submitted for publication in local and international journals. (MD98074)

Please refer to previous issues of this publication for more details of the following ongoing research at the department:

<u>Edition</u>	<u>Title/Investigators</u>
1997-98	Promoting Independent Learning and Clinical Competence through Implementing Contract Learning in a Clinical Context (ED97001) ✉ CHAN Wai Chi Sally
1997-98	An Evaluation of the Implementation of Case Management in the Community Psychiatric Nursing Service (MD97084) ✉ CHAN Wai Chi Sally • MACKENZIE Ann Elizabeth •

- CHAN Oi Wah* • KU Man Wing,
Betty* • LEUNG Lai To, Winnie*
- 1997-98 Promoting Students' Critical Thinking:
The Use of Videotaped Vignettes in a
Baccalaureate Nursing Programme
(MD97020)
✍ CHANG Anne Marie • LEE Fung
Kam • CHAU Pak Chun Janita •
LEE Tze Fan Diana • WOOTTON
LAW Siu Yin • WILLS Shuc Han
Betty# • IP Wan Yim
- 1996-97 How Chinese Elders Adjust to
Residential Home Life (MD96179)
✍ LEE Tze Fan Diana
- 1997-98 Assessment of Psychosocial Adjustment,
Attitudes and Motivation towards
Unrelated Bone Marrow Donation
(MD97051)
✍ MOLASIOTIS Alexandros •
HOLROYD Eleanor
- 1997-98 A Pilot Study to Assess the Effectiveness
of Group Cognitive-Behavioral and Peer
- Support / Counselling in Symptomatic
HIV Patients (MD97093)
✍ MOLASIOTIS Alexandros •
TWINN Sheila Frances •
CALLAGHAN Patrick#
- 1997-98 The Lived Experience of Insulin-Treated
Patients Who Worry about Diabetes
Complications and Hypoglycaemia
(MD97136)
✍ SHIU Tak Ying
- 1996-97 Increasing Women's Knowledge of the
Prevention of Cervical Cancer and the
Uptake of Cervical Screening: the
Implementation of a Nurse Led
Community Outreach Programme
(MD96026)
✍ TWINN Sheila Frances • MAK Mui
Hing June#
- 1997-98 Telling Stories: A Strategy to Enhance
Ethical Decision Making (MD97021)
✍ YUNG Ha Ping Hilary

RESEARCH OUTPUTS AND PUBLICATIONS

- <P943252> **Herdman, Elizabeth and Stephanie Short.** "The Deskillng of Registered Nurses: The Social Transformation of Nursing Work in a NSW Hospital: 1970-1990". *Health Papers: "Social Theory in Practice" TASA Conference* ed. by John Germov. pp.134-142. Australia: Department of Sociology and Anthropology, University of Newcastle, 1994.
- <P953660> **Omeri, Akram and Violeta Nahas.** "Cultural Care Nursing Assessment". *Issues in Australian Nursing 5 - The Nurse as Clinician* ed. by Gray, G., Pratt, R. & McMurray, A. pp.149-162. Melbourne: Churchill Livingstone, 1995.
- <P953661> **Wong, Frances K.Y.; Betty S.H. Wills and Alice Y. Loke.** "Hong Kong Nurses' Perception Towards Health Assessment on Patients with Respiratory Disorders". *The Hong Kong Nursing Journal* vol.69, pp.3-8. Hong Kong, 1995.
- <P953663> **Chien, Wai-Tong.** "Primary Nursing Can Work in Psychiatric Nursing Care". *Asian Journal of Nursing Studies* vol.2 no.3, pp.19-25. Hong Kong, 1995.07.
- <P953664> **Chien, Wai Tong.** "Physical Restraint on Hospitalized Patients: An Exploratory Study". *Master Thesis* 133 pgs. Hong Kong: The Chinese University of Hong Kong, 1995.
- <P953665> **Lau, Ruth; Sally Chan and Susanna Chan.** "The Stressors of Nurses in the Intensive Care Unit in Hong Kong". *The Hong Kong Nursing Journal* vol.69, pp.17-24. Hong Kong, 1995.
- <P953666> **Lee, David; Serena Lee and Karen Eldridge.** "A Study of an Established Nursing Practice: An Intramuscular Injection Technique". *Collegian: Journal of Royal College of Nursing* vol.2 no.3, pp.32-36. Australia, 1995.

- <P953667> **Jo, Alexander; Valerie Levy and Sarah Roch. ed.** *Aspects of Midwifery Practice: A Research Based Approach*. 194 pgs. Basingstoke: Macmillan Education, 1995.
- <P953668> **Herdman, Elizabeth and Sue Kippax.** "Medical Discourse, Institutional Practices and HIV Related Discrimination". *Abstracts of the Australian Sociological Association Annual Conference* p.85. Australia: University of Newcastle, 1995.
- <P953669> **Herdman, Elizabeth and Susan Kippax.** *Institutional Discrimination: Critical Ethnography of HIV/AIDS Related Discrimination in a Hospital Setting*. 126 pgs. Australia: Macquarie University/HIV AIDS & Society Publications, 1995.
- <P953670> **Herdman, Elizabeth.** "Professionalisation, Rationalisation and Policy Change: The Transfer of Pre-Registration Nurse Education to the University Sector". *Annual Review of Health Social Sciences* vol.5, pp.61-77. Australia, 1995.
- <P953673> **Wong, Francis; Alice Loke; Sally Chan and Agnes Tiwari.** "Promoting the Integration of Theory and Practice, and Relationship Between Teachers and Students in the Education of Registered Nurses". *Abstracts of the 6th Annual International Nurse Education Tomorrow Conference* p.25. Durham, UK: Grey College, University of Durham (UK), 1995.
- <P964277> **Chien, Wai-Tong.** "Contributions of Qualitative Methods to Nursing Research". *The Hong Kong Nursing Journal* issue no.72, pp.13-21. Hong Kong, 1996.
- <P964282> **Henderson, Amanda and Sandy Phillips.** "Surgical Patients' Information Needs on Discharge: Are they Being Met?". *International Journal of Nursing Practice* vol.2, pp.229-235. Australia, 1996.
- <P964283> **Barry, Bonny and Amanda Henderson.** "Nature of Decision-Making in the terminally ill patient". *Cancer Nursing* vol.19 no.5, pp.384-391. Philadelphia, USA, 1996.
- <P964296> **Wong, Frances; Sally Chan; Alice Loke and Aggie Tiwari.** "An Action Research Study into the Development of Teacher-Student Partnership in Educating Experienced Nurses". Paper presented in the Action Learning Project Conference, organized by the Hong Kong Polytechnic University. Hong Kong, 1996.
- <P964297> 陳慧慈、鄭炳樞。〈第一屆中港護理教育會議-兩籌委之報告〉。《香港護理雜誌》第73期，頁44-45。香港，1996。
- <P964298> **Chan, Sally W.C. and Cheng B.S.** "Nurses' Political Participation in Hong Kong". Paper presented in the International Images of Health, Philosophical and Political Dimensions, a Multidisciplinary Conference, organized by University of Ballarat. p.1. Victoria, Australia, 1996.02.
- <P974940> **Nahas, Violeta L.** "An Innovative Approach to Teaching Maternal/Infant Care in Jordan". *International Nursing Review* vol.44 no.3, pp.85-90. Geneva, Switzerland, 1997.
- <P974944> **Molassiotis, Alexander.** "A Conceptual Model of Adaptation to Illness and Quality of Life for Cancer Patients Treated with Bone Marrow Transplants". *Journal of Advanced Nursing* vol.26, pp.572-579. Edinburgh, UK, 1997.
- <P974945> **Molassiotis, Alexander; O.B.A. van den Akker and B.J. Boughton.** "Perceived Social Support, Family Environment and Psychosocial Recovery in Bone Marrow Transplant Long-Term Survivors". *Social Science & Medicine* vol.44 no.3, pp.317-325. London, UK, 1997.
- <P974946> **Molassiotis, Alexander; O.B.A. van den Akker; D.W. Milligan and J.M. Goldman.** "Symptom Distress, Coping Style and Biological Variables as Predictors of Survival after Bone Marrow Transplantation". *Journal of Psychosomatic Research* vol.42 no.3, pp.275-285. London, UK, 1997.

- <P974947> **Molassiotis, Alexander.** "Nursing Research Within Bone Marrow Transplantation in Europe: An Evaluation". *European Journal of Cancer Care* vol.6, pp.257-261. Edinburgh, UK, 1997.
- <P974948> **Molassiotis, Alexander.** "Psychosocial Transitions in the Long-Term Survivors of Bone Marrow Transplantation". *European Journal of Cancer Care* vol.6, pp.100-107. Edinburgh, UK, 1997.
- <P974949> **Yung, Hilary Ha-Ping.** "The Relationship Between Role Conception and Ethical Behaviour of Student Nurses in Hong Kong". *Nursing Ethics* vol.4 no.2, pp.99-113. UK, 1997.
- <P974950> **Yung, Hilary Ha-Ping.** "Ethical Decision-Making and the Perception of the Ward as a Learning Environment: A Comparison Between Hospital-Based and Degree Nursing Students in Hong Kong". *International Journal of Nursing Studies* vol.34 no.2, pp.128-136. UK, 1997.
- <P975034> **Molassiotis, Alexander and P.J. Morris.** "Suicide and Suicidal Ideation after Marrow Transplantation". *Bone Marrow Transplantation* vol.19, pp.87-90. Hampshire, UK, 1997.
- <P975035> **Molassiotis, Alexander and P.J. Morris.** "The Meaning of Quality of Life and the Effects of Volunteer Unrelated Donor BMT in Adult Survivors". *Abstracts of the 23rd Annual Meeting of the European Bone Marrow Transplant Interest Group* p.S220. Aix Les Bains, France: European Bone Marrow Transplant Group, 1997.
- <P975046> **Nahas, Violeta L.** "A Transcultural Study of Jordanian Nursing Student's Care Encounters in the Clinical Area". *Transcultural Nursing: New Pathways, New Venture* p.19. Sydney, Australia: Royal College of Nursing, Australia, 1997.12.04.
- <P975048> **Nahas, Violeta L.** "Humour: A Phenomenological Study within the Concept of Clinical Education". *Abstracts of the 2nd International Nursing Conference: Strategies for Excellence in Nursing & Midwifery Practice* pp.131-132. Oman: Directorate of Nursing Affairs, Minister of Health, 1997.10.09.
- <P975049> **Nahas, Violeta L.** "Development of a Culturally Congruent Nurse Caring Behaviour Instrument". *Abstracts of the 2nd International Nursing Conference: Strategies for Excellence in Nursing & Midwifery Practice* pp.75-76. Oman: Directorate of Nursing Affairs, Minister of Health, 1997.10.08.
- <P975051> **Nahas, Violeta L.** "Muslim Patients' Perceptions of a Caring Nurse". *The Professional Nurse* ed. by Ian Wee King. vol.24 no.4, pp.20-23. Singapore: Paperclip Communications Pty. Ltd, 1997.04.
- <P975054> **Nahas, Violeta L. and Patricia Josipovic. ed.** *Newsletter of the Transcultural Nursing Society, RCNA.* vol.2 no.1, 4 pgs. Australia, 1997.03.
- <P975055> **Nahas, Violeta L. and Patricia Josipovic. ed.** *Newsletter of the Transcultural Nursing Society, RCNA.* vol.2 no.3, 4 pgs. Australia, 1997.09.
- <P975060> **Chan, Sally; Cheng Bing-Shu; Wendy Lam and Monica Ho.** "A Brief Report on a Study of the Needs and Concerns of Nurse Educators". *Newsletter, The Hong Kong Society for Nursing Education* pp.4-6. Hong Kong, 1997.
- <P975061> **Chan, Sally W.C. and Cheng Bing-Shu.** "Some Insights Gained from the 10th World Congress of Psychiatry". *Newsletter, The Hong Kong Society for Nursing Education* p.8. Hong Kong, 1997.
- <P975065> **Jo, Alexander; Valerie Levy and Carolyn Roth.ed.** *Midwifery Practice: Core Topics 2* . 148 pgs. Basingstoke: Macmillan Education, 1997.
- <P975066> **Chan, S. and Twinn S.** "Consumer Evaluation of Child Health Services in the Non-Government Sector of Hong Kong". *Research Report* 27 pgs. Hong Kong: The Hong Kong Polytechnic University, 1997.
- <P975067> **Chan, S. and Twinn S.** "Consumer Evaluation of Maternal and Child Health Services in the Non-Government Sector in Hong Kong". *Abstracts of the 2nd International Conference on Community*

- Health Nursing Research, p.8. UK: RCNUK/International Committee on Community Health Nursing, 1997.
- <P982540> **Nahas, Violeta L.** "Humour: A Phenomenological Study within the Context of Clinical Education". *Nurse Education Today* vol.18, pp.663-672. London, 1998.
- <P982544> **Rossiter, Joh Chin.** "Promoting Breast Feeding: The Perceptions of Vietnamese Mothers in Sydney, Australia". *Journal of Advanced Nursing* vol.28 no.3, pp.598-605. London, 1998.
- <P982545> **Chang, Anne M. and Ann E. Mackenzie.** "State Self-Esteem Following Stroke". *Stroke* vol.29, pp.2325-2328. USA, 1998.
- <P982546> **Chan, Sally W.C..** "Book Review: Nursing Administration, Managing Patient Care". *The Hong Kong Nursing Journal* vol.34 no.3, p.46. Hong Kong, 1998.
- <P982547> **Mackenzie, Ann E.; Eleanor E. Holroyd and May H.L. Lui.** "Community Nurses' Assessment of the Needs of Hong Kong Family Carers Who are Looking After Stroke Patients". *International Journal of Nursing Studies* vol.35, pp.132-140. UK, 1998.
- <P982548> **Mackenzie, Ann E.; D.T.F. Lee; S. Dudley-Brown and T.M. Chin.** "The Processes of Case Management: A Review of the Evaluation of a Pilot Study for Elderly People in Hong Kong". *Journal of Nursing Management* vol.6, pp.293-301. UK, 1998.
- <P982693> **Morris, P.J. and A. Molassiotis.** "Quality of Life in Patients with Chronic Myeloid Leukaemia After Unrelated Donor Bone Marrow Transplantation". *Bone Marrow Transplantation* vol.21 Suppl.1, p.S254. Basingstoke, UK: Macmillan Press, 1998.
- <P982696> **Twinn, Sheila.** "An Analysis of the Effectiveness of Focus Groups as a Method of Qualitative Data Collection with Chinese Populations in Nursing Research". *Journal of Advanced Nursing* vol.28 no.3, pp.654-661. UK, 1998.
- <P982697> **Twinn, Sheila and Claire Johnson.** "The Supervision of Health Visiting Practice: A Continuing Agenda for Debate". *Clinical Supervision and Mentorship in Nursing* ed. by Butterworth T, Faugier J., Burnard P. 2nd ed., pp.153-173. UK: Stanley Thornes (Publishers) Ltd, 1998.
- <P982810> **Shiu, Ann Tak Ying and Wong Yee Man, Rebecca.** *Investigating Fear of Hypoglycaemia Among Insulin-Treated Patients of Working Age 67* pgs. Hong Kong: The Chinese University of Hong Kong, 1998.08.01.
- <P982811> **Shiu, Ann Tak-Ying.** "The Significance of Sense of Coherence for the Perceptions of Task Characteristics and Stress During Interruptions Amongst a Sample of Public Health Nurses in Hong Kong: Implications for Nursing Management". *Public Health Nursing* vol.15 no.4, pp.273-280. USA, 1998.
- <P982812> **Shiu, Ann Tak-Ying.** "Mood States and Spouse Support of Public Health Nurses with Children and Full-Time Employment Taking on a Part-Time Degree Programme: An Experience Sampling Study in Hong Kong". *Abstracts of the 9th Annual International Participative Conference* p.24. Grey College, University of Dusham, 1998.09.
- <P982813> **Shiu, Ann Tak-Ying** "Work and Family Role Juggling and Mood States of Hong Kong Public Health Nurses with Children". *Journal of Advanced Nursing* vol.28 no.1, pp.203-211. UK, 1998.
- <P982814> **Molasiotis, Alexander and P.J. Morris.** "Fatigue after Bone Marrow Transplantation: 5 Years of Experience". *Bone Marrow Transplantation* vol.21 Suppl.1, p.S250. Basingstoke, UK: Macmillan Press, 1998.
- <P982887> **Katherason, Supaleichimi and Violeta Nahas.** "The Nursing Process as a Model for Clinical Supervision". *Nurse Educator* vol.23 no.5, pp.41, 50. USA, 1998.

- <P983077> **Molassiotis, Alexander and Eleanor Holroyd.** *The Psychosocial Adjustment of Hong Kong Chinese Unrelated Bone Marrow Donors and their Perceptions of the Experience of Donation* Research Report 41 pgs. Hong Kong: Department of Nursing, The Chinese University of Hong Kong, 1998.10.
- <P983101> **Chan Sally W.C. and F. Yuen.** "The Needs and Concerns of Mature Age Nursing Students". *Abstracts of the 2nd International Conference on Expanding Boundaries of Nursing Education Globally* p.69. Pattaya, Thailand: Mahidol University, 1998.11.
- <P983109> **Callaghan, Patrick; Chang A.M.; Cheung Y.L. and Norman P.** "Predicting Exercise in Young Chinese People". *Abstracts of the 12th Conference of the European Health Psychology Society* p.97. Vienna, 1998.
- <P983133> **Yam, Bernard M.C.** "Confidentiality in Clinical Nursing Practice". *Singapore Nursing Journal* vol.25 no.4, pp.10-12. Singapore, 1998.12.
- <P983143> **Mackenzie, Ann E. and Diana Lee.** "Case Management: A Nursing Intervention to Support Older Adults in the Community". *Conference Abstracts of the Hong Kong Epidemiological Association 1st Annual Scientific Meeting* p.8. Hong Kong, 1998.11.14.
- <P983155> **Callaghan, Patrick; Cheung Yuk-Lung; Yao King-Yu Ida and Chan Siu-Ling.** "Evidence-Based Care of Chinese Men Having Transurethral Resection of the Prostate (Turp)". *Journal of Advanced Nursing* vol.28 no.3, pp.1-8. London, 1998.
- <P983185> **Ip, Glendy S.H. and Ann E. Mackenzie.** "Caring for Relatives with Serious Mental Illness at Home: The Experiences of Family Carers in Hong Kong". *Archives of Psychiatric Nursing* vol.XII no.5, pp.288-294. USA, 1998.10.
- <P983189> **Chan, Sally W.C.; Ann MacKenzie; Dominic Ng and Jessie Leung.** "An Evaluation on the Implementation of Case Management in the Community Psychiatric Nursing Service". *Proceedings of the 3rd International Nursing Conference* pp.203-207. Brunei Darussalam: The College of Nursing, 1998.11.
- <P983198> **Callaghan, Patrick and K.B. Luk.** "A Randomised Controlled Trial Testing the Effect of Three Comfort Interventions in Soothing Pain-Elicited Distress in Chinese Neonates". *Abstracts of the 5th International Congress of Behavioral Medicine* p.42(19.1). Copenhagen: Danish Technical University, 1998.08.
- <P983250> **Molassiotis, Alexander and Morris P.J.** "Fatigue after Bone Marrow Transplantation: 5 Years of Experience". *Abstracts of the 24th Annual Meeting of the European Group for Blood and Marrow Transplantation and 14th Meeting of the Nurses Group* vol.21 suppl.1, p.S250. Courmayeur, Italy: European Bone Marrow Transplantation Group, 1998.03.
- <P983251> **Molassiotis, Alexander.** "Measuring Psychosexual Functioning in Cancer Patients: Psychometric Properties and Normative Data of a New Questionnaire". *European Journal of Oncology Nursing* vol.2 no.4, pp.194-205. Edinburgh, UK, 1998.
- <P983332> **Henderson, Amanda; Dianne Milburn and Kylie Everingham.** "Where to from here: Patients of a Day Hospital Rehabilitation Programme Perceived Needs Following Stroke". *Contemporary Nurse* vol.7 issue 4, pp.211-216. 1998.12.
- <P983373> **Lee, Fung-Kam; Anne M. Chang; Janita P.C. Chau; Betty S.H. Wills; Yvonne S.Y. Wootton; Diana T.F. Lee; Wan-Yim Ip and Patricia P.N. Leung.** "Promoting Critical Thinking: The Use of Videotaped Vignettes Based on Clinical Situations in a Baccalaureate-Nursing Programme". *Proceedings of Quality in Teaching and Learning: A Celebration of Best Practices in Hong Kong Higher Education* pp.89-90. Hong Kong: The Hong Kong Polytechnic University, 1998.12.
- <P983374> **Twinn, Sheila; Eleanor Holroyd and T.Y. Shiu.** "A Case Study of the Community Rehabilitation Network: An Evaluation of an Innovative Strategy in Nursing Practice". *The Hong Kong Nursing Journal* vol.34 no.4, pp.6-13. Hong Kong, 1998.12.01.

- <P983436> **Callaghan, Patrick.** "Social Support and Locus of Control as Correlates of UK Nurses' Health-Related Behaviours". *Journal of Advanced Nursing* vol.28 no.5, pp.1127-1133. London, 1998.
- <P983550> **Rossiter, Joh Chin and Bernard Yam.** "Promoting the Nursing Profession: The Perceptions of Non-English-Speaking Background High School Students in Sydney, Australia". *International Journal of Nursing Practice* vol.4, pp.213-219. Australia, 1998.
- <P983693> **Chang, Anne M. and Ann Mackenzie.** "Nurses' Presence and Planning Care with Patient Promotes Performance State Self-Esteem". *Abstracts of the 4th Nursing Practice Conference: Nursing Practice in the Web of the Future* p.9. Adelaide: Royal Adelaide Hospital/Dept of Nursing and the University of Adelaide, 1998.11.
- <P983694> **Molassiotis, Alexander** "Psychosocial Adjustment and Quality of life after Bone Marrow Transplantation". *Nosileftiki* vol.3, pp.222-229. Athens, Greece, 1998.
- <P983695> **Molassiotis, Alexander** "Cancer, Chemotherapy and Pregnancy". *Nursing Times* vol.94 no.9, pp.48-50. UK, 1998.03.04.
- <P983920> **Nahas, Violeta L.** "Culture Care Meanings and Experiences of Postpartum Depression among Jordanian Women: A Transcultural Nursing Study". Poster presented in the 1st International Nursing Research Congress, p.19. Manila, Philippines: University of the Philippines, 1998.04.15.
- <P983921> **Nahas, Violeta L.** "Postpartum Depression: The Lived Experience of Middle Eastern Women". *Abstracts of the Empowerment and Health: 3rd International Nursing Conference* p.37. Brunei Darussalam: College of Nursing, 1998.11.
- <P984069> **Callaghan, Patrick; Cheung Yuk-Lung; Yao King-Yu Ida and Chan Siu-Ling.** "The Effect of Pre-Operative Information on Post-Operative Anxiety, Satisfaction with Information, and Demand for Analgesia, in Chinese Men Having Transurethral Resection of the Prostate (TURP)". *Journal of Clinical Nursing* vol.7, pp.479-480. London, UK, 1998.
- <P984360> **Twinn, Sheila; Sally Chan and Monica Ho.** "Selecting a Postgraduate or Undergraduate Programme in Hong Kong: Factors to Consider". *Newsletter, Hong Kong Society for Nursing Education* pp.5-8. Hong Kong, 1998.11.
- <P984372> **Lee, Yin-King; Eleanor Holroyd; Lisa Wong Pui-Yuk; Frankie Yau Kwok-Hong and Bonnie Leung Shuk-Lin.** "Hong Kong Chinese Women in Labour: Implication for Midwives". *The Practising Midwife* vol.1 no.11, pp.26-28. UK, 1998.11.
- <P984497> **Yam, Bernard M.C.** *Perceptions of Caring Behaviours Among Hong Kong Nurses.* Research Report. Hong Kong: The Chinese University of Hong Kong, 1998.
- <P984890> **Chan, Carmen W.H. and June Tsang.** "Exploring Oncology Nurses' and Clients' Perspectives Towards Oral Care in Hong Kong". *A Report of the Student Work Scheme (1997/98)* Hong Kong: Department of Nursing, The Chinese University of Hong Kong, 1998.
- <P990123> **Chien, Wai-Tong and Sally Chan.** "The Use of Contract Learning in Nursing Education". *Newsletter, Hong Kong Society for Nursing Education* pp.3-6. Hong Kong, 1999.02.
- <P990155> **Mackenzie, Ann E. and Diana T.F. Lee.** "Carers and Lay Caring" ed. by S.J. Redfern and F.M. Ross. *Nursing Older People* 3rd ed., Chap.16, pp.269-280. London: Churchill Livingstone, 1999.
- <P990195> **Chan, Carmen W.H. and Anne M. Chang.** "Dealing With Cancer: The Family Perspectives". *Abstracts of Hong Kong Nursing Symposium on Cancer Care 1999* p.19. Hong Kong: The Chinese University of Hong Kong, 1999.01.23.
- <P990196> **Lee, Diana T.F.; Chan M.C.; Tam E.P.Y. and Yeung W.S.K.** "Use of Physical Restraints on Elderly Patients: An Exploratory Study of the Perceptions of Nurses in Hong Kong". *Journal of Advanced Nursing* vol.29 no.1, pp.153-159. UK, 1999.

- <P990205> **Chan, Carmen W.H. and Lui, May. ed.** *Hong Kong Society for Nursing Education-Newsletter.* (editor of 11.1998 and 02.1999 issues) 9 pgs.. Hong Kong: Medcom Limited, 1999.02.
- <P990254> **Callaghan, Patrick** "Health Beliefs and Their Influence on United Kingdom Nurses' Health-Related Behaviours". *Journal of Advanced Nursing* vol.29 no.1, pp.28-35. London, 1999.
- <P990255> **Levy, Valerie.** "Protective Steering: A Grounded Theory Study of the Processes by Which Midwives Facilitate Informed Choices During Pregnancy". *Journal of Advanced Nursing* vol.29 no.1, pp.104-112. London, 1999.
- <P990278> **Chang, Anne M.; Janita P.C. Chau and Eleanor Holroyd.** "Translation of Questionnaires and Issues of Equivalence". *Journal of Advanced Nursing* vol.29 no.2, pp.316-322. London, 1999.
- <P990279> **Chan, Carmen W.H. and Anne M. Chang.** "Managing Caregiver Tasks Among Family Caregivers of Cancer Patients in Hong Kong". *Journal of Advanced Nursing* vol.29 no.2, pp.484-489. London, 1999.
- <P990343> **Chang, Anne M.; Ann E. Mackenzie; M.P. Yip and R. Dhillon.** "The Psychosocial Impact of Stroke". *Journal of Clinical Nursing* vol.8, pp.477-478. UK, 1999.
- <P990344> **Lee, David.** "Pre-operative Teaching of a Group of Nurses in Australia: An Ethnographic Study". *Abstracts of the 1st Pan-Pacific Nursing Conference: Promoting Nursing Excellence in the 21st Century Sharing Innovations in Practice* p.62. Hong Kong, 1999.06.10.
- <P990345> **Chien, Wai-Tong** "The Use of Physical Restraint of Hospitalized Elderly Patients". *Journal of Psychiatric and Mental Health Nursing* vol.6, pp.249-250. UK, 1999.06.
- <P990346> **Chang, Anne M. and Ann E. Mackenzie.** "Psychosocial Care of the Elderly: Care for those Recovering from Stroke". *Abstracts of the Asia-Pacific Regional Conference for The International Year of Older Persons* pp.25-26. Hong Kong: Hong Kong Council of Social Service and Social Welfare Department, 1999.04.27.
- <P990347> **Chang, Anne M. and Ann E. Mackenzie.** "The Influence of State Self-esteem on Stroke Rehabilitation". *Abstracts of the 1st Pan-Pacific Nursing Conference: Promoting Nursing Excellence in the 21st Century Sharing Innovations in Practice* p.51. Hong Kong, 1999.06.10.
- <P990348> **Molassiotis, Alexander and Carmen W.H. Chan.** "Fatigue Patterns in Chinese Cancer Patients". *Abstracts of Hong Kong Nursing Symposium on Cancer Care 1999* p.23. Hong Kong, 1999.01.23.
- <P990349> **Molassiotis, Alexander** "A Correlational Evaluation of Tiredness and Lack of Energy in Survivors of Haematological Malignancies". *European Journal of Cancer Care* vol.8, pp.19-25. UK, 1999.
- <P990350> **Molassiotis, Alexander.** "Further Evaluation of a Scale to Screen for Risk of Emotional Difficulties in Bone Marrow Transplant Recipients". *Journal of Advanced Nursing* vol.29 no.4, pp.922-927. UK, 1999.
- <P990351> **Molassiotis, Alexander and E. Holroyd.** "Experiences and Psychosocial Adjustment of Chinese Unrelated Bone Marrow Donors". *Abstracts of the 25th Annual Meeting European Group for Blood and Marrow Transplantation and 15th Meeting of the Nurses Group* p.S257. Germany, 1999.
- <P990352> **Molassiotis, Alexander.** "The Management of Chemotherapy-induced Nausea and Vomiting with the Adjuvant Use of progressive Muscle Relaxation Training in Chinese Breast Cancer Patients". *Abstracts of Hong Kong Symposium on Cancer Care 1999* p.6. Hong Kong, 1999.01.23.
- <P990537> **Nahas, Violeta L.** "Clinical Teachers As Mothers from the Jordanian Nursing Students' Perspective". *Abstracts of Advances in Qualitative Methods Conference* p.63. Alberta, Canada: University of Alberta, 1999.02.

- <P990545> **Nahas, Violeta L. and Nawal Amasheh.** "Culture Care Meanings and Experiences of Postpartum Depression Among Jordanian Australian Women: A Transcultural Study". *Journal of Transcultural Nursing* vol.10 no.1, pp.37-45. USA, 1999.01.
- <P990571> **Twinn, Sheila.** "Increasing the Uptake of Cervical Screening Amongst Hong Kong Chinese Women: The Contribution of the Nurse Practitioner". *Journal of Clinical Nursing* vol.8, pp.323-324. UK, 1999.04.
- <P990663> **Herdman, Elizabeth.** "Methodological Fallout: A Contribution to the Continuing Debate Over Access to Clinical Settings for Qualitative Research". *Abstracts of the 1st International Interdisciplinary Conference: Advanced in Qualitative Methods* p.110. Edmonton, Canada: University of Alberta, 1999.02.
- <P990664> **Nahas, Violeta L.; Sharon Hillege and Nawal Amasheh.** "Postpartum Depression: The Lived Experiences of Middle Eastern Migrant Women in Australia". *Journal of Nurse-Midwifery* vol.44 no.1, pp.65-74. USA, 1999.
- <P990670> **Nahas, Violeta L.** "Clinical Credibility of Nurse Teachers in Postgraduate Tertiary Specialisation". *Abstracts of the Critical Care Nursing Conference: Advancing into the Next Millenium* p.35. Hong Kong: Hospital Authority, 1999.03.
- <P990671> **Hillege, S.P.; V.L. Nahas and N. Amasheh.** "Coming to Terms with Postpartum: The Lived Experience of Middle Eastern Women in Sydney". *Abstracts of the 5th International Qualitative Health Research Conference* p.235. Australia: Faculty of Nursing, the University of Newcastle, 1999.04.
- <P990725> **Twinn, Sheila and Frances Cheng.** "A Case Study of the Effectiveness of Nurse-Led Screening Programmes for Cervical Cancer Among Hong Kong Chinese Women". *Journal of Advanced Nursing* vol.29 no.5, pp.1089-1096. UK, 1999.06.
- <P990807> **Wong, Rebecca Y.M. and Shiu, Ann Tak-Ying.** "The Effects of Length of Insulin Treatment, Frequency of Hypoglycemia-Induced Hospitalization and Impact of Working Life on Fear of Hypoglycemia Among Insulin-Treated Patients". *Abstracts of the 1st Pan-Pacific Nursing Conference: Promoting Nursing Excellence in the 21st Century Sharing Innovations in Practice* p.89. Hong Kong: Department of Nursing, CUHK, 1999.06.11.
- <P990808> **Shiu, Ann Tak-Ying.** "The Part-Time Student Role: Implications for the Emotional Experience of Managing Multiple Roles Amongst Hong Kong Public Health Nurses". *Nurse Education Today* vol.19, pp.188-198. UK, 1999.
- <P990809> **Shiu, Ann Tak-Ying; S.F. Twinn and E. Holroyd.** "The Contribution of Nursing to an Interprofessional Community-Based Rehabilitation Team: Perceptions of Nurses, Patients and Carers". *Journal of Interprofessional Care* vol.13 no.1, pp.65-75. UK, 1999.02.
- <P990810> **Twinn, Sheila.** "Developments in Community Health: Opportunities and Challenges for Nursing". *Abstracts of the 12th Annual Nursing Conference.* Hong Kong: College of Nursing, 1999.05.29.
- <P990848> **Lee, David.** "The Evening Tea Break Ritual - A Case Study". *Contemporary Nurse* vol.8 issue 1, pp.227-231. Australia, 1999.03.
- <P990850> **Chan, Carmen W.H.** "Issues of Age, Family Caregiving and Terminal Cancer". *Abstracts of the Asia Pacific Hospice Conference 1999* Hong Kong, 1999.06.02.
- <P990851> **Twinn, Sheila.** "Methodological Issues in the Evaluation of Health Education Interventions". Paper presented in the Royal College of Nursing Research Society Annual Conference. UK, 1999.04.23.
- <P990852> **Twinn, Sheila.** "Focus Groups as a Method of Process Evaluation: Challenges and Opportunities". *Abstracts of the 1st Pan-Pacific Nursing Conference: Promoting Nursing Excellence in the 21st*

Century Sharing Innovations in Practice p.100. Hong Kong: Department of Nursing, The Chinese University of Hong Kong, 1999.06.11.

- <P990853> **Twinn, Sheila; Ann Shiu T.Y. and Eleanor Holroyd.** "Responding to Women's Needs in the Prevention of Cervical Cancer: Opportunities for the Development of Nurse-led Screening Services". *Abstracts of the 12th Annual Nursing Conference (Theme A: Health Promotion)* Hong Kong: College of Nursing, 1999.05.29.
- <P991072> **Chan, Sally W.C. and Ka-Fai Wong.** "The Use of Critical Pathways in Caring for Schizophrenic Patients in a Mental Hospital". *Archives of Psychiatric Nursing* vol.XIII no.3, pp.145-153. USA, 1999.
- <P991073> **Ng, Dominic T.F.; Sally Chan and Ann Mackenzie.** "The Implementation of Case Management in the Community Psychiatric Nursing Service in Hong Kong: An Exploratory Study of the Case Managers". *Abstracts of the 1st Pan-Pacific Nursing Conference: Promoting Nursing Excellence in the 21st Century Sharing Innovations in Practice* p.82. Hong Kong: Department of Nursing, The Chinese University of Hong Kong, 1999.06.10.
- <P991074> **Chan, Sally W.C. and Frances Wong.** "Development of Basic Nursing Education in China and Hong Kong". *Journal of Advanced Nursing* vol.29 no.6, pp.1300-1307. Britain, 1999.
- <P991075> **Chan, Sally W.C. and B.S. Cheng.** "Political Participation in Hong Kong: A Study". *Journal of Nursing Management* vol.7, pp.167-175. Britain, 1999.
- <P991650> **Lui, May H.L. and Ann E. Mackenzie.** "Chinese Elderly Patients' Perceptions of Their Rehabilitation Needs Following a Stroke". *Journal of Advanced Nursing* vol.30 no.2, pp.391-400. London, UK, 1999.
- <P991651> **Kong, Irene Lim Lim and Alexander Molassiotis.** "Quality of Life, Coping and Concerns in Chinese Patients after Renal Transplantation". *International Journal of Nursing Studies* vol.36, pp.313-322. London, UK, 1999.
- <P991704> **Levy, Valerie.** "Making and Facilitating Informed Choices During Pregnancy: The Importance of Trust". *Proceedings of the 25th Triennial Congress of the International Confederation of Midwives* pp.332-334. Manila: Integrated Midwives Association of the Philippines Incorporated, 1999.
- <P991706> **Henderson, Amanda and David Shum.** "Hong Kong Chinese Patients Preferences for Participation in Decision-Making about Health Care Treatment". *Abstracts of the 1st Pan-Pacific Nursing Conference: Promoting Nursing Excellence in the 21st Century Sharing Innovations in Practice* p.48. Department of Nursing, CUHK, 1999.06.10.
- <P991709> **Lee, Diana T.F.** "How Chinese Elders in Hong Kong Experience the Changes Associated with Residential Care Placement". *Proceedings of the International Nursing Research Conference* p.71. Edmonton, Canada: University of Alberta, 1999.06.16.
- <P991710> **Lee, Diana T.F.; Ann E. Mackenzie; Iris F.K. Lee and Carmen W.H. Chan.** "Hospital Readmissions Among Elderly Patients in Hong Kong: A Preliminary Study". *Journal of Clinical Nursing* vol.8, pp.478-479. UK, 1999.
- <P991729> **Henderson, Amanda.** "Informing the Client: Is Nursing Serving up the Traditional Hospital Diet of Biomedical Knowledge?". *Abstracts of the ICN Centennial Conference* London, UK: Royal College of Nursing, 1999.06.30.
- <P991730> **Levy, Valerie.** "Maintaining Equilibrium: A Grounded Theory Study of the Processes Involved When Women Make Informed Choices during Pregnancy". *Midwifery* vol.15, pp.109-119. England, 1999.
- <P991921> **Shiu, Ann Tak-Ying and Rebecca Y.M. Wong.** "Emotional Wellbeing Among Insulin-Treated Patients in Hong Kong: Implications for Partnerships with the Consumers of Diabetes Patients

Education". Abstracts of the ICN Centennial Conference, pp.166-167. London, UK: Royal College of Nursing 1999.06.29.

<P991922> **Holroyd, Eleanor; Sheila Twinn and Ann Shiu.** "Assessing Hong Kong Women's Knowledge of Pap Smear Service Provision". *Abstracts of the 1st Pan-Pacific Nursing Conference: Promoting Nursing Excellence in the 21st Century Sharing Innovations in Practice* p.59. Hong Kong: Department of Nursing, The Chinese University of Hong Kong, 1999.06.

<P992184> **Nahas, Violeta L. ed.** "Greeting from the Chief Editor". *Hong Kong Association of Critical Care Nurses Newsletter* vol.1, 4 pgs. Hong Kong, 1999.04.

RESEARCH PROJECTS

Prevalence and Intra-type Variation of Human Papillomavirus (HPV) Infection in Cervical Cancers: A Nationwide Perspective of China

✉ CHUNG Kwok Hung Tony • WONG Yick Fu • CHAN Kwok Mei May (Anatomical & Cellular Pathology)

□ 1 August 1998

❖ Research Grants Council

There is a substantial body of scientific evidence linking human papillomavirus (HPV) infection with the pathogenesis of cervical cancer. Among more than 77 genotypes of HPV isolated to date, types 16, 18, 31 and 33 have been identified as "high-risk" of causing cervical cancer.

Geographic and ethnic variations in the HPV genotypes isolated from cervical cancers have been reported. However, there is no data from a comprehensive well designed study using available, quality controlled method about the prevalence of HPV infection in cervical cancers in China nor the HPV genotype.

With reunification, it is more feasible to conduct and co-ordinate a major research project from Hong Kong involving several centres in China. We propose a nationwide study of HPV infection in cervical cancers by selecting 5 geographic regions of China: Hong Kong, Shanghai (Eastern China), Beijing (Northern China), Sichuan (Western China) and Guangdong (Southern China) Provinces. Polymerase chain reaction (PCR) and DNA sequencing-based HPV assays that afford specific detection of different HPV genotypes will be used.

This information would be important to assess the significance of HPV infection in cervical cancers in China. The data obtained from this nationwide survey will also provide valuable information pertinent to the development of HPV diagnostic probes and development of vaccination strategies in the future to prevent HPV infection and by logical extension, cervical cancer. (CU98248)

Pro-apoptotic and Anti-apoptotic Regulators in Cervical Neoplasm: Expression of Both Bcl-2 and Caspase Family Members (Bcl-2, Bcl-X, Bax, Mcl-1, Caspase-3 and Caspase-7)

✉ CHUNG Kwok Hung Tony • WONG Yick Fu • CHEUNG Tak Hong • YU Mei Yung (Anatomical & Cellular Pathology)

□ 1 December 1998

❖ CUHK Research Committee Funding

Apoptosis is a distinct mode of genetically controlled programmed cell death that appears to be an

important safeguard against tumour development and progression. Several genes in the Bcl-2 family have been identified as possible apoptotic regulators. They may be pro-apoptotic: Bax, Bak, Bad, Bcl-X_s, Bid, Bik *etc.*, or anti-apoptotic: Bcl-2, Bcl-X_L, Bcl-w, Mcl-1, A1, Bcl-2 *etc.* In addition, current evidence suggests that Caspases are essential components of the proteolytic cascade that is triggered in response to a death stimulus. These may have roles in both the regulation and execution stages of apoptosis. Recently it has been reported that the apoptotic index significantly decreases as degree of cellular abnormality in cervical neoplasia increases. However the role of apoptotic regulators in the genesis of cervical neoplasm remains unclear.

In this project, researchers propose to examine the expression of 6 apoptotic regulators in cervical neoplasm including cervical intraepithelial neoplasia (CIN) and invasive squamous cell carcinoma of uterine cervix using immuno-histochemical techniques. The information obtained from this study may contribute to the understanding of the association between the alterations of apoptotic regulators and the pathogenesis in cervical neoplasm. This information may further enable us to find new prognostic markers for cervical neoplasm and to develop therapeutic interventions targeting specific apoptotic regulators with the aim of accelerated death of cervical neoplastic cells.

This is a collaborative study with The Burnham Institute, La Jolla, USA, which is an internationally recognized leading center for the study of apoptosis and cell death. (MD98044)

Evidence for Oxidative Stress and Apoptosis in the Brain Following Perinatal Hypoxicischaemic Insults

✉ HAINES Christopher John • FISCUS Ronald Ray (Physiology) • JAMES Anthony Edward (Laboratory Animal Services Centre) • STADLIN Alfreda (Anatomy) • WONG Yick Fu • ROGERS Michael Scott

□ 1 January 1999

❖ Research Grants Council

We propose that minor perinatal hypoxic-ischaemic (H-I) insults may cause subtle brain injuries which are not detectable at birth. These injuries may result in behavioural or learning difficulties later in life. Premature infants are more susceptible to perinatal H-I insults and may develop lesions different from those in a term foetus.

This study will investigate the relationship between oxidative stress and resulting cell death after minor perinatal H-I insults. We have established a 3-day-old rat model which will reflect the type of brain injury seen in a 24-26 week human foetus. This model will be used to clarify the type and site of

lesions that develop in the preterm brain after minor H-I insults. Once the characteristic lesions have been defined, the model will be used to study the role of oxidative stress in the generation of apoptotic cell death. Follow-up behavioural studies will also be performed to determine the long term effects of minor H-I injury in the preterm setting. This work will contribute to the development of mechanisms by which a preterm foetus could be protected against H-I injury.
(CU98251)

A Study of the Role of Prostaglandin in the Pathogenesis of Diabetic Embryopathy Using Explanted Rat Embryos

- ✉ LAU Tze Kin • PRATTEN Margaret K.*
- ☐ 1 July 1998
- ❖ CUHK Mainline Research Scheme

The incidence of congenital malformation is higher among diabetic mothers. Although both hyperglycaemia and low insulin level have been found to be important factors in inducing these malformations, the exact underlying mechanism is still unknown. Recent studies suggested that a deficiency in prostaglandin level might be the intermediate step in the pathogenesis of diabetic embryopathy. The objectives of this study is to test whether supplementation of prostaglandins prevents malformations induced by high glucose level or low insulin level.

Whole rat embryo will be explanted at 9.5 day gestation and cultured *in vitro*. Embryos will be exposed to either high glucose or low insulin environment, with or without the addition of exogenous prostaglandins. The incidences of malformation among different groups will be assessed and compared with a control group. The result of this study will provide more information in the pathogenesis of diabetic embryopathy.
(MD98009)

Relationship of Birth Weight and Chorionicity of Placenta - Retrospective Study

- ✉ LEUNG Tak Yeung • TAM Wing Hung
- ☐ 7 September 1998
- ❖ CUHK Departmental Funding

The difference of birth weight between twins are compared with respected to the chorionicity of placenta.
(MD98014)

MRI Growth Curves

- ✉ SAHOTA Daljit Singh • CHANG Mang Z. Allan • BAKER P. N.*

- ☐ 21 July 1998
- ❖ CUHK Departmental Funding

A cohort of normal women were scanned using a Magnetic Resonance scanner. The volume of internal fetal organs was then derived from each of the MRI image sets produced. Multilevel modelling is then to be applied to analyse longitudinal measurements of brain, liver, lung and fetal volume for generation of normograms which in turn can be used prospectively.
(MD98019)

Computerised Estimation of Cellular Proliferative Index in Placental Tissue

- ✉ SAHOTA Daljit Singh • CHANG Mang Z. Allan • BAKER P. N.*
- ☐ 21 July 1998
- ❖ CUHK Departmental Funding

Computerised estimation of cell proliferation using by neural network classification of stain in placental tissue. Samples of placental tissue have been stained using H&E stain to identify proliferating cells. Sample images were obtained and used to train a self organising map neural network. The proliferative index was calculated for each slide and compared with that derived by conventional counting.
(MD98020)

Customised Growth Assessment in the Local Ethnic Chinese Population

- ✉ SAHOTA Daljit Singh • LAU Tze Kin • LEUNG Tse Ngong • PANG Man Wah Selina • CHANG Mang Z. Allan
- ☐ 1 June 1999
- ❖ CUHK Research Committee Funding

Fetal growth and weight gain during pregnancy has been shown to be one important indicator for fetal well being. One measure of the assessment of fetal growth is the birthweight. The birthweight whilst being gestational dependent, has also been found to be related to socio-economic factors. In addition, the birthweight has also been found to be dependent on the physical characteristics of the mother such as her height, booking weight, ethnicity and her previous obstetrics history.

Recently published studies have documented the relationship of birthweight and maternal characteristics in other Asian ethnic communities. However, there is no information available to show how birthweight is related to these parameters in the local host community and whether obstetric outcome is worse in those babies that fail to reach their own growth potential.

The aims of this study are, firstly, the establishment of a local customised birth chart which can be

adjusted for individual maternal characteristics for each pregnancy. Secondly the assessment of the screening accuracy of the growth curve in correctly identifying those small for dates babies and the comparison of the subsequent neonatal morbidity in this group.

(MD98104)

A Comparison of the Effect of Dydrogesterone and Medroxyprogesterone Acetate on the Serum Lipid Profile and Plasma Total Antioxidant Capacity in Chinese Post-Menopausal Women on Oestrogen Replacement

✉ TAM Wing Hung • HAINES Christopher John • LAM Wai Kei Christopher (Chemical Pathology)

□ 1 October 1998

❖ CUHK Research Committee Funding

Objective: To determine whether dydrogesterone has a different effect on the lipid profile and is more cardioprotective when combined with oestrogen 17β oestradiol for hormone replacement therapy as compared to medroxyprogesterone acetate.

Design: Prospective randomised study.

Setting: Prince of Wales Hospital, The Chinese University of Hong Kong.

Population: One hundred post-menopausal, non-hysterectomised, women who are not receiving hormone replacement therapy will be recruited when they are first referred for hormone replacement therapy.

Methods: Patients will be randomised into two groups. Group 1 will receive 17 oestradiol 2mg daily for 28-days cycle in a month, with dydrogesterone 10 mg added to the last 14 days of each cycle. Group 2 will receive 17 oestradiol 2mg daily for 28 days a month combined medroxyprogesterone acetate 5 mg for the last 14 days of each cycle for 12 consecutive months. Blood samples would be taken before the replacement therapy, and thereafter at 1,3,6 and 12 monthly intervals for the assay of serum HDL-C, LDL-C, triglyceride, total cholesterol and Lp(a) and TAOC.

Implications: The purpose of this study is to determine whether hormone replacement with estrogen combined with newer progestogen will optimise the cardioprotective effect on postmenopausal women.

(MD98017)

Is Bat Quasi-monomorphic Tract a Prognostic Indicator for Endometrial Cancer? A Translational Study of a Biomolecular Marker to Clinical Utility

✉ WONG Yick Fu • CHUNG Kwok Hung Tony • CHEUNG Tak Hong

□ 1 December 1998

❖ CUHK Research Committee Funding

Microsatellite instability (MI) is a hallmark of DNA replication error phenotype (RER⁺). It has been reported that RER⁺ tumours has a better prognosis compared to RER⁻ tumours. RER⁺ would appear to be a potential biomolecular prognostic marker. However, different studies reporting MI have used varying number and type of microsatellite loci. The number of unstable microsatellite observed to define a tumour as RER⁺ also varied in different studies. Recently, it has been shown that poly(A) tract BAT-26, a repeat of 26 deoxyadenosines localized in an intron of mismatch repair gene *hMSH2*, is quasi-monomorphic. Simple typing of this may be sufficient to confirm RER⁺ status in human tumours. In this project we propose to test 4 BAT poly(A) tracts for establishing a polymerase chain reaction (PCR)-based, simple, low-cost, and rapid method to screen for RER status and correlate it with prognosis in endometrial cancer. There is also potential application in other gynaecological and other human malignancies.

This is a collaborative study with Prof. G. Hampton, University of California San Diego. His team is world renowned in research on RER status in cervical cancer.

(MD98045)

Effect of Antenatal Corticosteroids Therapy on Bone Metabolism and Lipids Changes

✉ YUEN Pong Mo • MAK Wing Lai Tony (Chemical Pathology) • NG Pui Shan • LEUNG Tse Ngong • LAM Wai Kei Christopher (Chemical Pathology) • CHANG Mang Z. Allan

□ 1 August 1998

❖ CUHK Departmental Funding

The aim of the study is to investigate the effects of repeated courses of antenatal corticosteroids on maternal bone metabolism and lipid changes, including the LDL particle size and oxidisability.

(MD98016)

Effect of Antenatal Corticosteroids Therapy on Maternal Hypothalamic-Pituitary-Adrenal Suppression

✉ YUEN Pong Mo • MAK Wing Lai Tony (Chemical Pathology) • PANG Man Wah Selina • LEUNG Tse Ngong • LAM Wai Kei Christopher (Chemical Pathology) • CHANG Mang Z. Allan

□ 1 September 1998

❖ CUHK Departmental Funding

The aim of the study is to investigate the effects of repeated courses of antenatal corticosteroids on

maternal bone metabolism and lipid changes, including the LDL particle size and oxidisability. (MD98015)

✉ HAINES Christopher John • CHEUNG Lai Ping • LEUNG Tak Yeung • LOONG Edward Ping Leung

Please refer to previous issues of this publication for more details of the following ongoing research at the department:

Edition Title/Investigators

1996-97 Methylation of p16^{INK4} Promoter in Gynaecologic Tumours (MD96126)
✉ CHANG Mang Z. Allan • WONG Yick Fu

1997-98 The Effect of Sex Steroids on Neuronal Apoptosis (MD97156)

✉ HAINES Christopher John • CHUNG Kwok Hung Tony • CHANG Mang Z. Allan

1997-98 Characterization of the Up-Stream Regulators of Retinoblastoma Gene in Squamous Cell Carcinoma of Uterine Cervix (MD97052)
✉ CHANG Mang Z. Allan • CHEUNG Tak Hong • WONG Yick Fu

1997-98 Evidence of Oxidative Stress and Apoptosis after Perinatal Hypoxic-Ischaemic Insults on the Rat Brain (MD97053)

✉ HAINES Christopher John • CHANG Mang Z. Allan • FISCUS Ronald Ray (Physiology) • JAMES Anthony Edward (Laboratory Animal Services Centre) • STADLIN Alfreda (Anatomy) • WONG Yick Fu

1996-97 Prevalence and the Significance of DNA Replication Errors in Endometrial Cancer with a Geographic and Racial Comparison (MD96066)
✉ CHUNG Kwok Hung Tony • WONG Yick Fu

1997-98 Two Way Cell Trafficking: Elective LSCS (MD96209)

✉ LAU Tze Kin • FUNG Tak Yuen# • CHANG Mang Z. Allan • LO Yuk Ming Dennis (Chemical Pathology)

1996-97 Postnatal Depression in Hong Kong Chinese (MD96014)
✉ CHUNG Kwok Hung Tony • LEE Tak Shing Dominic (Psychiatry) • LEUNG Yip Shing Tony (Psychiatry) • NG Kee On* • WONG Chung Kwong (Psychiatry)

1997-98 Oxygen Free Radicals in Amniotic Fluid Sample in Second Trimester of Pregnancy (MD97119)

✉ LAU Tze Kin • FUNG Tak Yuen* • ROGERS Michael Scott

1997-98 Postnatal Depression - Epidemiology (MD96206)
✉ CHUNG Kwok Hung Tony • YIP Shing Kai Alexander

1996-97 Measurement of Maternal Plasma Corticotrophin Releasing Hormone (CRH) in the Prediction of Abnormal Pregnancy Outcome (MD96067)

✉ LEUNG Tse Ngong • CHUNG Kwok Hung Tony

1997-98 Intratype Variation of Human Papillomavirus Infection in Cervical Cancer: A Regional Perspective in China (MD97054)
✉ CHUNG Kwok Hung Tony • WONG Yick Fu • CHEUNG Tak Hong

1997-98 Placental Apoptosis in Normal Pregnancy and Pregnancies Complicated with Preterm Labour, Pre-Eclampsia, or Intrauterine Growth Retardation (MD97152)

✉ LEUNG Tse Ngong • TO Ka Fai (Anatomical & Cellular Pathology) • SAHOTA Daljit Singh • CHANG Mang Z. Allan

1997-98 Hypoxic-Ischemic Induction of Apoptosis in the Newborn Rat (MD96210)
✉ HAINES Christopher John • CHANG Mang Z. Allan • ROGERS Michael Scott

1997-98 Psychosexual Function after Childbirth in Hong Kong Chinese Women (MD97120)

✉ LEUNG Tse Ngong • LEE Tak Shing Dominic (Psychiatry) • TANG So Kum Catherine (Psychology) • CHUNG Kwok Hung Tony • YIP Shing Kai Alexander • LAU Tze Kin

1997-98 A Comparison of Two Stimulation Protocols for Poor Responders in IVF (MD97155)

- 1997-98 A Study of Feto-Maternal Haemorrhage after External Cephalic Version at Term Using PCR Method (MD96203)
 ✎ LO Wing Kit • LAU Tze Kin • LO Yuk Ming Dennis (Chemical Pathology) • ROGERS Michael Scott
- 1997-98 Comparative Study of GnRHa (Enantone vs Decapeptyl) in Treatment of Endometriosis (MD97154)
 ✎ LO Wing Kit • CHEUNG Tak Hong • LAU Woon Chung#
- 1997-98 A Study of Actocardiogram in Patients with External Cephalic Version at Term (MD97148)
 ✎ LO Wing Kit • LAU Tze Kin • SAHOTA Daljit Singh • LEUNG Tak Yeung • ROGERS Michael Scott
- 1996-97 Effects of MTAP Antisense Oligonucleotides on Chemosensitivity of Gynaecologic Cancer Cells *in vitro* (MD96069)
 ✎ ROGERS Michael Scott • WONG Yick Fu
- 1997-98 Lipid Peroxidation in Fetal Sheep: Relationship between Peroxides, Anti-Oxidants and Purine Metabolism (MD97160)
 ✎ ROGERS Michael Scott • MURRAY Henry* • WANG Chi Chiu • PANG Chi Pui Calvin (Ophthalmology and Visual Sciences)
- 1997-98 Lipid Peroxidation in Fetal Sheep: Identification of Unique Marker of Neurological Hypoxia-Reperfusion Injury (MD97163)
 ✎ ROGERS Michael Scott • MURRAY Henry* • WANG Chi Chiu
- 1997-98 Comparison of Cadherin, Catenin and Integrin Expression in Endometrium, and in Invasive and Non-Invasive Endometriosis (MD97161)
 ✎ ROGERS Michael Scott • YUEN Pong Mo • LIEW Choong Tsek (Anatomical & Cellular Pathology)
- 1997-98 A Study of Changes in Lipid Peroxidation, Purine Degradation and Antioxidant Status Following Variable Hypoxic Insults in the Acutely Exteriorised Fetal Sheep (MD97121)
- ✎ ROGERS Michael Scott • PANG Chi Pui Calvin (Ophthalmology and Visual Sciences) • WANG Chi Chiu • MURRAY Henry*
- 1997-98 A Prospective Randomised Controlled Study of Using Oral Misoprostol and Vaginal Prostaglandin E₂ for Induction of Labour in Patients with Unfavourable Cervix (MD97122)
 ✎ SAHOTA Daljit Singh • LO Wing Kit • LEUNG Tse Ngong • YUEN Pong Mo • CHUNG Kwok Hung Tony • CHANG Mang Z. Allan
- 1997-98 Fraxiparine in Pregnancy (MD96213)
 ✎ TAM Wing Hung • YUEN Pong Mo • LEUNG Tse Ngong • LI Chi Yin
- 1997-98 Intrauterine Adhesions Following Spontaneous Abortion (MD96212)
 ✎ TAM Wing Hung • CHEUNG Lai Ping • CHUNG Kwok Hung Tony • LAU Woon Chung#
- 1997-98 To Determine the Usefulness of 1,5-Anhydroglucitol in the Diagnosis and Monitoring of Gestational Diabetes and Impaired Glucose Tolerance (MD97123)
 ✎ TAM Wing Hung • ARUMANAYAGAM Manoharan (Chemical Pathology) • ROGERS Michael Scott • LAU Tze Kin • COCKRAM Clive Stewart (Medicine & Therapeutics) • LI Chi Yin
- 1996-97 Refinement of a Region of Loss of Heterozygosity at Chromosome 1 Short Arm in Cervical Cancer (MD96070)
 ✎ WONG Yick Fu • CHUNG Kwok Hung Tony
- 1997-98 Feasibility of a PCR-Based Technique of Whole Genome Amplification to Screen for Allelic Loss in Cervical Intraepithelial Neoplasia (MD97055)
 ✎ WONG Yick Fu • CHUNG Kwok Hung Tony • CHEUNG Tak Hong
- 1997-98 MRI of the Post-Term Cervix and Induction of Labour (MD96207)
 ✎ YIP Shing Kai Alexander • CHUNG Kwok Hung Tony • CHAN Yu Leung (Diagnostic Radiology & Organ Imaging)
- 1997-98 Urodynamic Studies on Patients with Post-Partum Urinary Retention (MD97056)

- ✉ YIP Shing Kai Alexander • FUNG Tak Yuen*
 1997-98 A Collaborative Prospective Randomised Study of Oral Misoprostol and Intramuscular Syntometrine in the Management of the Third Stage of Labour (MD97157)
 ✉ YUEN Pong Mo • NG Pui Shan • TANG L. C. H.* • CHEUNG Kai Bun

RESEARCH OUTPUTS AND PUBLICATIONS

- <P953658> **Leung, T.N.; Li C.Y. and Chang A.M.Z.** "Letters to the Editor: A Survey of Pregnancies That Ended in Haemoglobin Bart's Hydrops Foetalis and Cooley's Anaemia". *Hong Kong Medical Journal* vol.1 no.3, p.273. 1995.09.
- <P964275> **Chung, Tony; Peter Leung; Lai Ping Cheung; Christopher Haines and Allan M.Z. Chang.** "A Medical Approach to Management of Spontaneous Abortion Using Misoprostol Extending Misoprostol Treatment to a Maximum of 48 Hours can Further Improve Evacuation of Retained Products of Conception in Spontaneous Abortion". *Acta Obstet Gynecol Scand* vol.76, pp.248-251. Den, 1996.08.06.
- <P974927> **Brieger, Geoffrey M.; L.Y. Hin; Christopher J. Haines; Daljit Sahota and Allan M.Z. Chang.** "A Predictive Model for the Onset of Spontaneous Labor". *Acta Obstetrica et Gynecologica Scandinavica* vol.77, pp.122-123. Denmark, 1997.06.12.
- <P974928> **Brieger, G.M.; M. Mongelli; L.Y. Hin and T.K.H. Chung.** "The Epidemiology of Urinary Dysfunction in Chinese Women". *International Urogynecology Journal* vol.8, pp.191-195. London, 1997.
- <P975073> **Yuen, P.M. and Sahota D.S.** "Outpatient Audit Database Version 2.0". Hong Kong: Prince of Wales Hospital, The Chinese University of Hong Kong, 1997.10.14.
- <P975074> **Yuen, P.M.; D.S. Sahota and A.M.Z. Chang.** "Gynaecological Operative Endoscopy Audit Version 2.0". Hong Kong: Prince of Wales Hospital, The Chinese University of Hong Kong, 1997.08.
- <P981005> **Lo, Keith Wing Kit and Pong Mo Yuen.** "Hysteroscopic Metroplasty Under Laparoscopic Ultrasound Guidance". *Acta Obstetrica et Gynecologica Scandinavica* vol.77, pp.580-581. 1998.11.01.
- <P981297> **Chang, Allan Mang Zing and Wong Yick Fu.** "Future Trends in the Applications of Computer Technology in Obstetrics and Gynaecology". Paper presented in the Beijing/Hong Kong Medical Exchange 2nd Meeting-Obstetrics and Gynaecology, organized by Chinese Medical Association, the Hong Kong Medical Association, Hong Kong College of Obstetrician and Gynaecologists. Beijing, China, 1998.08.31.
- <P981303> **Rogers, M.S.; J.M. Mongelli; K.H. Tsang; C.C. Wang and K.P. Law.** "Lipid Peroxidation in Cord Blood at Birth: The Effect of Labour". *British Journal of Obstetrics and Gynaecology* vol.105, pp.739-744. UK, 1998.07.
- <P981935> **Lau, Tze K.; Din Wan; So F. Yim; John E. Sanderson and Christopher J. Haines.** "Prospective, Randomized, Controlled Study of the Effect of Hormone Replacement Therapy on Peripheral Blood Flow Velocity in Postmenopausal Women". *Fertility and Sterility* vol.70 no.2, pp.284-288. USA, 1998.08.
- <P982192> **Haines, C.J.; T.K. Lau; S.F. Yim and J.E. Sanderson.** "A Prospective Randomized Controlled Study of the Effect of Different Types of Hormone Replacement Therapy on Peripheral Blood

- Flow in Postmenopausal Women". *Proceedings of the 13th International Congress of Pharmacology* p.46 Abstracts no.225. Germany, 1998.07.26.
- <P982196> **Haines, C.J.** "HRT in East-Asian Women Compared to Western Women". Paper presented in the Philippine Society of Climacteric Medicine 1998 Annual Meeting. Manila, the Philippines, 1998.09.
- <P982197> **Haines, C.J.** "Cardiovascular Effects of HRT". Paper presented in the Philippine Society of Climacteric Medicine 1998 Annual Meeting. Manila, the Philippines, 1998.09.
- <P982198> **Haines, C.J.** "Prevention and Treatment of Postmenopausal Osteoporosis". *Proceedings of the Beijing/Hong Kong Medical Symposium* p.34. Beijing/Hong Kong, 1998.08.
- <P982505> **Yuen, Pong Mo; Tony W.L. Mak; So Fan Yim; Warwick D. Ngan Kee; Christopher W.K. Lam; Michael S. Rogers and Allan M.Z. Chang.** "Metabolic and Inflammatory Responses after Laparoscopic and Abdominal Hysterectomy". *American Journal of Obstetrics and Gynecology* vol.179 no.1, pp.1-5. USA, 1998.07.
- <P982537> **Fung, Tak Yuen; Tze Kin Lau; Man Ching Yam and Ka Fai To.** "Prenatal Diagnosis of Cardiac Osteoma: A Case Report". *Prenatal Diagnosis* vol.18, pp.1209-1211. UK, 1998.
- <P982582> **Haines, Christopher J.** "Cardiovascular Effects of Oestrogen". Paper presented in the Obstetrical and Gynaecological Society of Hong Kong Scientific Meeting on HRT. Hong Kong, 1998.10.13.
- <P982923> **Hin, L.Y.** "Prediction of Antepartum and Intrapartum Caesarean Sections". Paper presented in the 10th Anniversary Celebration Symposium Future Directions of Obstetrics and Gynaecology. Hong Kong, 1998.08.
- <P982930> **Chang, A.M.Z.; Sahota D.S. and Wong Y.F.** "Use and Common of Computer in Obstetrics and Gynecology". *China Journal of Obstetrics and Gynecology* vol.33 no.11, p.645. China, 1998.11.18.
- <P982931> **Sahota, D.S.; Yuen P.M.; Wong Y.F.; Chung T.K.H. and Chang A.M.Z.** "Computerized Transformation of the Cardiotocographic Paper Record to Its Digital Equivalent for Computerised Analysis". *Chinese Journal of Obstetrics and Gynecology* vol.33 no.11, pp.649-651. China, 1998.11.18.
- <P982949> **Chang, A.M.Z.** "Computer Analysis of Intrapartum CTG". Paper presented in the 6th World Symposium on Computers in Obstetrics & Gynecology, organized by Wayne State University, School of Medicine. Florida, USA, 1998.10.
- <P982955> **Yim, S.F.; T.K. Lau; D.S. Sahota; T.K.H. Chung; A.M.Z. Chang and C.J. Haines.** "Prospective Randomized Study of the Effect of 'Add-Back' Hormone Replacement on Vascular Function During Treatment with Gonadotropin-Releasing Hormone Agonists". *Circulation* vol.98, pp.1631-1635. 1998.12.
- <P982956> **Leung, T.N.; T.K. Lau; V.J. Roach; D. Wilson; M.S. Rogers and A.M.Z. Chang.** "Obstetric Outcome of Immigrants from Mainland China in Hong Kong". *International Journal of Gynecology & Obstetrics* vol.62, pp.223-227. 1998.05.08.
- <P983012> **Yip, Shing-Kai and Tak-Yeung Leung.** "Vesicouterine Fistula: An Updated Review". *International Urogynecology Journal* vol.9, pp.252-256. 1998.
- <P983065> **Cheung, T.H.; W.T. Yang; M.Y. Yu; W.K. Lo and S. Ho.** "New Development of Laparoscopic Ultrasound and Laparoscopic Pelvic Lymphadenectomy in the Management of Patients with Cervical Carcinoma". *Gynecologic Oncology* vol.71, pp.87-93. USA, 1998.10.

- <P983129> **Wong, W.; Lau T.K. and Wong T.W.** "Recommendations for Maternal Weight Gain in Chinese". *Abstracts of the Hong Kong College of Community Medicine 4th Annual Scientific Meeting "Public Health Challenges for the Next Millennium"* p.16. Hong Kong, 1998.11.22.
- <P983199> **Cheung, L.P.; W.H. Tam; Sandra Wong and Y.M. Ip.** "Grief Counselling Programme in the Department of Obstetrics and Gynaecology, Prince of Wales Hospital". *The Art of Medicine and the Science of Care* ed. by Cheung L.P. p.71. Hong Kong: Hong Kong Hospital Authority, 1998.05.
- <P983285> **Rogers, M.S. and Wang, C.C.** "Intrapartum Fetal Hypoxia-Reperfusion Injury and Oligohydramnios. A Comparison of Three Ultrasound Estimates of Amniotic Fluid Volume". Poster presented in the 8th World Congress on Ultrasound in Obstetrics and Gynecology *Ultrasound in Obstetrics & Gynaecology*. vol.12, supplement 1 p.161. 1998.11.
- <P983288> **Arulkumaran, S. and M.S. Rogers.** "Management of Labor: Normal Labor". *Obstetrics and Perinatal Care for Developing Countries* ed. by Arulkumaran S. pp.662-710. Pakistan: SAF Publications, 1998.
- <P983314> **Li, C.Y.** "Gestational Diabetes Mellitus". *A Manual for Management of Diabetes Mellitus* ed. by Juliana C.N. Chan, Vincent T.F. Yeung, C.C. Chow, Gary T.C. Ko and Clive S. Cockram. pp.120-125. Hong Kong: The Chinese University Press, 1998.
- <P983324> **Leung Tse N.; Jun Zhang; Tze K Lau; N. Magnus Hjelm and Y.M. Dennis Lo.** "Maternal Plasma Fetal DNA as a Marker for Preterm Labour". *The Lancet* vol.352, pp.1904-1905. UK, 1998.12.12.
- <P983405> **Chung, T.K.H.; L.P. Cheung; D.T.S. Lee and C.J. Haines.** "Spontaneous Abortion: A Randomized Controlled Trail of Misoprostol Versus Routine Uterine Curettage". *28th British Congress of Obstetrics & Gynaecology* ed. by John M Grant. vol.105 suppl.17, p.406. Harrogate, UK: Royal College of Obstetricians & Gynaecologists, 1998.
- <P983406> **Cheung, L.P.; M.W. Pang; C.W.K. Lam; B. Tomlinson; T.K.H. Chung and C.J. Haines.** "Acute Effects of a Surgical Menopause on Serum Concentrations of Lipoprotein(a)". *Climacteric* vol.1, pp.33-41. 1998.
- <P983855> **Fung, Tak Yuen; Lau Tze Kin; Li Chi Kong and Li Chi Keung.** "Brief Clinical Report: Homozygous Alpha-Thalassemia Associated with Hypospadias in Three Survivors". *American Journal of Medical Genetics* vol.82, pp.225-227. Amsterdam, The Netherlands, 1999.
- <P983856> **Fung, T.Y.; T.K. Lau; W.H. Tam and C.K. Li.** "Short Communication *In Utero* Exchange Transfusion in Homozygous Alpha-Thalassaemia: A Case Report" *Prenatal Diagnosis* vol.18, pp.838-841. 1998.
- <P983859> **Roach, V.J.; T.F. Cheung; T.K.H. Chung; N.M. Hjelm; M.A. Waring; E.P.L. Loong and C.J. Haines.** "Phytoestrogens: Dietary Intake and Excretion in Postmenopausal Chinese Women". *Climacteric* vol.1, pp.290-295. New York, USA, 1998.10.01.
- <P983876> **Tam, W.H.; Yuen P.M. and Sahota D.S.** "Database for Outpatient Hysteroscopy". *Computer Software Version 1.0* Hong Kong: The Chinese University of Hong Kong, 1998.
- <P984210> **Fung, T.Y. and T.K. Lau.** "Poor Perinatal Outcome Associated with Vasa Previa: Is it Preventable? A Report of Three Cases and Review of the Literature". *Ultrasound in Obstetrics Gynecology* vol.12, pp.430-433. Britain, 1998.12.
- <P984212> **Fung, Tak Y.; So Fan Yim and Hedy Yan Mei Fung.** "Intramymetrial Abscess Complicating Pregnancy: A Report of Two Cases" *The Journal of Reproductive Medicine* vol.43 no.11, pp.1002-1004. USA, 1998.11.
- <P984882> **Yuen, P.M. and D.S. Sahota.** "Outpatient Audit Database Version 3.0". Hong Kong: Prince of Wales Hospital, The Chinese University of Hong Kong, 1998.09.30.

- <P984883> **Yuen, P.M.** "Territory-Wide Audit in Obstetrics & Gynaecology Version 1.0". Hong Kong: Hong Kong College of Obstetricians and Gynaecologists 1998.09.
- <P984898> **Cheung, L.P.; M.W. Pang; C.W.K. Lam; B. Tomlinson; T.K.H. Chung and C.J. Haines.** "Acute Effects of a Surgical Menopause on Serum Concentrations of Lipoprotein (a)". *Hong Kong Medical Journal Supplement* vol.4, p.89. Hong Kong: Hong Kong Academy of Medicine, 1998.12.
- <P984899> **Cheung, T.H.; W.T. Yang; M.Y. Yu; W.K. Lo and S. Ho.** "Clinical Use of Laparoscopic Ultrasonography and Laparoscopic Pelvic Lymphadenectomy in Cervical Carcinoma". *Hong Kong Medical Journal Supplement* vol.4, p.85. Hong Kong: Hong Kong Academy of Medicine, 1998.12.
- <P984900> **Haines, C.J.** "Therapy in Prevention of Osteoporosis". *Hong Kong Medical Journal Supplement* vol.4, p.80. Hong Kong: Hong Kong Academy of Medicine, 1998.12.
- <P984901> **Chung, T.; T.S. Lee; L.P. Cheung and C.J. Haines.** "A Randomised, Controlled Trial Involving Women Who Have Aborted Spontaneously". *Hong Kong Medical Journal Supplement* vol.4, p.46. Hong Kong: Hong Kong Academy of Medicine, 1998.12.
- <P984902> **Lau, T.K.; D. Wan; S.F. Yim; J.E. Sanderson and C.J. Haines.** "A Prospective Randomized Controlled Study of the Effect of Hormone Replacement Therapy on Peripheral Blood Flow Velocity in Postmenopausal Women". *Hong Kong Medical Journal Supplement* vol.4, p.137. Hong Kong: Hong Kong Academy of Medicine, 1998.12.
- <P984903> **Yim, S.F.; T.K. Lau; D.S. Sahota; T.K.H. Chung; A.M.Z. Chang and C.J. Haines.** "A Prospective Randomized Study of the Effect of 'Add-Back' Hormone Replacement Therapy on Vascular Function During Treatment with Gonadotropin Releasing Hormone Agonists". *Hong Kong Medical Journal Supplement* vol.4, p.88. Hong Kong: Hong Kong Academy of Medicine, 1998.12.
- <P984907> **Leung, P.H.Y.; W.C. Lau; L.Y. Hin and P.M. Yuen.** "A Review of Obstetrical Risk Factors in Shoulder Dystocia Associated with Poor Fetal Outcome". *Hong Kong Medical Journal Supplement* vol.4, p.140. Hong Kong: Hong Kong Academy of Medicine, 1998.12.
- <P984908> **Leung, T.N.; T. Chung; L.Y. Hin; G. Madsen; A.M.Z. Chang; W. Walters and R. Smith.** "Mid-trimester Maternal Corticotrophin-releasing Hormone (CRH) and Alpha-fetoprotein (AFP) Levels in the Prediction of Spontaneous Preterm Delivery". *Hong Kong Medical Journal Supplement* vol.4, p.88. Hong Kong: Hong Kong Academy of Medicine, 1998.12.
- <P984909> **Tai, S.; W.H. Tam and M.S. Rogers.** "Prediction of Cervical Response to Prostaglandin E₂ Using Oncofetal Fibronectin". *Hong Kong Medical Journal Supplement* vol.4, p.46. Hong Kong: Hong Kong Academy of Medicine, 1998.12.
- <P984910> **Tam, W.H.** "An Investigation on Intrauterine Adhesion after Treatment for Spontaneous Abortion". *Hong Kong Medical Journal Supplement* vol.4, p.86. Hong Kong: Hong Kong Academy of Medicine, 1998.12.
- <P984912> **Lo, K.W.K. and P.M. Yuen.** "The Value of Outpatient Hysteroscopy: A Clinical Experience with 1600 Patients". *Hong Kong Medical Journal Supplement* vol.4, p.139. Hong Kong: Hong Kong Academy of Medicine, 1998.12.
- <P984942> **Leung, T.N.; J. Zhang; T. K. Lau; N. M. Hjelm and Y. M. D. Lo.** "Elevated Maternal Plasma Fetal DNA Levels in Pregnancies Complicated by True Preterm Labour". *Hong Kong Medical Journal Supplement* vol.4, p.50. Hong Kong: Hong Kong Academy of Medicine, 1998.12.
- <P984981> **Leung, T.Y. and S.K. Yip.** "Vesicouterine Fistula-a Case Report and Updated Review". *Hong Kong Medical Journal Supplement* vol.4, p.138. Hong Kong: Hong Kong Academy of Medicine, 1998.12.

- <P984984> **Yuen, P.M. and S.F. Yim.** "Comparison of Radially Expanding Cannulas with Conventional Cutting Tip Cannulas". *Abstracts of the 27th Annual Meeting of the American Association of Gynecologic Laparoscopists* vol.5 no.3, p.59. Georgia, USA, 1998.08.
- <P984985> **Lok, I.H. and P.M. Yuen.** "Audit of Laparoscopic Surgery for Ovarian Cysts". *Hong Kong Medical Journal Supplement* vol.4, p.48. Hong Kong: Hong Kong Academy of Medicine, 1998.12.
- <P984988> **Lau, W.C. and P.M. Yuen.** "Patients Acceptability to Outpatient Hysteroscopy". *Hong Kong Medical Journal Supplement* vol.4, p.139. Hong Kong: Hong Kong Academy of Medicine, 1998.12.
- <P984992> **Yip, S.K.** "A Study of the Effect of Duration of Labour on Post-Partum Post-Void Residual Bladder Volume". *Hong Kong Medical Journal Supplement* vol.4, p.49. Hong Kong: Hong Kong Academy of Medicine, 1998.12.
- <P984993> **Yip, S.K. and T.Y. Fung.** "Ultrasonographic Estimation of Post-Partum Post-Void Residual Bladder Volume-A Comparison Between Rans-Abdominal and Trans-Vaginal Ultrasonography". *Hong Kong Medical Journal Supplement* vol.4, p.137. Hong Kong: Hong Kong Academy of Medicine, 1998.12.
- <P984994> **Fung, T.Y. and T.K. Lau.** "Poor Perinatal Outcome Associated with Vasa Previa-is It Preventable? A Report of 3 Cases and Review of the Literature". *Hong Kong Medical Journal Supplement* vol.4, p.138. Hong Kong: Hong Kong Academy of Medicine, 1998.12.
- <P984996> **Chung, T.K.H.; T.S. Lee; S.K. Yip and H. Chiu.** "Introduction of a Postnatal Depression Screening Programme in Hong Kong". *Hong Kong Medical Journal Supplement* vol.4 no.4, p.87. Hong Kong: Hong Kong Academy of Medicine, 1998.12.
- <P990095> **Yip Shing-kai.** "Female Urinary Incontinence-Symptom Evaluation and Diagnosis". *Urogynaecology-A Multidisciplinary Approach* p.2. Hong Kong: Department of Obstetrics & Gynaecology, The University of Hong Kong, 1999.01.31.
- <P990491> **Chung, Tony.** "Outcome Indicators of Electronic Fetal Monitoring". Paper presented in the National Symposium on Fetal Monitoring, organized by Chinese Journal of Obstetrics & Gynecology Chinese Medical Association and The Chinese University of Hong Kong. Xi'an, China, 1999.05.19.
- <P990541> **Chang, A.M.Z. and Y.F. Wong.** "Computerised Assessment of the CTG and Risk Assessment Models". Paper presented in the National Symposium on Fetal Monitoring, organized by Chinese Journal of Obstetrics & Gynecology Chinese Medical Association and The Chinese University of Hong Kong. Xi'an, China, 1999.05.19.
- <P990542> **Tam, Wing Hung; Yip Shing Kai and Michael Rogers.** "Screening Test for Gestational Diabetes Mellitus". Paper presented in the National Symposium on Fetal Monitoring, organized by Chinese Journal of Obstetrics & Gynecology Chinese Medical Association and The Chinese University of Hong Kong. Xi'an, China, 1999.05.19.
- <P990543> **Haines, C.J.; R.R. Fiscus; A.E. James; Stadlin A; Wong Y.F.; Rogers M.S. and Chang A.M.Z.** "Evidence for Oxidative Stress and Apoptosis in the Brain Following Perinatal Hypoxicischaemic Insults". Paper presented in the National Symposium on Fetal Monitoring, organized by Chinese Journal of Obstetrics & Gynecology Chinese Medical Association and The Chinese University of Hong Kong. Xi'an, 1999.05.
- <P990544> **Lau, W.C.; W.K. Lo; W.H. Tam and P.M. Yuen.** "Paracervical Anaesthesia in Outpatient Hysteroscopy: A Randomised double-blind Placebo-Controlled Trial". *British Journal of Obstetrics and Gynaecology* vol.106, pp.356-359. British, 1999.04.
- <P990555> **Sahota, D.S. and Y.F. Wong.** "Computerised Analysis of Fetal Behaviour". Paper presented in the National Symposium of Fetal Monitoring, organized by China J Obstetrics & Gynecology Chinese Medical Association and The Chinese University of Hong Kong. Xi'an, China, 1999.05.

- <P990583> **Rogers, Michael S.; Mano Arumanayagam; Hedy Fung and T.K. Lau.** "Diurnal Variation in Excretion of N-Acetyl-β-D-Glucosaminidase During Pregnancy: Implications for the Prediction of Pre-Eclampsia". *Gynecologic and Obstetric Investigation* vol.47 no.1, pp.9-12. Switzerland, 1999.01.
- <P990585> **Lau, W.C.; R.Y.F. Ho; M.K. Tsang and P.M. Yuen.** "Patient's Acceptance of Outpatient Hysteroscopy". *Gynecologic and Obstetric Investigation* vol.47 no.3, pp.191-193. Switzerland, 1999.04.
- <P990586> **Tam, W.H.; K.S. Wong; P.M. Yuen; T.N. Leung and C.Y. Li.** "Low-Molecular-Weight Heparin and Thromboembolism in Pregnancy". *The Lancet* vol.353, p.932. UK, 1999.03.13.
- <P990834> **Wang, W.; C.C. Wang and M.S. Rogers.** "Free Oxygen Radical Activity During Labour". Paper presented in the National Symposium on Fetal Monitoring, Xi'an, China, 1999.05.
- <P991013> **Leung, T.Y.; P.S. Ng and T.Y. Fung.** "Ectopic Pregnancy Diagnosed by Laparoscopic Ultrasound Scan". *Ultrasound Obstetrics & Gynecology* vol.13 no.4, pp.281-282. UK, 1999.04.
- <P991066> **Vindla, Srinji; David James and Daljit Sahota.** "Comparison of Unstimulated and Stimulated Behaviour in Human Fetuses with Congenital Abnormalities". *Fetal Diagnosis and Therapy* vol.14, pp.156-165. UK, 1999.06.
- <P991157> **Wong, Y.F.; T.K.H. Chung; T.H. Cheung; T. Nobori; A.L. Yu; J. Yu; A. Batova; K.W.H. Lai and A.M.Z. Chang.** "Methylation of *p16^{INK4A}* in Primary Gynecologic Malignancy" *Cancer Letters* vol.136, pp.231-235. USA, 1999.06.
- <P991201> **Chung, Tony Kwok Hung; Dominic Tak Sing Lee; Lai Ping Cheung; Christopher John Haines and Allan Mang Zing Chang.** "Spontaneous Abortion: A Randomized, Controlled Trial Comparing Surgical Evacuation with Conservative Management using Misoprostol". *Fertility and Sterility* vol.71 no.6, pp.1054-1059. USA, 1999.06.
- <P991203> **Fung, Tak Y. and Chi Y. Li.** "Successful Pregnancy in a Woman with Secondary Biliary Cirrhosis with Portal Hypertension from Recurrent Pyogenic Cholangitis". *The Journal of Reproductive Medicine* vol.44 no.5, pp.475-477. USA, 1999.05.
- <P991205> **Rogers, M.S.; C.C. Wang; K.S. Khaw and W.K. Ngan.** "Effect of Inspired Oxygen Concentration on Maternal and Fetal Free Oxygen Radical Activity During Elective Cesarean Section". Poster and pages presented in the 5th International Symposium on Intrapartum Surveillance, organized by South Hospital, Karolinska Institute. 1999.06.15.
- <P991215> **Rogers, M.S. and Wang C.C.** "Intrapartum Ultrasonography: Its Role in Prevention of Hypoxia-reperfusion Injury". Paper presented in the 5th International Symposium on Intrapartum Surveillance, organized by South Hospital, Karolinska Institute. 1999.06.14.
- <P991216> **Fung, T.Y. and T.K.H. Chung.** "Abducens Nerve Palsy Complicating Pregnancy: A Case Report". *European Journal of Obstetrics & Gynecology and Reproductive Biology* vol.83 no.2, pp.223-224. Holland, 1999.04.
- <P991622> **Hin, L.Y.; T.K. Lau; M.S. Rogers and A.M.Z. Chang.** "Dichotomization of Continuous Measurements Using Generalized Additive Modelling-Application in Predicting Intrapartum Caesarean Delivery". *Statistics in Medicine* vol.18, pp.1101-1110. UK, 1999.06.
- <P991825> **Yip, S-K.** "Angiotensin-Converting Enzyme Inhibitors in Pregnancy: A New Aspect of Indication". *Acta Obstetrica et Gynecologica Scandinavica* vol.78, p.169. Denmark, 1999.06.
- <P991882> **梁子昂、劉子健、張軍、盧煜明、N.M. Hjelm.** <早產孕婦血漿中胎兒 DNA 的水平>. 論文發表於全國胎兒督學術研討會, 主辦機構為中華醫學會中華婦產科雜誌編委會, 香港中文大學婦產科學系. 中國西安, 1999.05.

- <P992297> **Sahota, D.S.; S. Smith; T.N. Leung; A.M.Z. Chang and P.N. Baker.** "The Comparison of Cell Proliferation Using a Self Organising Map Versus the Number of Proliferating Nuclei in Placental Tissue". *Scientific Program and Abstracts of the 46th Annual Meeting Supplement to: Journal of the Society for Gynecologic Investigation* vol.6 no.1(Supplement), Abstra. Atlanta, Georgia: Elsevier, 1999.03.
- <P992298> **Duncan, K.R.; D.S. Sahota; A.M.Z. Chang; P.A. Gowland; I.R. Johnson and P.N. Baker.** "Asymmetrical Fetal Organ Growth in Intrauterine Growth Restriction: First Demonstration Using MRI". *Scientific Program and Abstracts of the 46th Annual Meeting Supplement to: Journal of the Society for Gynecologic Investigation* vol.6 no.1(Supplement). Atlanta, Georgia: Elsevier, 1999.03.
- <P992299> **Leung, T.N.; S.C. Smith; K.F. To; D.S. Sahota and P.N. Baker.** "Increased Placental Apoptosis in Pregnancies Complicated by Preeclampsia". *Scientific Program and Abstracts of the 46th Annual Meeting Supplement to: Journal of the Society for Gynecologic Investigation* vol.6 no.1(Supplement), Abstracts no. 312. Atlanta, Georgia: Elsevier, 1999.03.10.
- <P992300> **Duncan, K.R.; D.S. Sahota; A.M.Z. Chang; P.A. Gowland; I.R. Johnson and P.N. Baker.** "Normal Fetal and Placental Growth Defined Using Echo-Planar MRI". *Scientific Program and Abstracts of the 46th Annual Meeting Supplement to: Journal of the Society for Gynecologic Investigation* vol.6 no.1(Supplement). Atlanta, Georgia: Elsevier, 1999.03.
- <P992303> **Yuen, P.M.; D.S. Sahota and A.M.Z. Chang.** "Operation Record Database Version 1.0". Hong Kong: Prince of Wales Hospital, The Chinese University of Hong Kong, 1999.06.
- <P992450> **Haines, Christopher J.; Anthony E. James; Nirmal S. Panesar; Therse J. Ngai; Daljit S. Sahota; Robert L. Jones and Allan M.Z. Chang.** "The Effect of Percutaneous Oestradiol on Atheroma Formation in Ovariectomized Cholesterol-Fed Rabbits". *Atherosclerosis* 2nd ed., vol.143, pp.369-375. Ireland, 1999.04.
- <P992661> **Rogers, Michael S.; Hedy Y.M. Fung and Cathy Y. Hung.** "Calcium and Low-Dose Aspirin Prophylaxis in Women at High Risk of Pregnancy-Induced Hypertension". *Hypertension in Pregnancy* vol.18 no.2, pp.165-172. New York, USA, 1999.06.

see also <P982898>, <P983061>, <P983088>, <P983539>, <P983874>, <P984911>, <P990032>, <P990052>, <P990774>, <P990802>, <P991117>, <P991626>, <P991639>, <P992051>, <P992161>, <P992449>

RESEARCH PROJECTS

Sequence Alterations in the PAX 6 Gene In-Patients with Aniridia or Anterior Segment Dysgenesis and Their Predictive Value for the Development of Glaucoma

✉ CHUA Kien Han John • LAM Shun Chiu Dennis • PANG Chi Pui Calvin • CHENG Chak Kwan Arthur# • FAN Shu Ping Dorothy

□ 1 April 1999

❖ CUHK Research Committee Funding

The PAX 6 gene, a highly conserved gene implicated in the control of neural crest cell migration, is expressed in discrete regions of the developing central nervous system. There are many PAX6 related ocular diseases. Heterozygous nonsense mutations in PAX 6 are responsible for both sporadic and familial aniridia. Missense mutations may give rise to anterior segment dysgenesis, Peter's, Axenfeld's and Rieger's anomalies. Glaucoma, a frequent complication leading to irreversible visual loss, occurs in 50% of these patients due to developmental anomalies of the angle structures that obstruct the trabecular meshwork. However, the development of glaucoma does not correlate with the degree of structural abnormalities and cannot be reliably predicted clinically. In view of the high risk of patients with aniridia or anterior segment dysgenesis to develop glaucoma and the lack of data on PAX 6 gene mutations for Chinese patients, we propose to study sequence alterations in the PAX6 gene in such patients. The coding exons and splice sites of PAX6 will be analysed by polymerase chain reaction, single strand conformation polymorphism, Southern hybridization, and DNA sequencing. Functions of mutant alleles will be studied by Western blotting after *in vitro* expression. Our results will throw light on the predictive value of PAX 6 mutations for the development of glaucoma in PAX 6 related ocular disorders. Detailed correlation of molecular and clinical data will provide important information on the genotype-phenotype relationship that may improve our understanding of the pathophysiology, and treatment of such conditions to prevent blindness.
(MD98105)

Epidemiology of School Myopia in Hong Kong: Prevalence, Incidence and Risk Factors analysis

✉ LAM Shun Chiu Dennis • CHEW Sek Jin* • LAU Tak Fai Joseph (Centre for Clin. Trials & Epidemiological Research) • FAN Shu Ping Dorothy • CHENG Hong Ming*

□ 1 August 1998

❖ Health Services Research Fund, Hospital Authority

Objectives: to determine the prevalence and incidence of myopia in primary school children in Hong Kong; and to identify risk factors of developing myopia in children with special reference to their visual tasks, family history of myopia and genetic basis.

Design: a school-based longitudinal study of school children in Hong Kong.

Setting: 19 primary schools each from one School district will be randomly selected.

Subjects: about 2100 children age 6 to 12 will be recruited in the study, 180 children and their family members will be randomly selected for genetic analysis

Interventions: None

Main outcome measures: refractive error, corneal curvature, axial ocular dimensions, visual tasks, family history of myopia and genetic basis of myopia

Results: the prevalence and incidence of myopia in school children at age 6 to 12 will be known. It is also likely that relevant useful information regarding the effect of visual tasks, family history and genetic basis on the development of myopia in school children can be found.

Conclusions: Myopia is the commonest ocular problem in Hong Kong. The epidemiology data can help in health care planning. Moreover, the etiological factors identified in this study would formulate the basis from which future preventive and therapeutic methods can be directed.

(MD98004)

Molecular Study of Poly-adenylribose-polymerase (PARP) in Apoptotic Cell Death of Retinal Neurons after Ischemia/Glaucomatous Insult

✉ LAM Tim Tak

□ 1 November 1998

❖ CUHK Research Committee Funding

With the support of a current RGC grant on "Neuronal Rescuers for Apoptotic Degeneration of Retinal Ganglion Cells", researchers were able to obtain evidence showing important roles of caspases and poly-adenosine-diphosphate (ADP)-ribose polymerase (PARP) in apoptotic loss of retinal neurons after ischemia/glaucomatous insult. To further confirm their findings in the "molecular level" as well as to establish the necessary methodology within their laboratory for future of "RGC" grant applications, they propose to examine the (1) enzyme activities, (2) enzyme protein levels and forms by Western blotting, (3) m-RNA levels by Northern blotting and by *in-situ* hybridization (or *in-situ* RT-PCR) of PARP. This study will provide further insight into the role of PARP in apoptotic loss of inner retinal neurons and into the development of therapeutic strategy. It will also provide them with the experience in molecular studies of apoptotic modulators for further development of our research program.

(MD98046)

Study on Sequence Aberrations in the Mitochondrial Genome in Leber Hereditary Optic Neuropathy (LHON) and determination of their Predictive Value for Clinical Course and Outcome

✉ PANG Chi Pui Calvin • LAM Shun Chiu Dennis
• LAM Ching Wan (Chemical Pathology) •
CHENG Chak Kwan Arthur# • FAN Shu Ping
Dorothy

□ 1 September 1998

❖ CUHK Research Committee Funding

Leber Hereditary Optic Neuropathy (LHON) is an acute or sub-acute bilateral loss of vision with variable age of onset, disease progression, extent of vision recovery and association with other disorders. Diagnosis based on clinical presentation is unreliable. LHON is caused by mutations in the mitochondrial genome (mtDNA) and so far 18 causative mutations have been identified. Some are primary mutations. Some interact with other mutations and environmental factors for clinical manifestations. Disease severity, ancillary disorders and clinical course are mutation related. The 3460, 11778 and 15257 mutations account for most LHON in North Europe while over 95% of Japanese LHON are caused by the 11778 mutation. However, family linkage studies have revealed the complex genetics of LHON which is not a clearly defined mitochondrial disorder. Recently we have shown maternal transmission of the 11778 mutation with complete penetrance in 2 Chinese LHON families. In view of the unclear etiology of LHON and the need to establish an unequivocal diagnostic test, we propose to investigate sequence aberrations in the mitochondrial genome in 50 Chinese families with LHON. We plan to identify all mtDNA mutations by polymerase chain reaction and direct DNA sequencing. We shall delineate the pattern of inheritance of these mutations in LHON families and to establish their predictive value for clinical course and outcome of LHON. Detail correlation of molecular and clinical data will provide important information on phenotype-genotype relationship. Results of our study will also lay a foundation for in-depth investigation of the molecular etiology of LHON.

(MD98036)

Effects of Genetic Variants of Lipoprotein Lipase on Coronary Heart Disease and Familial Combined Hyperlipidaemia

✉ PANG Chi Pui Calvin • TOMLINSON Brian
(Medicine & Therapeutics) • MAK Ying Tat
(Chemical Pathology)#

□ 1 January 1999

❖ Research Grants Council

Lipoprotein lipase (LPL) is a key enzyme in lipid metabolism in man. Deficiency in LPL activity may lead to hypertriglyceridaemia, which is a risk factor for coronary heart disease (CHD). The LPL gene is located on chromosome 8 comprising 10 exons and spanning 30kb. Over 60 LPL gene mutations leading to LPL deficiency have been found and are recognized as risk factors for hypertriglyceridaemia and CHD. During the last three years we have investigated 160 Chinese hypertriglyceridaemic subjects for base aberrations in the LPL gene. We have found 6 novel and 2 previously reported LPL mutations which co-segregated with the hypertriglyceridaemia in the families as well as 4 novel and 2 reported polymorphisms which may be associated with lipid disorders. We therefore propose an in-depth study on these mutations. We shall continue to search for novel LPL mutations and polymorphisms in more hyperlipidaemic subjects. The mutant alleles will be characterized by *in vitro* expression studies and the catalytic functions and stability of the mutant LPL proteins will be investigated. The structure-function relationship of the mutant LPL enzyme will be examined. We shall also investigate CHD patients for these LPL mutations and polymorphisms to ascertain those which may be a genetic risk factor for CHD, as some heterozygotes may initially have normal lipid profiles and require secondary factors, such as obesity, to modulate their phenotypic expressions. The LPL genotype will be correlated with lipid profiles in these subjects.

(CU98282)

Please refer to previous issues of this publication for more details of the following ongoing research at the department:

<u>Edition</u>	<u>Title/Investigators</u>
1997-98	Corneal Stem Cell and Amniotic Membrane (MD97162) ✉ LAM Shun Chiu Dennis • LAU Tze Kin (Obstetrics & Gynaecology)
1997-98	Molecular Marker for Familial Adenomatous Polyposis (FAP) and Predictive Value of Congenital Hypertrophy of the Retinal Pigment Epithelium (CHRPE) in FAP (MD97062) ✉ LAM Shun Chiu Dennis • PANG Chi Pui Calvin • TANG Leung Sang Nelson (Chemical Pathology) • LAU Wan Yee Joseph (Surgery)
1997-98	Diagnostic Kits for Early Detection of Genetic Eye Diseases for Blindness

	Prevention and Genetic Counselling (MD97092) ✍ LAM Shun Chiu Dennis • PANG Chi Pui Calvin	1996-97	Biochemical and Genetic Markers for Breast Cancer (MD96147) ✍ PANG Chi Pui Calvin • KING Wing Keung Walter (Surgery) • TANG Leung Sang Nelson (Chemical Pathology) • LAW Lap Kay (Chemical Pathology)
1995-96	Apoptosis of Photoreceptor Cells (CU95628) ✍ LAM Tim Tak • TSO Mark On Man#		
1996-97	Neuronal Rescuers for Apoptotic Degeneration of Retinal Ganglion Cells (CU96673) ✍ LAM Tim Tak • TSO Mark On Man#	1996-97	Molecular Genetics of Alzheimer Disease (MD96148) ✍ PANG Chi Pui Calvin • NG Ho Keung (Anatomical & Cellular Pathology) • WOO Jean (Medicine & Therapeutics)
1997-98	Ultrastructural Studies of Rod and Cone Degeneration in Transgenic Mouse and Pig Models of Retinitis Pigmentosa (MD97025) ✍ LAM Tim Tak • TSO Mark On Man# • WONG Fulton*	1997-98	Interactions between Smoking, Diabetes Mellitus and Genes Affecting Lipoprotein Coronary Heart Disease Risk Factors (MD97172) ✍ PANG Chi Pui Calvin • JANUS E.D.* • MASAREI J R L*
1997-98	Therapeutics for Apoptotic Loss of Retinal Neurons in Glaucoma (CU97639) ✍ LAM Tim Tak • TSO Mark On Man#	1997-98	Study of the Enzymic Properties of Lipoprotein Lipase (LPL) Variants and their Effects on Hyperlipidaemia (MD97113) ✍ PANG Chi Pui Calvin • TOMLINSON Brian (Medicine & Therapeutics)
1996-97	The Lipoprotein Lipase Gene in Hyperlipidaemia (MD96146) ✍ PANG Chi Pui Calvin • TOMLINSON Brian (Medicine & Therapeutics)		

RESEARCH OUTPUTS AND PUBLICATIONS

- <P964287> 徐格致、李維英、曹安民。〈病理性近視視網膜變性中感光細胞的凋亡〉。《中華眼底病雜誌》第 12 卷第 3 期, 頁 144-146。中國, 1996.09.
- <P964288> **Li, Suhui; Deepak P. Edward; K.S. Ratnakar; Madhukar Reddy and Mark O.M. Tso.** "Clinicohistopathological Findings of Gelatinous Droplike Corneal Dystrophy Among Asians". *Cornea* vol.15 no.4, pp.355-362. Philadelphia, USA, 1996.
- <P974932> **Lam, Dennis S.C.; Wah Cheuk and Jimmy S.M. Lai.** "Short-Term Results of Using Lamellar Corneo-Scleral Patch Graft for the Ahmed Glaucoma Valve Implant Surgery". *Eye Science* vol.13, pp.109-112. 1997.
- <P975030> **Saw, Seang Mei; Rajan Uma; Dennis S.C. Lam; Hong Meng Cheng and Sek Jin Chew.** "Myopia Epidemiologic Studies: The Concept of Family Risk Scores". *Hong Kong Journal of Ophthalmology* vol.1 no.2, pp.58-63. Hong Kong, 1997.07.
- <P975031> **Lam, Dennis S.C.; Elizabeth T.S. Houang; Dorothy S.P. Fan; Alfred T.S. Leung; Angus K.K. Wong; Augustine F.B. Cheng; Agnes T.Y. Tse; Wai-Kwan Wu; Chung-Chai Chi; Nai-Man Lam; Betty T.M. Poon; Yue-Kwong Au and Chi-Yuen Siu.** "Etiological Agents and Risk Factors of Microbial Keratitis in Hong Kong: A Preliminary Report on the First 50 Cases". *Hong Kong Journal of Ophthalmology* vol.1 no.3, pp.99-103. 1997.10.

- <P975064> **Lam, Dennis S.C. ed.** *Journal of Hong Kong Ophthalmology*. vol.1 no.3, p.43. Hong Kong: Pacific Press Group/College of Ophthalmologists of Hong Kong, 1997.10.
- <P981932> **Lam, Dennis S.C.; Ricky W.K. Law and Angus K.K. Wong.** "Phacoemulsification, Primary Posterior Capsulorhexis, and Capsular Intraocular Lens Implantation for Uveitic Cataract". *Journal of Cataract & Refractive Surgery* vol.24 no.8, pp.1111-1118. USA, 1998.08.
- <P982256> **Lam, Dennis S.C.; Angus K.K. Wong; Dorothy S.P. Fan; Sekjin Chew; Peter S.K. Kwok and Mark O.M. Tso.** "Intraoperative Mitomycin C to Prevent Recurrence of Pterygium after Excision: A 30-Month Follow-Up Study". *Ophthalmology* vol.105, pp.901-904. 1998.
- <P982557> **Pang, C.P.; Zhang Jun; Woo Jean; Chan Daniel; Law Lap K.; Tong Shirley F.; Kwok Timothy and Kay Richard.** "Rarity of Debrisoquine Hydroxylase Gene Polymorphism in Chinese Patients with Parkinson's Disease". *Movement Disorders* vol.13 no.3, pp.529-532. USA, 1998.
- <P982842> **Lam, Dennis S.C.; Angus K.K. Wong; Clement C.Y. Tham and Alfred T.S. Leung.** "The Use of Combined Intravenous Pulse Methylprednisolone and Oral Cyclosporin A in the Treatment of Corneal Graft Rejection: A Preliminary Study". *Eye* vol.12, pp.615-618. UK, 1998.08.
- <P982973> **Lam, Dennis S.C.; Jimmy S.M. Lai and Clement C.Y. Tham.** "Immediate Argon Laser Peripheral Iridoplasty as Treatment for Acute Attack of Primary Angle-Closure Glaucoma". *Ophthalmology* vol.105, pp.2231-2236. 1998.12.
- <P982983> **Chew, S.J.; H.M. Cheng; Dennis S.C. Lam; Arthur C.K. Cheng; Alfred T.S. Leung; John K.H. Chua; C.P. Yu; V. Balakrishnan and W.K. Chan.** "OphthWeb-Cost-Effective Telemedicine for Ophthalmology". *Hong Kong Medical Journal* vol.4 no.3, pp.300-304. Hong Kong, 1998.09.
- <P983281> **Lam, Dennis S.C.; Joan S.K. Ng; Dorothy S.P. Fan; John K.H. Chua; Alfred T.S. Leung and Clement C.Y. Tham.** "Short-Term Results of Scleral Intraocular Lens Fixation in Children". *Journal of Cataract Refract Surgery* vol.24, pp.1474-1479. USA, 1998.11.
- <P983493> **Lam, T.T. and M.O.M. Tso.** "Neuroprotective Effects of Naturally Occuring Carotenoids". *The 2nd International Symposium on the Challenges and Controversies of Ophthalmology & Visual Sciences in the Next Millennium* p.54(S67). Hong Kong: Department of Ophthalmology & Visual Sciences, CUHK, 1998.08.20.
- <P983494> **Lam, T.T. and Mark O.M. Tso.** "Apoptosis and Neuroprotection". *The 1st Global Chinese Ophthalmic Conference* p.87(OR\05\02). Beijing, China: Chinese Ophthalmological Society, 1998.08.24.
- <P983495> **Lam, Tim T. and Mark O.M. Tso.** "Neuroprotective Studies in Animal Models". *The 18th International Congress of Ophthalmology* p.45. The Netherlands: International Council of Ophthalmology, 1998.06.21.
- <P983496> **Lam, T.T. and M.O.M. Tso.** "Neuroprotective Effect of Lutein, A Naturally Occuring Carotenoid, on Retinal Ischemia-Reperfusion Injury in Rats". *Investigative Ophthalmology & Visual Science* vol.39 no.4, p.S993. Florida: The Association for Research in Vision and Ophthalmology, 1998.05.14.
- <P983497> **Kwong, M.K. and T.T. Lam.** "C-Fos Immunoreactivity(IR) in N-Methyl-D-Aspartate (NMDA) Induced Apoptosis". *Investigative Ophthalmology & Visual Science* vol.39 no.4, p.S827. Florida, USA: The Association for Research in Vision and Ophthalmology, 1998.05.13.
- <P983498> **Poon, H.K.; T.T. Lam and M.O.M. Tso.** "Up Regulation of P53 in Photoreceptor Cells after Retinal Photoc Injury in Rat". *Investigative Ophthalmology & Visual Science* vol.39 no.4, p.S1105. Florida, USA: The Association for Research in Vision and Ophthalmology, 1998.05.15.

- <P983499> **Chiang, Samuel K.S.; M.O.M. Tso and T.T. Lam.** "The Effect of Administration Time on the Efficacy of 3-Aminobenzamide, an Inhibitor of Poly-Adenosine Diphosphate (ADP)-Ribose Polymerase (PARP), on Ischemia-Reperfusion Injury in the Rat Retina". *Investigative Ophthalmology & Visual Science* vol.39 no.4, p.S993. Florida, USA: The Association for Research in Vision and Ophthalmology, 1998.05.14.
- <P983500> **Li, W.W.Y.; C. Zhang; D.T. Yew; M.O.M. Tso and T.T. Lam.** "Ultrastructural Changes in the Dystrophic Neurosensory Retina of the RCS Rat". *Investigative Ophthalmology & Visual Science* vol.39 no.4, p.S965. Florida, USA: The Association for Research in Vision and Ophthalmology, 1998.05.14.
- <P983638> **Lai, Jimmy S.M.; Dennis S.C. Lam and C.K. Yeung.** "Bilateral Iris Sector Heterochromia with or without Hirschsprung's Disease". *Eye* vol.12 part 6, pp.1024-1027. 1998.12.
- <P983766> **Chiu, K.; S.K.S. Chiang; M.O.M. Tso and T.T. Lam.** "Immunoreactivities of P53, BAX and BCL-2 in Rat Retinas after Ischemia-Reperfusion Injury". *Investigative Ophthalmology & Visual Sciences* vol.39 no.4, p.S992. Florida: The Association for Research in Vision and Ophthalmology, 1998.05.14.
- <P983898> **Poon, Agnes S.Y.; Joan S.K. Ng; Dennis S.C. Lam; Dorothy S.P. Fan and Alfred T.S. Leung.** "Epidemiology of Severe Childhood Eye Injuries that Required Hospitalisation". *Hong Kong Medical Journal* vol.4 no.4, pp.371-374. Hong Kong, 1998.12.
- <P983916> **Chan, Clement; Ivan Leung; Kwok-Wai Lam and Mark O.M. Tso.** "The Occurrence of Retinol and Carotenoids in Human Subretinal Fluid". *Current Eye Research* vol.17, pp.890-895. UK, 1998.
- <P983917> **Tso, Mark O.M.** "Melanocytomas of the Optic Nervehead and Uvea". *The Vision Care: The Proceedings of the Hoya Vision Care, The First Asia-Pacific International Conference* Mishima S. ed. by Mishima S. pp.156-159. Tokyo, Japan: Mishima S., Editor, 1998.
- <P983918> **Tso, Mark O.M.** "Expanding the Global Horizon of the Archives". *Archives of Ophthalmology* vol.116, pp.1362-1363. 1998.10.
- <P983919> **Tso, Mark O.M.; Gottfried O.H. Naumann and Shi-Yuan Zhang.** "Studies of Prevalence of Blindness in the Asia-Pacific Region and the Worldwide Initiative in Ophthalmic Education". *American Journal of Ophthalmology* vol.126 no.4, pp.582-585. USA, 1998.10.
- <P983995> **Kwok, Alvin K.H.; Dennis S.C. Lam; Lulu L. Cheng and Tarun Sharma.** "Outpatient Postoperative Fluid-Gas Exchange After Early Failed Vitrectomy Surgery". *Ophthalmology* vol.105, pp.1787-1788. 1998.
- <P983996> **Lam, Dennis S.C.; Louis T.C. Chow; S.R. Gandhi; May F.Y. Cheng; David H.Y. Chan and Mark O.M. Tso.** "Benign Fibrous Histiocytoma of the Choroid". *Eye* vol.12, pp.208-211. 1998.
- <P983997> **Kwok, Alvin K.H.; Dennis S.C. Lam and C.T. Liew.** "Bilateral Arteritic Central Retinal Artery Occlusion in a Chinese Patient". *Australian and New Zealand Journal of Ophthalmology* vol.26, pp.175-176. 1998.
- <P983998> **Lam, Dennis S.C.; Joan S.K. Ng; George P.M. Cheng and Randa T.H. Li.** "Autogenous Palmaris Longus Tendon as Frontalis Suspension Material for Ptosis Correction in Children". *Am J Ophthalmol* vol.126, pp.109-115. 1998.
- <P984000> **Pang, C.P. and Dennis S.C. Lam.** "Molecular Genetics of Eye Diseases: Where to go from Here?". *Hong Kong Journal of Ophthalmology* vol.2 no.1, pp.1-3. Hong Kong, 1998.10.
- <P984001> **Lam, Kwok-Wai; Tommy Y.M. Lin; Dennis S.C. Lam and Arthur C.K. Cheng.** "The Inverse Correlation of Ascorbic and Uric Acid Concentrations in the Aqueous Humor of Human Eyes with Cataract". *Hong Kong Journal of Ophthalmology* vol.2 no.1, pp.4-7. Hong Kong, 1998.10.

- <P984002> **Lam, Dennis S.C. ed.** *Journal of Hong Kong Ophthalmology*. vol.2 no.1, 47 pgs. Hong Kong: College of Ophthalmologists of Hong Kong, 1998.10.
- <P984018> **Lam, Tim T. and Mark O.M. Tso.** "Apoptosis and Neuroprotection". Paper presented in the 2nd International Symposium on *The Challenges and Controversies of Ophthalmology & Visual Sciences in the Next Millennium*, organized by the Department of Ophthalmology & Visual Sciences, the Chinese University of Hong Kong. Hong Kong, 1998.08.22.
- <P984020> **Lam, T.T.** "Neuroprotection in Retinal Ischemia". Paper presented in the Asian Pacific Symposium on Neural Regeneration, organized by Neuroscience Research Center/VA Office of Regeneration Research, USA. Hong Kong, 1998.12.04.
- <P984025> **Keung, J.W.Y.; N.L.S. Tang; Dennis S.C. Lam and C.P. Pang.** "Sequence Alterations in the Adenosin Polyposis Coli Gene in Familial Adenosin Polyposis Patients with Congenital Hypertrophy of Retinal Pigment Epithelium". *Abstracts of the Hong Kong Ophthalmological Symposium 1998* p.49. Hong Kong, 1998.
- <P984039> **Pang, Chi-Pui.** "Molecular Diagnostics for Cardiovascular Disease". *Clin Chem Lab Med* vol.36 no.8, pp.605-614. Germany, 1998.
- <P984040> **Cheng, Arthur C.K.; Calvin C.P. Pang; Alfred T.S. Leung; John K.H. Chua; Dorothy S.P. Fan and Dennis S.C. Lam.** "Smoke Gets in Your Eyes". *Abstracts of the Hong Kong Ophthalmological Symposium 1998* p.44. Hong Kong, 1998.
- <P984041> **Keung, Joyce W.Y.; Nelson L.S. Tang; Dorothy Fan; Dennis S.C. Lam and Calvin C.P. Pang.** "APC Gene Mutations in Patients with Familial Adenomatous Polyposis". *Abstracts of the 2nd Hong Kong Conference of Clinical Chemistry* p.15. Hong Kong, 1998.
- <P984042> **Wu, John T.; Dennis S.C. Lam; Dorothy S.P. Fan; Wynn W.M. Lam and Clement C.Y. Tham.** "Intravitreal Phaco Chopper Fragment Missed by Computed Tomography". *British Journal of Ophthalmology* vol.82 no.4, pp.460-461. UK, 1998.04.
- <P990228> **Lam, Dennis S.C.; John K.H. Chua; Alvin K.H. Kwok; Angus K.K. Wong; Alfred T.S. Leung; Dorothy S.P. Fan and Lingam Gopal.** "Combined Surgery for Severe Eye Trauma with Extensive Iridodialysis, Posterior Lens Dislocation, and Intractable Glaucoma". *Journal of Cataract Refract Surgery* vol.25, pp.285-288. 1999.02.
- <P990229> **Ng, Joan S.K.; Dennis S.C. Lam; C.K. Li; K.W. Chik; George P.M. Cheng; Patrick M.P. Yuen and Mark O.M. Tso.** "Ocular Complications of Pediatric Bone Marrow Transplantation". *Ophthalmology* vol.106 no.1, pp.160-164. 1999.01.
- <P990501> **Kwok, Alvin K.H.; Alfred T.S. Leung; Sze-Wing Lam and Dennis S.C. Lam.** "Ocular Hypertension after a Triple Procedure: Phacoemulsification Intraocular Lens Implantation, and Scleral Buckling Surgery". *Retina, the Journal of Retinal & Vitreous Diseases* vol.19 no.2, pp.174-175. 1999.
- <P990502> **Lam, Dennis S.C.; Barbara S.M. Tam; Wai-Man Chan and Alfred T.S. Leung.** "Retinal Breaks". *Ophthalmology* vol.106 no.5, pp.859-860. 1999.05.
- <P990871> **Tham, Clement C.Y.; Jimmy S.M. Lai and Dennis S.C. Lam** "Immediate Argon Laser Peripheral Iridoplasty for Acute Attack of PAGG (Addendum to Previous Report)". *Ophthalmology* vol.106 no.6, pp.1042-1043. 1999.
- <P990880> **Kwok, Alvin K.H.; Sharma T. and Dennis S.C. Lam** "Early Primary Pars Plana Vitrectomy in Severe Eye Injuries". *Retina, the Journal of Retinal and Vitreous Diseases* vol.19, pp.87-88. 1999.
- <P990884> **Lam, D.S.C.; Leung A.T.S.; Chua J.K.H.; Chan W.M. and Fan D.S.P.** "Intraoperative Mitomycin C for Pterygium Surgery". *Ophthalmology* vol.106 no.2, pp.208-209. 1999.

- <P990885> **Fan, Dorothy S.P.; Dennis S.C. Lam and Kenneth K.W. Li.** "Retinal Complications after Cataract Extraction in Patients with High Myopia". *Ophthalmology* vol.106, pp.688-691. 1999.
- <P990887> **Chua, W.H.; T.K. Chan; D.S.C. Lam and S.J. Chew.** "One-Year Results of Topical Atropine for the Control of Rapidly Progressive School Myopia". *IOVS* vol.40 no.4, p.S694. 1999.
- <P990901> **Lam, Tim T. and Samuel K.S. Chiang.** "Protective Effect of Cyclosporine on Retinal Ischemia/Reperfusion Injury". Paper presented in the Annual Meeting of the Association for Ocular Pharmacology and Therapeutics. Irvine, USA, 1999.01.28.
- <P990902> **Bhuyan, D.K.; P.G. Reddy; T.T. Lam and K.C. Bhuyan.** "Lipid Peroxidation and VEGF and EGF Receptors in the Retina and Lens of Rats with Retinal Dystrophy(RCS/rdy+) and Posterior Subcapsular Cataract(PSC)". *Investigative Ophthalmology & Visual Science* vol.40 no.4, p.S161. Bethesda, USA: The Association for Research in Vision and Ophthalmology, 1999.05.09.
- <P990903> **Zhang, C.; T.T. Lam and M.O.M. Tso.** "Retinal Excitotoxicity Following Subretinal Injection of Glutamate in Rabbit". *Investigative Ophthalmology & Visual Science* vol.40 no.4, p.S132. Bethesda, USA: The Association for Research in Vision and Ophthalmology, 1999.05.09.
- <P990904> **Chiu, K.; Mark O.M. Tso and T.T. Lam.** "Apoptotic Markers in Inner Retinal Cell Death after Ischemia-Reperfusion Injury". *Investigative Ophthalmology & Visual Science* vol.40 no.4, p.S479. Bethesda, USA: The Association for Research in Vision and Ophthalmology, 1999.05.09.
- <P990905> **Man, P.S.; W.W.Y. Li; F. Wong and T.T. Lam.** "Photoreceptor Degeneration in a Strain of Transgenic Mice Carrying the Porcine Rhodopsin Pro347ser Mutation". *Investigative Ophthalmology & Visual Science* vol.40 no.4, p.S717. Bethesda, USA: The Association for Research in Vision and Ophthalmology, 1999.05.09.
- <P990906> **Zhang, L.; C. Zhang; W.W.Y. Li; H.L. Wong; T.T. Lam and M.O.M. Tso.** "Iodoacetic Acid Affects Eye Growth in Chicks". *Investigative Ophthalmology & Visual Science* vol.40 no.4, p.S848. Bethesda, USA: The Association for Research in Vision and Ophthalmology, 1999.05.09.
- <P990907> **Lai, Jimmy S.M. and Dennis S.C. Lam.** "Trabeculectomy Using a Sutureless Scleral Tunnel Technique: A Preliminary Study". *Journal of Glaucoma* vol.8, pp.188-192. 1999.
- <P990908> **Lai, Jimmy S.M.; John K.H. Chua and Dennis S.C. Lam.** "Effect of Latanoprost on IOP". *J Cataract Refract Surg* vol.25, p.304. 1999.
- <P990909> **Lai, Jimmy S.M.; Clement C.Y. Tham and Dennis S.C. Lam.** "Limited Argon Laser Peripheral Iridoplasty as Immediate Treatment for an Acute Attack of Primary Angle Closure Glaucoma: A Preliminary Study". *Eye* vol.13, pp.26-30. 1999.
- <P990910> **Lam, D.S.C.; Kohler A.; Fan D.S.P.; Cheuk W.; Leung A.T.S. and Ng J.S.K.** "Endogenous Fungal Endophthalmitis Caused by *Paecilomyces Variotii*". *Eye* vol.13, pp.113-116. 1999.
- <P990911> **Lam, D.S.C.; Ng J.S.K.; Cheng G.P.M. and Chua J.K.H.** "Autogenous Palmaris Longus Tendon as Frontalis Suspension Material for Ptosis Correction in Children (Letters to the Editor)". *Am J Ophthalmol* vol.127, pp.488-489. 1999.
- <P990919> **Lam, D.S.C.; Cheng A.C.K. and Leung A.T.S.** "LASIK Complications". *Ophthalmology* vol.106, pp.1455-1457. 1999.
- <P990920> **Kwok, Alvin K.H.; Clement C.Y. Tham; Dennis S.C. Lam; M. Li and John C. Chen.** "Modified Sutureless Sclerotomies in Pars Plana Vitrectomy". *Am J Ophthalmol* vol.127 no.6, pp.731-733. 1999.
- <P990923> **Lam, Tim T.; Andrew S. Abler and Mark O.M. Tso.** "Apoptosis and Caspases after Ischemia-Reperfusion Injury in Rat Retina". *Investigative Ophthalmology & Visual Science* vol.40 no.5, pp.967-975. Bethesda, USA, 1999.04.

- <P990927> **Pang, C.P.; Lam C.W.; Baum L.; Fan D.S.P.; Keung J.W.Y. and Lam D.S.C.** "The 11778G A Mitochondrial Mutation in Chinese". *Clin Chem Lab Med* vol.37 special suppl., p.S143-M108. Germany, 1999.
- <P990928> **Pang, C.P.** "Genetic Investigation of Hyperlipidaemia in Cardiovascular Diseases in Hong Kong". *Abstracts of the Asian Pacific Society of Atherosclerosis and Vasular Diseases Workshop* p.33. Japan, 1999.
- <P990937> **Fan, Dorothy S.P.; Joan S.K. Ng; S.J. Chew and Dennis S.C. Lam.** "A Comparative Study on the Potency of Different Cycloplegic Agents Commonly Used in Children". *IOVS* vol.40, p.S696. 1999.
- <P990946> **Pang, C.P.; J.K.H. Chua; Y.F. Leung; K.W. Choy; D.S.P. Fan and D.S.C. Lam.** "Sequence Alterations in the TIGR gene in Chinese Patients with Primary Open Angle Glaucoma". *Invest Ophthalmol Vis Sci* vol.40 no.4, pp.S510-2692. USA, 1999.
- <P990949> **Leung, Y.F.; D.S.P. Fan; W.M. Chan; L. Baum; C.P. Pang and D.S.C. Lam.** "Apolipoprotein E Alleles in Age-Related Macular Degeneration". *Invest Ophthalmol Vis Sci* vol.40 no.4, p.S920-4849. USA, 1999.
- <P990950> **Lam, D.S.C.; W.M. Chan; D.S.P. Fan; J.W.Y. Keung; N.L.S. Tang and C.P. Pang.** "Mutations in the APC Gene in Chinese Patients with Familial Adenomatous Polyposis (FAP)". *Invest Ophthalmol Vis Sci* vol.40 no.4, p.S468-2468. USA, 1999.
- <P991109> **Li, L.; J. Wu; T.T. Lam and M. Tso.** "Multifocal ERG in the Early Stage of Age-Related Macular Degeneration". *Investigative Ophthalmology & Visual Sciences* vol.40 no.4, p.S315. Bethesda, MD, USA: The Association for Research in Ophthalmology and Vision, 1999.05.09.
- <P991110> **Baum, Larry; C.P. Pang; Dorothy S.P. Fan; Priscilla M.K. Poon; Y.F. Leung; John K.H. Chua and Dennis S.C. Lam.** "Run-On Mutation and Three Novel Nonsense Mutations Identified in the PAX6 Gene in Patients with Aniridia". *Human Mutations - Mutation and Polymorphism Report* vol.14 no.72, pp.272-273. 1999.
- <P991111> **Lam, Dennis S.C.; Chi K. Li; LuLu L. Cheng; Jennifer G.C. Teo; Ki W. Chik; Wing H. Kwan; Joan S.K. Ng; William W.L. Poon and Patrick M.P. Yuen.** "Primary Orbital Ewing's Sarcoma: Report of a Case and Review of the Literature". *Eye* vol.13, pp.38-42. 1999.
- <P991112> **Lam, Dennis S.C.; Alfred T.S. Leung; Joan T. Wu; Dorothy S.P. Fan; Arthur C.K. Cheng and Zheng Wang.** "Culture-Negative Ulcerative Keratitis after Laser *in situ* Keratomileusis" *J Cataract Refract Surg* vol.25, pp.1004-1008. 1999.
- <P991116> **Chiang, Samuel K.S.; J.M.K. Kwong and T.T. Lam.** "Poly-Adenosine Diphosphate (ADP)-Ribose Polymerase (PARP), in NMDA Induced Excitotoxicity and Ischemia-Reperfusion Injury in Rat Retinas". *Investigative Ophthalmology & Visual Science* vol.40 no.4, p.S482. Bethesda, MD, USA: The Association for Research in Ophthalmology and Vision, 1999.05.09.
- <P991543> **Pang, C.P.; Priscilla M.K. Poon; Qian L. Chen; Kelly Y.C. Lai; Chang H. Yin; Zheng Zhao; Nan Zhong; C.H. Lau; Stephen T.S. Lam; Chung K. Wong and W. Ted Brown.** "Trinucleotide CGG Repeat in the *FMR1* Gene in Chinese Mentally Retarded Patients" *American Journal of Medical Genetics* vol.84, pp.179-183. USA, 1999.

see also <P964286>, <P982715>, <P983173>, <P983177>, <P983741>, <P984015>, <P984021>, <P984024>, <P984026>, <P984027>, <P984028>, <P984029>, <P984030>, <P984031>, <P984032>, <P984033>, <P984037>, <P984038>, <P984136>, <P984757>, <P990890>, <P990926>, <P990929>, <P990930>, <P990931>, <P990933>, <P990934>, <P990947>, <P991108>, <P992006>

RESEARCH PROJECTS

The mechanisms of delayed healing and chronic disorders in tendons - Characterization and regulation of proteoglycans of patellar tendon in a rat model

✉ CHAN Kai Ming • LEE Kwong Man Simon (Lee Hysan Clinical Research Laboratories) • QIN Ling • CHAN Barbara P.

□ 1 September 1998

❖ Research Grants Council

Chronic Achilles and patellar tendon disorders are common in clinical practice. The true incidence is not known, due to an inconsistency on definitions. It is often described in terms of "overuse injury". In operated series however, up to 30% of the cases were not related to vigorous physical activity. Various extrinsic or intrinsic factors are suggested to be associated, but the literature fails to support. In literature, pathogenesis refer to "tendinitis or tendinosis", and to "degeneration" in chronic cases, despite the lack of histopathologic evidence of inflammation and sparse data on the healing potential of the disordered tendon. The most common management is the application of anti-inflammatory drugs although inflammation is absent from these tendons. In biopsies from operated human Achilles tendons, we have recently quantified an increased amount of proteoglycans, indicating a disturbed synthesis, which could be a key etiologic factor in the development of chronic tendon disorders. Further characterisation by capillary electrophoresis support these data. An animal model simulating the changes in proteoglycan profile of the human disordered tendons, is the key to open up the opportunities to therapeutic management. In our laboratory, we have established a rat patellar tendon injury model inducing an elevated proteoglycan stainability.

In this study, the profile of proteoglycan in a rat patellar tendon injury model will be characterized. Secondly, down-regulation of the proteoglycans will be studied by local injections of

- (1) IL-1, decreasing proteoglycan synthesis,
- (2) TGF- β 1, stimulating proteoglycan degradation, and
- (3) a combination of the optimal dosages of these two factors which may have a synergistic effect in decreasing proteoglycans.

The outcome of this study may

- (1) facilitate understanding of the etiology of chronic tendon disorders; and
- (2) potentiate further studies on the therapeutic management of chronic tendon disorders associated with proteoglycan matrix disturbances. (CU98255)

A Cellular and Molecular Study of the Capacity of Cytokines to Promote Tendon and Ligament Healing Following Injury

✉ CHAN Kai Ming • LEE Ka Ho Kenneth (Anatomy)

□ 1 September 1998

❖ Research Grants Council

Tendon and ligament injuries are extremely common conditions in orthopedic medicine. These connective tissues are notorious for their inability to heal properly following damage - resulting in considerable disability to patients. In this proposed study, we will focus on the capacity of various cytokines to enhance tendon healing, using the rat patellar tendon as an experimental model. Specifically, we will examine the influence of basic Fibroblast Growth Factor (bFGF), Hepatocyte Growth Factor (HGF), Platelet Derived Growth Factor (PDGF-BB) and Bone morphogenic protein (Bmp) -12 and -13 on the behaviour of tendon cells at the cellular and molecular levels. *In vivo*, we will incorporate these cytokines into biocompatible alginate gels and transplant them into experimentally created wounds in the rat patellar tendon. Prior to experimentation, the release profile of these cytokines from the alginate gel will be characterized using ELISA to quantify the amount of cytokines released to the surroundings. To determine the effectiveness of the cytokines on tendon healing, 3 parameters will be analyzed (1) tendonocyte proliferation, (2) tendonocyte migration and (3) collagen type I and type III gene expression by *in situ* hybridization and competitive RT-PCR. (CU98256)

Enhancement of Spinal Fusion with Osteoinductive Growth Factors Proactivated HA-TCP

✉ CHENG Chun Yiu Jack • GUO Xia • LAU L P* • QU S X* • ZHANG X D* • LI J*

□ 1 July 1998

❖ CUHK Departmental Funding

Autograft was the gold standard in posterior spinal fusion. The limited supply of autograft tissue and the potential of pathogen transfer with allografts have inspired surgeons and engineers to search for synthetic bone substitutes. Porous HA-TCP ceramics have been shown to have osteoconductive effect in filling bone defects. Bone morphogenetic proteins (BMPs) can enhance bone fracture healing and are capable of inducing ectopic bone formation from skeletal muscles. Aim of the present study was to determine the influence of osteoinductive bone morphogenetic protein proactivated HA-TCP on the outcome of posterior spinal fusion.

Posterolateral lumbar intertransverse process fusion was performed on two groups of 12 New Zealand white rabbits. Group I acted as control group with HA-TCP blocks as implant material. In group II, the experimental group, HA-TCP blocks were augmented with bovine-derived osteoinductive bone protein extract before the implantation. The fusion masses were evaluated 7 weeks postoperatively. The fusion masses were prepared into undecalcified sections and evaluated with microradiography, fluorescence microscopy and light microscopy. (MD98139)

Molecular Cloning and Expression of Bone Morphogenetic Protein 2 (BMP-2) in Bacterial System

- ✉ CHENG Chun Yiu Jack • WONG Lai Man • LI Ming • PU Q*
- 1 September 1998
- ❖ CUHK Departmental Funding

It was believed that bone morphogenetic proteins (BMPs) play an important role in bone repair and maintenance. Although, it was known that crude BMPs extract could be isolated from cow bone, the quality and quantity being one of the major problems. Therefore, the aim of the current study is to produce a pure and functional recombinant BMP-2 for further studies.

The cDNAs encoding full-length and functional domain (C-terminus) of the BMP-2 were cloned into expression plasmid respectively. The cloned plasmids were transformed into bacteria. The transformants were selected and induced to express BMP-2. The expression of BMP-2 was checked by SDS-PAGE. The expression was verified by Western blot. The expressed BMP-2 and functional domain were recovered by electro-elution method. The recovered BMP-2 and functional domain were dissolved in 6 M guanidine and refolded by dissolve-dilution-refolding strategy with refolding buffer. The refolded product was then tested for its activity in redirection of the differentiation pathway of myoblastic cell into osteoblast pathway. (MD98135)

Low Volumetric Bone Mineral Density in Adolescent Idiopathic Scoliosis

- ✉ CHENG Chun Yiu Jack • QIN Ling • GUO Xia • LEE Kwong Man Simon (Lee Hysan Clinical Research Laboratories) • NG S W Edmond*
- 1 September 1998
- ❖ CUHK Departmental Funding

Previous studies indicated total body low areal bone mineral density (aBMD) associated with AIS, which suggested a intrinsic disturbance in bone

development in AIS patients. However, DEXA measured ABMD can not differentiate disturbance of calcification (osteomalacia) from bone with loose structure (osteopenia). PQCT is a non-invasive technique which can measure volumetric BMD(vBMD). Aim of this study was to further investigate the vBMD in AIS patients.

This study investigated bone mineral status in 75 AIS patients of 12-14 years of age and compared with 94 age and maturity gender matched normal control subjects. ABMD of the lumbar spine (L2-L4) and bilateral proximal femur were measured using DEXA and vBMD of the non-dominant distal radius and bilateral distal tibiae were measured with pQCT. Severity of the spinal deformity (Cobb's angle) were also evaluated and correlated with BMDs. (MD98136)

Expression of Bone Morphogenetic Protein 4 (BMP-4) in Myoblasts Leading to Osteoblast Formation

- ✉ CHENG Chun Yiu Jack • WONG Lai Man • LI Ming • LEE Kwong Man Simon (Lee Hysan Clinical Research Laboratories)
- 1 September 1998
- ❖ CUHK Departmental Funding

Bone morphogenetic proteins (BMPs) are a subgroup of proteins belonging to the transforming growth factor- β (TGF- β) superfamily. They were initially identified by their ability to induce bone formation at ectopic sites, such as in some soft tissues. To understand if BMP-4 can re-direct the soft tissue cells to differentiate into osteoblastic cells, the myoblastic (C2C12) cells was transfected with plasmid harbouring BMP-4 encoding sequence. Then the morphologies and one of the osteoblastic marker of the transfectants were studied.

The full-length BMP-4 cDNA was engineered to add six histidine tag on the C-terminus and amplified by Polymerase Chain Reaction (PCR). The PCR product was introduced into the mammalian expression vector, pCI-neo vector, using restriction cloning technique. Both of the pCI-neo plasmid and the pCI-neo-BMP-4 plasmid were transfected into the C2C12 myoblasts separately, with the former as an empty vector control. A day after, the positive clones were selected by incubating with 800 μ g/ml antibiotic G-418 sulfate containing medium for a week. Different mono-clones were collected and continuously grown in selection medium forever. The expression of BMP-4 in cells was confirmed by immunocytochemistry using anti-BMP-4 monoclonal antibody and anti-histidine antibody. The detection of alkaline phosphatase (ALP) was used as a marker for osteoblast differentiation. (MD98137)

Evaluation of the Quality of Posterior Spinal Fusion with High Resolution 3D-QCT

- ✉ CHENG Chun Yiu Jack • GUO Xia • QIN Ling
• KOLLER B* • Ruegsegger P*
- 1 September 1998
- ❖ CUHK Departmental Funding

Non destructive *in vivo* evaluation of microarchitecture of bone and quantitative measurement of trabecular bone have become available through the recently introduced high resolution 3D-QCT. Aim of the present study was to test the capacity of this new technique in evaluating the quality of posterior spinal fusion in an animal model.

Unilateral intertransverse process fusion of L5-L6 level was performed on two New Zealand White rabbits. One used a corticocancellous allograft, the other used a porous hydroxyapatite-tricalciumphosphate ceramic as graft. Seven weeks post implantation, the lumbar spine was biopsied together with the grafts. The samples were stored in 70% ethanol. 3D-QCT images were obtained by using a special purpose low-dose 3-D QCT localized in University of Zurich, Switzerland. The specimen then were embedded in PMMA and prepared into 100 mm undecalcified section for microradiography. The results of 3D-QCT imaging were compared with the microradiography.
(MD98138)

Study of the Mechanical Properties of Bone-Hydroxyapatite Tricalcium Phosphate (HATCP) Interface by Nanoindentation

- ✉ CHENG Chun Yiu Jack • GUO Xia • LEUNG Y* • GUO L H*
- 1 September 1998
- ❖ CUHK Departmental Funding

Interface mechanical properties are important criteria for evaluating the integration ability of a biomaterial with host bone. The mechanical properties of the bone-implant interface measured by conventional mechanical tests are determined by both the composition as well as the structural organization. Though the morphological and chemical composition of bone-implant interface has been extensively studied, little is known about the intrinsic mechanical properties and its relationship with the interface composition. Nanoindentation has been used in combination with histomorphology in this study to evaluate the hardness and elastic properties of different composition in the bone-HATCP interface. Experimental lumbar posterolateral intertransverse process fusion using porous HA-TCP as bone graft substitute was conducted in a rabbit model. Seven weeks postoperatively, the specimen were biopsied,

embedded in PMMA and then prepared into undecalcified sections with a thickness of 50 m. The composition of the bone-HATCP interface was identified using light microscopy. The regional micromechanical properties of each composition, including hardness and Young's modulus, were measured by multiple nanoindentation tests.
(MD98142)

Outcome of Treatment of Congenital Pseudarthrosis of the Tibia - PWH Experience

- ✉ CHENG Chun Yiu Jack • NG B K W* • LAM C Y*
- 1 March 1999
- ❖ CUHK Departmental Funding

Congenital pseudarthrosis of the tibia is one of the most difficult problems in orthopaedics. Treatment is often associated with many complications. The aim is to study the outcome of a series congenital pseudarthrosis of the tibia treated in Prince of Wales Hospital. This is a retrospective review of all cases of congenital pseudarthrosis of the tibia followed up in a special clinic. The records and X-ray films were retrieved. The course of treatment and the occurrence of complications during treatment were reviewed. Patients were assessed for ranges of motion of the knee and ankle, muscle power, shortening and deformity of the involved leg at the final follow-up.
(MD98134)

Correlation Study on Calcaneal Ultrasound with Bone Mineral Density, Structural and Strength Indices of Weight Bearing Distal Tibia and Non-Weight-Bearing Distal Radius

- ✉ CHENG Chun Yiu Jack • HUNG Wing Yin Vivian • QIN Ling • AU Sze Ki • CHOY Wing Yee • LEUNG Ping Chung
- 1 March 1999
- ❖ CUHK Departmental Funding

Quantitative ultrasound (QUS) and peripheral quantitative computed tomography (pQCT) are used to measure bone structure properties. The aim of this study was to investigate the correlation between weight bearing and non-weight bearing skeletons using above two measurement modalities. QUS(Paris, Norland) and pQCT (Densiscan 2000, Scanco) were used to study the correlation between the broadband ultrasound attenuation (BUA) and velocity of sound (VOS) of heel by QUS and the volumetric bone mineral density (BMD) and content (BMC), bone cross-sectional area (CSA) and bone strength indices(BSIs) of both cortical and trabecular components of the non-dominant distal extremities (radius and tibia) by pQCT.

(MD98140)

Surgical Treatment of Recurrent Patella Dislocation in Children – PWH Experience

✉ CHENG Chun Yiu Jack • NG B K W* • MOK WY*

□ 1 March 1999

❖ CUHK Departmental Funding

Recurrent dislocation of patella is an uncommon problem in paediatric patients. This study reviewed the outcome of those paediatric patients that was treated with proximal soft tissue realignment procedure.

It is a retrospective review. 11 patients and 13 knees were operated from 1985-1996, all were treated with radical lateral release and quadriceps realignment. Post-operation, they were allow to weight bear and were immobilized in long leg cast for 6 weeks and then protected with hinge brace for 6 weeks more with gradual increase in flexion of the knee. 2 incisions were used in 7 knees, single midline incision was used in 6 knees. Mean age at operation was 8.4 (5-14) years old. Mean length of follow up was 4.9 (0.8-12) years. They were assessed clinically and with X-rays.

(MD98141)

The Use of Allograft in Posterior Spinal Fusion in Scoliosis Surgery

✉ CHENG Chun Yiu Jack • NG B K W* • FU LLK*

□ 1 March 1999

❖ CUHK Departmental Funding

Autologous iliac crest bone graft is the "Gold standard" for the posterior spinal fusion (PSF) with both successful fusion rates and low immunological rejection. However, autograft has the disadvantage of limitation in quantity. In long fusion and neuromuscular scoliosis, allografts has been used to supplement the bone graft which is necessary to enhance the spinal fusion. This study aims at studying the efficacy, safety and the effect on PSF in paediatric and adolescent scoliosis patients using deep frozen allogeneic femoral head allografts. From 1996 to 1999, deep frozen allogeneic femoral heads were used in 39 cases of PSF on patients with scoliosis. There are 29 girls and 10 boys with average age of 12.8 in girls and 13.7 in boys. The allogeneic femoral heads were collected from elderly patients with fracture neck of femur and undergoing hemiarthroplasty. Investigations including HIV, HbsAg, HCV, and CMV were conducted to exclude virus infection. Bacterial culture has been done to exclude contamination of aerobic and anaerobic bacteria as well as fungi. The femoral heads were

stored in -85°C freezer. The femoral heads were prepared into bone chips directly during the operation. The average postoperative follow-up period was 15.4 months.

(MD98143)

Production of Recombinant Bone Morphogenetic Protein 4 for the Treatment of Bone Defects and Disorders

✉ CHENG Chun Yiu Jack • LI Ming

□ 20 March 1999

❖ UK/Hong Kong Joint Research Scheme, the British Council

Previous studies have proved that the BMP family may be a group of very important regulators in bone repair, bone formation and normal maintenance of bone tissue. The most practical application of BMPs is in clinical medicine, as a therapeutic drug for the treatment of patients with big bone defects, incurable bone fracture and bone disorders where the bone implantation becomes necessary. Repairing large bone defects created by massive trauma, excisions of tumours and congenital malformations, reconstructing bone stocks worn off by an implanted endo-prosthesis and healing delayed fractures are all formidable challenges to orthopaedic surgeons today. Therefore, our present research proposed study is aimed to produce recombinant BMP-4, which is so engineered with a 6-histidine tag fused with the C-terminus of BMP-4 that purification of the engineered BMP-4 can be achieved in just one step using affinity chromatography. Then the purified BMP-4 will be refolded into functional BMP-4 *in vitro*. The function of this purified and refolded recombinant BMP-4 will be tested both in cell culture and *in vivo* system by promoting the ectopic bone formation. The functional recombinant BMP-4 will be used in the study of improved treatment of scoliosis by spinal fusion enhanced by Morphogenetic proteins.

(MD98091)

Osteopenia in Adolescent Idiopathic Scoliosis - A Study of the Genetic Markers, Bone Mineral Turnover and Their Correlation with the Severity and Progression of the Spinal Deformity

✉ CHENG Chun Yiu Jack • LEE Kwong Man Simon (Lee Hysan Clinical Research Laboratories) • QIN Ling • GUO Xia

□ 1 April 1999

❖ CUHK Research Committee Funding

Scoliosis is a serious deformity that can affect any parts of the spine. Among the various causes the most common group is Adolescent Idiopathic Scoliosis (AIS) which typically affects the growing

adolescent girls of the age of 10 to 16. Scoliosis deformity when not treated or improperly treated may deteriorate progressively leading to significant cosmetic problems and functional disabilities. In severe cases increased mortality rate can result from the associated early onset cardiopulmonary failure.

The prevalence of AIS in Hong Kong was found to be 3.08% of all adolescents. Our recent study has revealed an alarmingly high percentage (58.7%) of AIS patients had significantly lower bone mineral density (BMD). Such lower BMD status was not secondary to the scoliosis deformity itself nor related to the bracing treatment. To look into more detail scientifically on the possible link of osteopenia to AIS we proposed this study. The main *Objectives* are to identify the potential factors that can contribute to the lower BMD in AIS patients, and to investigate whether osteopenia is one of the risk factors affecting the progression of scoliosis deformity.

The outcome of the proposed study will shed light on the etiology and pathogenetic mechanisms of osteopenia in AIS. This may lead to a novel approach in the monitoring, prognostication and treatment of AIS. In those AIS with osteopenia, one may be able to alter the natural history of the scoliotic deformity by non-invasive interventional treatment to improve the bone mineral status.

(MD98106)

Efficiency and Tissue Safety of Transdermal Iontophoresis Treatment of Scar Tissues

✉ HUNG Leung Kim • LIN Ge (Pharmacology) • ZHANG Yuanting (Electronic Engineering)

□ 1 April 1999

❖ CUHK Research Committee Funding

Wound healing is invariably associated with scar formation, which is particularly severe after burn injuries, forming hypertrophic scars or keloids, and is a particular problem affecting the local population (Lewis & Sun 1990). Besides causing disfigurement, scar tissues also deform joints, limit movements or growth, and cause constant discomfort. The consequences are particularly serious for children, who ironically are more prone to scar formation after burn injuries. Conventional treatments include pressure garment treatment, topical steroid or steroid injection into the scars, surgical excision or more recently laser therapy. These modalities of treatment are prolonged, uncomfortable or inconvenient, even painful. Transdermal iontophoresis provides a means to deliver medication to scar directly. Medication penetration into the scar is promoted with a low energy electric field. It offers an attractive alternative to scar treatment: it could be applied to large surface area, it could be applied repeatedly and programmed, it is "needle-less", does not produce pain, and reduces systemic complications of treatment. Preliminary studies indicated this technique could be adapted for

treatment of scars (Zhao 1996). The aim of this study is to determine the pharmacokinetics of transdermal iontophoresis of interferon gamma, which has a down-regulatory effect on cell proliferation and collagen production in fibroblasts from hypertrophic scars, for scar treatment.

(MD98107)

A Biomechanical and Histomorphometrical Study for the Improvement of Implant Fixation on Osteoporotic Bone with Ovariectomised Female Goats

✉ LEUNG Kwok Sui • CHOW Hung Kay, Daniel* • JAMES Anthony Edward (Laboratory Animal Services Centre) • QIN Ling • CHAN Chun Wai (Lee Hysan Clinical Research Laboratories)

□ 1 October 1998

❖ Research Grants Council

Osteoporosis is common among old people. Osteoporotic bone fractures easily. They are associated with serious complications of which include death, loss of mobility and independence. Early operative treatment offers the best chance for these patients in minimizing these complications, in the control of pain and prevents deformity. Fixing osteoporotic fractures remains a major challenge to orthopaedic surgeons. Implants are commonly used in treating these fractures. Most of the available implants are designed to fix normal bone in young adults. The use of these implants to fix osteoporotic fractures often results in "bone failures" where the poor bone quality makes stable fixation difficult during the operation and leads to loosening of the implants and hence loss of fixation in the postoperative periods. This proposed project is designed to study the currently available implants with ovariectomised female goats as the osteoporotic animal model. The interaction between the implant and the bone will be studied by histomorphometry and biomechanical testing after implantation into the osteoporotic bone. Different augmentation techniques, which include the use of the most recently available biomaterial, will also be studied. The results of the study will then be used to improve the design of implants and surgical technique. It will ultimately lead to improvement of fixation for osteoporotic fractures and hence decrease the complications in treating these common and yet difficult fractures.

(CU98270)

Intervention Prevention for Fast Bone Losers Identified with a High Accurate Imaging Peripheral Quantitative Computed Tomography

✉ LEUNG Ping Chung • QIN Ling • LAU Edith Ming Chu (Community and Family Medicine) • DAMBACHER M. A.*

□ 1 May 1999

❖ CUHK Research Committee Funding

The prevalence of osteoporosis in Hong Kong, as evidenced by osteoporotic fractures is high. Osteoporotic fractures have become the 5th most commonly occurring medical condition in Hong Kong. It is estimated that with appropriate prevention more than 50% of these fractures could be avoided.

The present consensus is that one of the high-risk group of osteoporosis are people who suffer from an annual trabecular bone loss of over 3% - as defined as fast bone losers. Since bone loss is at its peak in the first decade after menopause, early effective diagnosis and monitoring of treatment effects for the fast bone losers are important. A newly developed high precise pQCT has been proven to be able to full fill this task. This pQCT can measure the trabecular and cortical BMD separately in a true volumetric density compared with other available conventional 2-dimensional densitometers, such as DEXA. This pQCT enables us to detect 1% BMD changes within one year and identify fast bone losers within 6 months. The high resolution imaging feature of the pQCT also enables us to perform qualitative evaluation of both cortical and trabecular bone structure and degree of bone mineralisation. We propose to use this new advanced technique to conduct a non-invasive direct BMD measurement in pre- and post-menopausal women aged of 50-58. After identifying the fast bone losers, the subjects will participate in intervention prevention programs including participating in programmed Tai Chi, a popular physical exercise among the elderly in our oriental culture and in a proven anti-resorptive medication. Beyond measuring BMD, muscle strength and balance capacity will be monitored. The outcome of this study may provide new scientific data for promoting physical exercise programs for prevention of osteoporosis and fall-induced osteoporotic fracture so as improving the quality of life of the elderly.

(MD98108)

A Study of the Effect of Cartilaginous Tissues on Endothelial Cells in Angiogenesis of Tumour

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□ 1 February 1999

❖ CUHK Research Committee Funding

Osteosarcoma is a primary malignant tumor of bone. Clinically, it is observed that osteosarcoma hardly invades through cartilaginous tissues, including growth plate and articular cartilage. Our previous

study showed that chondrocytes did not exert any direct cytotoxic or cytostatic effect on osteosarcoma cells. On the other hand, some biochemical factors are characterized such as anti-angiogenesis factor from rabbit costal chondrocyte conditioned medium cartilaginous tissue and chondrocyte-derived inhibitor from bovine articular cartilage exhibiting inhibition of collagenase activity. Thus it is postulated that cartilaginous tissue may retard tumor spread by inhibiting the sprouting of new blood vessels that provide nutrients for tumor growth.

This project is designed to investigate the effect of growth plate and articular chondrocytes on the proliferation, viability and migration of endothelial cells *in vitro*. Hamster cheek pouch model will also be established to study the anti-angiogenesis effect *in vivo*. Results from this study will help us to clarify the inhibition mechanism of cartilaginous tissues on angiogenesis during tumour growth. It is hoped that the isolation of the inhibitor(s) can be applied in clinical practice to control tumor spread.

(MD98109)

Lower Limb Amputation in Local Chinese Population

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□ 1 July 1998

❖ CUHK Departmental Funding

Lower limb amputation is a common sequelae of diabetes mellitus and peripheral vascular disease. With advances in vascular reconstruction, improved awareness of energy consumption, better prosthetic designs and use of more distal amputation levels, satisfactory to good surgical and rehabilitation outcome has been reported. The local Chinese population suffers from a different propensity towards peripheral vascular disease and diabetes as compared to other races. Our social and psychological behavior are certainly also different. Whether the same results apply to us remains to be verified.

This research project is a prospective review of 242 consecutive lower limb amputations performed in 1994 to 1996. Information pertaining to demographic data, contributing medical conditions, vascular assessment and intervention, indications for surgery, level of amputation, surgical and rehabilitation outcome parameters, contra-lateral limb outcome and mortality are collected. Telephone interviews are made to assess their two year outcome in terms of contralateral limb risk, activities of daily living score, ambulatory status and survival.

Data collected will be compiled and analyzed. The epidemiology of Chinese lower limb amputation will be compared and contrasted with previous literature reports on other ethnicity. Prognostic factors affecting short and long term outcomes will be identified.

(MD98012)

Please refer to previous issues of this publication for more details of the following ongoing research at the department:

<u>Edition</u>	<u>Title/Investigators</u>
1996-97	An <i>in vivo</i> Study of the Change in Type I and Type III Collagen in Healing Rat Patellar Tendon - the Effect of Growth Factors (MD96072) ✍ CHAN Kai Ming • CHAN Pui Barbara • LEE Ka Ho Kenneth (Anatomy)
1996-97	Health Benefits of Programmed Physical Exercise on the Prevention of Bone Loss in Postmenopausal Women (MD96021) ✍ CHAN Kai Ming • QIN Ling • LAU Edith Ming Chu (Community and Family Medicine) • WOO Jean (Medicine & Therapeutics) • LEE Shiu Hung
1997-98	A Cellular and Molecular Study of the Potential Application of Growth Factors in the Enhancement of Tendon Healing Following Sports Injury (MD97057) ✍ CHAN Kai Ming • LEE Ka Ho Kenneth (Anatomy) • CHAN Pui Barbara • FU Sai Chuen Bruma (Lee Hysan Clinical Research Laboratories) • QIN Ling • CHENG S. H.*
1996-97	Dual Energy X-Ray absorptiometry in Lower Limb Callotasis Lengthening (MD95259) ✍ CHENG Chun Yiu Jack • MAFFULLI N.* • NG B.*
1997-98	Coraline Hydroxyapatite as a Bone Substitute to Enhance Spinal Fusion (MD96200) ✍ CHENG Chun Yiu Jack • YURIANTO Henry# • GUO Xia • LEE Kwong Man Simon (Lee Hysan Clinical Research Laboratories)
1997-98	The Clinical Patterns of Presentation of Congenital Muscular Torticollis in Infants and Children (MD97138) ✍ CHENG Chun Yiu Jack • CHEN Tracy M. K.* • TANG S. P.* • LEE Sandra*
1997-98	Abormal Somatosensory Evoked Potential in Adolescent Idiopathic
1997-98	Scoliosis - Where is the Site of the Abnormality? (MD97140) ✍ CHENG Chun Yiu Jack • GUO Xia • SHER Hing Leung Andy (Lee Hysan Clinical Research Laboratories)#
1997-98	Correlation between Curve Severity, Somatosensory Evoked Potential and MRI in Adolescent Idiopathic Scoliosis (MD97141) ✍ CHENG Chun Yiu Jack • GUO Xia • SHER Hing Leung Andy (Lee Hysan Clinical Research Laboratories)# • CHAN Yu Leung (Diagnostic Radiology & Organ Imaging) • METREWELI Constantine (Diagnostic Radiology & Organ Imaging)
1997-98	Application of Bone Morphogenetic Protein-Hydroxyapatite Composite Implant in Un-Decorticated Posterior Spinal Fusion (CU97669) ✍ CHENG Chun Yiu Jack • GUO Xia • LEE Kwong Man Simon (Lee Hysan Clinical Research Laboratories) • MAK Arthur K.F.* • ROSIER Randy N.*
1997-98	Injectable Hydroxyapatite-Tricalciumphosphate for Orthopaedic Use (MD97058) ✍ CHENG Chun Yiu Jack • GUO Xia
1997-98	Outcome of Surgical Treatment of Congenital Muscular Torticollis (MD97182) ✍ CHENG Chun Yiu Jack • TANG S. P.* • NG B K W*
1997-98	Correction of Lower Limb Deformity in Children – An Early Outcome Analysis (MD97183) ✍ CHENG Chun Yiu Jack • NG B K W* • FUNG P W*
1997-98	Scoliosis and Abnormal Postural Balance (MD97137) ✍ CHENG Chun Yiu Jack • CHOW Hung Kay, Daniel*
1996-97	Analysis of <i>Tlx</i> Gene Functions in Oncogenesis and Development Using Gain-of-function and Loss-of-function Mutants in Transgenic Mice (CU96662) ✍ CHENG Shuk Han
1995-96	Effect of the Muscular Regeneration Regulated Factors on Myoblasts Transfer

- Therapy in Duchenne Muscular Dystrophy (MD95228)
 ✎ GUO Xia • CHENG Chun Yiu Jack • CHAN Kai Ming
- 1993-94 Distraction Lengthening of Upper Limb Anomalies in Children (MD94145)
 ✎ HUNG Leung Kim • CHENG Chun Yiu Jack
- 1994-95 Outcome Study of Nerve Injuries and the Role of Sensory Re-education (MD95094)
 ✎ HUNG Leung Kim • CHENG Shu Kei Andy*
- 1996-97 Iontophoresis with Pulsed-short Circuit-pulsed Direct Current (PSPDC) Device: Tissue Effects and Drug Permeation (MD96073)
 ✎ HUNG Leung Kim • ZHANG Yuanting (Electronic Engineering) • ZHAO Li • WU Hay Tong
- 1996-97 Neurotrophic Factors Derived from Schwann Cells in a "Pre-degenerated" Peripheral Nerve Environment - Temporal Changes and Clinical applications (MD96075)
 ✎ HUNG Leung Kim • LAO J • KWONG Wing Hang (Anatomy) • WU Hay Tong
- 1996-97 Interleukin-1 and Interleukin-8 Expression in Burn Wound - *in vivo* and *in vitro* Studies (MD96074)
 ✎ HUNG Leung Kim • WU Hay Tong • CHENG Chi Wa# • FUNG Ming Chiu (Biology)
- 1997-98 Quantitative Studies of P-Glycoprotein and Related Biochemical Markers to Monitor Drug Resistance in Malignant Musculoskeletal Tumours (MD97061)
 ✎ KUMTA Shekhar Madhukar • LEUNG Kwok Sui • WONG Wan Nar Margaret • LEE Kwong Man Simon (Lee Hysan Clinical Research Laboratories) • FUNG Kwok Pui (Biochemistry)
- 1993-94 The Establishment of a Coordinated Research Programme on Cytogenetics and Molecular Biology of Musculoskeletal Tissue (MD93115)
 ✎ LEUNG Kwok Sui • LEUNG Ping Chung • CHAN Kai Ming • HUNG Leung Kim • LEE Yuen Lun • YIP Man Hing Kevin# • LEE Kwong Man Simon (Lee Hysan Clinical Research Laboratories)
- 1995-96 The Biochemical Events of the Regeneration of Osseous Tissue Under Tension and Compression Stress - A Study with Callotaxis Model in Goat (CU95655)
 ✎ LEUNG Kwok Sui • LEE Kwong Man Simon (Lee Hysan Clinical Research Laboratories) • FUNG Kwok Pui (Biochemistry)
- 1996-97 The Effect of Reaming Technique on Intramedullary Pressure and Marrow Fat Embolisation - A Quantitative Study (CU96631)
 ✎ LEUNG Kwok Sui • CHEN Zhen Yu (Biochemistry) • WONG Wan Nar Margaret • FUNG Kwok Pui (Biochemistry)
- 1996-97 Identification of TGF-beta Induced Genes During Chondrogenesis in Rabbit Periosteal-derived Cells Using mRNA Differential Display Analysis (MD96076)
 ✎ LEUNG Kwok Sui • CHAN Chun Wai (Lee Hysan Clinical Research Laboratories)
- 1996-97 A Study to Correlate the Hand Function with the Physical and Physiological Structure of the Cervical Spine in Cervical Myelopathy (MD96169)
 ✎ LEUNG Kwok Sui • LEE Yuen Lun
- 1997-98 Study of Relationship between Femoral Neck Bone Density and Failure of Screw Fixation in Femoral Neck Fractures (MD96197)
 ✎ LEUNG Kwok Sui • WONG Chin Hong* • LI Kit Yee*
- 1997-98 Prospective Study and Review of Intramedullary Nailing in Fractures of Humerus (MD96198)
 ✎ LEUNG Kwok Sui • WONG Chin Hong* • LI Kit Yee*
- 1997-98 Fixation of Radial Neck Fracture Using Forked Plate (MD96199)
 ✎ LEUNG Kwok Sui • WONG Chin Hong* • LI Kit Yee*
- 1997-98 A Study of Physcal Retardation to Osteosarcoma Growth: Its Significance in Clinical and Basic Studies in Tumour Spread (MD97059)
 ✎ LEUNG Kwok Sui • FUNG Kwok Pui (Biochemistry) • LEE Kwong Man Simon (Lee Hysan Clinical Research Laboratories) • CHAN

- Chun Wai (Lee Hysan Clinical Research Laboratories) • CHEUNG Wing Hoi
- 1997-98 A Comparative Study of the Mechanical and Histological Properties of Bone to Bone Union and Bone to Tendon Healing (MD97015)
 ✎ LEUNG Kwok Sui • QIN Ling • CHONG Wai Sing Wilson
- 1995-96 Biosynthesis and Implantation of Artificial Growth Plate Using Population of Proliferative Chondrocytes Cultured on a Collagen Matrix (CU95656)
 ✎ LEUNG Ping Chung • LEE Kwong Man Simon (Lee Hysan Clinical Research Laboratories) • OOI Vincent E. C. (Biology) • FUNG Kwok Pui (Biochemistry)
- 1996-97 Cartilage Elastography (MD96128)
 ✎ QIN Ling • MAK F. T. Arthur* • MOW Van C.*
- 1997-98 Identification of Fast Bone Losers Measured with the Most Accurate pQCT (Densiscan 2000) and Specific Bone Turnover Biochemical Markers (MD97060)
 ✎ QIN Ling • CHENG Shuk Han • CHAN Kai Ming • NEFF M.*
- 1996-97 Epidemiological Study on Foot and Ankle Disorders (MD96170)
 ✎ WONG Wan Nar Margaret • LEUNG Ping Chung
- 1997-98 A Comparative Study of the Mechanical and Histological Properties of Bone to Bone Union and Bone to Tendon Healing - A Goat Model (CU97668)
 ✎ WONG Wan Nar Margaret • QIN Ling • LEUNG Kwok Sui • ZHANG Yuanting (Electronic Engineering)

RESEARCH OUTPUTS AND PUBLICATIONS

- <P975021> **Li, M.; J.X. Li; R. Xie and K.M. Chan.** "Effect of muscle mitogens on healing and regeneration of muscle injury (in Chinese)". Paper presented in the 5th Conference of Sports Science. pp.107-108. Beijing, 1997.11.
- <P975062> **Guo, X.; J.C.Y. Cheng; S.X. Qu; X.D. Zhang and Lee K.M.** "Bony Fusion Between HA and Cortical Bone". *Abstracts of the Third Far-Eastern Symposium on Biomedical Materials* p.128. Chengdu, China, 1997.07.
- <P975063> **Guo, X.; J.C.Y. Cheng; S.X. Qu and X.D. Zhang.** "Bony Fusion Between Graft and Cortical Bone: Feasibility of Posterior Spinal Without Decortication". *Abstracts of the 2nd Scientific Congress of Chinese Speaking Orthopaedic Society* pp.320-321. Shanghai, China, 1997.03.
- <P980764> **Kumta, Shekhar M.; Ping-Chung Leung; Louis Chow; Siu-Hang To; Simon Lee and Shuk-Han Cheng.** "Assessment of Chemosensitivity in Patients with Osteogenic Sarcoma Using the Doxorubicin Binding Assay". *Journal of Surgical Oncology* vol.68 no.3, pp.169-172. 1998.07.
- <P980996> **Lui, Pauline P.Y.; S.K. Kong; K.P. Fung and C.Y. Lee.** "The Rise of Nuclear and Cytosolic Ca²⁺ Can be Uncoupled in HeLa Cells". *European Journal of Physiology* vol.436, pp.371-376. Berlin, Germany, 1998.08.
- <P981012> 王春陽、胡聲宇、秦嶺。〈不同月份胎兒關節軟骨的光鏡觀察研究〉。《第四屆全國運動解剖學學術研討會論文匯編》頁 89-90。中國北京：北京體育大學出版社，1998.07.28。
- <P981013> 秦嶺。〈現代骨質的多學科綜合研究〉。《第四屆全國運動解剖學學術研討會論文匯編》頁 3-5。中國北京：北京體育大學出版社，1998.07.28。
- <P981014> 王松、胡聲宇、秦嶺。〈不同月齡胎兒半月板的電鏡觀察研究〉。《第四屆全國運動解剖學學術研討會論文匯編》頁 91。中國北京：北京體育大學出版社，1998.07.28。

- <P981648> **Chan, K.M.; Yip K.M.H. and Chen E.H.** "The Use of Endobutton in Anterior Cruciate Ligament Reconstruction". *Hong Kong Journal of Orthopaedic Surgery* vol.2 no.1, pp.63-68. Hong Kong, 1998.
- <P981939> **Lui, P.P.Y.; C.Y. Lee; D. Tsang and S.K. Kong.** " Ca^{2+} is Released from the Nuclear Tubular Structure into Nucleoplasm in C6 Glioma Cells after Stimulation with Phorbol Ester". *FEBS Letters* vol.432, pp.82-87. UK, 1998.07.31.
- <P982369> **Wan, K.C.; W.H.P. Lewis; P.C. Leung; P. Chien and L.K. Hung.** "A Longitudinal Study of C3, C3d and Factor Ba in Burn Patients in Hong Kong Chinese". *Burns* pp.241-244. Hong Kong: Elsevier Science Ltd, 1998.
- <P982532> **Leung, P.C.** "Application of Microsurgical Technique in Orthopaedic Surgery". *Orthopaedics Update (India)* vol.8 no.2, pp.91-94. India, 1998.08.
- <P982641> **Kumta, S.M.; P.C. Leung; J.F. Griffith; D.J. Roebuck; L.T.C. Chow and C.K. Li.** "A Technique for Enhancing Union of Allograft to Host Bone". *The Journal of Bone and Joint Surgery* vol.80-B, pp.994-998. British, 1998.05.13.
- <P982643> **Cheng A.S.K.; Hung L.K.; Wong J.M.W.; Chan J.; Lau H.; Wong S.K.M. and Leung P.C.** "Early Tactile Stimulation Improves Recovery of Functional Sensibility in Digital Nerve Injury". *Abstracts of the 1st Pan Pacific Conference on Rehabilitation Musculoskeletal Disorders* p.010, Guangzhou, China: The Hong Kong Polytechnic University and The Sun Yat-sen University of Medical Sciences, 1998.08.29.
- <P982710> **Wong, M.W.N. and M.K. Tse.** "Eccrine Poroma - A Differential Diagnosis in Chronic Foot Ulcers". *Proceedings of the Hong Kong Orthopaedic Association 18th Annual Meeting* p.138. Hong Kong, 1998.11.
- <P982711> **Chong, W.S.; C.W. Chan; L. Qin; M.W.N. Wong; K.O. Tai and K.S. Leung.** "Autologous Cartilage as Interposition Material for Accelerating Bone-Tendon Junction Healing - A Pilot Histological Study in Rabbits". *Proceedings of the Hong Kong Orthopaedic Association 18th Annual Meeting* vol.18, pp.126-127. Hong Kong, 1998.11.
- <P982712> **Wong, M.W.N. and C. Fok.** "Lower Limb Amputation in Local Chinese Population". *Proceedings of the Hong Kong Orthopaedic Association 18th Annual Meeting* p.96. Hong Kong, 1998.11.
- <P982720> **Cheng, J.C.Y.; N. Tang and J. Griffith.** "The Outcome of Early Operative Fixation of Femoral Neck Fractures in Children". Paper presented in the 12th Congress of Western Pacific Orthopaedic Association'98. Fukuoka, Japan, 1998.11.
- <P982750> **Cheng, J.C.Y.; X. Guo; Y.L. Chan and C. Metreweli.** "Correlation Between Curve Severity, Sep and Mri in Adolescent Idiopathic Scoliosis". *Abstracts of the 12th Congress of Western Pacific Orthopaedic Association '98* p.7. Fukuoka, Japan, 1998.11.
- <P982751> **Cheng, J.C.Y. and Lam T.P.** "Supracondylar Fracture of Humerus in Children - An Epidemiological Study of 403 Cases". *Hong Kong Journal of Orthopaedic Surgery* vol.2 no.2, pp.120-126. Hong Kong, 1998.10.
- <P982759> **Kumta, Shekhar M. and P.C. Leung.** "The Technique and Indications for the Use of Biodegradable Implants in Fractures of the Hand". *Techniques in Orthopaedics* vol.13 no.2, pp.160-163. Philadelphia, USA, 1998.
- <P982878> **Leung, P.C.** "Health and Medical Services" ed. by Larry Chuen-ho Chow and Yiu-kwan Fan., *The Other Hong Kong Report 1998* pp.275-286. Hong Kong: The Chinese University Press, 1998.
- <P982884> **Kumta, Shekhar M.; James F. Griffith; Louis T.C. Chow and Ping Chung Leung.** "Primary Juxtacortical Chondrosarcoma Dedifferentiating After 20 Years". *Skeletal Radiology* vol.27, pp.569-573. 1998.10.

- <P982889> **Hung, T.S.L.; W.S. Chan and J.C.Y. Cheng.** "Legg-Calve-Perthes' Disease - A Fifteen-Year Experience in Prince of Wales Hospital". *Abstracts of the 18th Annual Congress of the Hong Kong Orthopaedic Association - Minimally Invasive Orthopaedic Surgery* pp.56-57. Hong Kong, 1998.11.
- <P982890> **Yurianto, H.; J.C.Y. Cheng; X. Guo and K.M. Lee.** "Coraline Hydroxyapatite as a Bone Substitute to Enhance Spinal Fusion". *Abstracts of the 18th Annual Congress of the Hong Kong Orthopaedic Association - Minimally Invasive Orthopaedic Surgery* p.78. Hong Kong, 1998.11.
- <P982891> **Koo, B.; X. Guo and J.C.Y. Cheng.** "Quantitative EMG on Paraspinalis Muscles in Adolescent Idiopathic Scoliosis". *Abstracts of the 18th Annual Congress of the Hong Kong Orthopaedic Association - Minimally Invasive Orthopaedic Surgery* pp.77-78. Hong Kong, 1998.11.
- <P982892> **Guo, X.; H.L. Sher and J.C.Y. Cheng.** "Abnormal Somatosensory Evoked Potential in Adolescent Idiopathic Scoliosis-Where is the Site of the Abnormality?". *Abstracts of the 18th Annual Congress of the Hong Kong Orthopaedic Association - Minimally Invasive Orthopaedic Surgery* p.55. Hon, 1998.11.
- <P982893> **Li, M.; K.M. Chan and J.C.Y. Cheng.** "The Enhanced Incorporation of Myoblasts into Existing Intact Muscle Fibers by Muscle Extract of Rats". *Abstracts of the 18th Annual Congress of the Hong Kong Orthopaedic Association - Minimally Invasive Orthopaedic Surgery* pp.58-59. Hong Kong, 1998.11.
- <P983047> **Maffulli, N.; J.C.Y. Cheng; A. Sher and T.P. Lam.** "Temporal Behaviour of Bone Mineral Content and Bone Mineral Density at the Callotasis Site after Completion of Lengthening: A Longitudinal Study". *Proceedings of the British Orthopaedic Association Irish Orthopaedic Association, Combined Meeting wit British Orthopaedic Association*, 1998.10.
- <P983050> **Leung, P.C.** "Comparing Traditional Chinese Medicine with Western Medicine". *Proceedings of the ISP International Symposium (Hong Kong 1998) - Healthcare Redefined New Frontiers for the 21st Century* pp.12-13. Hong Kong, 1998.10.
- <P983069> **Ho, P.C.; S.W. Law; C.Y. Lam and L.K. Hung.** "Arthroscopic Bone Grafting in Carpal Bone - A New Technique and Concept". *The 18th Annual Congress of the Hong Kong Orthopaedic Association* p.56. Hong Kong, 1998.11.
- <P983079> **Hung, L.K. and K.K. Lui.** "Transdermal Iontophoresis for Musculoskeletal Disorders - The Efficiency of a new Mode of Electric Field (Pulsed Short-Circuit Pulsed Direct Current)". *The 18th Annual Congress of the Hong Kong Orthopaedic Association* p.133. Hong Kong, 1998.11.
- <P983080> **Lao, J.; L.K. Hung; W.H. Kwong and H.T. Wu.** "Electrophysiology Studies of Motor Nerve Function Recovery after Using 'Pre-Degenerated' Nerve Graft - Correlation with Histology". *The 18th Annual Congress of the Hong Kong Orthopaedic Association* p.130. Hong Kong, 1998.11.
- <P983137> **Lao, J.; L.K. Hung and H.S. Wong.** "A Modification and Purified Method to Culture the Schwann Cells by Adult SD Rat". *The 18th Annual Congress of the Hong Kong Orthopaedic Association* p.130. Hong Kong, 1998.11.
- <P983138> **Zhao, L.; L.K. Hung and Y.T. Zhang.** "The Changing in Electrical Properties of Normal and Scarred Skin". *The 18th Annual Congress of the Hong Kong Orthopaedic Association* p.104. Hong Kong, 1998.11.14.
- <P983139> **Lam, C.Y.; C.W.C. Tong; P.C. Ho and L.K. Hung.** "Wrist Arthroscopy - The Use in Chronic Wrist Pain". *The 18th Annual Congress of the Hong Kong Orthopaedic Association* pp.89-90. Hong Kong, 1998.11.
- <P983140> **Ho, P.C.; K.O. Kwok and L.K. Hung.** "Wrist Arthroscopy Under Portal Site Local Anaesthesia (PSLA) without Tourniquet - Is It Really Feasible?". *The 18th Annual Congress of the Hong Kong Orthopaedic Association* pp.88-89. Hong Kong, 1998.11.

- <P983141> **Hung, L.K. and H.T. Wu.** "Association of Reduced Bone Mineral Density with Fractures of the Distal Radius - A Risk Factor for Osteoporosis". *The 18th Annual Congress of the Hong Kong Orthopaedic Association* p.88. Hong Kong, 1998.11.
- <P983142> **Ho, P.C. and L.K. Hung.** "Arthroscopic Repair of Triangular Fibrocartilage Complex (TFCC) Tears". *The 18th Annual Congress of the Hong Kong Orthopaedic Association* p.87. Hong Kong, 1998.11.
- <P983144> **Qin, L.; C.W. Cheng; L.K. Hung; Arthur T.F. Mak and K.M. Chan.** "Methodology to Study Fluid Movement in Interstitial Compartment of Cortical Bone". *The 18th Annual Congress of the Hong Kong Orthopaedic Association* p.135. Hong Kong, 1998.11.
- <P983145> **Law, S.W.; P.C. Ho and L.K. Hung.** "Transcaphoid Perilunate Dislocation - Open or Percutaneous Fixation?". *The 18th Annual Congress of the Hong Kong Orthopaedic Association* p.131. Hong Kong, 1998.11.
- <P983146> **Cheng, C.W.; H.T. Wu and L.K. Hung.** "Identification of Differentially Expressed Genes in the Hypertrophic Scar by DDRT-PCR". *The 18th Annual Congress of the Hong Kong Orthopaedic Association* p.126. The Hong Kong Orthopaedic Association, 1998.11.
- <P983147> **Hung, L.K.; P.C. Ho; H.F. Tsui and C.Y. Lam.** "Forearm Intravenous Regional Anaesthesia (FIRA) Provides a Safe Anaesthesia for Hand Surgery". *The 18th Annual Congress of the Hong Kong Orthopaedic Association* p.128. Hong Kong: The Hong Kong Orthopaedic Association, 1998.11.
- <P983220> **Li, R.; J. Cheng; X. Guo; K.M. Chan and A. Parker.** "Range of Movement and Muscular Strength Characteristics of Adolescents with Idiopathic Scoliosis". *Abstracts of 1998 Australian Conference of Science and Medicine in Sport* p.160. Adelaide, Australia, 1998.10.
- <P983274> **Kumta, Shekhar M.; Ping-chung Leung; Louis T.C. Chow; James Griffith and Linda Fu.** "Biology and Biomechanics of Osteoarticular Allografts for Tumor Reconstruction". *9th International Conference on Biomedical Engineering* vol.15 no.2, pp.102-105. UK, 1998.03.
- <P983279> **Qin, L.; S.K. Au; K.M. Chan; E. Lau; K.M. Lee; S.H. Cheng; M.A. Dambacher; M. Neff and P.C. Leung.** "Using High Resolution pQCT for the Identification of Fast Bone Losers in Pre- and Postmenopausal Chinese Women in Hong Kong". *Abstracts of the 2nd Joint Meeting of the American Society for Bone and Mineral Research and the International Bone and Mineral Society.* 1998.12.
- <P983282> **Kumta, S.M.; P.L. Liu; J. Griffith; T.C. Chow and P.C. Leung.** "Indications and Results of Surgical Intervention in Fibrous Dysplasia". *Proceedings of the 18th Annual Congress of the Hong Kong Orthopaedic Association* pp.90-91. Hong Kong, 1998.11.
- <P983298> **Leung, K.S.** *Multicenterstudie Eines Modifizierten Gamma-Nagels im Ostasiatischen Raum.* pp.332-341. Einhorn-Press Verlag, 1998.
- <P983300> **Wong, C.H. and K.S. Leung.** "Fixation of Radial Neck Fractures Using Forked-Plate". *Proceedings of the 18th Annual Congress of the Hong Kong Orthopaedic Association* pp.136-137. Hong Kong, 1998.11.
- <P983301> **Leung, K.S.; W.S. Chong; N.M. Cheung; C.W. Chan and W.S. Siu.** "The Study of Bone Ingrowth and Extraction of Flexible Hamburg Humeral Nail". *Proceedings of the 18th Annual Congress of the Hong Kong Orthopaedic Association* p.132. Hong Kong, 1998.11.
- <P983302> **Ho, H.M.; C.K. Ko and K.S. Leung.** "Simple Elbow Dislocation - Local Treatment Protocol & Result". *Proceedings of the 18th Annual Congress of the Hong Kong Orthopaedic Association* pp.127-128. Hong Kong, 1998.11.

- <P983304> **Tong, C.W.C.; J.F. Griffith; K.S. Leung; C.G. Rolf and K.M. Chan.** "Spiral CT of Acute Knee Sprain with Haemarthrosis". *Proceedings of the 18th Annual Congress of the Hong Kong Orthopaedic Association* pp.120-121. Hong Kong, 1998.11.
- <P983305> **Yeung, H.Y.; K.M. Lee; S.H. Cheng; K.P. Fung and K.S. Leung.** "Immunohistochemical Localization of Basic Fibroblast Growth Factor (bFGF) and Acidic Fibroblast Growth Factor (aFGF) in Distraction Osteogenesis". *Proceedings of the 18th Annual Congress of the Hong Kong Orthopaedic Association* pp.103-104. Hong, 1998.11.
- <P983307> **Ho, H.M.; C.K. Ko and K.S. Leung.** "Fracture/Dislocation Around Elbow - Risks Factors". *Proceedings of the 18th Annual Congress of the Hong Kong Orthopaedic Association* p.83. Hong Kong, 1998.11.
- <P983308> **Leung, K.S.; L. Qin; C.W. Chan; L.K. Fu and R.N. Rosier.** "Interface Healing between the Remaining Patella and Patellar Tendon after Partial Patellectomy". *Proceedings of the 18th Annual Congress of the Hong Kong Orthopaedic Association* p.63. Hong Kong, 1998.11.
- <P983309> **Leung, K.S.** "Minimal Invasive Surgery in Orthopaedic Trauma - An Overview". *Proceedings of the 18th Annual Congress of the Hong Kong Orthopaedic Association* pp.36-37. Hong Kong, 1998.11.
- <P983321> **Wong, M.W.N.; K.S. Leung; Y.L. Lam; H.F. Tsui and S.H. Yung.** "Subclinical Hypoxaemia - A Precedence of Fat Embolism Syndrome ?". *Proceedings of the 18th Annual Congress of the Hong Kong Orthopaedic Association* pp.96-97. Hong Kong, 1998.11.
- <P983322> **Law, K.K.P.; Y.L. Lee and K.S. Leung.** "Correlation of Hand Function with the Physical and Physiological Status of the Cervical Spinal Cord in Cervical Myelopathy". *Proceedings of the 18th Annual Congress of the Hong Kong Orthopaedic Association* p.79. Hong Kong, 1998.11.
- <P983396> **Leung, P.C.** "Complications of Osteoporosis". Paper presented in the Hong Kong Academy of Medicine 1st International Congress. Hong Kong, 1998.11.
- <P983662> **Ho, P.C.; Hung L.K. and Lam C.Y.** "Arthroscopic Bone Grafting in Carpal Bone - A New Technique". *Abstracts of the 7th Congress of the International Federation of Societies for Surgery of the Hand* p.12. Vancouver, Canada, 1998.05.
- <P983664> **Lao, J.; Hung L.K. and Kwong W.H.** "Repairing a Nerve Gap with a Predegenerated Nerve Graft - An Experimental Study". *Abstracts of the 7th Congress of the International Federation of Societies for Surgery of the Hand* p.80. Vancouver, Canada: International Federation of Societies for Surgery of the Hand, 1998.05.
- <P983665> **Lao, J. and Hung L.K.** "A Microanatomical Study on: The Innervation of the Trapezius Muscle". *Abstracts of the 7th Congress of the International Federation of Societies for Surgery of the Hand* p.80. Vancouver, Canada, 1998.05.
- <P983666> **Lao, J.; Hung L.K.; Gu Y.D. and Kwong W.H.** "The Optimal Time to Perform the Distal Nerve Anatomsis in Experimental C7 Neurotization for BPI". *Abstracts of the 7th Congress of the International Federation of Societies for Surgery of the Hand* p.112. Vancouver, Canada, 1998.05.
- <P983667> **Tsui, H.F.; Ho P.C. and Hung L.K.** "Synthetic Skin Cover (Hyphecan™) for the Treatment of Finger Tip Injury". *Abstracts of the 7th Congress of the International Federation of Societies for Surgery of the Hand* p.122. Vancouver, Canada, 1998.05.
- <P983668> **Ho, P.C.; Hung L.K. and Choi K.Y.** "Acute Ligamentous Injury in Scaphoid Fracture". *Abstracts of the 7th Congress of the International Federation of Societies for Surgery of the Hand* p.133. Vancouver, Canada, 1998.05.
- <P983669> **Li-Tsang, W.P.C.; Chan C.H.; Lam C.W.; Hung L.K. and Siu Z.** "Effect of Joint Mobilisation, Education and Work Hardening for C.T.D. Patients". *Abstracts of the 7th Congress of the International Federation of Societies for Surgery of the Hand* p.138. Vancouver, Canada, 1998.05.

- <P983670> **Choi, K.Y.; Leung K.S. and Hung L.K.** "Operative Treatment of Complex Volar Marginal Fractures of Distal Radius". *Abstracts of the 7th Congress of the International Federation of Societies for Surgery of the Hand* p.151. Vancouver, Canada, 1998.05.
- <P983671> **Ho, P.C.; Hung L.K. and Lung T.K.** "Role of External Fixation in Comminuted Basal Fracture of First Metacarpal Bone". *Abstracts of the 7th Congress of the International Federation of Societies for Surgery of the Hand* p.156. Vancouver, Canada, 1998.05.
- <P983672> **Zhao, Li; Xiong Liangjian Hung L.K. and Fei Qili.** "Transdermal Iontophoresis-A New Approach for Treating Orthopedic Diseases(in Chinese)". *Chinese Journal of Hand Surgery* vol.14 no.3, pp.184-186. 1998.
- <P983777> 胡永善、熊良儉。〈香港、上海兩地康復醫學現狀初析〉。《傷殘醫學雜誌》第6卷第3期，頁63-64。1998。
- <P983780> **Kumta, S.M.; Griffith J.F.; Chow L.T.C. and Leung P.C.** "Juxtacortical Chondrosarcoma Masquerading as a Juxtacortical Chondroma and Involving the Medullary Canal". Paper presented in the 2nd Meeting of The Asia Pacific Musculoskeletal Tumor Society, organized by Asia Pacific Musculoskeletal Tumor Society. 1998.06.
- <P983781> **Kumta, S.M.; Griffith J.F.; Chow L.T.C. and Leung P.C.** "Dedifferentiation of a Juxtacortical Chondrosarcoma After 20 Years". Paper presented in the 2nd Meeting of the Asia Pacific Musculoskeletal Tumor Society, organized by Asia Pacific Musculoskeletal Tumor Society. Seoul, Korea, 1998.06.
- <P983836> **Qin, L.; S.K. Au; K.M. Chan; E. Lau; K.M. Lee; S.H. Cheng; M.A. Dambacher and P.C. Leung.** "Identification of Fast Bone Losers Using High Precision PQCT in Pre- and Postmenopausal Chinese Women in Hong Kong". *Proceedings of the 20th Annual International Conference of the IEEE Engineering in Medicine and Biology Society* vol.20 no.5, pp.2. 1998.
- <P983928> 熊良儉、胡晞棠、梁秉中。〈Colle's 骨折與骨質疏鬆關係的探討〉。《骨質疏鬆症：骨基礎理論研究》羅先正、陶天遵、胡蘊玉編。頁354-361。中國：哈爾濱出版社，1998.12。
- <P983979> **Chan, KM and Tong CWC.** "Rotator Cuff Disease and Shoulder Impingement Syndrome - Consensus and Controversies". *The Laureate of the Dragon* vol.2, pp.147-151. Hong Kong, 1998.
- <P983980> **Tong, C.W.C.; Griffith J.F.; Lam T.P. and Cheng J.C.Y.** "The Conservative Management of Acute Pyogenic Iliopsoas Abscess in Children". *Journal of Bone and Joint Surgery* vol.80B, pp.83-85. UK, 1998.01.
- <P983981> **Tong, C.W.C.; Hung L.K. and Cheng J.C.Y.** "Lengthening of a One-Bone Forearms. A Sequelae of Neonatal Osteomyelitis". *Journal of Hand Surgery* vol.23B, pp.453-456. UK, 1998.
- <P984117> **Cheng, J.C.Y.; Y.L. Chan; X. Guo and H.L. Sher.** "Adolescent Idiopathic Scoliosis - The Correlation of Curve Severity, SEP and MRI Findings". *The Journal of Bone and Joint Surgery* vol.80B no.3, p.225. England, 1998.
- <P984118> **Cheng, J.C.Y.; X. Guo and H.L. Sher.** "Osteopenia in Adolescent Idiopathic Scoliosis". *Journal of Bone and Joint Surgery* vol.80B no.3, p.227. England, 1998.
- <P984120> **Yurianto, H.; Cheng J.C.Y.; Guo X. and Lee K.M.** "Coraline Hydroxyapatite as a Bone Substitute to Enhance Spinal Fusion". *Proceedings of the 20th Annual International Conference - IEEE/EMBS* pp.2467-2468. Hong Kong, 1998.
- <P984122> **Koo, B.; J.C.Y. Cheng and X. Guo.** "Motor Unit Analysis of Paraspinalis Muscles in Idiopathic Scoliosis". *The Journal of Bone and Joint Surgery* vol.80B no.3, p.226. England, 1998.

- <P984145> **Fu, L.L.K.; Maffulli N.; Yip K.M.H. and Chan K.M.** "Articular Cartilage Lesions of the Knee Following Immobilisation or Destabilisation for 6 or 12 Weeks in Rabbits". *Clinical Rheumatology* vol.17, pp.227-233. 1998.
- <P984146> **Leung, M.; Li M.; Li J.X.; Cheng S.H. and Chan K.M.** "Identification of Muscle Mitogen that Enhances Proliferation and Differentiation of Satellite Cell". *Medicine and Science in Sports & Exercise* vol.30 no.5. 1998.
- <P984147> **Li, M.; Li J.X.; Lee S.; Xie R. and Chan K.M.** "Skeletal Muscle Injury Repair and Regeneration Enhanced by Muscle Mitogen". *Medicine and Science in Sports & Exercise* vol.30 no.5. 1998.
- <P984148> **Qin, L.; Au S.K.; Chan K.M.; Lau E.; Lee K.M.; Cheng S.H. and Dambacher M.A.** "Using High Precision pQCT for the Identification of Fast Bone Losers in Pre-and Postmenopausal Chinese Women in Hong Kong". *Bone* vol.23 no.5, p.520. 1998.
- <P984149> **Hong, Y.; Chan K.M. and Li J.X.** "A Comparative Study of Health-Related Physical Fitness of School Children in Hong Kong and Mainland China". *Medicine and Science in Sports & Exercise* vol.30 no.5, p.S114. 1998.
- <P984150> **Hong, Y.; Chan K.M. and Li J.X.** "Health-Related Physical Fitness of School Children in Hong Kong and Mainland China - A Comparative Analysis". *Journal of Comparative Physical Education and Sports* vol.20, pp.2-10. 1998.
- <P984151> **Hong, Y.; Chan K.M. and Li J.X.** "The Beneficial Effects of Programmed Table Tennis Exercise on Cardiorespiratory Fitness in Children". *Chinese Journal of Preventive Medicine* vol.32 no.3, p.190. 1998.
- <P984269> **Chan, K.M.** "Advance Development of Knee Arthroscopy". Paper presented in the CSOS Interational Conference in Orthopaedic Advance Technology. Urumqi, China, 1998.08.
- <P984270> **Li, M.; D.Q. Cai and K.M. Chan.** "Identification and Purification of Human Myogenic Factors that Enhance Skeletal Muscle Repair and Regeneration". *Proceedings of International Society of Arthroscopy Knee Surgery and Orthopaedics Sport Medicine* p.1. USA, 1998.07.
- <P984271> **Li, M.; J.X. Li; S.H. Cheng; M. Leung and K.M. Chan.** "Identification of Muscle Mitogen that Enhances Proliferation and Differentiation of Satellite Cell". *Medicine and Science in Sports & Exercise* vol.3 no.5 suppl., p.1. Orlando, USA, 1998.06.
- <P984272> **蔡冬青、陳啟明、李嘉豪、鄧美娟.** <競爭性反轉錄聚合 Tc 鏈反應對髓韌帶中的 1-I 型膠原蛋白基因表達的定量檢測>. 《體育科學》第 18 卷 第 5 期, 頁 54-57. 1998.10.
- <P984273> **Chan, K.M.; M. Li; S.H. Cheng; J.X. Li and S. Lee.** "Muscle Mitogen Raises New Hope to Cure DMD". *Medicine and Science in Sports & Exercise* vol.30 no.5 suppl., p.1. Olamdo, USA, 1998.06.
- <P984312> **Cai, D.Q.; Jao Z.X.; Li M.; Lee S.; Lee K.K.H.; Sha J B and Chan K.M.** "Analysis of Age Related Changes of Aqueous Proteins in Rat Soleus Using Two-Dimensional Electrophoresis". Paper presented in the 20th Annual International Conference of the IEEE Engineering in Medicine and Buology Society "Biomedical Engineering Toward 1998.
- <P984314> **Qin, L.; Leung K.S.; Leung M.C.T.; Chan F.C.W. and Chan K.M.** "Proteoglycans Content Decreased in the Remaining Patellar Articular Cartilage after Partial Petellectomy in Rabbits". Paper presented in the 20th Annual International Conference of the IEEE Engineering in "Biomedical Engineering Towards the Years 200" 1998.11.
- <P984315> **Au, S.K.; Choy W.Y.; Chan K.M.; Leung P.C.; Hung W.Y. and Qin L.** "Correlation of Area Bone Mineral Density and Volumetric Bone Mineral Density Measured with Dual X-Ray Absorptiometry (DEXA) and High Resolution Peripheral Quantitative Computed Tomography (pQCT)". *Bone* vol.23 no.5, p.SA608. 1998.

- <P984561> **Zheng, Y.P.; A.F.T. Mak and L. Qin.** "Load-Indentation Response of Soft Tissues with Multi-Layers". *Proceedings of the 20th Annual International Conference of the IEEE Engineering in Medicine and Biology Society* vol.20 no.5, pp.2270-2272. Hong Kong: IEEE Engineering in Medicine and Biology Society, 1998.11.
- <P984562> **Zheng, Y.P.; Mak A.F.T.; Qin L. and Ding C.X.** "Ultrasound Elastography of Articular Cartilage: A Preliminary Study". Paper presented in the 20th Annual International Conference of the IEEE-EBMS, organized by IEEE Engineering in Medicine and Biology Society. vol.20 no.2, pp.629-661. Hong Kong, 1998.11.
- <P984563> **Dambacher, Maximilian A.; Maurus Neff; Ruedi Kissling and Ling Qin.** "Highly Precise Peripheral Quantitative Computed Tomography for the Evaluation of Bone Density, Loss of Bone Density and Structures". *Drugs & Aging* vol.12 suppl.1, pp.15-24. New Zealand, 1998.12.
- <P984564> **Dambacher, M.A.; M. Neff; R. Kissling and L. Qin.** "Highly Precise Peripheral Quantitative Computed Tomography for the Evaluation of Fast and Slow Bone Losers". *Bone* vol.23 no.5(suppl.), p.S617. San Francisco, USA: ASBMR/IBMS, 1998.12.
- <P984566> **Qin, L.; K.S. Leung; C.W. Chan; L.K. Fu and R.N. Rosier.** "Interface Healing between Remaining Patella and Patellar Tendon after Partial Patellectomy - An Experimental Study in Rabbits". *Proceedings of the 20th Annual International Conference of the IEEE Engineering in Medicine and Biology Society* vol.20. IEEE Engineering in Medicine and Biology Society, 1998.11.
- <P984569> **Guo, Linghong; Shuxin Qu; Xingdong Zhang; Ling Qin; Xia Guo and Jack Cheng.** "Microstructure Study of Porous Biphasic Calcium Phosphate Ceramics". *Proceedings of the 20 Annual International Conference of the IEEE Engineering in Medicine and Biology Society* vol.20 no.6, pp.2913-2916. Hong Kong: IEEE Engineering in Medicine and Biology Society, 1998.11.
- <P984570> **Guo, Linghong; Xia Guo; Ling Qin; Jack Cheng and Xingdong Zhang.** "XRPD Quantitative Analysis of Biomaterials Based on Calcium Phosphate". *Proceedings of the 20 Annual International Conference of the IEEE Engineering in Medicine and Biology Society* vol.20 no.6, pp.2893-2896. Hong Kong, 1998.11.
- <P984571> **Lu, W.W.; Y. Zheng; L. Qin; Q. Zhu; S. Zhong and J.C.Y. Leong.** "Bone Mineral Density Variations of the Sacrum and Its Significance on Sacral Fixation". *Proceedings of the 18th HKOA Annual Congress* vol.18, pp.59-60. Hong Kong: Hong Kong Orthopaedics Association, 1998.11.
- <P984572> **Siu, W.S.; N.M. Cheung; L. Qin; A.E. James; C.W. Chan; D.H.K. Chow and K.S. Leung.** "Establishment of an Osteoporotic Animal Model". *Proceedings of the 18th HKOA Annual Congress* vol.18, pp.102-103. Hong Kong: Hong Kong Orthopaedics Association, 1998.11.
- <P984573> **Leung, C.T.; L. Qin; Arthur F.T. Mak; W.Y. Choy and K.M. Chan.** "Correlation of Imaging Semi-Quantification with Biochemical Assessment of Proteoglycans Content in Trypsinized Articular Cartilage". *Proceedings of the 20th Annual International Conference of the IEEE Engineering in Medicine and Biology Society* v. IEEE Engineering in Medicine and Biology Society, 1998.11.
- <P984574> **Chan, K.M.; L. Qin; C.T. Leung and A.F.T. Mak.** "Correlation of Histomorphometric Evaluation with Biochemical Assesment of Proteoglycans Content in Trypsinized Articular Cartilage". *Bone* vol.23 no.5, p.232. San Francisco, USA: ASBMR/IBMS, 1998.12.
- <P984577> **Qin, L.; Arthur T.F. Mak; C.W. Cheng; L.K. Hung and K.M. Chan.** "Fluid Movement in Cortical Bone in Goats". *Proceedings of the 20th Annual International Conference of the IEEE-Engineering in Medicine and Biology Society* vol.20 no.5/6, pp.2460-2462. Hong Kong: IEEE Engineering in Medicine and Biology Society, 1998.11.
- <P984578> **秦嶺.** <骨組織生物力學在防治骨質疏鬆症新葯開發中的應用>. 《第二期國際骨質疏鬆講習班論文》第2期, 頁28-32. 中國西安: 國際華人骨研學會, 1998.04.04.

- <P984579> **Au, S.K.; W.Y. Choy; K.M. Chan; P.C. Leung; W.Y. Hung; M.A. Dambacher; M. Neff and L. Qin.** "Correlation of Area Bone Mineral Density and Volumetric Bone Mineral Density Measured with High Resolution Peripheral Quantitative Computed Tomography (HRpQCT) and Dual X-Ray Absorptiometry (DXA)". *Bone* vol.23 no.5, p.8. USA: ASBMR/IBMS, 1998.
- <P984580> **Chan, B.P.; Fu S.C.; Qin L. and Chan K.M.** "An *in vivo* Study of the Rat Patellar Tendon Healing - Histological, Biochemical and Biomechanical Aspects". *Proceedings of the 20th Annual International Conference of the IEEE-Engineering in Medicine and Biology Society* vol.20 no.5/6, pp.2471-2. IEEE Engineering in Medicine and Biology Society, 1998.11.
- <P984581> **Li, M.; J.X. Li; S. Lee; R. Xie and K.M. Chan.** "Skeletal Muscle Injury Repair and Regeneration Enhanced by Muscle Mitogen". *Medicine and Science in Sports & Exercise* vol.30 no.5 suppl., p.S1. Orlando, USA, 1998.06.
- <P984582> **Li, M.; D.Q. Cai and K.M. Chan.** "Identification and Isolation of Human Myogenic Factors that Enhance Skeletal Muscle Repair and Regeneration". *Proceedings of the 18th Hong Kong Orthopaedic Association Annual Congress* p.57. Hong Kong, 1998.
- <P984584> **Chan, B.P.; S.C. Fu; Qin L. and Chan K.M.** "Effect of Basic Fibroblast Growth Factor(bFGF) in Tendon Healing Using an Alginate Gel as the Delivery System". *The 20th Annual International Conference of the IEEE-EBMS "Biomedical Engineering Towards the Year 2000 and Beyond"* vol.20, pp.2884-2885. 1998.
- <P984585> **Chan, B.P.; S.C. Fu; L. Qin and K.M. Chan.** "Effect of Basic Fibroblast Growth Factor (bFGF) in Tendon Healing Using an Alginate Gel as the Delivery System". *Proceedings of the 18th Hong Kong Orthopaedic Association Annual Congnss* p.125. Hong Kong, 1998.11.
- <P984586> **Chan, Barbara P.; S.C. Fu; L. Qin; C. Rolf and K.M. Chan.** "Pyridinoline in Relation to Ultimate Stress of the Patellar Tendon During Healing: An Animal Study". *Journal of Orthopaedic Research* vol.16, pp.597-603. 1998.
- <P984587> **Au, S.K.; Choy W.Y.; Chan K.M.; Leung P.C.; W.Y. Hung and Qin L.** "Correlation of Bone Mineral Density Measured by Peripheral Quantitative Computed Tomography (pQCT) and Dual X-Ray Absorptiometry (DEXA)". *Proceedings of the 20th Annual International Conference of the IEEE Engineering in Medicine and Biology Society* IEEE Engineering in Medicine and Biology Society, 1998.11.
- <P984588> **Leung, P.C.; L. Qin; K.M. Chan; S.K. Au and K.M. Lee.** "Bone Mass & Bone Loss Rate in Pre-And Postmenopausal Chinese Women in Hong Kong Measured Using a Highly Precise pQCT". *Proceedings of the 18th Hong Kong Orthopaedic Association Annual Congress* vol.18, p.93. Hong Kong: Hong Kong Orthopaedics Association, 1998.11.
- <P984589> **Rolf, C.G.** "Knee Arthroscopy Under Local Anesthesia". *Hong Kong Journal of Orthopedic Surgery* vol.2 no.2, pp.158-163. 1998.
- <P984590> **Movin, Tomas; Maria Kristoffersen-Wiberg; Adel Shalabi; Adel Gad; Peter Aspelin and Christer Rolf.** "Intratendinous Alterations as Imaged by Ultrasound and Contrast Medium-Enhanced Magnetic Resonance in Chronic Achillodynia". *Foot & Ankle International* vol.19 no.5, pp.311-317. USA, 1998.05.
- <P984591> **Movin, T.; M. Kristoffersen-Wiberg; C. Rolf and P. Aspelin.** "MR Imaging in Chronic Achilles Tendon Disorder". *Acta Radiologica* vol.39, pp.126-132. Denmark, 1998.
- <P984592> **Ekenman, I.; K. Halvorsen; P. Westblad; L. Fellander-Tsai and C. Rolf.** "The Reliability and Validity of an Instrumented Staple System for *in vivo* Measurement of Local Bone Deformation" *Scandinavian Journal of Medicine & Science in Sports* vol.8, pp.172-176. Denmark, 1998.
- <P984593> **Ekenman, Ingrid; Kjartan Halvorsen; Par Westblad; Li Fellander-Tsai and Christer Rolf.** "Local Bone Deformation at Two Predominant Sites for Stress Fractures of the Tibia: An *in vivo* Study" *Foot & Ankle International* vol.19 no.7, pp.479-484. USA, 1998.

- <P984595> **Colliander, Erland B.; Karin Strigard; Par Westblad; Christer Rolf and Jorgen Nordenstrom.** "Muscle Strength and Endurance after Surgery for Primary Hyperparathyroidism". *Eur J Surg* vol.164, pp.489-494. Sweden, 1998.
- <P984754> **Li, J.X.; Chan K.M.; Lu J.F.; Xin D.; Li H. and Gao J.N.** "The Effects of Verbascoside on Reducing the Concentration of Oxygen Free Radicals of Skeletal Muscle During and after Exercise". Paper presented in the 20th Annual International Conference of the IEEE Engineering in Medicine and Biology Society. 1998.11.
- <P984758> **Cheung, S.K.; Cheng J.C.Y.; Guo X.; Qin L. and Sher H.L.** "The Evaluation of Bone Mineral Density in Adolescent Idiopathic Scoliosis". *Proceedings of the 20th Annual International Conference of the IEEE Engineering in Medicine and Biology Society* vol.20 no.5, pp.2469-2470. Hong Kong: IEEE Engineering in Medicine and Biology Society, 1998.11.
- <P984759> **Cheng, J.C.Y.; S.K. Cheung; X. Guo; H.L. Sher and L. Qin.** "Generalized Low Bone Mineral Density of Patients with Adolescent Idiopathic Scoliosis". *Bone* vol.23 no.5, p.348. San Francisco, USA: The American Society for Bone and Mineral Research and the International Bone and Mineral Society. 1998.12.
- <P984760> **Chong, W.S.; C.W. Chan; L. Qin and K.S. Leung.** "Autologous Cartilage as Interpositional Material for Accelerating Bone-Tendon Junction Healing - A Pilot Histological Study in Rabbits". *Proceedings of the 20th Annual International Conference of the IEEE Engineering in Medicine and Biology Society* vol.20 no.6, pp.2924-2927. IEEE Engineering in Medicine and Biology Society, 1998.11.
- <P984762> **Li, M.; Jiao Z.X.; Cai D.Q.; Lee K.; Liu M.J. and Chan K.M.** "Enhanced Skeletal Muscle Healing and Regeneration by Purified Novel Mitogens from Rats". Paper presented in the 20th Annual International Conference of the IEEE Engineering in Medicine and Biology Society. Hong Kong, 1998.
- <P984763> **Leung, C.T.; Qin L.; Mak A.F.T. and Chan K.M.** "Correlation of Histomorphometric Evaluation with Biochemical Assessment of Proteoglycans Content in Trypsinized Articular Cartilage". *Proceedings of the 20th Annual International Conference of the IEEE Engineering in Medicine and Biology Society* 1998.
- <P984764> **Li, J.X. and Chan K.M.** "Study of Concentration of Oxygen Free Radicals in Muscle During and after Exercise in Rats". Paper presented in the 45th Annual Meeting American College of Sports Medicine. USA, 1998.
- <P984831> **Fu, L.K.; S.M. Kumta; P.C. Leung and T.C. Chow.** "Musculoskeletal Tissue Banking: Clinical and Research Applications". *Transplantation Proceedings* vol.30, p.3775. New York, 1998.
- <P984832> **Kumta, S.M.; J. Kew; L.K. Fu and P.C. Leung.** "Massive Diaphyseal and Pelvic Bone Allograft for Skeletal Reconstruction". *Transplantation Proceedings* vol.30, p.3776. New York, 1998.
- <P984963> **Christer, Rolf.** "Knee Arthroscopy under Local Anesthesia". *Hong Kong Journal of Orthopaedic Surgery* vol.2 no.2, p.158. 1998.
- <P984968> **Fu, L.L.K.; N. Maffulli; K.M.H. Yip and K.M. Chan.** "Articular Cartilage Lesions of the Knee Following Immobilisation or Destabilisation for 6 or 12 Weeks in Rabbits". *Clinical Rheumatology* vol.17, pp.227-233. 1998.
- <P984978> **Leung, K.S.** "How I do It - Intramedullary Fixation of Distal Femoral Fractures". *Hong Kong Journal of Orthopaedic Surgery* vol.2 no.2, pp.146-154. Hong Kong, 1998.
- <P984979> **區施琪、古明達、梁國穗、馮國培、梁秉中、鄭淑嫻、李廣文.** <骨質特殊同質異構鹼性磷酸鹽酶為測定成骨細胞活動及監察骨肉瘤之可靠指標>. *Hong Kong Journal of Orthopaedic Surgery* 第2卷第2期, 頁132-136. 香港, 1998.

- <P984980> **Lee, Y.L.; Poon K.M.; Wong C.H.; Kew J.; Davey I. and Metrewelli C.** "Is Low Molecular Weight Heparin Necessary in Geriatric Hip Fractures? A Randomised Study for Prophylaxis Against Deep Vein Thrombosis". *Hong Kong Journal of Orthopaedic Surgery* vol.2 no.2, pp.127-131. 1998.
- <P990079> **Leung, P.C.** "Interface Between Family Medicine and Orthopaedics". *The Hong Kong Practitioner, the Journal of the Hong Kong College of Family Physicians* vol.21 no.2, pp.49-50. Hong Kong, 1999.02.
- <P990260> **Li, Xiaojun; Hung Leungkim and Fu Xiaokuan.** "Anatomic Study and Clinical Application of Free Medialis Pedis Flap". *Chinese Journal of Microsurgery* vol.22 no.1, pp.51-52. 1999.02.
- <P990261> **Ho, P.C.; L.K. Hung; C.Y. Lam and S.W. Law.** "Arthroscopic Bone Grafting in Carpal Bone-A New Technique and Concept" *Proceedings of the 2nd Congress of the Asian Pacific Federation Societies for Surgery of the Hand* p.41. Singapore, 1999.02.28.
- <P990262> **Ho, P.C.; L.K. Hung and J.C.Y. Cheng.** "Surgical Management of Congenital Duplicated Thumb - A Long Term Study". *Proceedings of the 2nd Congress of the Asian Pacific Federation of Societies for Surgery of the Hand* p.134. Singapore, 1999.02.28.
- <P990263> **Lam, C.Y.; C.W.C. Tong; P.C. Ho and L.K. Hung.** "Wrist Arthroscopy-the Use in Chronic Wrist Pain". *Proceedings of the 2nd Congress of the Asian Pacific Federation of Societies for Surgery of the Hand* p.119. Singapore, 1999.02.28.
- <P990264> **Li-Tsang, W.P.C. and Hung L.K.** "Hand Function of Children with and without Congenital Upper Limb Anomalies". *Proceedings of the 2nd Congress of the Asian Pacific Federation of Societies for Surgery of the Hand* p.144. Singapore, 1999.02.28.
- <P990265> **Ho, P.C. and L.K. Hung.** "Arthroscopic Repair of Triangular Fibrocartilage Complex (TFCC) Tears". *Proceedings of the 2nd Congress of the Asian Pacific Federation of Societies for Surgery of the Hand* p.118. Singapore, 1999.02.28.
- <P990274> **Leung, K.S.** "Multicenter Trial of a Modified Gamma Nail in East Asia". *The Gamma Locking Nail - Ten Years Results and Surgical Experience* pp.316-324. Germany: Einhorn-Press Verlag, 1999.
- <P990275> **Leung, Kwok-Sui.** "Minimally Invasive Surgery in Orthopaedic Trauma - An Overview". *Proceedings of the 72nd Annual Meeting of the Japanese Orthopaedic Association* p.94. Yokohama, Japan, 1999.04.
- <P990276> 肖湘、梁國穗。〈股骨轉子下骨折髓內固定技術的進展〉。《中華骨科雜誌》第19卷第3期，頁182-184。中國，1999.03。
- <P990280> **Wan, K.C. and L.K. Hung.** "Effects of Free Radical Scavengers on Pyridinoline Crosslinks Formation in Cultured Fibroblasts from Normal Skin". Paper presented in the Annual Scientific Meeting 99, organized by Hong Kong Society for Immunology. 1999.01.30.
- <P990282> **Wong, M.W.N.; Y.L. Lam; K.S. Leung; H.F. Tsui and S.H. Yung.** "Asymptomatic Hypoxia after Long Bone Fractures and Intramedullary Nailing". Paper presented in Societe Internationale de Recherche Orthopedique et de Traumatologie 8th World Triennial Congress. Sydney, Australia, 1999.04.
- <P990293> **Kumta, S.M.; Leung P.C.; Chow T.C. and Kew J.** "Biological Reconstruction for Locally Aggressive Lesions Affecting the Proximal Femur". *Proceedings of the 10th International Symposium on Limb Salvage* pp.37-38. Cairns, Australia: International Society of Limb Salvage, 1999.04.
- <P990294> **Leung, P.C.; Kumta S.M.; Fu L.K. and Liu P.L.** "A Technique to Enhance Allograft-Host Bone Union". *Proceedings of the 10th International Symposium on Limb Salvage* p.23. Cairns, Australia: International Society of Limb Salvage, 1999.04.

- <P990295> **Kumta, S.M.; Leung P.C.; Chow T.C.; Leung W.T. and Kew J.** "Skeletal Stabilization in Patients Metastases". *Proceedings of the 10th International Symposium on Limb Salvage* pp.109-110. Cairns, Australia: International Society of Limb Salvage, 1999.04.
- <P990514> **Cheng, J.C.Y.** "Pavlik Harness in the Treatment of Developmental Dysplasia of the Hip - A Clinical and Ultrasonographic Study". *Journal of Musculoskeletal Research* vol.3 no.1, pp.11-18. Singapore, 1999.03.
- <P990515> **Ho, P.C.; Hung L.K. and Cheng J.C.Y.** "Surgical Management of Congenital Duplicated Thumb - A Long Term Study". *Abstracts of the Hong Kong Society for Surgery of the Hand Annual Congress 99 - Congenital Upper Limb Anomalies* p.28. Hong Kong, 1999.06.
- <P990529> **Cheng, Jack C.Y.; Xia Guo and Y.L. Chan.** "Abnormal Somatosensory Evoked Potential in Adolescent Idiopathic Scoliosis: Where is the Site of the Abnormality?". *American Academy of Orthopaedic Surgeons - 66th Annual Mtg. Proceedings* p.154. Anaheim, CA, USA,, 1999.02.
- <P990550> **Cheng, Jack C.Y. and N. Tang.** "Decompression and Stable Internal Fixation of Femoral Neck Fractures in Children Can Affect the Outcome". *Journal of Pediatric Orthopaedics* vol.19, pp.338-343. 1999.
- <P990551> **Cheng, Jack C.Y.; B.K.W. Ng; S.Y. Ying and P.K.W. Lam.** "A 10-Year Study of the Changes in the Pattern and Treatment of 6,493 Fractures". *Journal of Pediatric Orthopaedics* vol.19, pp.344-350. 1999.
- <P990552> **Tong, C.W.C.; Hung L.K. and Cheng J.C.Y.** "Free Vascularised Fibular Graft Reconstruction of Large Postosteomyelitis Segmental Bony Defects in Children". *Hong Kong Journal of Orthopaedic Surgery* vol.3 no.1, pp.52-58. Hong Kong, 1999.
- <P990581> **Leung, P.C.** "Orthopaedic Rehabilitation in China - A Personal View". *Hong Kong Journal of Orthopaedic Surgery* vol.3 no.1, pp.48-51. Hong Kong, 1999.
- <P990587> **Leung, P.C.** "Hand Surgery - Past, Present and Future". *Proceedings of the '99 Symposium on Functional Reconstruction of Thumb and Finger* pp.120-124. Qingdao, China: Society of Hand Surgery of Chinese Medical Association, 1999.05.
- <P990598> **Leung, Kwok-Sui.** "Multicentre Study of Modified Gamma Nail in East Asia". *25 Years of Locking Nailing and 13 Years AIOD* pp.67-71. Strasbourg, France: AIOD, 1999.05.
- <P990599> **Qin, L. and Leung K.S.** "Development of an Orthopaedic Research Laboratory". *Hong Kong Journal of Orthopaedic Surgery* vol.3 no.1, pp.40-47. Hong Kong, 1999.04.01.
- <P990616> **Hung, L.K.; Cheng C.Y. and Leung P.C.** "Operative Techniques for Polydactyly of the Thumb". *Proceedings of the 99' Symposium on Functional Reconstruction of Thumb and Finger* pp.125-127. Qingdao, China: Society of Hand Surgery of Chinese Medical Association, 1999.05.
- <P990617> **Lao, Jie; Yu-dong Gu and Leung-Kim Hung.** "Microanatomic Study on: Second Dorsal Metatarsal Artery on Foot". *Proceedings of the 99' Symposium on Functional Reconstruction of Thumb and Finger* p.106. Qingdao, China: Society of Hand Surgery of Chinese Medical Association, 1999.05.
- <P990618> **Hung, L.K.** "Pollicisation of the Index Finger for Congenital Deficiency of the Thumb". *Proceedings of the 99' Symposium on Functional Reconstruction of Thumb and Finger* pp.113-114. Qingdao, China: Society of Hand Surgery of Chinese Medical Association, 1999.05.
- <P990619> **Hung, L.K. and Ho P.C.** "Reconstruction of the Congenital Deficient Thumb". *Proceedings of the 99' Symposium on Functional Reconstruction of Thumb and Finger* pp.124-125. Qingdao, China: Society of Hand Surgery of Chinese Medical Association, 1999.05.06.

- <P990872> **Li, J.X.; Xin D.; Li H.; Lu J.F.; Tong C.W.C.; Gao J.N. and Chan K.M.** "Effects of Verbascoside on Decreasing Concentration of Oxygen Free Radicals and Lipid Peroxidation in Skeletal Muscle". *Acta Pharmacologica Sinica* vol.20, pp.126-130. China, 1999.
- <P990892> **Tong, C.W.C.** "Guide for Passing Section B&C of the FRCSED/FCSHK: 2. Advice on Oral Examination". *Annals of the College of Surgeons of Hong Kong* vol.3. Hong Kong, 1999.
- <P990893> **Tong, C.W.C.** "Guide for Passing Section B & C of the FRCSED/FCSHK: 1. Background Information and Advice on the Written Examination". *Annals of the College of Surgeons of Hong Kong* vol.3, pp.48-49. Hong Kong, 1999.
- <P990994> **Cheng, J.C.Y.; Qin L.; Cheung S.K.; Sher H.L.; Lee K.M. and Guo X.** "Low Trabecular Mineral Density in Patients with Adolescent Idiopathic Scoliosis". *Abstracts of the 1st International Conference on Children's Bone Health* p.144. The Netherlands, 1999.05.
- <P991078> **Cheng, Jack C.Y. and S.P. Tang.** "Outcome of Surgical Treatment of Congenital Muscular Torticollis". *Clinical Orthopaedics & Related Res.* vol.362, pp.190-200. 1999.
- <P991079> **Cheng, Jack C.Y.; Xia Guo and Andy H.L. Sher.** "Persistent Osteopenia in Adolescent Idiopathic Scoliosis – A Longitudinal Follow-up Study". *Spine* vol.24 no.12, pp.1218-1222. 1999.
- <P991080> **Qin, L.; S.K. Au; W.Y. Hung; W.Y. Choy and J.C.Y. Cheng.** "Correlation of Heel Ultrasound with Volumetric Bone Mineral Density in Distal Tibia". *Proceedings of the 3rd International Congress on Osteoporosis Osteoporosis Update 1999* p.6. Xi'an, China: Osteoporosis Committee of China & CGSOC & ICHTS, 1999.
- <P991081> **Guo, X.; Cheng J.C.Y.; Sher H.L.; Lau L.P.; Guo L.H. and Zhang X.D.** "Hydroxyapatite Particles as Filling Grafts for Bone Defects". *Abstracts of the 5th UUMRS International Conference on Advanced Materials IUMRS-ICAM'99, International Union of Materials Research Society* p.84 Abstracts S80. Beijing, China: Chinese Materials Research Society, 1999.
- <P991082> **Linghong, Guo; Zou Changming; Guo Xia; J.C.Y. Cheng and Zhang Xingdong.** "XPS Microanalysis of New-Formed Tissues and HA/TCP Implant in Intertransverse Process Spinal Fusion". *Abstracts of the 5th UUMRS International Conference on Advanced Materials IUMRS-ICAM'99, International Union of Materials Research Society, Chinese Materials Research Society,* 1999.06.
- <P991083> **Li, M.; Wong L.M.; Guo L.H. and J.C.Y. Cheng.** "The Conversion of Differentiation Pathway of Myoblasts into the Osteoblast Lineage by Transfection of BMP-4 Coding Sequence". *Abstracts of the 5th UUMRS International Conference on Advanced Materials IUMRS-ICAM'99, International Union of Materials Research Society, Chinese Materials Research Society,* 1999.06.
- <P991084> **Cheng, Jack C.Y.** "Synthetic Porous Ceramic Compared with Allograft in a Spinal Fusion Rabbit Model". *Abstracts of the 5th UUMRS International Conference on Advanced Materials IUMRS-ICAM'99, International Union of Materials Research Society* p.46 Abstracts S3. Beijing, China: Chinese Materials Research Society, 1999.06.
- <P991120> **Cheng, J.C.Y.; N. Maffulli; S.S.F. Leung; W.T.K. Lee; J.T.F. Lau and K.M. Chan.** "Axial and Peripheral Bone Mineral Acquisition: A 3-Year Longitudinal Study in Chinese Adolescents". *Eur J Pediatr* vol.58, pp.506-512. 1999.
- <P991121> **Cheng, J.C.Y.; Guo X.; Lee S.K.M.; Lau L.P.; Sher H.L.; Qu S.X.; Zhang X.D.; Liu J. and Hu Y.Y.** "Posterior Spinal Fusion with Osteoinductive Growth Factor Proactivated HA-TCP". *The 5th UUMRS International Conference on Advanced Materials IUMRS-ICAM'99, International Union of Materials Research Society* pp.84-85(S81). Beijing, China: Chinese Materials Research Society, 1999.06.
- <P991277> **Cai, D.Q.; K.M. Chan; M.K. Tang and K.K.H. Lee.** "Bone Morphogenetic Protein-4 Was Involved in Rat Patellar Tendon Healing Process". *Proceedings of the 5th Iumrs International*

Conference on Advanced Materials p.87. International Council of Materials Research Societies, 1999.06.02.

- <P991278> **Cai, D.Q.; M. Li; K.M. Chan and K.M. Lee.** "Age Related Changes of Aqueous Protein Profiles in Fast and Slow Twitch Skeletal Muscle in Rats". *Japanese Journal of Electrophoresis* vol.43, p.104. Japan, 1999.05.
- <P991279> **Li, Ming; Kai Ming Chan and Hugh D. Jones.** "Synthesized Short Peptide Splicing *in vitro* Demonstrated by Capillary Electrophoresis" *Japanese Journal of Electrophoresis* vol.43 no.1, p.102. 1999.05.
- <P991320> **Dambacher, M.A.; M. Neff; H. Radspieler and L. Qin.** "1st Die Herrschende Meinung, Perimenopausal Schneller-Senile Osteoporose Langsamer Knochenverlust, Korrekt". *Journal Für Menopause* vol.6 no.2, pp.5-6. Wien, Austria: Krause & Pachemegg GmbH-Verlag, 1999.02.
- <P991325> **Leung, P.C.; S.K. Au; K.M. Chan; E. Lau; J. Woo; M.A. Dambacher and L. Qin.** "Fast Bone Losers Identified with a High Resolution and Multislice pQCT". *Osteoporosis Update 1999. The Third International Congress on Osteoporosis* vol.3, p.105. Xian, China: Osteoporosis Committee of China Gerontological Society (CGSOC), International Chinese Hard Tissue Society (ICHTS), 1999.03.
- <P991328> **Cai, D.Q.; M. Li; K.M. Chan and K.M. Lee.** "Identification of Specific Protein Markers for Differentiating Fast and Slow Twitch Muscle Fibers". *Japanese Journal of Electrophoresis* vol.43 suppl.1, p.128. Japan, 1999.05.
- <P991333> **Larsson, Erik; Lars Wesslen; Olle Lindquist; Ulrik Baandrup; Lars Eriksson; Eckhardt Olsen; Christer Rolef and Goran Friman.** "Sudden Unexpected Cardiac Deaths among Young Swedish Orienteers-Morphological Changes in Hearts and Other Organs". *APMIS* vol.107, pp.325-336. Denmark, 1999.
- <P991539> **Li, Ming; Dong Qing Cai; Ying Wang; Zhenrong Yu; Kwong Man Lee and Kai Ming Chan.** "Two Novel Myogenic Factors Were Identified and Isolated by Sequential Isoelectric Focusing Electrophoresis". *Japanese Journal of Electrophoresis* vol.43 suppl.1, p.102. 1999.05.
- <P991583> **Leung, P.C.; Au S.K.; Chan K.M.; Lau E.; Woo J. and Dambacher M.A.** "Fast Bone Losers Identified with a High Resolution and Multislice pQCT". *Proceedings of the 3rd International Congress on Osteoporosis* p.105. 1999.04.
- <P991881> **Qin, Ling; Kwok-Sui Leung; Chun-Wai Chan; Lap-Kun Fu and Randy Rosier.** "Enlargement of Remaining Patella after Partial Patellectomy in Rabbits". *Medicine and Science in Sports & Exercise* vol.31 no.4, pp.502-505. USA, 1999.04.
- <P991983> **蔡冬青、陳啟明、李嘉豪、鄧美娟。** <中部 1/3 髌韌帶切除後其修復過程中的鈣化現象>。《體育科學》第 19 期, 頁 68-71. 中國, 1999.02.
- <P991984> **蔡冬青、陳啟明、李嘉豪、鄧美娟。** <中部 1/3 髌韌帶切除後其修復過程中的細胞行為及組織學觀察>。《體育科學》第 19 期, 頁 66-69. 中國, 1999.03.
- <P992087> **Cheng, J.C.Y.; Sher H.L. and Guo X.** "High Prevalence of Persistent Osteopenia in Patients with Adolescent Idiopathic Scoliosis". *Abstracts of the 1st International Conference on Children's Bone Health* p.88. The Netherlands, 1999.05.
- <P992098> **Kumta, S.M.; T.C. Chow; J. Griffith; C.K. Li; J. Kew and P.C. Leung.** "Classifying the Location of Osteosarcoma with Reference to the Epiphyseal Plate Helps Determine the Optimal Skeletal Resection in Limb Salvage Procedures". *Arch Orthop Trauma Surg* vol.119, pp.327-331. 1999.
- <P992712> **Kumta, S.M., L. Fu Lap-Kun, J.H. Griffith, T.C.L. Chow and P.C. Leung.** "The Development of A Regional Musculoskeletal Tissue Bank in Hong Kong: Integration of Research

and Clinical Applications". *Advances in Tissue Banking* vol.3, pp.427-435. Singapore: World Scientific Publishing Co. Pre. Ltd., 1999.

see also <P982597>, <P982724>, <P982782>, <P982788>, <P982969>, <P983244>, <P983245>, <P983293>, <P983306>, <P983323>, <P983791>, <P983950>, <P984116>, <P984248>, <P984568>, <P984827>, <P984906>, <P990296>, <P990297>, <P990334>, <P990601>, <P990707>, <P990720>, <P990741>, <P991540>, <P991640>, <P991751>, <P991940>, <P992529>

RESEARCH PROJECTS

Randomized Comparison of Cefpodoxime Versus Cefuroxime Axetil as Follow on Treatment of Pneumonia

- ✉ FOK Tai Fai • SUNG Yn Tz Rita • YU Chung Wah
- ☐ 20 July 1998
- ❖ Sankyo Co Ltd

Cefpodoxime proxetil is a newer oral broad spectrum cephalosporin with high resistance to inactivation by beta-lactamases. Its pharmacokinetics supports a twice daily dosing regime and its daily cost is lower than cefuroxime or cefaclor. This clinical study is designed to evaluate the safety and efficacy of cefpodoxime versus cefuroxime for follow on treatment of pneumonia in children. (MD98127C)

Effects of Oxygen Toxicity on Megakaryocytopoiesis

- ✉ FOK Tai Fai • LI Kwai Har Karen • YANG Mo • XU Feng
- ☐ 1 November 1998
- ❖ CUHK Research Committee Funding

Oxygen toxicity is an important cause of lung injury in preterm infants receiving mechanical ventilation for life support. Thrombocytopenia is another common complication of these infants. In a pilot study, researchers have established a hyperoxia neonatal rat model and shown that these animals had low circulating platelets, indicating that oxygen toxicity could down-regulate megakaryocytopoiesis. Researchers hypothesize that oxygen toxicity induces the consumption of lung megakaryocytes, leading to thrombocytopenia and a feedback mechanism regulated by the cytokine thrombopoietin (TPO) and its receptor. Using this premature rat model of hyperoxic lung injury, they shall perform a randomized controlled study to investigate the mechanism of megakaryocytopoiesis at multiple levels. The formation of megakaryocyte progenitors in the bone marrow will be measured by the assays of colony forming units (CFU-MK). The circulating thrombopoietin (TPO), a megakaryocyte-specific cytokine, will be quantified by enzyme-linked immunosorbent assays (ELISA). The TPO receptor (c-mpl) gene expression in bone marrow cells will be analysed by RT-PCR. The morphology and megakaryocytes of lung tissues will be studied by staining with acetyl-choline esterase (AChE). Neonatal thrombocytopenia could be associated with complications such as hemorrhage of the central nervous system. This study would contribute to the understanding of oxygen-induced deregulation of

megakaryocytopoiesis and the possible prevention and better management of neonatal thrombocytopenia and platelet disorders. (MD98047)

Novel Molecular Defense-mechanism Against Tuberculosis: Enhanced Expression of the Inflammation-associated Gene PML

- ✉ HUI Hon Lam Stephen • CHAN Yeuk Hon John (Clinical Oncology) • CHOW Louis Tsun Cheung (Anatomical & Cellular Pathology)*
- ☐ 1 October 1998
- ❖ CUHK Research Committee Funding

The promyelocytic leukemia (PML) is known to be induced by signals of stress and inflammation including interferons, hormones and DNA damages. This research is aimed at elucidating the role of PML during TB infection in lung tissues. Researchers' preliminary data showed enhanced expression of the inflammation-associated gene PML in TB tissues and, thus, PML may play an important role in cellular response to defend against the bacteria infection. Researchers propose the following: (1) to confirm their preliminary findings in a larger cohort of samples if enhanced expression of PML is associated with TB infected lung tissues; (2) to determine by double labeling techniques with the macrophage-specific marker kp1 and β -galactosidase, if the activated macrophages over-expressed PML, and to determine if the drug-resistant TB cases are defective in PML inductions. (MD98048)

Effect of Interleukin-13 on Eosinophil Activation, Degranulation and Survival in Chinese Patients with Multitransfused Thalassaemia

- ✉ LEUNG Ting Fan • LI Kwai Har Karen • CHIK Ki Wai • LI Chi Kong
- ☐ 1 November 1998
- ❖ CUHK Research Committee Funding

Previous reports found that patients with multitransfused thalassaemia had immunomodulation involving T and B lymphocytes as well as NK cells. On the other hand, Caucasian patients with transfusion-dependent thalassaemia were described to have lower prevalence of allergic diseases. The reason for this observation was not clear. These patients were also at risk of iron overload and its related multi-organ dysfunction. There has also been no report on the eosinophil functions in this group of patients. In this study, researchers investigate on *in vitro* eosinophil functions including activation, degranulation and survival in response to interleukin-13 stimulation in patients with multitransfused thalassaemia. Interleukin-13 was a cytokine secreted

by helper T 2 lymphocytes which had widespread effects on different immune cells. In addition, we examine eosinophil functions in thalassaemic patients after bone marrow transplantation. From this study, researchers can obtain information on abnormalities of eosinophil functions and also analyze their correlation with iron overload in Chinese patients with multitransfused thalassaemia.

(MD98049)

Human Stem Cell Technology: *ex vivo* Expansion of Cord Blood Stem/Progenitor Cells and Applications

✉ LI Kwai Har Karen • HUANG POON Wai Sin Dolly (Anatomical & Cellular Pathology) • TSANG Kam Sze Kent (Anatomical & Cellular Pathology)*

□ 1 January 1999

❖ Industrial Support Fund, Industry & Technology Development Council

The prime objective of this project is to develop the biotechnology of cord blood stem cell expansion. Cord blood contains high quality stem cells. The major problem of its application is the small volume available in each collection, thus limiting its use mostly for children. In addition, the recovery period of the blood system of patients after cord blood transplant is usually lengthy, resulting in morbidity and high hospital cost. To resolve this constraint, we shall establish the *ex vivo* growth of cord blood stem cells in the laboratory prior to transplant, in order to expand the scope of their application to adults. We shall develop the use of improved reagents/techniques on blood cell volume reduction, cryopreservation and growth factor stimulation for stem cell expansion. Target users of this project include patients suffering from malignancy or blood cell and genetic disorders, cord blood banking and transplant institutions, the personalized banking industry and the stem cell-based technological industry. The application of *ex vivo* expansion of stem cells could be extended to areas of bone marrow and peripheral blood cell transplant (for reducing cancer cell contamination). This technique is also required in the worldwide development of gene corrective therapies using blood stem cells.

(MD98070)

WHO/GSTF Maternity Advice Study

✉ NELSON Edmund Anthony Severn • COWAN S.* • MANGIATERRA V.* • CAFFERATA M.*

□ 1 June 1999

❖ Norwegian SIDS Society

The study is based on the hypothesis that SIDS may be an unrecognised but significant problem in countries where prone sleeping for infants is prevalent. A previous study noted a relatively high rate of prone sleeping in Buenos Aires, Argentina, together with a significant incidence of SIDS. This prompted a successful low-cost "Link" programme between New Zealand and Argentina to raise awareness of SIDS. This highlighted the potential for similar low-cost interventions to be implemented in other countries. Therefore the SIDS Global Strategy Task Force recommended that an international study be undertaken in collaboration with WHO to determine what infant sleep position advice is given to new mothers in selected countries in Europe and Latin America. Country coordinators will be responsible for liaising with Health Departments and for distributing a questionnaire to each participating maternity hospital. The questionnaire seeks information on how babies are placed for sleep in the special care units and normal care units, whether the hospital recommends a best sleep position for babies, and whether there is printed information and a written policy on this. Data entry and check programmes are available in English and Spanish (Epiinfo statistical software, CDC). Any country, where advice to sleep infants prone is common, will be examined further to establish whether SIDS may be a significant but unrecognised problem. If indicated consideration will then be given to setting up "Link" programmes between these countries and countries experienced in SIDS risk reduction campaigns. Implementation of the study to other WHO regions will be considered at a later stage.

(MD98123)

The Effect of Postnatal Systemic Corticosteroids on Serum Leptin Concentration in Preterm, Very Low Birth Weight Infants

✉ NG Pak Cheung • LAM Wai Kei Christopher (Chemical Pathology) • FOK Tai Fai • WONG Wing Kin Gary

□ 1 October 1998

❖ CUHK Research Committee Funding

High dose systemic corticosteroids have been successfully used antenatally to prevent and to lessen the severity of respiratory distress syndrome, and also postnatally for treatment of bronchopulmonary dysplasia and to facilitate weaning from respirator in preterm, very low birth weight infants. However, systemic corticosteroids have been associated with many serious adverse effects, and one of the most important side effects is an increase in resting metabolic expenditure and nitrogen loss due to enhancement of protein and fat catabolism. Researchers have previously reported a marked increase in blood urea concentration and alterations in plasma aminogram secondary to structural protein

breakdown following dexamethasone treatment. However, the interaction between the neuroendocrine system and their target organs (skeletal muscles and adipose tissue) leading to severe catabolism is not fully understood.

Leptin, a newly discovered hormone, has been shown to involve in the regulation of body weight by controlling appetite and energy expenditure. It has been proposed that leptin acted through specific receptors in the hypothalamus and provided a vital link between the neuroendocrine system and the adipose tissue. As the clinical importance of leptin remains uncertain in human and, thus far, no report has attempted to delineate its biological effects in preterm infants, this study is designed to compare the serum leptin concentrations in VLBW infants who did and did not receive postnatal systemic dexamethasone treatment. The result will enable better understanding of the inter-relationship between the hypothalamic-pituitary-adrenal axis, the insulin pathway and the leptin-adipose tissue hormone system.

(MD98050)

CTLA-4 Gene Polymorphism in Childhood Graves' Disease

✉ WONG Wing Kin Gary • LI Kwai Har Karen

☐ 1 September 1998

❖ CUHK Research Committee Funding

CTLA-4 gene is a recently described T-cell surface molecule important in controlling stimulatory signals, blocking function and suppression of antibody responses. HLA genes have also been confirmed to confer susceptibility and protection for Graves' disease in Chinese. Graves' disease is a common autoimmune disease in Chinese children. Researchers propose in this study to analyse the CTLA-4 allele distribution in a group of patients with childhood Graves' disease along with a control group. This study may help to clarify the genetic predisposition of childhood Graves' disease in Chinese.

(MD98051)

Please refer to previous issues of this publication for more details of the following ongoing research at the department:

Edition Title/Investigators

1997-98 Molecular Analysis of *MLL* and *TEL* Gene Abnormalities in Paediatric Leukaemia (MD97063)

✉ CHIK Ki Wai • YUNG Chung Ming Edmund

1996-97 To Provide Gestation-Specific Standards on Physical Measurements on Chinese Newborns (MD96165)

✉ FOK Tai Fai • LAU Tak Fai Joseph (Centre for Clin. Trials & Epidemiological Research) • SO Hung Kwan

1996-97 Enterobacter Septicaemia in Newborns: Analysis of Risk Factors (MD96166)

✉ FOK Tai Fai • LEE Cheuk Hon • WONG Ming Chung (Centre for Clin. Trials & Epidemiological Research) • LYON Donald James (Microbiology) • NG Pak Cheung

1997-98 A Controlled Study of Obstructive Sleep Apnea Syndrome in Obese Children in Hong Kong (MD97002)

✉ FOK Tai Fai • WING Yun Kwok (Psychiatry) • LEUNG Suk Fong Sophie# • HUI Hon Lam Stephen • CHEN Char Nie (Psychiatry) • HO Kwok Wah Crover (Psychiatry)

1997-98 Determination of Local Oxygen Consumption by Healthy and Diseased Lungs in a Rabbit Model (MD97064)

✉ FOK Tai Fai • GU Jia Shi • XU Feng# • YIN Ai Tsang Jane

1997-98 To Provide Gestational Age-Specific Standards of Physical Measurements for Local Chinese Newborns (MD97086)

✉ FOK Tai Fai • LAU Tak Fai Joseph (Centre for Clin. Trials & Epidemiological Research) • NG Pak Cheung • CHANG Mang Z. Allan (Obstetrics & Gynaecology) • LEE Wai Hong* • CHOW Chun Bong*

1997-98 Vincristine Neurotoxicity in Children with Acute Lymphoblastic Leukaemia (MD97016)

✉ LEUNG Ting Fan • YEUNG Wai Lan • CHIK Ki Wai

1997-98 Effects of Platelet Granule Proteins on NF-E2 Expression and Megakaryocytopoiesis (MD97066)

✉ LI Kwai Har Karen • YANG Mo

1997-98 Haematopoietic Stem Cells: Characterization and Retrovirus-Mediated Gene Transfer (MD97096)

✉ LI Kwai Har Karen • LI Chung Leung*

- 1997-98 Cross Cultural Comparison of Child Care Related Sids Risk Factors (MD97105)
✍ NELSON Edmund Anthony Severn
• SCHIEFENHOEVEL Wulf*
- 1997-98 The Pituitary-Adrenal Response in Preterm Very Low Birth Weight Infants after Treatment with Multiple Courses of Antenatal Corticosteroids (MD97024)
✍ NG Pak Cheung • LAM Wai Kei Christopher (Chemical Pathology) • WONG Wing Kin Gary • FOK Tai Fai • LEE Cheuk Hon
- 1997-98 A Study on Cytokines and Cell Adhesion Molecules Expression in Respiratory Syncytial Virus Bronchiolitis (MD97067)
✍ SUNG Yn Tz Rita • HUI Hon Lam Stephen • LAM Wai Kei Christopher (Chemical Pathology) • CHAN Grace*
- 1995-96 The Epidemiology of Childhood Diabetes in Hong Kong (MD90205)
✍ WONG Wing Kin Gary • LEUNG Suk Fong Sophie# • OPPENHEIMER Stephen James#
- 1996-97 Identification of Genetic and Environmental Risk Factors for Childhood Asthma in Hong Kong (CU96609)
✍ WONG Wing Kin Gary • LEUNG Chung Chuen Roland (Medicine & Therapeutics) • LAI Kei Wai Christopher (Medicine & Therapeutics) • LAU Tak Fai Joseph (Centre for Clin. Trials & Epidemiological Research)
- 1997-98 Bone and Collagen Turnover in Preterm Neonates with Dexamethasone Treatment (MD97065)
✍ WONG Wing Kin Gary • NG Pak Cheung • LAM Wai Kei Christopher (Chemical Pathology) • FOK Tai Fai
- 1996-97 The Correlation between Graft-versus-Host Disease and Cytokine Profiles in Bone Marrow and Peripheral Blood Stem Cell Transplantation (CU96663)
✍ YUEN Man Pan Patrick • CHIK Ki Wai • LI Kwai Har Karen • PONG Nga Hin Henry

RESEARCH OUTPUTS AND PUBLICATIONS

- <P964270> **Yam, M-C. and S. Menahem.** "Mitral Valve Replacement for Severe Mitral Regurgitation in Infants with Anomalous Left Coronary Artery from the Pulmonary Artery". *Pediatric Cardiology* vol.17, pp.271-274. USA, 1996.
- <P974943> **Loftus, W.K.; S.H.L. Hui; T.F. Fok; D.J. Roebuck and C. Metreweli.** "The Role of HRCT in the Diagnosis of Pulmonary Tuberculosis in Childhood". *Pediatric Radiology* vol.27 no.5, p.458. USA, 1997.05.
- <P975056> **Nelson, Tony and Bernadette Kiberd.** "Global Strategy Task Force: Report from the Epidemiology Working Group". *Journal of Sudden Infant Death Syndrome and Infant Mortality* vol.2 no.4, pp.197-204. New York, USA, 1997.
- <P980615> 梁淑芳. <鈣營養與骨質疏鬆症 (二)>. 《親子雜誌》第 56 期, 頁 53. 香港, 1998.07.
- <P981016> **Nelson, E.A.S. and L. Yim.** "Rolling Over in Chinese Infants". *Abstracts Book of the 22nd International Congress of Pediatrics* p.391. Amsterdam: International Pediatric Association, 1998.08.12.
- <P981017> **Fitzgerald, K. and E.A.S. Nelson.** "SIDS Global Strategy Task Force". *Abstracts Book of the 22nd International Congress of Pediatrics* p.390. Amsterdam: International Pediatric Association, 1998.08.12.
- <P981019> **Curtin, T. and E.A.S. Nelson.** "Education Policy, Social Development & the World Bank". *Abstracts Book of the 22nd International Congress of Pediatrics* p.124. Amsterdam: International Pediatric Association, 1998.08.12.

- <P981023> **Li, K.; J. Liu; P. Law; D. Young; T.F. Fok and P.M.P. Yuen.** "Differentiation and Expansion of CD34+ Cells From Hematopoietic Cell Sources to the Dendritic Lineage". (27th Annual Meeting of the International Society for Experimental Hematology) *Experimental Haematology* vol.26 no.8, p.775. Canada, 1998.08.
- <P981079> **Hui, J.; T.F. Leung; E. Shoubridge; C.K. Li; K.W. Chik; M.M.K. Shing; G.W.K. Wong; W.L. Yeung; N.L.S. Tang and P. Yuen.** "Kearns-Sayre Syndrome in Association with Aplastic Anaemia". *Journal of Inherited Metabolic Diseases* vol.22 suppl.2, p.78. UK, 1998.07.
- <P981141> 宋銀子. <香港兒科心血管病的診治近況>. 《中華兒科雜誌》第 36 卷第 7 期, 頁 392-394. 北京, 1998.07.
- <P981500> 楊杰、楊默、霍泰輝、李桂霞、許峰、谷嘉禧. <高氧性肺損傷大鼠骨髓巨核細胞集落形成能力與肺組織巨核細胞數目>. 《中華兒科雜誌》第 36 卷第 7 期, 頁 398-400. 北京, 1998.07.
- <P981501> 霍泰輝、梁乃江. <香港兒科的發展>. 《中華兒科雜誌》第 36 卷第 7 期, 頁 389-391. 北京, 1998.07.
- <P981824> 楊默、李桂霞、阮文賓、**Chong B.H.** <血小板 α -粒子蛋白對巨核細胞生長的作用>. 《中華兒科雜誌》第 36 卷第 7 期, 頁 395-397. 中國北京, 1998.07.
- <P981825> **Li, K.; M. Yang; P.K. Chan; P.M.P. Yuen and B.H. Chong.** "Thrombospondin-1 (TSP-1) Inhibits Human Megakaryocyte Growth in Culture and the Relation with CD36 Expression". Paper presented in the 27th Annual Meeting of the International Society for Experimental Hematology. vol.26 no.8, p.770. Canada, 1998.08.
- <P981834> **Liu, Jie; Karen Li; Fung-Wan Yau and Yuen Man Pan, Patrick.** "Ex vivo Expansion of CD34⁺ Stem Cells and Progenitor Cells from Cord Blood". *Chinese Journal of Pediatric* vol.36 no.7, p.401. Beijing, China, 1998.
- <P982497> **Fok, T.F.; K. Lam; P.C. Ng; H.K. So; K.L. Cheung; W. Wong and K.W. So.** "Randomised Crossover Trial of Salbutamol Aerosol Delivered by Metered Dose Inhaler, Jet Nebuliser, and Ultrasonic Nebuliser in Chronic Lung Disease". *Archives of Disease in Childhood Fetal & Neonatal Edition* vol.79, p.F100-F104. UK, 1998.09.
- <P982507> **Hui, S.H.L.; R. Chan; D. Ng and T.F. Fok.** "The Presentation of Tuberculosis in Children in Hong Kong". *Proceedings of the 36th Annual Scientific Meeting of the Hong Kong Paediatric Society* p.14. Hong Kong, 1998.09.18.
- <P982508> **Hui, S.H.L.; A.Y.M. Cheung and T.F. Fok.** "Obstructive Sleep Apnea Syndrome in Children with Adenotonsillar Hypertrophy". *Proceedings of the 36th Annual Scientific Meeting of the Hong Kong Paediatric Society* p.15. Hong Kong, 1998.09.18.
- <P982510> **Ng, P.C.; T.F. Fok; G.W.K. Wong; C.W.K. Lam and C.H. Lee.** "Pituitary-Adrenal Suppression in Preterm VLBW Infants after Inhaled Fluticasone Propionate Treatment". *Proceedings of the 36th Annual Scientific Meeting of the Hong Kong Paediatric Society* p.2. Hong Kong, 1998.09.18.
- <P982511> **Ng, P.C.; C.H. Lee; T.F. Fok; K.W. So; K.L. Cheung and W. Wong.** "A Double-Blind Randomised Placebo-controlled Study of Oral Vancomycin in Prevention of Necrotising Enterocolitis in Preterm, Very Low Birth Weight Infants". *Proceedings of the 36th Annual Scientific Meeting of the Hong Kong Paediatric Society* p. 7. 1998.09.18.
- <P982512> **Tian, L. P.; E.A.S. Nelson; A. C. Senok; L. M. Yu; S. J. Oppenheimer and Karen Li.** "Red Cell Age and Susceptibility to Malaria During Pregnancy". *Acta Obstetrica et Gynecologica Scandinavica* vol.77 no.7, pp.717-721. Denmark, 1998.08.
- <P982513> **Siu, Y.K.; P.C. Ng; S.C.K. Fung; C.H. Lee; M.Y. Wong; T.F. Fok; K.W. So; K.L. Cheung; W. Wong and A.F.B. Cheng.** "Double Blind, Randomised, Placebo Controlled Study of Oral

Vancomycin in Prevention of Necrotising Enterocolitis in Preterm, Very Low Birthweight Infants". *Archives of Disease in Childhood Fetal & Neonatal Edition* vol.79, pp.F105-F109. UK, 1998.09.

- <P982531> **Nelson, E.A.S.; E. Chow; P.J. Lewindon and R. Biswas.** "Paediatric Polypharmacy in Hong Kong". *Proceedings of the 36th Annual Scientific Meeting of the Hong Kong Paediatric Society* p.4. Hong Kong, 1998.09.19.
- <P982543> **Ng, P.C.; T.F. Fok; C.H. Lee; K.L. Cheung; C.K. Li; K.W. So; W. Wong and P.M.P. Yuen.** "Is Homozygous α -thalassaemia a Lethal Condition in the 1990s?". *Acta Paediatrica Scandinavica* vol.87, pp.1197-1199. Sweden, 1998.
- <P982556> **Yu, C.W.; R.Y.T. Sung; T.F. Fok and E.M.C. Wong.** "Effects of Blood Transfusion on Left Ventricular Output in Premature Babies". *Journal of Paediatrics and Child Health* vol.34, pp.444-446. Australia, 1998.
- <P982586> **Lee, Cheuk Hon; P.C. Ng; S.C.K. Fung; T.F. Fok and A.F.B. Cheng.** "A Double-Blind Randomised Placebo-Controlled Study of Oral Vancomycin on Prevention of Necrotising Enterocolitis in Preterm Very Low Birth Weight Infants". *Abstracts of the Shanghai International Pediatric Symposium* p.140. Shanghai, China: Children's Hospital, Shanghai Medical University, 1998.11.02.
- <P982587> **Fok, Tai Fai.** "The Role of Aerosol in Neonatal Pulmonary Care". *Abstracts of the Shanghai International Pediatric Symposium* pp.59-65. Shanghai, China: Children's Hospital, Shanghai Medical University, 1998.11.01.
- <P982592> **Ng, Pak Cheung.** "The Effect of Corticosteroids on Pituitary-adrenal Function in Preterm, Very Low Birth Weight Infants". *Abstracts of the Shanghai International Pediatric Symposium* pp.84-85. Shanghai, China: Children's Hospital, Shanghai Medical University, 1998.11.01.
- <P982716> **Lee, V.; C.K. Li; C.W.K. Lam; S. Yu; K.F. To; M.K. Shing; K.W. Chik; H. Lai and P. Yuen.** "Value of Liver Biopsy in Patients with Transfusion Dependent Halassaemia". *Proceedings of the 36th Annual Scientific Meeting for the Hong Kong Paediatric Society* p.13. Hong Kong, 1998.09.19.
- <P982717> **Lee, V.; C.K. Li; C.W.K. Lam; S. Yu; K.F. To and P. Yuen.** "Liver Biopsy in Transfusion Dependent Thalassaemia Patients". *The 2nd International Conference on Thalassaemia in China, Thalassaemia in Millennium* p.79. China: Guangxi Medical University, 1998.10.
- <P982741> **Leung, T.F.; W.C. Tsoi; C.K. Li; K.W. Chik; M.M.K. Shing and P.M.P. Yuen.** "A Chinese Adolescent Girl with Fechtner-Like Syndrome". *Acta Paediatrica* vol.87, pp.705-707. Stockholm, 1998.06.
- <P982752> **Senok, A.C.; K. Li; E.A.S. Nelson; M. Arumanayagam and C.K. Li.** "Flow Cytometric Assessment of Oxidant Stress in Age-Fractionated Thalassaemic Trait Erythrocytes and Its Relationship to *in vitro* Growth of *Plasmodium falciparum*". *Parasitology* vol.116, pp.1-6. UK, 1998.
- <P982754> **Lai, D.H.; C.K. Li; M.K. Shing; K.W. Chik; V. Lee; S.S. Cheung and P. Yuen.** "Feasibility and Complications of Peripherally Inserted Central Catheter in Paediatric Oncology Patients". *Proceedings of the 36th Annual Scientific Meeting of the Hong Kong Paediatric Society* p.11. Hong Kong, 1998.09.19.
- <P982755> **Li, C.K.; M.K. Shing; K.W. Chik; K.S. Tsang; H. Pong and P. Yuen.** "Low Rejection Rate After Aggressive Conditioning Regimen in Thalassaemia Patients". *Abstracts of the International Symposium on Bone Marrow Transplantation in Childhood* p.19(P4). Manchester, UK: Manchester Children's Hospital, 1998.10.
- <P982850> **Li, K.; J. Liu; T.F. Fok; F.W. Yau; A. Wong; C.K. Li; M. Yang; K.W. So; K.W. Chik; K.S. Tsang; M.M.K. Shing and P.M.P. Yuen.** "CD34+ Cells of Human Neonatal Blood, Their

Kinetics of Decline and *Ex Vivo* Expansion Capacity" *Blood* vol.92 no.10 suppl.1, p.288B. Miami, USA: American Society of Hematology, 1998.11.15.

- <P982871> **Fok, Tai Fai; Cheuk Hon Lee; Eric M.C. Wong; Donald J. Lyon; William Wong; Pak Cheong Ng; Kam Lau Cheung and Augustine F.B. Cheng.** "Risk Factors for Enterobacter Septicemia in a Neonatal Unit: Case-Control Study". *Clinical Infectious Diseases* vol.27, pp.1204-1209. USA, 1998.
- <P982885> **Yang, M.; P.K. Chan; K. Li; C.M.Y. Chui and P.M.P. Yuen.** "Identification of IL-1 Type 1 and Type 2 Receptors on Meg-01 and Platelets". *Blood* vol.92 no.10 suppl.1, p.579A, Abstracts no.2386. Miami, USA, 1998.11.15.
- <P982899> **Lau, Yu Lung; Raymond Yung; Louis Low; Rita Sung; Chi Wai Leung and Wai Hong Lee.** "*Haemophilus Influenzae* Type b Infections in Hong Kong" *The Pediatric Infectious Disease Journal* vol.17 no.9, pp.S165-S169. USA, 1998.09.
- <P983134> **Nelson, Tony.** "Commonwealth Health Ministers and NGOs Seek Health for All". *The Lancet* vol.352, p.1766. UK, 1998.12.28.
- <P983451> **Leung, S.S.F.; Y.L. Chan; C.W.K. Lam; X.H. Peng; K.S. Woo and C. Metreweli.** "Body Fatness and Serum Lipids of 11-Year-Old Chinese Children". *Acta Paediatr* vol.87, pp.363-367. 1998.05.
- <P983659> **Fok, T.F.** "Medical Ethics in the Management of Severe Congenital Malformation". *Hong Kong Medical Journal Supplement* vol.4, p.4. Hong Kong: Hong Kong Academy of Medicine 1st International Congress, 1998.11.
- <P983861> **Fok, T.F.; K. Lam; P.C. Ng; T.F. Leung; H.K. So; K.L. Cheung and W. Wong.** "Delivery of Salbutamol to Nonventilated Preterm Infants by Metered-dose Inhaler, Jet Nebulizer, and Ultrasonic Nebulizer". *European Respiratory Journal* vol.12, pp.159-164. Denmark, 1998.07.
- <P983862> **Yuen, P.M.P.; K.W. Chik; C.K. Li; M.M.K. Shing and T.F. Leung.** "Transplantation in Childhood Hematologic Malignancies with Closely Matched Family Donors in Hong Kong". *Transplantation Proceedings* vol.30, pp.3481-3483. USA, 1998.11.
- <P983863> **Chik, Ki-Wai; Matthew Ming-Kong Shing; Chi-Kong Li; Ting-Fan Leung; Kam-Sze Tsang; Hui-Leung Yuen; Shuk-Han Cheng and Patrick Man-Pan Yuen.** "Treatment of Hemoglobin Bart's Hydrops with Bone Marrow Transplantation". *The Journal of Pediatrics* vol.132, pp.1039-1042. USA, 1998.06.
- <P983864> **Li, C.K.; M.M.K. Shing; K.W. Chik; W.H. Kwan; D.H. Lai; T.F. Leung and P.M.P. Yuen.** "Isolated Testicular Relapse after Bone Marrow Transplant with Total Body Irradiation and Testicular Boost in Acute Lymphoblastic Leukemia". *Bone Marrow Transplantation* vol.22, pp.397-399. UK, 1998.08.
- <P983901> **Li, Chi Kong; Patrick Man Pan Yuen; Ki Wai Chik; Matthew Ming Kong Shing; Karen Li; Kam Sze Tsang; Annie Wong; Ting Fan Leung and Howard Lai.** "Allogeneic Peripheral Blood Stem Cell Transplant in Children". *Medical and Pediatric Oncology* vol.30, pp.147-151. USA, 1998.03.
- <P983950> **Chow, C.B.; C. Chan; B. Lui; J. Cheng; T.W. Wong; W.L. Cheung; W. Poon; C.K. Wong; K.K. Lai; K.M. Chan; J. Kwan and S.H. Lee.** "Childhood Injury Prevention in Hong Kong". *Hong Kong Medical Journal* vol.4 no.4, pp.400-404. Hong Kong, 1998.12.
- <P984863> **Hui, S.H.L.; A.Y.M. Cheung and T.F. Fok.** "Obstructive Sleep Apnea Syndrome In Children with Adenotonsillar Hypertrophy". *Respirology* vol.3 suppl., p.A64. Sydney, Australia: Blackwell Science, 1998.10.
- <P990030> **Li, Karen; Jie Liu; Tai Fai Fok; Fung Wan Yau; Annie Wong; Chi Kong Li; Mo Yang; King Woon So; Ki Wai Chik; Kam Sze Tsang; Matthew Ming Kong Shing and Patrick Man Pan**

- Yuen.** "Human Neonatal Blood: Stem Cell Content, Kinetics of CD34 Cell Decline and *ex vivo* Expansion Capacity" *British Journal of Haematology* vol.104, pp.178-185. UK, 1999.
- <P990202> **Leung, T.F.; J. Hui; E. Shoubridge; C.K. Li; K.W. Chik; M.M.K. Shing; G.W.K. Wong; W.L. Yeung and P.M.P. Yuen.** "Aplastic Anaemia in Association with Kearns-Sayre Syndrome". *Journal of Inherited Metabolic Diseases* vol.22, pp.86-87. The Netherlands, 1999.02.
- <P990269> **Nelson, E.A.S.** "Dietary Guidelines and Childhood Obesity". *The Hong Kong Medical Diary* vol.4 no.2, pp.3-5. Hong Kong, 1999.04.
- <P990412> **Senok, A.C.; K. Li; E.A.S. Nelson and K.W. Chung.** "*In vitro* Sensitivity of Artemeter in *Plasmodium Falciparum*-Infected Beta-thalassaemic Trait Erythrocytes" *Parasitology* vol.118, pp.145-149. UK, 1999.
- <P990480> **Nelson, E.A.S.** "Protective Infant Care Practices and Education in the Community". Paper presented in European Society for the Study and Prevention of Infant Death. Jerusalem, Israel, 1999.06.03.
- <P990482> **Nelson, E.A.S.; W. Schiefenhoevel and F. Haimerl.** "Child Care Related SIDS Risk Factors in Traditional Societies". *Paediatric Research* vol.45 no.5, p.10A. Jerusalem, Israel: European Society for the Study and Prevention of Infant Death, 1999.05.
- <P990483> **Taylor, B.J.; E.A.S. Nelson and I.C.C.P.S. Study Group.** "Sleep Position, Smoking and Breast Feeding: Results of the International Child Care Practice Survey". *Paediatric Research* vol.45 no.5, p.7A. Jerusalem, Israel: European Society for the Study and Prevention of Infant Death, 1999.05.
- <P990484> **Nelson, E.A.S.; S. Cowan; V. Mangiaterra and M.L. Cafferata.** "WHO/GSTF Maternity Advice Study". *Paediatric Research* vol.45 no.5, p.6A. Jerusalem, Israel: European Society for the Study and Prevention of Infant Death, 1999.05.
- <P990572> **Wong, Gary W.K.; S.H. Cheng and J.S. Dorman.** "The HLA-DQ Associations with Graves' Disease in Chinese Children". *Clinical Endocrinology* vol.50, pp.493-495. UK, 1999.
- <P990592> **Ng, P.C.; G.W.K. Wong; C.W.K. Lam; C.H. Lee; T.F. Fok; M.Y. Wong and K.C. Ma.** "Effect of Multiple Courses of Antenatal Corticosteroids on Pituitary-Adrenal Function in Preterm Infants". *Archives of Disease in Childhood Fetal & Neonatal Edition* vol.80, pp.F213-F216. UK, 1999.
- <P990632> **Li, Karen; Annie Wong; Chi Kong Li; Matthew Ming Kong Shing; Ki Wai Chik; Kam Sze Tsang; Howard Lai; Ting Fan Leung and Patrick Man Pan Yuen.** "Granulocyte Colony - Stimulating Factor - Mobilized Peripheral Blood Stem Cells in α -thalassemia Patients: Kinetics of Mobilization and Composition of Apheresis Product". *Experimental Haematology* vol.27, pp.526-532. USA, 1999.03.
- <P990636> **Fok, T.F.; K. Lam; M. Dolovich; P.C. Ng; W. Wong; K.L. Cheung and K.W. So.** "Randomised Controlled Study of Early Use of Inhaled Corticosteroid in Preterm Infants with Respiratory Distress Syndrome". *Archives of Disease in Childhood Fetal & Neonatal Edition* vol.80, pp.F203-F208. UK, 1999.
- <P990666> **Fok, Tai F.; Mazan Al-Essa; Haresh Kirpalani; Shelly Monkman; Barry Bowen; Geoffrey Coates and Myrna Dolovich.** "Estimation of Pulmonary Deposition of Aerosol Using Gamma Scintigraphy". *Journal of Aerosol Medicine* vol.12 no.1, pp.9-15. 1999.
- <P990728> **Curtin, T.R.C. and E.A.S. Nelson.** "Economic and Health Efficiency of Education Funding Policy". *Social Science & Medicine* vol.48, pp.1599-1611. Oxford, England, 1999.
- <P990738> **Fok, Tai Fai and Haresh M. Kirpalani.** "Fluid and Electrolyte Balance and Management". *Residents Handbook of Neonatology* ed. by Max Perlman, Haresh M. Kirpalani and Aideen M. Moore. 2nd ed., pp.82-96. Canada: B.C. Decker Inc., 1999.

- <P990752> **Shing, Matthew Ming Kong; Chi Kong Li; Ki Wai Chik; Tai Kwan Lam; Howard Dan Ho Lai; Margaret Heung Ling Ng; Albert Y.K. Cheung and Patrick M.P. Yuen.** "Outcomes and Prognostic Factors of Chinese Children with Acute Lymphoblastic Leukemia in Hong Kong: Preliminary Results". *Medical and Pediatric Oncology* vol.32, pp.117-123. New York, USA, 1999.
- <P990806> **I.C.C.P.S. Study Group; E.A.S. Nelson and Barry J. Taylor.** "International Child Care Practices Study: Methods and Study Population". *Early Human Development* vol.55, pp.149-168. Ireland, 1999.
- <P990821> **Ng, P.C.; C.H. Lee; K.F. To; T.F. Fok; K.W. So; W. Wong and K.L. Cheung.** "Severe Congenital Absence of Skin in a Preterm Infant". *Journal of Paediatrics and Child Health* vol.35, pp.306-308. Australia, 1999.
- <P990956> **Sung, Rita Y.T.; C.W. Yu; Eddie Ng; M.C. Yam; Brian Tomlinson and Michael S.C. Tam.** "Specificity and Sensitivity of Head-up Tilt Test in Children and Adolescents: A Reevaluation". *Proceedings of the 7th Seventh Annual Scientific Congress of the Hong Kong College of Cardiology* p.216. Hong Kong, 1999.04.
- <P991108> **Li, C.K.; P.M.P. Yuen; R. Wong; C.P. Pang; W.K. Lai; E. Law; M.M.K. Shing; K.W. Chik and T.F. Leung.** "Busulphan Level and Early Mortality in Thalassaemia Patients after BMT". *Bone Marrow Transplantation* vol.23, pp.307-310. UK, 1999.
- <P991365> **Liu, J.; K. Li; P.M.P. Yuen; T.F. Fok; F.W. Yau; M. Yang and C.K. Li.** "Ex Vivo Expansion of Enriched CD34+ Cells from Neonatal Blood in the Presence of Thrombopoietin, a Comparison with Cord Blood and Bone Marrow" *Bone Marrow Transplantation* vol.24, pp.247-252. UK, 1999.
- <P991822> **Nelson, E.A.S.; Stephanie Fukui; Toshiko Sawaguchi and Hiroshi Nishida.** "International Child Care Practices: Japan and Hong Kong Report of Japanese SIDS Study". *The Report of Studies Supported by Ministry of Health and Welfare in 1998* pp.325-332. Japan, 1999.
- <P991869> **Chik, Ki-Wai; Chi-Kong Li; Matthew Ming-Kong Shing; Ting-Fan Leung and Patrick Man-Pan Yuen.** "Intracranial Germ Cell Tumors in Children with and Without Down Syndrome". *Journal of Pediatric Hematology/Oncology* vol.21 no.2, pp.149-151. Philadelphia, USA, 1999.03.
- <P991932> **Nelson, Tony and Lau Wing Chung.** "Childhood Obesity". *Care: Frisicare's Journal on Infant Nutrition* vol.1 issue 1, pp.8-9. The Netherlands, 1999.
- <P992162> **Hui, S.H.L.; A. Cheung and T.F. Fok.** "Obstructive Sleep Apnea Syndrome Secondary to Adenotonsillar Hypertrophy in Children in Hong Kong". *Respiratory and Critical Care Medicine* vol.159 no.3, p.A677. USA: American Thoracic Society, 1999.03.
- <P992240> **Li, C.K.; O.W.K. Mang and W. Foog.** "Epidemiology of Paediatric Cancer in Hong Kong, 1982 to 1991. Hong Kong Cancer Registry". *Hong Kong Medical Journal* vol.5 no.2, pp.128-134. Hong Kong, 1999.06.02.
- <P992395> **Sung, Rita Yn-Tz.** "Fetal Echocardiography as a Pre-natal Screening Test for Congenital Heart Disease in a Teaching Hospital in Hong Kong". *Abstracts of the 8th Asian-Pacific Conference on Doppler and Echocardiography* p.78. Taipei, Taiwan: Taiwan Society of Cardiology, 1999.05.
- <P992397> **Sung, R.Y.T.; C.W. Yu and S.S.F. Leung.** "Ambulatory Blood Pressure Monitoring in Children". *Proceedings of the 7th Annual Scientific Congress of Hong Kong College of Cardiology* p.243. Hong Kong: Hong Kong College of Cardiology, 1999.04.
- <P992688> **Hui, S.H.L.; G. Ha; E. Wong; I. Lau and T.F. Fok.** "Outcome Measures of an Asthma Management Program for Children in Hong Kong". *Respiratory and Critical Care Medicine* vol.159 no.3, p.A268. USA: American Thoracic Society, 1999.03.

see also <P975057>, <P981077>, <P981078>, <P982524>, <P982537>, <P982656>, <P982709>, <P982756>, <P982939>, <P983094>, <P983095>, <P983177>, <P983246>, <P983292>, <P983294>, <P983855>, <P983856>, <P983978>, <P984037>, <P990229>, <P990290>, <P990525>, <P990532>, <P990631>, <P990714>, <P990726>, <P991059>, <P991111>, <P991257>

RESEARCH PROJECTS

Cellular Mechanisms Involved in the Excitatory Actions of Prostanoid EP₃-and IP-Receptor Agonists

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☐ 1 July 1998

❖ UK/Hong Kong Joint Research Scheme, the British Council

The project involves the investigation of the receptors and cellular mechanisms involved in two prostaglandin-mediated actions: (1) contraction of vascular smooth muscle elicited by prostanoid EP₃-receptor agonists, and (2) excitation of sympathetic neurones in the vas deferens elicited by prostanoid IP-receptor agonists. The work is relevant to the clinical use of prostanoids in man. (BL98001)

Characterization of Muscarinic Receptors in Rat Isolated Pulmonary Artery and Thoracic Aorta

✉ KWAN Yiu Wa

☐ 1 October 1998

❖ CUHK Research Committee Funding

Pulmonary circulation is a low-resistance, low-pressure system. Muscarinic receptors as well as acetylcholinesterase have been found in the pulmonary vasculatures. However, the physiological functions of cholinergic system in the pulmonary vasculatures are not known. In the lungs, there is a heterogeneity of muscarinic receptors and whether the opposite effects of acetylcholine in the pulmonary vasculatures are dependent on activation of distinct muscarinic receptor subtypes has not been resolved. Compared to the acetylcholine-induced EDRF-dependent relaxation response, the physiological significance of acetylcholine-induced pulmonary artery contraction has received little attention. In the literature, information regarding the type of muscarinic receptors involved in acetylcholine-mediated contraction of pulmonary artery are confusing. In this study, a range of selective muscarinic subtype receptor agonists and antagonists will be examined in rat isolated pulmonary artery and thoracic aorta, in the presence of the acetylcholinesterase inhibitor neostigmine. Results obtained from this study will provide information of the type(s) of muscarinic receptors present in the pulmonary artery and thoracic aorta which may be important in the understanding of the pathophysiology of pulmonary vascular disease e.g. Eisenmenger's syndrome. (MD98052)

Studies on Anti-inflammatory Neuropeptides in Rat Knee Joints

✉ LAM Fu Yuen

☐ 1 January 1999

❖ CUHK Research Committee Funding

Sensory neurones apart from conveying pain messages to the central nervous system, could also release multiple neuropeptides from peripheral terminals to exert local effects. The released neuropeptides have different actions on peripheral tissues. One group of sensory neuropeptides is pro-inflammatory in nature and they mediate neurogenic inflammation in a variety of tissues including the joints. Another group of sensory neuropeptides possesses anti-inflammatory actions but their physiological roles, especially in joints, are not well understood.

The proposed research investigates the actions of anti-inflammatory neuropeptides in normal and diseased joints. Their therapeutic potentials in the treatment of inflammatory joint diseases will also be examined. (MD98053)

Functional Characterisation of Mast Cells Cultured from Human Cord Blood

✉ LAU Hang Yung Alaster • OBATA Toru* • NAGAKURA Toshikazu*

☐ 4 January 1999

❖ CUHK Research Committee Funding

Mast cells are widely distributed throughout the body and are pivotal in the pathogenesis of inflammation and allergy. Hence a thorough understanding of the mechanisms of mast cell activation and how it can be modulated pharmacologically is important for designing effective drug treatments of inflammatory and allergic diseases. Current knowledge on mast cell activation was derived almost entirely from studies using rodent mast cells. However, it is now well established that mast cells from different anatomical locations and from different animal species are indeed different and data obtained from the rodent cells cannot always be directly extrapolated to the human. Although significant advances have been achieved in the biology of human mast cells using the enzymatically isolated tissue mast cells, the advance of future research is limited by the difficulties in obtaining large number of homogeneous population of human mast cells using this protocol. Recently, homogeneous populations of human mast cells have been successfully cultured from human umbilical cord blood by a few laboratories. In collaboration with Jikei University School of Medicine of Japan, the current project is to

further characterise the functional responses of these cultured mast cells. Once they are found to be an appropriate substitute for the enzymatically isolated human lung mast cells, proper characterisation of pharmacological receptors and their underlying mechanisms of actions in these cells will be initiated in future projects.

(MD98054)

Neuropharmacological Investigations into the Role of Prostaglandin-Receptors in the Emetic Reflex

✉ RUDD John Anthony • JONES Robert Leslie

☐ 1 September 1998

❖ CUHK Research Committee Funding

Prostaglandins are involved in the nausea and vomiting induced by changes in metabolism, bacterial infection, ingestion of certain foods, chemotherapy and irradiation treatment. Moreover, the therapeutic use of Prostaglandin (PG) E_2 and $PGF_{2\alpha}$ and their analogues, in obstetric medicine, is associated with the unwanted side effects of nausea and vomiting in at least 20-80% of patients. There are five major types of prostaglandin receptor (DP-, EP-, TP- and IP-receptors; some of the receptors are further sub-divided, particularly the EP-receptor) but their involvement in the emetic reflex is unknown. The studies will determine the anatomical location and identity of the prostaglandin receptor(s) involved in the emetic reflex to provide a rationale for the use of selective PG-receptor antagonists to act as anti-emetic drugs. The studies will also develop models to determine the optimal anti-emetic therapy to prevent the emesis induced by the clinical use of prostanoids in obstetrics and gynaecology. The studies should also provide novel models to test the *in vivo* activity of new prototypic PG-receptor antagonists. At the very least, the proposed studies should provide new information relative to a more effective treatment of emesis induced by the use of prostanoids in the clinic.

(MD98055)

Investigation into the Mechanism of Action of Corticosteroids to Antagonise Cisplatin- and Motion-Induced Emesis

✉ RUDD John Anthony • YEUNG Hok Keung John

☐ 14 September 1998

❖ Research Grants Council

Corticosteroids used in combination with other anti-emetic drugs play an important role in the management of acute and delayed chemotherapy-induced emesis in man. However, the mechanism of action of the corticosteroids to improve the control of

emesis is unknown. The project will use two animal models that may be capable of elucidating the anti-emetic activity of corticosteroids like dexamethasone. These models are the recently developed model of acute and delayed chemotherapy-induced emesis using the ferret and a provocative motion-induced emesis model using *Suncus murinus*. The models will enable a range of corticosteroids to be investigated that have dissociated properties to determine the mechanism that relates to the antagonism of the emesis. The studies will use reference anti-inflammatory agents including selective inhibitors of COX-2, an enzyme that may be induced during the delayed phase of emesis. The studies will also address the role of leukotrienes to acute and delayed emesis and provocative motion-induced emesis. The role of cortisol and corticotrophin, an endogenous hormone that is suppressed by anti-emetic doses of corticosteroids, will also be assessed by immunoassays. Investigation of the corticosteroids and related agents in the presence of cortisol synthesis inhibitors and corticosteroid receptor antagonists will assess the role of negative feedback mechanisms to anti-emesis. The studies may lead to the introduction of a new and important range of potent and selective anti-emetic drugs.

(CU98049)

Metabolic Studies of a Series of Drugs in Horses

✉ YEUNG Hok Keung John • WONG Nai Ching Henry (Chemistry)

☐ 1 March 1999

❖ Hong Kong Jockey Club

The project is a joint research in which the Racing Laboratory, Hong Kong Jockey Club and Department of Pharmacology and Department of Chemistry, CUHK will provide academic and scientific input. The project aim is to investigate the metabolism of a series of drugs in horses. *In vitro* and *in vivo* studies will be carried out in the isolation and characterization of drug metabolites using different analytical techniques.

(MD98082)

Please refer to previous issues of this publication for more details of the following ongoing research at the department:

<u>Edition</u>	<u>Title/Investigators</u>
1997-98	Mechanisms of the Contractile Action of Prostanoid EP_3 -receptor Agonists on Vascular Smooth Muscle (MD97068) ✉ JONES Robert Leslie • KWAN Yiu Wa

- 1997-98 Modulatory Effects of Extracellular ATP on Delayed Rectifier K⁺ Channels of Guinea-Pig Single Sino-Atrial Nodal Cells (MD97072)
 ✎ KWAN Yiu Wa
- 1996-97 Evaluation of Anti-inflammatory Agents in Animal Models of Arthritis (MD96088)
 ✎ LAM Fu Yuen
- 1995-96 Neuropeptide Induced Mediator Release from Mast Cells: Effects of Non-peptide Antagonists of Neurokinins (MD95114)
 ✎ LAU Hang Yung Alaster • PEARCE Frederick Lawrence*
- 1996-97 Prostanoid Receptors on Mast Cells (CU96627)
 ✎ LAU Hang Yung Alaster • JONES Robert Leslie
- 1997-98 Chloride Influx and Mast Cell Activation (MD97069)
 ✎ LAU Hang Yung Alaster
- 1995-96 Investigation into the Mechanism of Metabolism-induced Hepatotoxicity of the Pyrrolizidine Alkaloid: Clivorine, and the Prevention of Such Hepatotoxicity Using Glycyrrhizin (CU95639)
 ✎ LIN Ge • DAMANI Lyaquatali A. (Pharmacy)# • HAWES Edward Miles*
- 1997-98 Chemical and Pharmacological Studies of Beimu, a Commonly Used Antitussive Traditional Chinese Medicine (CU97632)
 ✎ LIN Ge • KWAN Yiu Wa • HO Yee Ping (Pharmacy) • LI Ping*
- 1997-98 Identification of Brain Areas Involved in Emesis in the Ferret by c-fos Immunocytochemistry (MD97070)
 ✎ RUDD John Anthony • YEW Tai Wai David (Anatomy)
- 1997-98 Assessment of Prostanoid Receptor Stimulated Coupling of G_s to Adenylyl Cyclase (MD97001)
 ✎ WISE Helen
- 1997-98 The Role of Prostacyclin Receptors in Pain Modulation (CU97601)
 ✎ WISE Helen • JONES Robert Leslie
- 1996-97 Detection of Enzyme Induction During Anti-tuberculosis Therapy by a Novel Monoclonal Anti-6 β -hydroxycortisol Antibody-based ELISA Method (MD96090)
 ✎ YEUNG Hok Keung John • LAI Kei Wai Christopher (Medicine & Therapeutics) • TAI Kwok Ping*
- 1996-97 Pharmacogenetics of Trimethylamine N-oxidation in Chinese, and Associated Studies on Regulation of the Flavin-containing Monooxygenase in Animals (MD96115)
 ✎ YEUNG Hok Keung John • DAMANI Lyaquatali A. (Pharmacy)# • LIN Ge
- 1997-98 Effects of Polysaccharide Peptide (PSP) on Glutathione-Related Enzymes in the Mouse (MD97071)
 ✎ YEUNG Hok Keung John

RESEARCH OUTPUTS AND PUBLICATIONS

- <P974986> **Rudd, J.A.; M.P. Ngan and M.K. Wai.** "Investigation into the Mechanism of Action of Opioid Receptor Antagonists to Induce Emesis in *Suncus Murinus*". *Hong Kong Pharmacology Society 4th Scientific Meeting in Association with the Shaanxi Pharmacological Societies* p.9. Hong Kong: Hong Kong Pharmacology Society, 1997.11.
- <P975040> **Jones, R.L.; J.A. Rudd and K.K.C. Tsui.** "Stimulation of Neuronal IP₁-receptors by Non-prostanoid Prostacyclin Mimetics". *Fourth International Congress on Essential Fatty Acids and Eicosanoids* p.194(T11). Edinburgh, Scotland, 1997.07.
- <P975041> **Jones, R.L.; J.A. Rudd and K.K.C. Tsui.** "Excitation of Rat Isolated Vagus Nerve by Prostacyclin Mimetics". *British Journal of Pharmacology* vol.122, p.293P. UK: Stockton Press, 1997.12.

- <P980744> **Ge, Lin; Cui Yan-Yan; Ivo P. Nnane; Cheng Tin-Yan; Zhao Xian-Guo and Wang Zhen-Tao.** "Investigation into Hepatotoxic Pyrrolizidine Alkaloids". *Proceedings of the International Symposium on the Modernization of Traditional Chinese Medicine* pp.242-244. Nanjing, China, 1998.07.
- <P980853> **Lin, Ge; Ho Yee-Ping; Kwan Yiu-Wa; Chan Shun-Wan; Cheng Tin-Yan; Hau Kin-Man; Lam Chi-Lung; Ding Kan and Li Ping.** "Studies of the Commonly Used Antitussive Traditional Chinese Medicine, BEIMU". *Proceedings of the International Symposium on the Modernization of Traditional Chinese Medicine* pp.244-246. Nanjing, China, 1998.07.
- <P980992> **Wan, S.P. and H.Y.A. Lau.** "Chloride Channel Blockers and Mast Cell Activation". *Archives of Pharmacology* vol.358 no.1(suppl.2), pp.26-37. Germany, 1998.07.
- <P980998> **Yeung, J.H.K. and P.M.Y. Or.** "The Effects of Polysaccharide Peptide (PSP) on Glutathione and Glutathione-Related Enzymes in the Mouse". *Archives of Pharmacology* vol.358 no.1(suppl.2), p.R485. Germany, 1998.07.
- <P980999> **Yeung, J.H.K.; P.M.Y. Or; C.K.W. Lai; K.P. Tai and C.M. Tam.** "Detection of Cyp3A4 Induction by a Novel 6 β -Hydroxycortisol Monoclonal Antibody-Based Enzyme-Linked Immunosorbent Assay in Chinese Patients during Anti-Tuberculosis Treatment". *Paper presented in the 12th International Symposium on Microsomes and Drug Oxidations* Montpellier, France: International Union of Pharmacology, 1998.07.20.
- <P981433> 林鵠、畢培曦、周克俞、王崢濤。〈毒性吡咯哩西啶生物碱的 HPLC-MS 分析研究〉。《海峡兩岸暨香港第四屆中藥研討會學術論文集》頁 35。中國：華西醫科大學藥學院、國立中國醫藥研究所（台北）、香港中文大學中藥研究中心，1998.08。
- <P982542> **Jones, Robert L.; Yue-Ming Qian; Kam-Ming Chan and Anthony P.C. Yim.** "Characterization of a Prostanoid EP₃-Receptor in Guinea-Pig Aorta: Partial Agonist Action of the Non-Prostanoid ONO-AP-324" *British Journal of Pharmacology* vol.125, pp.1288-1296. UK, 1998.
- <P982560> **Lin, Ge; Ke-Yu Zhou; Xian-Guo Zhao; Zhen-Tao Wang and Paul Pui Hay But.** "Determination of Hepatotoxic Pyrrolizidine Alkaloids by On-line High Performance Liquid Chromatography Mass Spectrometry with an Electrospray Interface". *Rapid Communications in Mass Spectrometry* vol.12, pp.1445-1456. USA, 1998.
- <P982648> **Lau, C.P. and Y.W. Kwan.** "Effects of Extracellular ATP on Delayed Rectifier K Channels of Guinea Pig Single Sinoatrial Nodal Cells". *Programme Book of the 2nd Annual Scientific Meeting of Cardiovascular Therapy Institute of Cardiovascular Science and Medicine, University of Hong Kong Faculty of Medicine, HKU*, 1998.10.24.
- <P982816> **Rudd, J.A.; S.W. Chan; M.P. Ngan; M. Schirner; L. Turski and M.K. Wai.** "The Anti-Emetic Potential of ZK 200.775 in the Ferret and *Suncus Murinus*: Role of the AMPA Receptor". *Abstracts of the 13th International Congress of Pharmacology* vol.357 no.1 Suppl.1, p.R357. Munchen, Germany, 1998.07.
- <P982880> **Rudd, John A.; Celine H.K. Cheng and Robert J. Naylor.** "Serotonin-Independent Model of Cisplatin-Induced Emesis in the Ferret". *The Japanese Journal of Pharmacology* vol.78, pp.253-260. Japan, 1998.
- <P983042> **Lin, Ge; Ivo P. Nnane and Ting-Yan Cheng.** "Effects of Glycyrrhizin on Hepatotoxicity Induced by Metabolite of Retrorsine in Rats". *Abstracts of the 5th International ISSX Meeting* vol.13, p.154. Cairns, Australia: International Society for the Study of Xenobiotics, 1998.10.
- <P983043> **Cui, Yanyan and Ge Lin.** "Microsomal Metabolism of Clivorine, an Otonecine-Type Pyrrolizidine Alkaloid". *PharmSci (Supplement)* vol.1 no.1, p.S-43. Alexandria, USA: American Association of Pharmaceutical Scientists, 1998.11.

- <P983044> **Cui, Yanyan and Ge Lin.** "Qualitative and Quantitative Analysis of Clivorine and its Four Metabolites by HPLC". *PharmSci (Supplement)* vol.1 no.1, p.S-507. Alexandria, USA: American Association of Pharmaceutical Scientists, 1998.11.
- <P983045> **Chan, Shun Wan; Yiu Wa Kwan; Ge Lin; Yee Ping Ho and Ping Li.** "The Effects of Fritillaria Alkaloids on Isolated Rat Trachea and Bronchi". *PharmSci (Supplement)* vol.1 no.1, p.S-369. Alexandria, USA: American Association of Pharmaceutical Scientists, 1998.11.
- <P983149> **Wise, Helen; Takuya Kobayashi; Hong Li Li and Kevin B.S. Chow.** "Modification of the Carboxyl-Terminal Tail of the Prostacyclin (IP)-Receptor Increases the Efficacy of the IP-Receptor Partial Agonist, BMY 45778". *Proceedings of the 1st IUPHAR Conference on Receptor Mechanisms: Principles of Agonism* p.28. Merano, 1998.07.24.
- <P983209> **Lin, Ge; Ivo P. Nnane; Lyaquatali A. Damani; Kai K. Tse; Albert H.L. Chow and Pankaja K. Kadaba.** "High Performance Liquid Chromatographic Analysis of a Novel Aminoalkylpyridine Anticonvulsant 2-(4-Chlorophenyl) Amino-2-(4-Pyridyl) Ethane". *Journal of Pharmaceutical and Biomedical Analysis* vol.18, pp.403-409. USA, 1998.
- <P983331> **Jones, Robert L. and John A. Rudd.** "Neuronal Stimulant Actions of Prostacyclin and its Mimetics". *Essential Fatty Acids and Eicosanoids: Invited Papers from the 4th International Congress* ed. by Rudolph A. Riemersma, Roma Armstrong, Rodney W. Kelly, Robert Wilson. pp.84-87. Ill: AOCS Press, 1998.
- <P983635> **Wise, H.; Wong Y.H.; Hong L.L. and Chow B.S.** "Use of Forskolin to Detect Low Level Expression of Receptors Coupled to G_s Proteins" *Neuroscience Letters* Suppl.49, p.S17. Amsterdam: Elsevier, 1998.
- <P983765> **Lin, Ge; Ivo P. Nnane and Tin-Yan Cheng.** "The Effects of Pretreatment with Glycyrrhizin and Glycyrrhetic Acid on the Retrorsine-Induced hepatotoxicity in Rats". *Toxicol* vol.37, pp.1259-1270. The Netherlands, 1998.12.02.
- <P990147> **Rudd, John A.; Man P. Ngan and Man K. Wai.** "Inhibition of Emesis by Tachykinin NK₁ Receptor Antagonists in *Suncus Murinus* (House Musk Shrew)" *European Journal of Pharmacology* vol.366, pp.243-252. Switzerland, 1999.
- <P990414> **Kwan, Yiu Wa; Kin Wah To; Wai Man Lau and Shiu Hei Tsang.** "Comparison of the Vascular Relaxant Effects of ATP-dependent K⁺ Channel Openers on Aorta and Pulmonary Artery Isolated from Spontaneously Hypertensive and Wistar-Kyoto Rats" *European Journal of Pharmacology* vol.365, pp.241-251. The Netherlands, 1999.
- <P990578> **Lau, H.Y.A.; T. Obata; T. Nagakura and S.M. Chow.** "Functional Characterisation of Mast Cells Cultured from Human Umbilical Cord Blood". *Abstracts of the 18th Annual Meeting of the European Histamine Research Society* p.201. Lyon, France, 1999.05.15.
- <P990579> **Lau, H.Y.A. and S.P. Wan.** "Non-Pharmacological Inhibition of Compound 48/80 Induced Histamine Release from Rat Peritoneal Mast Cells by Chloride Channel Blockers". *Abstracts of the 18th Annual Meeting of the European Histamine Research Society* p.214. Lyon, France, 1999.05.15.
- <P990651> **Chow, K.B.S.; H. Li; T. Kobayashi and H. Wise.** "Modification of the Carboxyl-Terminal Tail of the Prostacyclin Receptor Results in a Constitutively-Active Mutant Receptor". *The FASEB Journal* vol.13 no.4, p.A462. USA: Federation of American Societies for Experimental Biology, 1999.03.12.
- <P990653> **Chan, C.L. and H.Y.A. Lau.** "Prostanoid DP Receptor Activation Inhibits Anti-IgE Induced Histamine Release From Rat Peritoneal Mast Cells". *Inflammation Research* vol.48 suppl.1, pp.S29-S30. Basel, 1999.
- <P990654> **Lau, H.Y.A. and S.M. Chow.** "Nitric Oxide does not Affect Histamine Release from Rat Peritoneal Mast Cells". *Inflammation Research* vol.48 suppl.1, pp.S27-S28. Basel, 1999.

- <P990771> **Rowlands, D.K. and H. Wise.** "Regulation of Prostacyclin Receptors in Rat Dorsal Root Ganglia Cells". *Mediators of Inflammation* vol.8 suppl.1, p.S107. UK: Carfax Publishing, 1999.
- <P991028> **Rudd, J.A.; J.Y.H. Tse and M.K. Wai.** "Profile of Cisplatin-Induced Emesis in the Cat: Effect of Granisetron and Dexamethasone". *Mediators of Inflammation* vol.8 suppl.1, p.P-11-25. Paris, France: 4th World Congress on Inflammation, 1999.
- <P991030> **Rudd, John A.; Celine H.K. Cheng; Robert J. Naylor; Man P. Ngan and Man K. Wai.** "Modulation of Emesis by Fentanyl and Opioid Receptor Antagonists in *Suncus Murinus* (House Musk Shrew)" *European Journal of Pharmacology* vol.374, pp.77-84. The Netherlands, 1999.
- <P991438> **Lam, F.Y. and A.L.M. Yip.** "Neuropeptide Actions on Blood Flow of Normal and Arthritic Rabbit Knee Joints". *Mediators of Inflammation* vol.8 suppl.1, p.S133. Paris, France: Carfax Publishing, 1999.
- <P991712> **Nnane, I.P.; M.C. Tsai; G. Lin; L.A. Damani; M. Mitterhauser and I. Zolle.** "Pharmacokinetics of 2-Methoxyphenylmetyrapone and 2-Bromophenylmetyrapone in Rats". *European Journal of Drug Metabolism and Pharmacokinetics* vol.24 no.1, pp.23-29. Geneva, Switzerland, 1999.
- <P992204> **Li, Na; Ge Lin; Yiu-Wa Kwan and Zhi-Da Min.** "Simultaneous Quantification of Five Major Biologically Active Ingredients of Saffron by High-Performance Liquid Chromatography". *Journal of Chromatography A* vol.849, pp.349-355. The Netherlands, 1999.04.28.

see also <P980993>, <P980997>, <P981434>, <P983041>, <P983460>, <P992450>

RESEARCH PROJECTS

Controlled Production of Spray-dried Drug Microparticles for Pulmonary Delivery

✉ CHOW Hee Lum Albert • LIN Ge (Pharmacology) • CHAN Chak Keung*

□ 1 January 1999

❖ Research Grants Council

An Investigation of the experimental and operational conditions governing the production of micron-sized salbutamol particles of pulmonary delivery in a laboratory-scale spray dryer (Buchi B-191) is proposed. Salbutamol is a widely-used anti-asthmatic drug commonly administered through the inhalation route. The proposed research involves particle production inside the spray dryer, physical and chemical characterization of particles, and evaluation of extent of particle deposition in rat lungs following inhalation. Spray drying is widely employed in the pharmaceutical industry in microencapsulation, film coating and the production of powders and granules. The technique involves atomization of a feed solution to form droplets; evaporation and drying of the droplets in a gas stream to effect particle formation; and separation of particles from the gas stream. A thorough understanding of the physical and chemical factors affecting the spray drying process is crucial to the production of powders with uniform properties. Studies will be conducted to systematically investigate the influence of solvents, additives, flow conditions and heating/drying conditions on particle morphology, size distribution, surface properties and crystallinity. Particles will be physically characterized by such techniques as scanning electron microscopy, X-ray diffractometry, thermal analysis, surface adsorption (BET) analysis and Coulter sizing analysis. The extent of deposition of spray-dried particles in rat lungs after inhalation will also be assessed. Through a detailed study of various operational and physicochemical parameters in spray drying on particle morphology and properties (and ultimately on particle delivery to the lungs), technology criteria for manufacturing uniform drug powders with high respirable fraction upon inhalation will be established. The proposed research is a concerted effort to develop a prototype technology for the production of novel drug microparticles in Hong Kong. (CU98244)

Establishment of a Certified Drug Evaluation Unit for Assessing the Quality of Oral Generic Drugs in Hong Kong

✉ CHOW Sing Sum Moses • CHOW Hee Lum Albert • HO Yee Ping • TOMLINSON Brian

(Medicine & Therapeutics) • LEE Kwing Chin Kenneth

□ 1 January 1999

❖ Industrial Support Fund, Industry & Technology Development Council

The prime objective of the present project is to provide certified bioavailabilities (BA) and bioequivalence (BE) evaluation for the locally produced oral generic drugs to enable them to meet the internationally recognized standards of quality. Through collaborative efforts of the CUHK Department of Pharmacy and Division of Clinical Pharmacology, the present project seeks to (a) establish a Drug Evaluation Unit that will meet the internationally recognized standards of Good Clinical Practice (GCP) and Good Laboratory Practice (GLP) for BA/BE studies and drug product testing; and (b) provide BA/BE testing of 20-24 oral drug products from local manufactures requiring valid BA/BE data for marketing and export purposes. The justifications for the proposed Drug Evaluation Unit to be set up in Hong Kong, and in particular at CUHK, are: (1) there are presently no established BA/BE study centres in Hong Kong and its neighbouring region which meet both GCP and GLP standards; (2) CUHK is the only tertiary institution in Hong Kong with an established Pharmacy School staffed by expert personnel in all aspects of drug evaluation; and (3) CUHK has a well established medical school with experienced clinical investigators to collaborate in certain aspects of BA/BE study. The deliverables of the project are: (a) *in-vitro* drug evaluation covering stability, content uniformity and dissolution; and (b) clinical drug evaluation, i.e. BA/BE studies on 24 oral products in healthy human subjects over the first three years. The target users will be the 50 plus local pharmaceutical manufacturers of "western" oral generic medicines. In the long term, the proposed BA/BE service will contribute to the growth and economic success of the local pharmaceutical industry leading to (1) less expensive but equally efficacious drug products; and (2) export of local generic products to developed countries. (MD98071)

Chemical and Pharmacological Study on Herbs Used for Functional Drinks

✉ ZHU Min • LI Yawei • ZHANG Jinnan

□ 10 September 1998

❖ Bacardi-Martini Asia Pacific Ltd.

Herbal wines and plant-derived soft drinks are very popular in China and Asia countries for promotion of human health and for the treatment of certain chronic diseases, e.g. rheumatism. However, research related to the chemical nature of these herbs and associated pharmacological effect as well as any changes of

ingredients during manufacture have not been conducted extensively. In this project, several herbs that are commonly used for preparation of functional drink are selected to investigate their chemical properties and pharmacological effects regarding anti-inflammation, anti-oxidation and immunomodulation.
(BL98038)

Quality Control of *Ganoderma* (Lingzhi) Products

- ✉ ZHU Min • QIAN Tianxiu (Chinese Medicinal Material Research Centre)
- ☐ 4 March 1999
- ❖ Vita Green Pharmaceuticals (HK) Ltd.

Quality control of herbal medicine is one of the major concerns for study of Chinese medicine that involved not only chemical but also pharmacological investigations. In this study, *Ganoderma* (Lingzhi) was selected and an array of examinations have been designed including isolation and structural identification of major components, establishment of quantitative measurements for active principles, pharmacological tests on active fractions and individual isolates and *in-vivo* pharmacokinetic study on *Ganoderma*. As a result, a set of analytic methods will be developed using different chromatographic techniques for the verified *in-vivo* bio-markers.
(BL98039)

Please refer to previous issues of this publication for more details of the following ongoing research at the department:

Edition Title/Investigators

- 1997-98 Formulation and Evaluation of Oral Traditional Chinese Medicines (TCMs) (MD97023)
✉ CHOW Hee Lum Albert • LEE Kwing Chin Kenneth • HO Yee Ping • HO Suk San Susan • LIN Ge (Pharmacology)
- 1997-98 Hygroscopic Growth of Pharmaceutical Aerosols (MD97134)
✉ CHOW Hee Lum Albert • CHAN Chak Keung* • CHEN Guo Hua*
- 1995-96 Prospective Pharmacokinetic Dosage Adjustment of Aminoglycoside Therapy Based on Drug Blood Level Data (MD95196)
✉ RAYMOND Kenneth • LI Chi Keung Ronald#
- 1996-97 Assessing the Pharmacokinetics and Pharmacodynamics of Drugs with Non-linear, Input Rate-dependent Dispositions (MD96087)
✉ RAYMOND Kenneth • LI Chi Keung Ronald#
- 1996-97 Quality Control of *Ganoderma* (Lingzhi) Products (MD96151)
✉ ZHU Min • CHANG Qi*
- 1997-98 Study on Antiulcer Effect of *Hippophae rhamnoides* (BL97040)
✉ ZHU Min • LI Chi Keung Ronald#

RESEARCH OUTPUTS AND PUBLICATIONS

- <P980997> **Lee, C.W.; B. Tomlinson; J.H.K. Yeung; G. Lin and L.A. Damani.** "Distribution of Trimethylamine N-Oxidation in a Chinese Population". *Archives of Pharmacology* vol.358 no.1(suppl.2), p.R427. Germany, 1998.07.
- <P981374> **Zhu, Z.Y. and Li, R.C.** "Impact of Pharmacokinetics on the Postantibiotic Effect Exhibited by *Pseudomonas Aeruginosa* Following Tobramycin Exposure: Application of an *in-vitro* Model". *Journal of Antimicrobial Chemotherapy* vol.42 no.1, pp.61-65. UK, 1998.07.
- <P981434> 何綺萍、侯健敏、林志龍、林鵠、關耀華、李萍。〈止咳中藥 - 貝母的化學及藥理研究〉。《海峽兩岸暨香港第四屆中藥研討會學術論文集》頁 67。中國：華西醫科大學藥學院、國立中國醫藥研究所（台北）、香港中文大學中藥研究中心，1998.08.
- <P983041> **Chow, A.H.L.; K.K.W. Chu; G. Lin and C.K. Chan.** "Hygroscopicity of Crude Traditional Chinese Medicine (TCM) Extracts". *Proceedings of Symposium on Natural Origin Substances in Drug Formulation* pp.27-28. Beijing, China: Chinese Pharmaceutical Association, 1998.11.

- <P983166> **Ronalo Li, C.; Min Zhu; T.H. Yung; C.H. Chou and Kenneth Raymond.** "Protective Effects of Wuweizi on Phase II Drug Metabolism". *ISSX Proceedings (International Society for Study of Xenobiotics)* vol.13, p.153. Cairns, Australia: International Society for the Study of Xenobiotics, 1998.10.
- <P983167> **Wu, S.Y.B.; S.C.H. Lung; S. Chang; S.C. Lee; J.A.J.H. Critchley and J.C.N. Chan.** "Evaluation of Drug Usage and Expenditure in a Hospital Diabetes Clinic". *Journal of Clinical Pharmacy and Therapeutics* vol.23, pp.49-56. 1998.
- <P983188> **Chang, S.; Chan, G.M.; Chan, J.C.; Raymond, K. and Critchley, J.A.** "Compliance with Prescriptions of Nine or More Medications Daily". *International Pharmaceutical Abstracts: 33rd American Society of Health-Care Pharmacists Midyear Clinical Meeting* vol.35 no.21, p.2280. USA, 1998.12.
- <P983606> **Zhang, J.N.; X.G. Liu; M. Zhu; F.C.K. Chiu and R.C. Li.** "Assessment of Presystemic Factors on the Oral Bioavailability of Rifampicin Following Multiple Dosing". *Journal of Chemotherapy* vol.10 no.5, pp.354-359. USA, 1998.
- <P983618> **Ho, S.S.; Chan Y.S. and Lin A.Y.** "Hong Kong Pharmacists' Needs for Postgraduate Education". *International Pharmaceutical Abstracts of the 33rd Annual ASHP Midyear Clinical Meeting* vol.35 no.21, pp.2348-2349. Las Vegas, USA: American Society of Health-System Pharmacists, 1998.11.15.
- <P983930> **李志強、朱敏.** <黃藥子對抗癌西藥阿霉素藥代動力學的影響>. 《海峽兩岸暨香港第四屆中藥研討會論文集》頁 52. 中國成都: 華西醫科大學/台北國立中國醫藥研究所/香港中文大學, 1998.08.18.
- <P983932> **Song, Jingmei; Min Zhu and Kenneth Raymond.** "Studies on the Mechanisms of Action of Hippophae in Gastric Protection and Ulcer Healing". *ISSX Proceedings (International Society for Study of Xenobiotics)* vol.13, p.170. Cairns, Australia, 1998.10.
- <P983933> **Zhu, M.; X.G. Liu; P.K. Narang and R.C. Li.** "Hepatic and Presystemic Enzyme Induction by Rifampin and Rifabutin: Influences on the Bioavailability and Disposition of Antipyrine". *Abstracts of the 1998 American Association of Pharmaceutical Scientists Annual Meeting* vol.1, p.S624. San Fran, 1998.11.15.
- <P983935> **Guo, Jian; Dong-Lei Yu; Lizhen Xu; Min Zhu and Shi-Lin Yang.** "Flavonol Glycosides from *Lysimachia Congestiflora*". *Phytochemistry* vol.48 no.8, pp.1445-1447. England, 1998.08.03.
- <P983936> **Zhu, M.; C.T. Luk and T.H. Lew.** "Cytoprotective Effect of *Lindera Aggregata* Roots Against Ethanol-Induced Acute Gastric Injury". *Pharmaceutical Biology* vol.36 no.3, pp.222-226. USA, 1998.09.02.
- <P983937> **Zhu, M.; J.D. Phillipson; P.M. Greengrass and N.G. Bowery.** "Searching for Plant Ingredients with Activity in the Central Nervous System by Ligand Receptor Binding Assays". *Recent Research Development in Phytochemistry* vol.2, pp.303-314. India, 1998.10.01.
- <P984047> **Zhu, M.; R.C. Li; K.F. Lin and R.Y. Yeung.** "Protection of Phase I Drug Metabolism in CCl₄ Damaged Liver by Schisandra Chinensis". *Abstracts of the 1998 Annual Meeting of the American Association of Pharmaceutical Scientists* p.S330. San Francisco, USA, 1998.11.15.
- <P984048> **Zhu, M.; R.C. Li; A.L. Ng; A.K. Chan and S. Chang.** "Study on the Drug-Drug Interaction between Ginseng and Warfarin Using a Rat Model". *Abstracts of the 1998 Annual Meeting of the American Association of Pharmaceutical Scientists* vol.1 no.1, p.S625. San Francisco, USA, 1998.11.15.
- <P984049> **Zhu, Min; Prudence Y.K. Wong and Ronald C. Li.** "The Effect of *Taraxacum Mongolicum* on the Bioavailability and Pharmacokinetics of Ciprofloxacin" 《海峽兩岸暨香港第四屆中藥研討

會論文集》頁 92. 中國成都: 華西醫科大學/國立中國醫藥研究所(台北)/香港中文大學, 1998.08.18.

- <P984050> **Zhu, Min; Prudence Y.K. Wong and Ronald C. Li.** "Impact of *Sanguisorba Officinalis L.* on the Absorption and Pharmacokinetics of Ciprofloxacin". *Abstracts of the 39th Annual Meeting of the American Society of Pharmacognosy* Abstracts no.p.10. Orlando, USA, 1998.07.17.
- <P984450> **Chang, S.; Chan W.H.; Kong Y.; Chan G.M.C.; Raymond K.; Lee A.; Lee S.C.; Critchley Jajh and Chan J.C.N.** "Use of Indapamide in Hospital and Community Clinics and Its Effect on Plasma Potassium in Chinese Patients". *Journal of Clinical Pharmacy and Therapeutics* vol.23 no.4, pp.295-302. 1998.
- <P990411> **Chan, Wai C.; Ronald C. Li; Julia M. Ling; Augustine F. Cheng and Jerome J. Schentag.** "Markedly Different Rates and Resistance Profiles Exhibited by Seven Commonly Used and Newer β -lactams on the Selection of Resistant Variants of *Enterobacter Cloacae*" *Journal of Antimicrobial Chemotherapy* vol.43, pp.55-60. USA, 1999.
- <P990692> **Zhu, Min and Ronald C. Li.** "Receptor Binding Activities of *Schefflera* Triterpenoids and Oligosaccharides" *Planta Medica* vol.65, pp.99-103. New York, 1999.03.01.
- <P990693> **Zhu, Min.** "Traditional Chinese Medicine in Hong Kong Research and Industry". *Proceedings of the Workshop on Business Creation for Industrial Exploitation of Medicinal and Aromatic Plant* pp.170-172. Beijing, China: International Centre for Science and High Technology, United Nations, 1999.05.
- <P990960> **Zhu, M; Wong P.Y. and Li R.C.** "Effects of Taraxacum Mongolicum on the Bioavailability and Disposition of Ciprofloxacin in Rats". *Journal of Pharmaceutical Sciences* vol.88, pp.632-634. USA, 1999.06.02.
- <P990961> **Zhu, M.; K.W. Chan; L.S. Ng; Q. Chang; S. Chang and R.C. Li.** "Possible Influences of Ginseng on the Pharmacokinetics and Pharmacodynamics of Warfarin in Rats". *Journal of Pharmacy and Pharmacology* vol.51, pp.175-180. England, 1999.02.01.
- <P991705> **Chang, S.; Wong S.Y.; Li R.C.; Chan L.S.Y.; Chan A.T.C.; Zhu M. and Raymond K.** "Utilization and Monitoring of Aminoglycosides in Oncology Patients at a Hong Kong Government Hospital". *The Annals of Pharmacotherapy* vol.33, pp.646-649. USA, 1999.05.
- <P991726> **Ho, Susan S.** "Treatment of Depression in Coronary Artery Disease". *Hong Kong Pharmaceutical Journal* vol.8 no.1, pp.17-20. Hong Kong, 1999.03.
- <P992125> **Chang, Sophie; Ronald C. Li; Lesley S.Y. Chan; S.Y. Wong; Min Zhu; Anthony T.C. Chan and Kenneth Raymond.** "Netilmicin Pharmacokinetics in Hong Kong Chinese Cancer Patients". *British Journal & Clinical Pharmacology* vol.48, pp.33-35. UK, 1999.

see also <P974970>, <P980853>, <P983045>, <P983162>, <P983209>, <P983452>, <P983460>, <P983467>, <P990498>, <P990945>, <P991098>, <P991099>, <P991712>, <P992357>

RESEARCH PROJECTS

Research in Epithelial Cell Biology

✉ CHAN Hsiao Chang • CHEW CHENG Siew Boon • FISCUS Ronald Ray • LEUNG Po Sing • WONG Patrick Yee Ding • YAO Xiaoqiang

☐ 1 October 1998

❖ CUHK Strategic Research Program

The epithelium is a continuous layer of cells that covers external body surface and forms lining of body cavities such as the lung, the pancreas, intestines and all glands with exocrine function. The epithelium plays an important role in maintaining the normal functions of various organs and glands. Defective epithelial function has been found responsible for some of the diseases such as cystic fibrosis, Young's syndrome, anhidrosis and some unexplained cases of male infertility. In addition, epithelial cells, which undergo frequent apoptosis, are the origin of most types of cancer. This program aims to promote research in epithelial cell biology by encouraging collaboration to work on a number of different epithelial cells including epididymal cells, endometrial cells, Merkel cells and tumor cells of epithelial origin so that problems of different disciplines (e.g., reproductive biology, developmental biology, tumor biology) can be addressed and tackled at various levels (molecular, cellular, tissue and organ) and different aspects (receptors, ion channels and signaling pathways). This program may also function to promote exchanges with China and other parts of the world. The long term goal of this program is to establish a main stream of research in the field of epithelial cell biology in this region. (MD98084)

Modulation of Sperm Ca^{++} -Activated K^+ Channels by Angiotensin II Receptors

✉ CHAN Hsiao Chang

☐ 1 May 1999

❖ CUHK Research Committee Funding

Ca^{2+} -activated K^+ channels (Kca) have been implicated in a number of sperm functions including sperm activation and gamete interaction; however, direct characterization of the channel and its regulation has been precluded by the small size of sperm. We have recently demonstrated functional expression of this channel in *Xenopus* oocytes by injection of RNAs of the germ cells isolated from the rat testes. Co-expression of other receptors have also been observed. The present study aims to further investigate the modulation of the Kca channel by angiotensin II (AII) since AII is known to be present in seminal fluid and affect sperm motility. Using the *Xenopus* oocyte system and voltage-clamp technique,

modulation of the Kca channel will be investigated in conjunction with the use of specific agonist and antagonist of AII receptors. Signalling pathways involved will also be investigated to confirm specific AII receptor subtype involved. The expression of mRNA of particular receptor subtypes, AT_1 or AT_2 , in spermatogenic cells will be confirmed by RT-PCR and their localization by immunohistochemistry. The proposed study will elucidate the underlying mechanism by which AII affects sperm motility. (MD98110)

Ultrastructural Identification of Apoptotic Cells by Direct Immunogold Detection of Digoxygenin-labeled Genomic DNA in Semithin Sections

✉ CHEW CHENG Siew Boon

☐ 1 October 1998

❖ CUHK Research Committee Funding

Apoptosis is a process of physiological cell death, distinct from necrosis, which plays a crucial role in a large number of physiological and pathological processes. It occurs during development, normal adult tissue maintenance and some disease processes. This active response is initiated by a definable physiological stimulus and the appearance requires de novo gene expression. Chromatin cleavage has been considered by many to be the biochemical hallmark of cell undergoing apoptosis. Fragmented DNA with 200-250 bp is followed by internucleosomal digestion to 180-200 bp fragments which could be detected by routine gel electrophoresis as the characteristic "ladder" pattern. On the other hand, the TUNEL method at the light microscopic level was widely used as a histochemical technique to detect internucleosomal DNA fragmentation at the levels of individual cells. However, the resolving power of light microscopy is limited. In the present study, a method of recognizing early apoptotic cells at an electron microscopic level will be established. The progressive of different stages of apoptotic cells can then be recognized *in situ* quantitatively by looking at the intensity of the labeled gold particles which act as a marker. (MD98056)

Mechanism of Atrial Natriuretic Factor (ANF)-induced Inhibition of DNA Fragmentation and Increased Expression of c-fos, junB and Ornithine Decarboxylase (ODC) Genes in NG108-15 Cells

✉ FISCUS Ronald Ray

☐ 1 October 1998

❖ CUHK Research Committee Funding

Alzheimer's disease, brain ischemia following a stroke and certain other neurological diseases involve the loss of neural functions because of apoptotic cell

death of neurons. In the case of Alzheimer's disease, neuronal apoptosis is believed to result, at least in part, from toxic effects of β -amyloid peptide ($A\beta$) and loss of neurotrophic effects of secreted form of β -amyloid precursor protein (β -APP^S). Our laboratory has shown that the neuroprotective effects of β -APP^S is mediated by elevation of cyclic GMP (cGMP) and activation of cGMP-dependent protein kinase (PKG) in neurons. Atrial and brain natriuretic peptides (ANF and BNP) were also found to elevated cGMP and inhibit DNA fragmentation (early step in apoptosis) in PC12 and NG108-15 cells. Our currently funded Direct Grant studies neuroprotective effects of BNP in PC12 cells (catecholaminergic neuron model) and role of superoxide dismutase (SOD). The proposed project will investigate ANF-induced inhibition of DNA fragmentation in NG108-15 cells (cholinergic neuron model) and role of increased gene expression of ornithine decarboxylase (ODC). The Working Hypothesis is that ANF increases survival of stressed cholinergic neurons by:

- (1) activating cGMP/PKG signal transduction pathway,
- (2) increasing phosphorylation of the transcription factor CREB,
- (3) increasing expression of *c-fos*, *junB* and ODC genes, and
- (4) thereby increasing production of polyamines that protect DNA from cleavage by endonucleases.

Expression of *c-fos*, *junB* and ODC gene will be assessed by RT-PCR and Northern blot analysis. Involvement of PKG and CREB will be assess by using specific activators and blockers of PKG and antibodies against the phosphorylated form of CREB. The results of this project should provide valuable new information about the cellular and molecular mechanisms of the inhibition of DNA fragmentation and *c-fos*, *junB* and ODC expression induced by ANF in cholinergic neurons. (MD98057)

Physiological Role of Membrane Potential in Regulation of Resistance Arterial Tone

✉ HUANG Yu • CHAN Leung Franky (Anatomy)
• NELSON Mark T.* • GOLLASCH Maik*

☐ 1 August 1998

❖ CUHK Mainline Research Scheme

Intravascular pressure causes many resistance arteries to develop myogenic tone which is further regulated by both vasoconstrictors and vasodilators. Myogenic tone is an important contributor to basal arterial tone as well as to autoregulation which is responsible for maintaining constant blood flow in the brain during blood pressure changes. Recent attention has focused on the potential role in the resistance vasculature, in particular, how this mechanism could contribute to the increased vascular resistance which is a characteristic of hypertension. The aim of the

proposed study is to investigate the myogenic tone in coronary and cerebral arteries of normotensive and spontaneously hypertensive rats, and the modulatory role of the endothelium and some newly identified vasoactive rats, and the modulatory role of the endothelium and some newly identified vasoactive neuropeptides (adrenomedullin and pituitary adenylate cyclase-activating peptide) in the vascular tone in vessels from both types of rats. These studies should provide new insights into the mechanisms of regulation of coronary and cerebral artery tone and autoregulation and probably a better understanding of the defects in coronary and cerebral flow regulation in the case of hypertension and stroke. (MD98008)

Study on Mechanisms of Vasodilator Action of Berberine

✉ HUANG Yu

☐ 1 October 1998

❖ CUHK Research Committee Funding

The cellular and ionic mechanisms underlying the antihypertensive action of berberine is largely unknown. The projected proposal will specifically examine the following hypotheses using several experimental approaches:

- (1) To investigate what endothelium-derived vasoactive factors (nitric oxide, endothelium-derived hyperpolarizing factor and prostacyclin) are involved in berberine-induced vasorelaxation;
- (2) To investigate whether berberine can inhibit plasma membrane calcium channels and calcium influx;
- (3) To investigate whether berberine can stimulate intracellular second messenger systems such as cyclic AMP and cyclic GMP to induce relaxation or inhibit protein kinase C-mediated vasoconstriction.

This will be the first detailed study to investigate the possible ionic and cellular mechanisms underlying the vascular response to berberine. This study should provide useful and novel information regarding the beneficial effect of berberine on cardiovascular function. (MD98058)

Study on Calcium Sparks in Smooth Muscle Cells

✉ HUANG Yu • GOLLASCH Maik*

☐ 1 June 1999

❖ Germany/Hong Kong Joint Research Scheme

Calcium ions play an essential role in the regulation of many forms of cellular activity including muscle contraction. The cell has access to two sources of signal calcium: extracellular calcium influx and

intracellular calcium release from the endoplasmic or sarcoplasmic reticulum. The plasma membrane provides the three major pathways for calcium influx on the basis of their regulatory mechanism: voltage-sensitive Ca^{2+} channels, receptor-operated Ca^{2+} channels, and store-operated Ca^{2+} channels. With advanced electrophysiological techniques, the former two types of channels have been pharmacologically characterized, while the latter is currently being intensively studied. At least two intracellular channels control release of calcium from the internal stores, the IP_3 receptors and ryanodine receptors. In this study, we specifically propose to (1) investigate the role of IP_3 and ryanodine-sensitive calcium release in agonist-induced oscillations of muscle tone using selective inhibitors. These experiments should generate useful information which will direct subsequent experiments on calcium signalling in single smooth muscle cells; (2) to identify the main source that triggers calcium sparks which are likely responsible for the global increase in $[\text{Ca}^{2+}]_i$ and the contractile phase of rhythmic activity in vas deferens smooth muscle; (3) to investigate interaction between calcium sparks and the activity of K_{ca} channels using simultaneous measurement of calcium signal and whole-cell K^+ currents. This series of experiments should yield useful results regarding the possible link between calcium sparks and sarcolemmal ion channels as well as the ionic basis for noradrenaline-induced rhythmic contractions in vas deferens smooth muscle.

(MD98117)

Simultaneous Measurements of Intracellular pH and ATP-evoked Anion Secretion in Cultured Equine Sweat Gland Epithelia

✉ KO Wing Hung

☐ 1 November 1998

❖ CUHK Research Committee Funding

The presence of P_{2Y_2} ($\text{P}_{2\text{U}}$ -purinergic) receptors in the apical membrane of the cultured equine sweat gland epithelia allows extracellular adenosine 5'-triphosphate (ATP) and uridine-5'-triphosphate (UTP) to evoke anion secretion when the cells were grown under conditions that favoured the development of the polarized phenotype seen *in vivo*. Activation of the anion secretion has been attributed to a rise in intracellular free calcium concentration ($[\text{Ca}^{2+}]_i$). These studies on $[\text{Ca}^{2+}]_i$ measurement, however, were carried out in single cells grown on glass coverslips that cannot reveal the mechanisms by which nucleotides activate anion channels in intact epithelia. With the advent of a new technique that has been recently developed in Hong Kong which allows us to measure transepithelial ion transport and fluorescent signals simultaneously in polarized epithelial cells, our data suggested that there is a far more complex regulatory mechanism of anion

secretion by $[\text{Ca}^{2+}]_i$. Other factors such as basolateral K^+ permeability and its regulation by intracellular pH (pH_i) may also be involved. The purpose of the experiments set out in this project proposal is to clarify this mechanism by developing a new approach in which both pH_i and anion secretion are monitored simultaneously.

(MD98059)

Ca^{2+} Signaling in Polarized Epithelial Cells

✉ KO Wing Hung • Jens LEIPZIGER*

☐ 1 June 1999

❖ Germany/Hong Kong Joint Research Scheme

Epithelial cells characteristically grow as distinct sheets that form the anatomical boundaries between the relatively stable internal environment of the body and the constantly changing environment of the outside world. Many epithelia have become specialized to permit the controlled secretion and/or absorption of salt and water. These transport processes can be controlled by hormones and neurotransmitters binding to specific cell surface receptors and so evoking the production of second messenger signals within the cell. A very prominent "second messenger" in epithelial function is the intracellular Ca^{2+} activity ($[\text{Ca}^{2+}]_i$). An agonist-stimulated $[\text{Ca}^{2+}]_i$ increase is usually composed of an initial InsP_3 -mediated intracellular Ca^{2+} store release and a subsequent activation of transmembrane Ca^{2+} influx. In some polarized epithelia, stimulation with agonists from the luminal or basolateral side lead to differential activation of transport processes.

The aim of the project is to investigate the Ca^{2+} signaling pathways activated by luminal and basolateral agonists (e.g. ATP) and its differential effect in regulating various transport processes in polarized epithelia using microspectrofluorimetric technique, video-microscopy and laser-scanning confocal microscopy.

(MD98118)

The Function of Merkel Cell as a Touch Sensory Receptor

✉ LEUNG Man Sing

☐ 1 April 1999

❖ CUHK Research Committee Funding

Molecular biological techniques will be used to find out the possible candidates of neurotransmitters being synthesized in Merkel cells (MC) which might finally be released onto the adjacent nerve terminals. This can provide evidence for the role of Merkel cells as a force transducer in addition to its force transmission properties. All the available information about the transmitters is obtained from immunohistochemical studies, suggesting the presence of VIP, CGRP, met-

enkephalin like substances in the granules of Merkel cell. The Merkel cells from vibrissal sinus hair of the rat are used for this study. The total RNA is extracted with the Qiagen RNeasy mini kits and subject to reverse transcription - polymerase chain reactions (RT-PCR) to obtain cDNA. Selective primers like VIP, CGRP, pro-enkephalin, neuropeptide Y, substance P, etc. are used for the PCR. Quantitative PCR is performed to determine the relative abundance of mRNAs for different candidates. The sequence of the PCR products is analysed by an automatic sequencer to confirm the correct DNA products. Since it is extremely difficult to isolate only Merkel cells from the surrounding cutaneous tissue for the experiments, a primary culture techniques will be developed to obtain a pure monolayer of Merkel cells. Such cultures can provide pure Merkel cells for other studies like programmed cell death (PCD) in these cells. Merkel cell neuroendocrine carcinoma is important due to its aggressiveness and similarity to the small cell carcinoma of the lung.
(MD98111)

Changes in the Localization and Expression of Angiotensin Receptors in the Chronic Hypoxic Rat Carotid Body

- ✉ LEUNG Po Sing
- 1 June 1999
- ❖ CUHK Research Committee Funding

The mammalian carotid body is predominantly involved in sensing changes in oxygen, carbon dioxide tension and hydrogen ion concentrations and inducing compensatory reflexes in respiratory and cardiovascular control. It has been known that the carotid body is enlarged several folds and its chemoreceptors, the glomus cells also increase in number during exposure to long-term oxygen deprivation (chronic hypoxia). This chronically hypoxic treatment could alter the cardiorespiratory function. The specialized preneural type I glomus cells contain multiple putative neurotransmitters including the biogenic amines, norepinephrine, acetylcholine and neuropeptides. It is believed that sensory transduction in the carotid body involves type I glomus cells which activate closely apposed carotid sinus nerve endings by releasing excitatory neuroactive agents. Recent evidence indicates that some vasoactive peptides interact directly with the carotid body, independently of alteration in blood flow. These include atrial natriuretic peptide, endothelin and angiotensin II. Angiotensin II is well known as a circulating humoral and tissue-based regulator of fluid and electrolyte homeostasis and cardiovascular function. It is also known that systemic angiotensin II levels are increased during hypoxia. However, the role of angiotensin II in the response to altered respiratory function is less well

studied. Interestingly, it has been recently demonstrated that angiotensin II receptor, type I (AT₁) may modulate the excitation of rat carotid body chemoreceptor afferent activity. The aim of the proposed project is to study the precise localization and expression of angiotensin II receptors, AT₁ and AT₂ in the rat carotid body and their changes by chronically hypoxic treatment. The study would provide useful data of the effect of chronic hypoxia on the localization and expression of angiotensin receptors and the physiological significance of angiotensin II in modulating the cardiorespiratory function.
(MD98112)

Internalization and Routing of Trichosanthin

- ✉ TAM Michael S C • SHAW Pang Chui (Biochemistry) • CHAN Wood Yee (Anatomy)
- 1 September 1998
- ❖ Research Grants Council

Trichosanthin TCS is a Ribosome Inactivating Protein (RIP) that has wide spectrum of biological activities. Preparation containing TCS is used in China as an abortifacient agent. It has been recently discovered that TCS inhibited replication of HIV and several tumor cells. It is generally believed that the biological effects of TCS on cells are mediated through ribosome inactivation. This means that TCS has to enter cells, and works its way to the ribosome. Nevertheless, this process has not been demonstrated. The objectives of this study are (1) to demonstrate entry of TCS into cells; (2) to work out the routing to the ribosome and (3) to find regions on TCS crucial for these processes. The outcome of this study can provide answers to many unexplained observations on TCS. For example, our preliminary data suggest that phagocytotic ability of a cell enhance internalization of TCS. This probably explains the variation in TCS potency between different cell lines. Phagocytotic cells are more sensitive than non-phagocytotic cells. If this finding is established, therapeutic use of TCS can be categorized. Strategy to reduce TCS toxicity can be designed in a way so that its entry into normal cell is impaired without affecting its entry into target phagocytotic cells. In conclusion, these studies form an important basis for TCS action. It also provides fundamental information for therapeutic use of TCS and related RIPs.
(CU98243)

Study of CNG1 Channel in Vascular Endothelial Cells

- ✉ YAO Xiaoqiang • KWAN Hiu Yee
- 1 October 1998
- ❖ CUHK Research Committee Funding

Vascular endothelium plays an important role in modulating smooth muscle tone and blood pressure. Stimulation of endothelial cells with vasoactive agents (e.g. bradykinin, histamine, ATP, and acetylcholine) causes an increase in intracellular Ca^{++} concentration as a key signal triggering the formation of two autacoids, prostacyclin (PGI₂) and endothelium-derived relaxing factor (EDRF, NO), which subsequently act on neighboring smooth muscle cells (SMC) and cause vasorelaxation and a decrease in blood pressure. Ca^{++} -permeable NSC channels are believed to be the sole Ca^{++} entry pathway in the vascular endothelium. We have recently cloned a 402-bp partial cDNA of rod-type nucleotide-gated nonselective cation (CNG1) channel from guinea pig mesenteric arteries and cultured vascular endothelial cells. The 402-bp cDNA has 100% nucleotide identity with the recently published rat eye CNG1 sequence. With the use of RT-PCR, northern blot analysis, and *in situ* hybridization, we have found that CNG1 mRNA is abundantly expressed in the vascular endothelial cells of large, medium, and small arteries. Here we propose to clone full length cDNA of CNG1 channel from vascular cells and to study the role of CNG1 channel in vasoregulation. Our research could potentially reveal the molecular identities of the main Ca^{++} entry pathway in vascular endothelial cells. (MD98060)

Rod-Type Nonselective Cation Channel in Vascular Endothelial Cells

- ✉ YAO Xiaoqiang • GARLAND Christopher*
- ☐ 1 April 1999
- ❖ UK/Hong Kong Joint Research Scheme, the British Council

Vascular endothelium plays an important role in modulating smooth muscle tone and blood pressure. Stimulation of endothelial cells causes an increase in intracellular Ca^{++} concentration as a key signal triggering the formation of NO, which subsequently act on neighboring smooth muscle cells and cause vasorelaxation and a decrease in blood pressure. Ca^{++} -permeable NSC channels are believed to be the sole Ca^{++} entry pathway in the vascular endothelium. We have recently cloned a 402-bp partial cDNA of rod-type nucleotide-gated nonselective cation (CNG1) channel from guinea pig mesenteric arteries and cultured vascular endothelial cells. The 402-bp cDNA has 100% nucleotide identity with the recently published rat eye CNG1 sequence. With the use of RT-PCR, northern blot analysis, and *in situ* hybridization, we have found that CNG1 mRNA is abundantly expressed in the vascular endothelial cells of large, medium, and small arteries. Here we propose to clone full length cDNA of CNG1 channel from vascular cells and to study the role of CNG1 channel in vasoregulation. Our research could

potentially reveal the molecular identities of the main Ca^{++} entry pathway in vascular endothelial cells. (MD98090)

Property and Role of Endothelial CNG Channel

- ✉ YAO Xiaoqiang • KWAN Hiu Yee
- ☐ 1 April 1999
- ❖ American Health Assistance Foundation

CNG channel is a Ca^{++} permeable nonselective cation channel sensitive to the modulation of cyclic nucleotides. The abundant presence of CNG channel in vascular endothelial cells suggest an important role of CNG channels in Ca^{2+} entry in vascular endothelium, therefore implicate a possible involvement of CNG proteins in the regulation of vasotone and arterial blood pressure.

Since endothelial CNG channels are potentially very important links in regulating arterial tone and blood pressure, we propose here to characterize the endothelial CNG channels and study the relationship between the activity of the channels and contractile response of the arterial vessels. Our aims are

- (1) to examine the basic electrophysiological and pharmacological properties of endothelial CNG channels using single channel patch clamp recording techniques; and
- (2) to use putative inhibitors of endothelial CNG channels to modulate the activity of the channels and examine whether the activity of these channels could affect contractile response of isolated arterial rings.

This study is set to reveal the electrophysiological and pharmacological properties of endothelial CNG channels which may be an important link in the regulation of arterial tone and blood pressure. An abnormal regulation of these channels may contribute the pathogenesis of hypertension and those diseases associated with hypertension such as myocardial infarction and stroke. Therefore, this study may eventually lead to the discovery of an important therapeutic site which can be modulated by antihypertensive drugs. (MD98122)

Please refer to previous issues of this publication for more details of the following ongoing research at the department:

<u>Edition</u>	<u>Title/Investigators</u>
1997-98	Identification and Functional Studies of VEGF Receptors in Rat Testicular Macrophages (CU97663) ✉ AU Chak Leung • LEE Will M.*
1995-96	Study of Epithelial Electrolyte Transport (MD95029)

- ✎ CHAN Hsiao Chang • WONG Patrick Yee Ding • CHEW CHENG Siew Boon • KO Wing Hung
- 1996-97 Local Paracrine/Autocrine Control of Epididymal Anion Secretion by Vasoactive Peptides (CU96612)
 ✎ CHAN Hsiao Chang • WONG Patrick Yee Ding • CHEW CHENG Siew Boon • KO Wing Hung
- 1996-97 Calcitonin Gene-Related Peptide (CGRP) and Nitric Oxide Interactions in Vascular Smooth Muscle: Cellular Mechanisms and Involvement in Endotoxin Shock (CU96644)
 ✎ FISCUS Ronald Ray
- 1997-98 Cellular and Molecular Mechanisms of Brain Natriuretic Peptide (BNP)-Induced Inhibition of Apoptotic Cell Death in PC12 Pheochromocytoma Cells (MD97074)
 ✎ FISCUS Ronald Ray • CHEW CHENG Siew Boon
- 1997-98 Study on Mechanisms of Vasodilator Effects of Green Tea Epicatechin Isomers in Spontaneously Hypertensive Rats and Normotensive Rats (CU97609)
 ✎ HUANG Yu • CHEN Zhen Yu (Biochemistry)
- 1997-98 Interaction between G Protein and K⁺ Channels in Rat Pituitary GH3 Cells (MD97101)
 ✎ HUANG Yu • HESCHELER Jurgen*
- 1997-98 Electrolyte Transport Mechanisms Underlying the Formation of Seminiferous Tubular Fluid by Rat Sertoli Cells (CU97640)
 ✎ KO Wing Hung • CHAN Hsiao Chang
- 1997-98 Apical P₂ Receptors and the Control of Anion Channel Activity in Epithelial Cells (MD97107)
- ✎ KO Wing Hung • WILSON Stuart M.*
- 1997-98 Testicular Hormone-Regulated Expression of the Renin-Angiotensin II System in the Rat Epididymis (CU97621)
 ✎ LEUNG Po Sing • CHAN Hsiao Chang
- 1997-98 Expression and Localization of the Pancreatic Renin-Angiotensin System in the Rat (MD97073)
 ✎ LEUNG Po Sing
- 1997-98 Expression & Regulation of Renin and Angiotensin Converting Enzyme in the Rat Pancreas (MD97104)
 ✎ LEUNG Po Sing • NOBILING Rainer*
- 1997-98 Development of Porcine Growth Hormone Immunoassays (BL97010)
 ✎ WONG Chun Cheung
- 1997-98 Studies of the Renin-Angiotensin System in the Rat Epididymis (MD97100)
 ✎ WONG Patrick Yee Ding • CHAN Hsiao Chang
- 1997-98 Anion Secretion by the Sertoli Cells from Cystic Fibrosis Transgenic Mice (MD97108)
 ✎ WONG Patrick Yee Ding • CUTHBERT Alan W.*
- 1997-98 Tissue Distribution and Characterization of a cGMP-Gated K Channel (MD97075)
 ✎ YAO Xiaoqiang
- 1997-98 The Nigral GABAergic Inhibitory Pathway as an Endogenous Control System of Epileptic Seizures: An Electrophysiological Study (CU97626)
 ✎ YUNG Wing Ho

RESEARCH OUTPUTS AND PUBLICATIONS

- <P981749> **Yao, X.; H.Y. Kwan and M.W. Fong.** "The Expression of a Nonselective Cation Channel in Vascular Endothelial and Vascular Smooth Muscle Cells". Paper presented in the American Physiological Society Conference. USA, 1998.09.

- <P982644> **Yao, Xiaoqiang; Yu Huang; Hiu-Yee Kwan; Pat Chan and Gary Desir.** "Characterization of a Regulatory Region in the N-Terminus of Rabbit Kv1.3". *Biochemical and Biophysical Research Communications* vol.249, pp.492-498. USA, 1998.09.03.
- <P982761> 陳小章、梁寶成、蘇兆祥、黃宜定。〈男性生殖系統的局部組織腎素血管緊張素系統〉。《生理通訊》第17期,頁45-46。中國,1998。
- <P982834> **Kwok, K.H.; N.W.K. Chan; C.W. Lau and Yu Huang.** "Contractile and Relaxant Effects of Tetrapentylammonium Ions in Rat Isolated Mesenteric Artery". *Pharmacology* vol.57, pp.188-195. Basel, Switzerland, 1998.10.
- <P982844> **Huang, Yu and Lau C.W.** "Unique Effect of Tetrapentylammonium Ions on Sympathetic Transmission in Rat Vas Deferens". *Journal of Autonomic Pharmacology* vol.18, pp.189-194. UK, 1998.09.
- <P982980> **Huang, Yu; C.W. Lau; N.W.K. Chan; X.Q. Yao and F.L. Chan.** "Prejunctionally Mediated Inhibition of Neurotransmission by Isoprenaline in Rat Vas Deferens". *Life Sciences* vol.63 no.23, pp.2107-2113. USA, 1998.10.23.
- <P983013> **Chan, Hsiao Chang; Po Sing Leung and Patrick Y.D. Wong.** "Local Renin-Angiotensin System in the Epididymis". *Developmental & Reproductive Biology* vol.7 no.2, pp.75-82. China, 1998.
- <P983105> **Fong S.K.; Liu C.Q. and Chan H.C.** "Cellular Mechanisms of Adrenaline-Stimulated Anion Secretion by the Mouse Endometrial Epithelium". *Biology of Reproduction* vol.59 no.6, pp.1342-1348. USA, 1998.12.
- <P983181> **Cheung, C.Y.; X.F. Wang and H.C. Chan.** "Stimulation of HCO₃⁻ Secretion Across Cystic Fibrosis Pancreatic Duct Cells by Extracellular ATP" *Biological Signals and Receptors* vol.7, pp.321-327. Basel, Switzerland, 1998.
- <P983320> **So, S.C.; W.L. Wu; J. Grima; P.S. Leung; Y.W. Chung; C.Y. Cheng; P.Y.D. Wong; Y.C. Yan and H.C. Chan.** "Functional Expression of Sperm Angiotensin II Type I Receptor in Xenopus Oocyte: Modulation of a Sperm Ca²⁺-Activated K⁺ Channel" *Biochimica et Biophysica Acta* vol.1415, pp.261-265. The Netherlands, 1998.
- <P983416> **Leung, P.S.; T.P. Wong; P.Y.D. Wong and H.C. Chan.** "Localization and Distribution of Pituitary Adenylate Cyclase-Activating Polypeptide in the Rat Epididymis". *Cell Biology International* vol.22, pp.193-198. USA, 1998.09.
- <P983417> **Chan, H.C.; W.L. Wu; Y.P. Sun; P.S. Leung; T.P. Wong; Y.W. Chung; S.C. So; T.S. Zhou and Y.C. Yan.** "Expression of Sperm Ca²⁺-Activated K⁺ Channels in Xenopus Oocytes and Their Modulation by Extracellular ATP" *Federation of European Biochemical Society Letter* vol.438, pp.177-182. 1998.11.06.
- <P983643> **Leung, P.S.; H.C. Chan; Y.W. Chung; T.P. Wong and P.Y.D. Wong.** "The Role of Local Angiotensins and Prostaglandins in the Control of Anion Secretion by the Rat Epididymis". *Journal of Reproduction and Fertility* Suppl.53, pp.15-22. UK, 1998.
- <P983899> **Lau, C.W.; Kwok K.H.; Chan N.W.K. and Huang Y.** "Potentiating and Inhibitory Effect of Tetrapentylammonium Ions (TPA⁺) on Neurotransmission in Vas Deferens". *Neuroscience Letters* suppl.49, p.S7. Amsterdam, Hollands, 1998.12.
- <P983900> **Huang, Y.; Lau C.W.; Chan N.W.K. and Chan F.L.** "Prejunctionally Mediated Inhibition of Neurotransmission by Isoprenaline in Rat Vas Deferens". *Neuroscience Letters* suppl.49, p.S20. Amsterdam, Hollands, 1998.12.
- <P984870> **Law, V.W.Y. and W.H. Ko.** "Calcium-Independent Mechanism of P₂ Receptor Mediated Anion Secretion in Polarized Epithelia". *Biological Signals and Receptors* vol.8 no.3, p.233. Taiwan: Department of Physiology, Kaohsiung Medical College, 1998.10.23.

- <P984881> **Ko, W.H.; H.C. Chan; S.B. Chew and P.Y.D. Wong.** "Regulated Anion Secretion in Cultured Epithelia from Sertoli Cells of Immature Rats". *The Journal of Physiology* vol.512 no.2, pp.471-480. UK, 1998.10.15.
- <P985009> **Chan, Priscilla K.Y., Savio C.Y. Chan and Wing-ho Yung.** "Presynaptic Inhibition of GABAergic Inputs to Rat Substantia Nigra Pars Reticulata Neurones by a Cannabinoid Agonist". *Neurophysiology* vol.9 no.4, pp.671-675. U.K., 1998.03.
- <P985010> **Chan, Priscilla K.Y., Chris K.S. Leung and Wing-Ho Yung.** "Differential Expression of Pre- and Postsynaptic GABA_B Receptors in Rat Substantia Nigra Pars Reticulata Neurones". *European Journal of Pharmacology* vol.349, pp.187-197. 1998.05.
- <P985011> **Chan, Priscilla K.Y. and Wing-Ho Yung.** "Occlusion of the Presynaptic Action of Cannabinoids in Rat Substantia Nigra Pars Reticulata by Cadmium". *Neuroscience Letters* vol.249, pp.57-60. 1998.06.
- <P985012> **Fiscus, R.R., L. Lu, A.W.K. Tu, H. Hao, L. Yang and X. Wang.** "Brain Natriuretic Peptide Enhances the Endothelium-independent cAMP and Vasorelaxant Responses of Calcitonin Gene-related Peptide in Rat Aorta". *Neuropeptides* vol.32 no.6, pp.499-509. Edinburgh, U.K., 1998.12.
- <P990077> **Chan, L.N.; Y.W. Chung; P.S. Leung; C.Q. Liu and H.C. Chan.** "Activation of an Adenosine 3',5'-Cyclic Monophosphate-Dependent Cl-Conductance in Response to Neurohormonal Stimuli in Mouse Endometrial Epithelial Cells: The Role of Cystic Fibrosis Transmembrane Con". *Biology of Reproduction* vol.60, pp.374-380. USA, 1999.
- <P990192> **Huang, Yu; C.W. Lau; F.L. Chan and X.Q. Yao.** "Contribution of Nitric Oxide and K⁺ Channel Activation to Vasorelaxation of Isolated Rat Aorta Induced by Procaine" *European Journal of Pharmacology* vol.367, pp.231-237. The Netherlands, 1999.02.
- <P990230> **Leung, P.S.; W.P. Chan; T.P. Wong and C. Sernia.** "Expression and Localization of the Renin-angiotensin System in the Rat Pancreas". *Journal of Endocrinology* vol.160, pp.13-19. UK, 1999.
- <P990233> **Wong, P.Y.D.; H.C. Chan; P.S. Leung; Y.W. Chung; Y.L. Wong; W.M. Lee; V. Ng and N.J. Dun.** "Regulation of Anion Secretion by Cyclo-Oxygenase and Prostanoids in Cultured Epididymal Epithelia from the Rat". *The Journal of Physiology* vol.514, pp.809-820. UK, 1999.
- <P990320> **Huang, Yu; Nickie Wai Kei Chan; Chi Wai Lau; Xiao Qiang Yao; Franky Leung Chan and Zhen Yu Chen.** "Involvement of Endothelium/Nitric Oxide in Vasorelaxation Induced by Purified Green Tea (-) Epicatechin". *Biochimica et Biophysica Acta* vol.1427 no.2-3, pp.322-328. The Netherlands, 1999.04.
- <P990397> **Chan, Wah-Lun; Pang-Chui Shaw; Xiao-Bing Li; Qiong-Fang Xu; Xian-Hui He and Siu-Cheung Tam.** "Lowering of Trichosanthin Immunogenicity By Site-Specific Coupling to Dextran". *Biochemical Pharmacology* vol.57, pp.927-934. USA, 1999.
- <P990405> **Yao, Xiaoqiang; Po-Sing Leung; Hiu-Yee Kwan; Tung-Po Wong and Mei-Wa Fong.** "Rod-type Cyclic Nucleotide-gated Cation Channel is Expressed in Vascular Endothelium and Vascular Smooth Muscle Cells". *Cardiovascular Research* vol.41, pp.282-290. 1999.
- <P990469> **Lau, C.W.; F.L. Chan; X.Q. Yao and Y. Huang.** "Procaine Mediates Endothelium-Dependent And-Independent Relaxation in Rat Aorta". *Proceedings of the 1999 Hong Kong Physiology Symposium* p.28. Hong Kong, 1999.05.
- <P990479> **Huang, Yu; Yiu-Wa Chung and P.Y.D. Wong.** "Potassium Channel Activity Recorded from the Apical Membrane of Freshly Isolated Epithelial Cells in Rat Caudal Epididymis". *Biology of Reproduction* vol.60, pp.1509-1514. USA, 1999.06.02.
- <P990533> **Leung, Po-Sing; Wai-Pong Chan; Man-Lung Fung and Rainer Nobiling.** "The Regulated Expression of Pancreatic Renin-Angiotensin System in Chronically Hypoxic Rat". Paper presented in the Endocrine Society's 81st Annual Meeting. USA, 1999.06.12.

- <P990534> **Chan, W.P.; M.L. Fung and P.S. Leung.** "The Effect of Chronic Hypoxia on the Expression of Renin-angiotensin System in the Rat Pancreas". *Biological Signals and Receptors* vol.8, p.195. Hong Kong, 1999.05.21.
- <P990535> **Leung, P.S.; T.P. Wong; S.Y. Lam; H.C. Chan and P.Y.D. Wong.** "Regulation of the Epididymal Renin-Angiotensin System by Castration and Hormonal Replacement". *Biological Signals and Receptors* vol.8, p.206. Hong Kong, 1999.05.21.
- <P990633> **Chan, N.W.K.; W.H. Ko and Y. Huang.** "Role of Endothelium/Nitric Oxide in Glibenclamide-induced Aortic Relaxation". *Proceedings of the 1999 Hong Kong Physiology Symposium* pp.9-10. 1999.05.
- <P990635> **Lau, C.W.; N.W.K. Chan; X.Q. Yao; F.L. Chan; Z.Y. Chen and Y. Huang.** "Inhibition of Endothelium-Dependent Relaxation by TOA⁺ in Rat Aorta" *Biological Signals and Receptors* vol.8, p.205. 1999.05.
- <P990986> **Chan, H.Y.; C.W. Lau; N.W.K. Chan; F.L. Chan; X.Q. Yao and Y. Huang.** "The Vasorelaxant Effect of 17 β -estradiol". *Proceedings of the Physiology Symposium 1999* p.9. Hong Kong, 1999.05.
- <P990997> **Zhu, Qin Yan; Yu Huang; David Tsang and Zhen-Yu Chen.** "Regeneration of α -Tocopherol in Human Low-Density Lipoprotein by Green Tea Catchin". *Journal of Agriculture and Food Chemistry* vol.47, pp.2020-2025. USA, 1999.04.10.
- <P990999> **Cheng, H.S.; S.C. So; S.H. Law and H.C. Chan.** "Angiotensin II-Mediated Signal Transduction Events in Cystic Fibrosis Pancreatic Duct Cells". *Biochimica et Biophysica Acta* vol.1449, pp.254-260. The Netherlands, 1999.
- <P991000> **Cheng, H.S.; W.S. Wong; K.T. Chan; X.F. Wang; Z.D. Wang and H.C. Chan.** "Modulation of Ca²⁺-Dependent Anion Secretion by Protein Kinase C in Normal and Cystic Fibrosis Pancreatic Duct Cells" *Biochimica et Biophysica Acta* vol.1418, pp.31-38. The Netherlands, 1999.
- <P992142> 陳小章、黃宜定。〈附睾陰離子分泌調控機制〉。《醫學研究通訊》第 28 卷 第 8 期, 頁 14-15. 北京、中國, 1999.
- <P992188> **Ko, W.H. and C.H.Y. Wong.** "Simultaneous Measurements of ATP-Activated Calcium Entry and Short-Circuit Current(I_{sc}) in Polarized Cultured Equine Sweat Gland Epithelia". *Proceedings of the Physiological Society (Journal of Physiology)* vol.517, pp.20-21. Manchester, UK: The Physiological Society, 1999.03.29.
- <P992189> **Wong, Connie H.Y. and W.H. Ko.** "Relationships Between Intracellular Ca²⁺ Release, Store-Operated Ca²⁺ Entry and Anion Secretion in Polarized Cultured Equine Sweat Gland Epithelia". *Biological Signals and Receptors* vol.8 no.3, p.215. Hong Kong: Department of Physiology, University of Hong Kong, 1999.05.21.
- <P992190> **McAlroy, H.L.; A. Collet; S. Ahmed; W.H. Ko; D.L. Baines and S.M. Wilson.** "Expression of Multiple P2Y Receptor Subtypes by Caco-2 Human Colonic Adenocarcinoma Cells". *Proceedings of the Physiological Society (Journal of Physiology)* vol.517, p.97. Manchester, UK: The Physiological Society, 1999.03.29.
- <P992660> **Chow, Dora S.L. and W.H. Ko.** "Microspectrofluorimetric Study of ATP-Activated Calcium Entry Pathway in Cultured Equine Sweat Gland Cells". *Biological Signals and Receptors* vol.8 no.3, p.197. Hong Kong: Department of Physiology, University of Hong Kong, 1999.05.21.
- <P992710> **Lu, Li Fang and Ronald R. Fiscus.** "Interleukin-1 β Causes Different Levels of Nitric Oxide-Mediated Depression of Contractility in Different Positions of Rat Thoracic Aorta". *Life Sciences* vol.64 no.16, pp.1373-1381. Amsterdam, 1999.05.

<P992711> **Lu, L.F. and R.R. Fiscus.** "Calcitonin Gene-related Peptide Causes Long-term Inhibition of Contraction in Rat Thoracic Aorta Through a Nitric Oxide-dependent Pathway". *Neuropeptides* vol.33 no.2, pp,145-154. Edinburgh, UK, 1999.06.

see also <P980931>, <P983162>, <P983207>, <P983619>, <P990398>, <P990543>, <P990761>, <P990804>, <P990956>, <P991533>, <P991555>

RESEARCH PROJECTS

Cytochrome P450 2D6 Genotyping and Movement Disorders in Schizophrenia

✉ LAM Chiu Wa • WAYE Mary Miu Yee (Biochemistry) • UNGVARI Gabor Sandor • CHIU Fung Kum Helen

☐ 1 October 1998

❖ CUHK Research Committee Funding

Movement disorders are commonly observed in patients suffering from schizophrenia. All forms of movement disorder constitute disabling effects. It could cause life-threatening respiratory distress in severe forms. The prevalence of tardive dyskinesia (a type of chronic movement disorder) in patients on longterm antipsychotic medication is about 10% in Chinese populations. However, apart from basic demographic characteristics, no risk factor for iatrogenic and spontaneous movement disorders has been ascertained.

Recent development in pharmacogenetics has identified the role of hereditary predisposition in drug metabolism and idiosyncratic reactions. Human cytochrome P450 2D6 isoenzymes are involved in the metabolism of most psychotropic medications. Variations in genotypic constituents of this isoenzyme system have led to different phenotypic presentations and changes in enzyme activity. It is possible that poor metabolism with prolonged accumulation of psychotropic drugs in the body may contribute to the higher incidence of severe side effects like movement disorders. Some studies also implicated a significant contribution of mutant alleles in cytochrome P450 2D6 gene in Parkinson's disease and dementia of the Lewy body. Both disorders are characterized by occurrence of abnormal movements. It is thus possible that the gene may also be implicated in the development of spontaneous movement disorders in schizophrenia.

Researchers' project aims to study the genotypic representation of the cytochrome P450 2D6 isoenzyme system in schizophrenic patients and the association between specific alleles and movement disorders. It is hoped that the result will generate important information to the mechanism underlying movement disorders in schizophrenia and provide a biologic marker for patients requiring psychotropic medication. (MD98061)

Outcome and Cultural Context of Anorexia Nervosa in Hong Kong

✉ LEE Sing • HSU L. K. George*

☐ 1 January 1999

❖ Research Grants Council

Anorexia nervosa is clearly becoming more common among females in Hong Kong. It is a severe psychiatric disorder characterised by rigid food refusal, marked weight loss, cessation of menstruation, and social dysfunction. Long-term outcome studies have indicated that 14% of anorexic patients die as a result of suicide or physical complications of the illness, while about one third of them continue to manifest eating disturbance, depression, and social impairment. The condition was once thought to be confined to women of Western societies, and was un-heard-of in Chinese societies. As a result of societal modernization and the changing and often conflicting roles of women in contemporary Hong Kong, however, an increasing number of young Chinese females who are afflicted with this condition have been reported since about a decade ago. Although clinical experience indicates that severe social impairment and death do occur among Chinese anorexic patients in Hong Kong, no outcome study of anorexia nervosa has ever been conducted in a Chinese society. This is regrettable because a systematic study of its course, outcome and prognostic factors can give clinicians a proper perspective and focus in treatment, evaluate the efficacy of existing treatment, and clarify the nature of anorexia nervosa from a cross-cultural perspective. It can also help health professionals plan the necessary health services as eating disorders predictably come to affect more young females in Hong Kong in the years to come. Since anorexia nervosa in Chinese patients is not always grounded in the fear of fatness, the present study, by combining psychiatric and cultural anthropological methodologies, may also shed light on how cultural factors shape the social course, local meaning, and symbolic function of morbid food refusal in a modern Chinese society. (CU98029)

A Randomised, Controlled Trial of Educational Counselling on the Management of Women Who Suffered Suboptimal Outcomes During Childbirth

✉ LEE Tak Shing Dominic • CHUNG Kwok Hung Tony (Obstetrics & Gynaecology) • CHIU Fung Kum Helen • CHEUNG Lai Ping* • TAM Wing Hung (Obstetrics & Gynaecology) • LEE Albert (Community and Family Medicine)

☐ 1 September 1998

❖ Health Services Research Fund, Hospital Authority

In Hong Kong, suboptimal medical outcomes occurring in public medical service have become an increasing focus of public attention. Each year, in HA alone, there are around 5,000 parturients who have an unexpected suboptimal outcome. It is recognised that suboptimal outcomes during childbirth is relatively high risks areas in terms of patient satisfaction and

grievances. Even in the absence of medical mismanagement, formal complaints and legal actions are not infrequent. Occurring at a time of anticipated joy, these unexpected outcomes also precipitate major psychological problems for the parturients and their families. Given the commonness and the potential deleterious consequences of the condition, if educational counselling programme provided by midwife is shown to be effective in reducing psychological morbidity and in promoting patient satisfaction, the programme will be highly applicable in other obstetric units in Hong Kong. Ultimately, the concept of proactive, systematic, interventionist educational counselling may also be applicable in the management of suboptimal outcomes amongst other medical specialities.
(MD98002)

A Study to Look into the Risk and Protective Factors for Drug Related Deaths in Hong Kong

- ✉ LEE Tak Shing Dominic • LAU Tai Shing (Statistics) • YIP Paul* • HALLIDAY Peter* • CHAN Kong Hei* • CHAN Choi Ha*
- ☐ 1 December 1998
- ❖ Action Committee Against Narcotics

An alarming increase in trend of drug related deaths has been suggested by recent Coroners Report. In 1996, there were 182 drug-related deaths examined by the coroners, representing an increase of more than 100% over the past four years. As yet, to the best of our knowledge, there is no study of drug related death in Hong Kong. Such kind of study has been carried out in the United States, the United Kingdom and Australia and they provide important information concerning the nature and the causes of drug related death. These studies provide also important information on how to design and implement preventive intervention to reduce drug-related death. In view of the findings of the Coroners Report, an in-dept analysis of trend of drug related deaths in Hong Kong is very timely.
(MD98079)

Please refer to previous issues of this publication for more details of the following ongoing research at the department:

<u>Edition</u>	<u>Title/Investigators</u>
1996-97	Pharmacokinetics of Tricyclic Antidepressant Treatment: An Integrated Phenotype and Genotype Approach (MD96114) ✉ CHIU Fung Kum Helen • WING Yun Kwok • CHOW Lok Yee
1997-98	A Study on Factors Affecting Drug Abuse Trend in Hong Kong (MD97091) ✉ LEE Tak Shing Dominic • LAU Tai Shing (Statistics) • SO Man Pui* • LEE Albert (Community and Family Medicine) • TANG Leung Sang Nelson (Chemical Pathology)
1997-98	Research on Effectiveness of Voluntary Residential Drug Abuse Treatment Programme in Hong Kong (MD97133) ✉ LEE Tak Shing Dominic
1997-98	The Effectiveness of Piracetam on ECT-Induced Memory Disturbances (MD97124) ✉ UNGVARI Gabor Sandor • LEUNG Chi Ming • CHUNG Wai Sau Dicky • TANG Wai Kwong* • LEUNG Yip Shing Tony
1996-97	The Use of Sleep and Neuroendocrine Changes as Biological Probes of Depression and Neurasthenia in Chinese Subjects in Hong Kong (CU96676) ✉ WING Yun Kwok • LEE Sing • CHEN Char Nie • CHOW Chun Chung Francis (Medicine & Therapeutics)
1997-98	An Epidemiological Study of Narcolepsy in Hong Kong Chinese (CU97675) ✉ WING Yun Kwok • CHEN Char Nie • HO Kwok Wah Crover • LEUNG Yip Shing Tony • LI Kam Tao Philip (Medicine & Therapeutics)

RESEARCH OUTPUTS AND PUBLICATIONS

<P974989> **Pang, A.H.T.; G.S. Ungvari; H.F.K. Chiu; L.C.W. Lam and D.W.S. Chung.** "A Double-Blind, Placebo-Controlled Study on Gradual Withdrawal of Antiparkinsonian Medication in Chinese Schizophrenic Patients". *Schizophrenia Patients European Neuropsychopharmacology* vol.7 Supl.2. The Netherlands: Elsevier, 1997.

- <P975057> **Chow, L.Y.; D. Chung; V. Leung; T.F. Leung and C.M. Leung.** "Suicide Attempt Due to Metoclopramide-Induced Akathisia". *Int J. Clin Pract* vol.51 no.5, pp.330-331. UK, 1997.
- <P975070> **Lai, K.Y.C.; T.S.F. Chan; A.H.T. Pang and C.K. Wong.** "Dropping Out from Child Psychiatric Treatment: Reasons and Outcome". *International Journal of Social Psychiatry* vol.43 no.3, pp.223-229. 1997.
- <P975071> **Pang, A.H.T.; K.Y.C. Lai and V. Bailey.** "Children's Consent to Psychiatric Treatment: All or Nothing?". *Interantional Journal of Clinical Practice* vol.51 no.6, pp.412-413. 1997.09.
- <P981127> **Lam, Linda C.W.** "Neuropsychiatric Impairment Following Radiation-Induced Temporal Lobe Injury in Nasopharyngeal Carcinoma". *Medical Progress* vol.25, pp.10-12. Hong Kong, 1998.08.
- <P981842> **Chow, L.K.; Chiu H.F.K.; Wing Y.K. and Garcia-Barcelo M.** "Cytochrome P 450 2D6 Genotype in Hong Kong Chinese". Paper presented in the 21st Congress of the Collegium Internationale Neuro Pharmacologic. p.244. Glasgow, Scotland, 1998.07.13.
- <P982924> **Lee, T.S.** "Postnatal Depression in Hong Kong". *Abstracts of the 3rd Annual Scientific Symposium of the Hong Kong College of Psychiatrists* p.11. Hong Kong, 1998.12.13.
- <P983539> **Lee, Dominic T.S.; Alexander S.K. Yip; Henry C.M. Leung; Helen F.K. Chiu and Tony K.H. Chung.** "The Practice of Traditional Cultural Ritual of 'Doing the Month' (Zuo Yue) in Contemporary Chinese Society". Paper presented in the Biennial Meeting of the Marce Society. USA, 1998.06.
- <P983571> **沈其傑、李誠、高歡.** <對我國情感性精神障礙流行病學研究的思考>. *Chin J Psychiatry* 第31卷第4期, 頁 240-242. 中國, 1998.11.
- <P983572> **李誠、陳國棟.** <談中國人軀體化現象及軀體樣障礙>. 《上海精神醫學》第10卷第1期, 頁 1-5. 中國, 1998.
- <P983573> **Lee, Sing; Yun Kwok Wing and Samson Fong.** "A Controlled Study of Folate Levels in Chinese Inpatients with Major Depression in Hong Kong". *Journal of Affective Disorders* vol.49, pp.73-77. UK, 1998.
- <P983574> **Lee, Sing.** "Estranged Bodies, Simulated Harmony, and Misplaced Cultures: Neurasthenia in Contemporary Chinese Society". *Psychosomatic Medicine* vol.60, pp.448-457. USA, 1998.
- <P983575> **Lee, Sing.** "Global Modernity and Eating Disorders in Asia". *European Eating Disorders Review* vol.6 no.3, pp.151-153. UK, 1998.
- <P983639> **Kam, W.K. and S. Lee.** "The Variable Manifestations and Contextual Meanings of Anorexia Nervosa: Two Case Illustrations from Hong Kong". *International Journal of Eating Disorders* pp.228-231. UK, 1998.
- <P983640> **Lee, Sing.** "Higher Earnings, Bursting Trains and Exhausted Bodies: The Creation of Travelling Psychosis in Post-Reform China". *Social Science & Medicine* vol.47 no.9, pp.1247-1261. USA, 1998.
- <P983642> **Lee, Sing; Antoinette M. Lee and Tony Leung.** "Cross-Cultural Validity of the Eating Disorder Inventory: A Study of Chinese Patients with Eating Disorders in Hong Kong". *International Journal of Eating Disorders* vol.23, pp.177-188. USA, 1998.
- <P983874> **Lee, D.T.S.; Yip S.K.; Chiu H.F.K.; Leung T.Y.S.; Chan K.P.M.; Chau I.O.L.; Leung H.C.M. and Chung T.K.H.** "Chinese Version of the Edinburgh Postnatal Depression Scale was Useful for Detecting Postnatal Depression". *Evidence-Based Mental Health* vol.1 no.4, p.120. UK, 1998.05.

- <P984743> **Lai, K.Y.C.; A.H.T. Pang; C.K. Wong; F. Lum and M.K. Lo.** "Characteristics of Dropouts from a Child Psychiatry Clinic in Hong Kong". *Social Psychiatry Epidemiology* vol.33, pp.45-48. 1998.01.
- <P990145> **Lu, Y.W.; Sing Lee; M.L. Liu; Y.K. Wing and T.S. Lee.** "Too Costly to be ill: Psychiatric Disorders among Hospitalized Migrant Workers in Shenzhen". *Transcultural Psychiatry* vol.36 no.1, pp.95-109. 1999.03.
- <P991626> **Lee, D. and T. Chung.** "A Better Screening Measure for Postnatal Depression: Double Test Using Edinburgh Postnatal Depression Scale and General Health Questionnaire". *The Royal College of Psychiatrists: Proceedings* p.124. Birmingham, 1999.06.28.
- <P991639> **Lee, D.T.S.; A.S.K. Yip; H.F.K. Chiu and T.K.H. Chung.** "Postnatal Depression and Traditional Postpartum Custom". *The Royal College of Psychiatrists Proceedings* p.131. Birmingham, UK, 1999.06.28.

see also <P982790>, <P983641>, <P983929>, <P983943>, <P984030>, <P984136>, <P984757>, <P984901>, <P984996>, <P990109>, <P990110>, <P990134>, <P990396>, <P990602>, <P990691>, <P990930>, <P990934>, <P991201>, <P991542>, <P991543>

RESEARCH PROJECTS

The Use of Octreotide in Adhesive Small Bowel Obstruction - A Prospective Double-Blinded Randomized Controlled Trial

✉ CHAN Chi Wai Angus • CHUNG Sheung Chee Sydney • LEE Wai Hung Danny • NG Enders Kwok-wai • LAU Yun Wong James • WONG Kin Hung Simon • LAW Ka Bo Bonita Angela

☐ 1 May 1999

❖ CUHK Research Committee Funding

Patients with previous abdominal surgery are prone to develop intestinal obstruction due to bowel adhesion and 50% of them may require another surgery to relieve the obstruction. And yet, they are vulnerable to have recurrent attack of obstruction. It would be beneficial to these patients if surgery could be avoided by other non-surgical means. A somatostatin synthetic analogue, Octreotide, has been reported with success in the treatment of adhesive intestinal obstruction and was shown to reduce the need of surgery in these patients in uncontrolled trials. We proposed to evaluate the effectiveness of octreotide in reducing the need of surgery in patients suffered from adhesive bowel obstruction in a prospective double-blinded randomized controlled trial.

(MD98113)

Helicobacter pylori infection and intragastric Nitrosation in gastric carcinogenesis

✉ CHUNG Sheung Chee Sydney • NG Enders K. W.* • SUNG Joseph Jao Yiu (Medicine & Therapeutics) • LING Kin Wah Thomas (Microbiology) • CHAN Chi Wai Angus • LAU Yun Wong James

☐ 1 December 1998

❖ Research Grants Council

Although the association between chronic *Helicobacter pylori* infection and stomach cancer is indisputable, how the bacterium causes cancer remains unclear. It is now generally believed that gastric carcinogenesis results from a combination of bacterial virulence of *H. pylori*, the host responses, and coexistence of certain environmental factors. Epidemiological studies suggest that preserved food and a high salt intake predispose to gastric cancer. Preserved food contains large amount of nitrates. In the presence of proteins these compounds can be converted to nitrosoamino acids by bacteria colonizing the stomach. It has been postulated that increased *in vivo* formation of nitroso compounds may cause neoplastic changes of the stomach. In this study we aim to investigate the relationship between *H. pylori*, nitrosamines, and pre-neoplastic mucosal

changes of the stomach through a series of clinical and laboratory studies.

(CU98218)

The Bioenergetic Basis of Liver Regeneration Following Partial Hepatectomy in Man - A ³¹P Magnetic Resonance Spectroscopy Study

✉ LAU Wan Yee Joseph • Darren Vivian MANN • METREWELI Constantine (Diagnostic Radiology & Organ Imaging) • HJELM Nils Magnus (Chemical Pathology) • LAM Wai Man Wynnie (Diagnostic Radiology & Organ Imaging)

☐ 1 September 1998

❖ Research Grants Council

Hepatocellular carcinoma (HCC) is one of the commonest malignancies in Hong Kong with an annual incidence of 30 per 100,000 population. Where feasible, surgical resection is the treatment of choice (and currently the only chance of cure) although it can be offered in only 10-15% of cases. The suitability of an individual patient for surgery relates to the functional condition of the liver (principally the presence of cirrhosis), since hepatic failure is the commonest cause of death after operation. When anatomically favorable, the judgment of operability is currently based on indirect assessment of liver function, with blood tests and radiological appearances being combined to estimate the risk of developing liver failure. The technique of phosphorus magnetic resonance spectroscopy (31P-MRS) allows measurement of the metabolic state of tissues, using principles similar to the more familiar magnetic resonance imaging (MRI). The advantages of 31P-MRS in the study of organ metabolism include the ability to provide direct, organ-specific information in a repeated and non-invasive manner. The aim of this research proposal is to clarify the relationship between liver metabolism and post-operative recovery in patients with HCC undergoing liver resection. The 31P-MRS evaluation of liver energetics pre- and postoperatively can be compared with the more traditional indirect assessments. The information derived from this study should help refine the selection of treatment options for individual patients, and advance scientific knowledge on the metabolic processes that characterise liver regeneration and recovery after hepatectomy in man.

(CU98214)

Linezolid for the Treatment of MRSA Infections: An Evaluator - Blinded Trial Comparing Linezolid with Vancomycin

✉ LEUNG Ka Lau • LAU Wan Yee Joseph • LYON Donald James (Microbiology) • LEUNG Chi Hang Bertrand

☐ 1 January 1999

❖ Pharmacia and Upjohn Limited

Methicillin resistant staphylococcus aureus (MRSA) was first identified in 1961 and since then has shown increasing resistance to other beta-lactam antibiotics. MRSA is a major nosocomial pathogen worldwide. Current isolates are uniformly susceptible to the glycopeptides, primarily vancomycin. However, with the prevalence of vancomycin resistant enterococci and the presence of a vancomycin resistance gene in an extra chromosomal element, the possibility of a vancomycin resistant *S. aureus* may not be far in the future. Other limitations of vancomycin include a small therapeutic range, intravenous-only method of administration and lack of deep tissue penetration. Linezolid has demonstrated good activity against MRSA and can be given intravenously and orally. Therefore the purpose of this study is to evaluate efficacy, safety, tolerance and health resource use of linezolid as compared to vancomycin. (MD98083)

Differential Gene Expression of Hepatocellular Carcinoma Using Micro Oligonucleotide Arrays Analysis

✉ LEUNG Mun Fai • LAU Wan Yee Joseph

□ 1 September 1998

❖ CUHK Research Committee Funding

The objective of this proposal is to initiate a pilot study of the difference(s) in gene expression between the liver cancer and the normal liver tissue using a new approach of micro oligonucleotide arrays analysis. Tens of thousands sequence database of genes of known as well as unknown functions were obtained by the advancement of the Human Genome Project. The abilities of orderly arrange oligonucleotides of this large volume of genetic information onto a matrix for screening gene expression results in the development of oligonucleotide arrays analysis. Oligonucleotide arrays analysis employs a standard molecular biology technique for detection. Thus, thousands of genes can be screened simultaneously and easily in a single test. Liver cancer is a significant disease of this region. The genetic information regarding to this disease is scarce. This project will increase the knowledge of gene expression of hepatocellular carcinoma in an exponential scale as compared to that of the current methods. The understanding of the gene expression between the liver cancer and the normal tissue is important in the future development of molecular diagnostic and gene therapy of liver cancer. (MD98063)

Cerebral Haemodynamic Tests in Traumatic Brain Injury (TBI): Do Abnormalities Such as Hypoperfusion, Hyperperfusion and Impaired

Autoregulation Require Treatment? A Correlative Study with Intracerebra

✉ POON Wai Sang • LAM Ming Kuen Joseph • HJELM Nils Magnus (Chemical Pathology) • LAM Wai Man Wynn (Diagnostic Radiology & Organ Imaging) • METREWELI Constantine (Diagnostic Radiology & Organ Imaging) • CHAN Matthew Tak Vai (Anaesthesia & Intensive Care)

□ 1 September 1998

❖ Research Grants Council

Patients with traumatic brain injury are prone to develop secondary brain damage. Cerebral blood flow (CBF) and autoregulation abnormalities have been shown to be associated with poor outcome. Non-invasive cerebral haemodynamic tests using transcranial Doppler ultrasonography (TCD) have been widely employed to document these abnormalities, although systematic validation with CBF measurements such as stable xenon-enhanced computerised tomography (CT) have not been carried out.

We propose to prospectively study 60 ventilated patients with moderate to severe head injury in the intensive care unit (ICU), where continuous invasive multimodality monitoring (arterial blood pressure, intracranial pressure, end-tidal CO₂, jugular bulb oxygen saturation and laser Doppler flowmetry) and twice daily TCD examination will be performed. Stable xenon-enhanced CT measurements of CBF with CO₂ challenge will be carried out on day one (when resuscitation including evacuation of intracranial haematoma is completed), day 3 and day 7, continuous intracerebral microdialysis (real time measurements of glucose, lactate, pyruvate and glutamate at 30-minute intervals) will be carried out in the frontal lobe of the side of maximum injury. This will be the first comprehensive study (1) to validate non-invasive haemodynamic tests against stable xenon-enhanced CT CBF measurements and laser Doppler flowmetry; (2) to correlate CBF abnormalities (ischaemia versus hyperemia) and autoregulation status with cerebral metabolic disturbance using real time microdialysis data and 6-month clinical outcome. (CU98223)

Predicting Severe Cerebral Ischaemia (SCI) During Carotid Endarterectomy (CEA) with Preoperative Stable Xenon-Enhanced Computed Tomography (XeCT) Cerebral Blood Flow Measurement

✉ RONALD BOET • POON Wai Sang • LAM Wai Man Wynn (Diagnostic Radiology & Organ Imaging) • METREWELI Constantine (Diagnostic Radiology & Organ Imaging) • WONG Ka Sing Lawrence (Medicine &

Therapeutics) • KAY Li Chi Richard (Medicine & Therapeutics) • LAM J.M.K.*

□ 1 October 1998

❖ CUHK Research Committee Funding

Carotid endarterectomy (CEA) has been shown to significantly reduce the risk of major stroke and death in patients with severe carotid stenosis, provided the operative mortality and morbidity can be kept to a minimum. Development of severe cerebral ischaemia (SCI) during carotid artery clamping occurs in 25% of these patients and is a major risk factor for postoperative stroke. Accurate prediction of patients at risk will enable intra-arterial shunting to be established before the crisis of SCI, hence minimising the operative risk. The current methods of predicting SCI are unsatisfactory. A prospective observational study in 20 patients with severe carotid stenosis will be carried out to assess the feasibility of employing acetazolamide activated xenon-enhanced computed tomography (XeCT) cerebral blood flow (CBF) measurement to predict the development of SCI during CEA. The baseline CBF and its acetazolamide reactivity of the three vascular territories in patients who develop SCI (estimated n=5) intraoperatively will be compared with those patients who do not (estimated n=15). This will be the first pilot study using XeCT CBF methodology to predict the occurrence of intraoperative SCI during CEA. (MD98062)

Development of a Cantonese Basic Speech Perception Test for Hearing-Impaired Children and Children with Minimal Language Ability – Establishing Validity and Reliability

✉ VAN HASSELT Charles Andrew • TONG Chi Fai Michael • LEE Y.S. Kathy* • CHIU S. N.* • WONG K.C. Terence*

□ 2 July 1999

❖ Health Services Research Fund, Hospital Authority

The study aims at developing a clinical tool for objective measurement of basic speech perception for Cantonese children with hearing impairment and minimal language ability. Test construction requires enormous time and funding. The procedures include planning, construction, quantitative evaluation and validation which are unable to be dealt with in a single project. The present project would focus on the first three stages, leaving actual validation for the next phase. The research objectives are:

- (1) to identify domains of Cantonese basic speech perception;
- (2) to test the hypothesis "normal three-year-old children are able to discriminate basic Cantonese tones";

- (3) to determine vocabulary used in the test;
- (4) to construct test items according to the domains identified; and
- (5) to examine the validity and reliability of the developed test items.

Objective (1) will be achieved through a literature search, consulting a panel of experts and conducting two research studies listed under objectives (2) and (3). One of the studies is on children's vocabulary inventory and the other is on Cantonese tones. With the information obtained, test items are constructed. Two pilot studies which involve 140 normal hearing and 140 hearing-impaired subjects will be conducted on the developed items. Results obtained in the pilot studies are subject to validity and reliability check including factor analysis, factor loading, Cronbach's alpha, inter-class correlation coefficient and paired t-tests. The expected outcome would be a valid and reliable assessment tool ready for actual validation process.

(AL98028)

A Comparative Study of the Physiological Changes with Pneumoperitoneum During Laparoscopic Surgery in Infantile Versus Adult Animals

✉ YEUNG Chung Kwong • AUN Sui Tee Cindy (Anaesthesia & Intensive Care) • GOMERSALL Charles David (Anaesthesia & Intensive Care)# • FOK Tai Fai (Paediatrics) • LAU Wan Yee Joseph

□ 1 September 1998

❖ Research Grants Council

The great advances of minimally invasive surgery in adults has led many to assume that these techniques should apply equally well to paediatric patients with the same degree of efficacy and safety. Over the last few years there has been a rapid expansion of the list of paediatric surgical operations being performed by laparoscopic approach worldwide, usually conducted with similar equipment operative settings, e.g. intraabdominal pressure for pneumoperitoneum, as in adults. However, scientific data regarding possible differences in physiological response and stress reaction between small children and adults during laparoscopic surgery are completely lacking. A prospective, randomized study of laparoscopic versus open appendectomy in children conducted recently in our unit has revealed no significant benefits of the former approach, and indeed some possible ill effects especially in cases with gangrenous or perforated appendicitis and bacterial contamination of the peritoneal cavity. This highlights the great importance to evaluate comprehensively the differences in physiological response including haemodynamic changes, arterial and portal venous oxygen saturation, respiratory function and intestinal mucosal microcirculation between infantile and adult

subjects during laparoscopic surgery, both in a clean as well as in a contaminated peritoneal cavity, using an animal model. The results should provide very important clues to the future development of minimally invasive surgery in young children and in particular should shed light on the necessary precautions that may be required for children with compromised cardiopulmonary status. (CU98224)

Appraisal of Microchimerism, Graft Tolerance and Rejection by Plasma and Urinary DNA Following Solid Organ Transplantation

- ✉ YEUNG Chung Kwong • LO Yuk Ming Dennis (Chemical Pathology) • PANG Chi Pui Calvin (Ophthalmology and Visual Sciences) • LAU Wan Yee Joseph
- 1 December 1998
- ❖ CUHK Research Committee Funding

The observation that donor-derived cells can be detected as resident cells in the recipient years after organ transplantation, or microchimerism, has led to the hypothesis that this may account for the development of graft tolerance. However, up to present little is known about the dynamics of donor cells in the host and its correlation with graft rejection or acceptance. Researchers have recently described the presence of donor-derived DNA in the plasma of organ transplant recipients, a phenomenon researchers termed "plasma DNA chimerism". Donor DNA was found in 100% and 83% of liver and kidney transplant patients respectively. Interestingly, plasma DNA chimerism was observed even in patients where peripheral blood cellular chimerism were undetectable. As graft rejection is an important cause of cell death in a transplanted organ, researchers observation raises the possibility that the level of donor DNA in the recipient's plasma may actually be a marker for rejection. Since cellular chimerism has been proposed as a possible mechanism towards donor-specific graft tolerance, they propose to study the relationship of plasma and cellular chimerism in correlation to the allograft outcome. Furthermore, as Starzl has proposed that the graft-host relationship can be a two-way paradigm in which there is both a host-versus-graft as well as a graft-versus-host reaction¹⁰, the dynamics of this two-way model can potentially be studied by quantitative analysis of the ratio of donor- and host-derived DNA. Results from this project may very probably help us to unveil the myriad of mysteries surrounding the immunology of organ transplantation. (MD98064)

Induction of Proinflammatory Cytokine mRNA Expression in Myocardium after Clinical Cardiopulmonary Bypass

- ✉ YIM Ping Chuen Anthony • WAN Song • IZZAT Mohammad Bashat# • WAYE Mary Miu Yee (Biochemistry)
- 1 September 1998
- ❖ CUHK Research Committee Funding

The release of proinflammatory cytokines, such as tumor necrosis factor α (TNF- α) and interleukin (IL)-6, has been suggested to play a critical role in the complex inflammatory response following cardiopulmonary bypass (CPB) and may further lead to postoperative complications [Wan *et al. Ann Thorac Surg* 1997;63:269-76]. Researchers have recently demonstrated that the myocardium is a major source of TNF- α and IL-6 during CPB [Wan *et al. J Thorac Cardiovasc Surg* 1996;112:806-11]. Nevertheless, it is still unclear whether the endothelial cells or the myocytes are the main source of these cytokines during clinical CPB. The current prospective study is designed to explore the possible cellular source of TNF- α and IL-6 during clinical CPB. 10 to 20 patients undergoing CPB will be enrolled in the study. Myocardial biopsies will be obtained immediately after the onset and after the end of CPB from right atrium, snap-frozen in liquid nitrogen and stored for *in situ* hybridization using a probe cocktail to determine TNF- α and IL-6 mRNA expression in the myocytes. This study is expected to enhance our understanding of the mechanisms involved in the cytokine reactions during CPB. (MD98065)

Please refer to previous issues of this publication for more details of the following ongoing research at the department:

<u>Edition</u>	<u>Title/Investigators</u>
1996-97	Neo-adjuvant Chemotherapy in Squamous Oesophageal Cancer: Prediction of Chemoresponse Using Biopsy Sample before Chemotherapy (CU96649) ✉ CHAN Chi Wai Angus • CHUNG Sheung Chee Sydney • LAU Yun Wong James • METREWELI Constantine (Diagnostic Radiology & Organ Imaging) • JOHNSON Philip James (Clinical Oncology) • NG Enders K. W.*
1997-98	A Double Blind, Randomized, Placebo Controlled, Parallel Group, Multicentre, Flexible Dose Escalation Study to Assess the Efficacy and Safety of Sildenafil Administered as Required to Male Patients with Erectile Dysfunction in Asia (MD97181)

- ✎ CHAN Siu Foon Peter
 1996-97 Prognostic Factors of Breast Cancer among Women in Hong Kong (MD96101)
 ✎ CHAN Sun Yin Eric • SUEN Wang Ming Michael (Anatomical & Cellular Pathology)
- 1996-97 To Investigate the Clinical Usefulness of Arginase, Amino Acid Profile and Sialic Acid as Tumour Markers for Breast Cancer (MD96096)
 ✎ CHAN Sun Yin Eric • PANG Chi Pui Calvin (Ophthalmology and Visual Sciences) • LAM Ping Kuen • KING Wing Keung Walter
- 1997-98 Use of Non-Confluently Cultured Keratinocytes and Fibroblasts in Fibrin and Matrix Gel Suspension as a Permanent Wound Coverage in Athymic Mice Model (MD97078)
 ✎ CHAN Sun Yin Eric • LAM Ping Kuen
- 1996-97 Reconstitution of a Human Skin Equivalent Composed of Lyophilized Allogenic Dermis, Keratinocytes and Fibrin (CU96648)
 ✎ KING Wing Keung Walter • LI Arthur K. C. • LAM Ping Kuen
- 1997-98 Prospective Study on the Relationship of Central Venous Pressure and Blood Loss During Hepatectomy (MD96217)
 ✎ LAI Bo San Paul • CHUI Po Tong (Anaesthesia & Intensive Care) • LEOW Chon Kar# • LAU Wan Yee Joseph
- 1996-97 The Induction of Apoptosis of Hepatic Cancer Cells by Polyunsaturated Fatty Acids (MD96119)
 ✎ LAU Wan Yee Joseph • LAI Bo San Paul • LEOW Chon Kar#
- 1997-98 The Determination of Kupffer Cell Kinetics During the Evolution of Cirrhosis and the Potential Role of Kupffer Cells in Preventing the Development of Liver Metastases in the Presence of Cirrhosis (CU97648)
 ✎ LAU Wan Yee Joseph • LEOW Chon Kar# • LIEW Choong Tsek (Anatomical & Cellular Pathology) • LAI Bo San Paul
- 1997-98 Evaluation of the Bioenergetic Basis of Liver Regeneration Following Partial
- Hepatectomy - An *in vivo* 31P-MRS Study (MD97077)
 ✎ LAU Wan Yee Joseph • Darren Vivian MANN • HJELM Nils Magnus (Chemical Pathology)
- 1996-97 Repeat Endoscopic Treatment or Surgery in the Management of Rebleeding Peptic Ulcers After Initial Endoscopic Haemostasis: A Prospective Randomized Controlled Trial (MD96182)
 ✎ LAU Yun Wong James • SUNG Joseph Jao Yiu (Medicine & Therapeutics) • CHUNG Sheung Chee Sydney • CHAN Ka Leung Francis (Medicine & Therapeutics)
- 1997-98 Adjuvant Intravenous Proton Pump Inhibitor in Bleeding Peptic Ulcers Receiving Endoscopic Therapy: A Double Blind Placebo Controlled Randomized Study (MD97171)
 ✎ LAU Yun Wong James • SUNG Joseph Jao Yiu (Medicine & Therapeutics) • CHUNG Sheung Chee Sydney • LEE Ka Ho Kenneth (Anatomy)
- 1996-97 Innovation Technology to Develop Human Cell Lines for Biomedical Applications and Biopharmaceutical Production (MD96192)
 ✎ LEUNG Mun Fai • IP Nancy*
- 1997-98 Immune Modulating Peptides Resemble Microtubule Binding Domains (MD97125)
 ✎ LEUNG Mun Fai
- 1996-97 Does Intensive Rehabilitation Improve the Functional Outcome of Traumatic Brain Injury (TBI)? (MD96006)
 ✎ POON Wai Sang • ZHU Xian Lun Cannon • HSIANG John Nai Keung# • CHAN Che Hin* • IP Wei Chung* • CHANG Wai Ching*
- 1996-97 Molecular Expression of Hypothalamic Atrial Natriuretic Peptide (ANP) and Anti-diuretic Hormone (ADH) in Hyponatraemia Following Experimental Head Injury (MD96103)
 ✎ POON Wai Sang • NG Ho Keung (Anatomical & Cellular Pathology) • LOLIN Yvette Ivanka (Chemical Pathology)# • YEUNG Tok Fai Vincent (Medicine & Therapeutics) • COCKRAM Clive Stewart (Medicine & Therapeutics)

Department of Surgery

- 1997-98 The Comparative Impact of Videoconsultation on Neurosurgical Health Services (MD97095)
 ✎ POON Wai Sang • KWOK Po Yin Samuel • JACOBS Philip*
- 1997-98 Development of a New Hyaluronic Acid Membrane Delivery System for Using the Cultured Keratinocytes as a Permanent Wound Cover (MD97126)
 ✎ TO Wai Hei Edward • KING Wing Keung Walter • LAM Ping Kuen • CHAN Sun Yin Eric
- 1997-98 An Open Clinical Trial of Dysport in Bilateral Masseteric Hypertrophy (MD97142)
 ✎ TO Wai Hei Edward • HO Wai Sun*
- 1994-95 Investigations into the Aetiology and Management of Nasopharyngeal Carcinoma (MD94071)
 ✎ VAN HASSELT Charles Andrew • LEE Chuen Kwun Joseph (School of Chinese Medicine)
- 1995-96 A Phase IIB Open Labelled, Single Group Study into the Effect of mTHPC-mediated PDT on Recurrent and Advanced NPC after Radiotherapy (MD95235)
 ✎ VAN HASSELT Charles Andrew • WOO Kong Sang John • TONG Chi Fai Michael • LEUNG Sing Fai (Clinical Oncology) • LEE A.* • CHANG Mei Kam Amy #
- 1996-97 Effect of Radiotherapy on the Cochlear and the Central Auditory Conduction Pathway in Patients with Nasopharyngeal Carcinoma (NPC) (MD96012)
 ✎ VAN HASSELT Charles Andrew • TONG Chi Fai Michael
- 1997-98 Neonatal Hearing Screening Using Distortion Product Otoacoustic Emissions (DPOAEs), Steady State Evoked Potentials (SSEPs) and Impedance Audiometry - A Preliminary Study (MD97076)
 ✎ VAN HASSELT Charles Andrew • TONG Chi Fai Michael • WONG Terrence K. C.* • LEUNG Eric K. C.* • FOK Tai Fai (Paediatrics) • McPHERSON B.*
- 1997-98 The Effect of Indoor Pollution on the Development of Rhinitis in Office Workers in Hong Kong (MD97019)
- ✎ VAN HASSELT Charles Andrew • TONG Chi Fai Michael • TSANG King Yin Raymond* • WOO Kong Sang John • LAU Tak Fai Joseph (Centre for Clin. Trials & Epidemiological Research) • WONG Ming Chung (Centre for Clin. Trials & Epidemiological Research) • NG Heung Ling Margaret (Anatomical & Cellular Pathology) • YU Tak Sun Ignatius (Community and Family Medicine)
- 1996-97 A Double Blind Randomised Placebo-control Trial on the Efficacy of Peri-operative Zithromax as Prophylactic Antibiotic for Functional Endoscopic Sinus Surgery (MD96143)
 ✎ WOO Kong Sang John • TONG Chi Fai Michael • VAN HASSELT Charles Andrew • KU Peter K. M.* • CHANG Mei Kam Amy #
- 1997-98 A Comparative Study of the Physiological Changes During Pneumoperitoneum in Laparoscopic Surgery in Infantile Versus Adult Pigs (MD97080)
 ✎ YEUNG Chung Kwong
- 1995-96 Video Assisted Thoracic Surgery (MD92192)
 ✎ YIM Ping Chuen Anthony
- 1997-98 Investigation of the Efficacy of External Stenting of Saphenous Vein Bypass Grafts in Preventing Deleterious Graft Wall Changes Following Coronary Artery Bypass Surgery (CU97647)
 ✎ YIM Ping Chuen Anthony • SANDERSON John Elsbj (Medicine & Therapeutics) • CHOW Tsun Cheung Louis (Anatomical & Cellular Pathology)
- 1997-98 Specific Inactivation of a Growth- and Transformation-Suppressor in Small Cell Lung Cancer (MD97083)
 ✎ YIM Ping Chuen Anthony • CHAN Yeuk Hon John (Clinical Oncology)
- 1997-98 Effect of Short Term Exposure of Saphenous Vein Grafts to Thapsigargin on Medial and Intimal Thickening in a Porcine Arterio-Venous Bypass Graft Model (MD97079)
 ✎ YIM Ping Chuen Anthony • HO Chin Ho Kenny #

RESEARCH OUTPUTS AND PUBLICATIONS

- <P922864> **Yim, Anthony P.** "Safe Cardiac Surgery from Gibbon to the Present". *Grand Rounds in Surgery* pp.37-46. 1992.11.28.
- <P943253> **Meng, William C.S.; Michael Chan; W.Y. Lau and Arthur K.C. Li.** "Splanchnic Aneurysms". *Grand Rounds in Surgery* ed. by Samuel P Y Kwok, Clarke B Hazlett and James Y W Lau, vol.2, pp.67-74. Hong Kong: THC Press Ltd, 1994.04.09.
- <P964289> **Liu, Kelvin K.W.; Gordon M.S. Soo; Dilys M.C. Cheung and K.H. Lee.** "A Multidisciplinary Approach in Managing Cleft Lip and Palate". *Grand Rounds in Surgery* ed. by S.P.Y. Kwok, C.B. Hazlett and J.W.Y. Lau. chapter14. Hong Kong: The Chinese University of Hong Kong, 1996.
- <P964292> **Fung, H.K.; John K.S. Woo and C.L. Sham.** "Nasal Diseases and Their Treatment: From Evolution to Revolution". *Grand Rounds in Surgery* ed. by S.P.Y. Kwok, C.B. Hazlett and J.Y.W. Lau. Vol.2, Chapter 10, pp.85-91. Hong Kong: THC Press Ltd, 1996.
- <P964293> **Tong, Michael C.F.; John K.S. Woo; Victor Abdullah and C. Andrew Van Hasselt.** "Ingested Foreign Bodies: Facts and Fate". *Grand Rounds in Surgery* ed. by S.P.Y. Kwok, C.B. Hazlett and J.Y.W. Lau. Vol.2, Chapter 9, pp.75-84. Hong Kong: THC Press Ltd, 1996.
- <P974926> **Hsiang, J.N.K.; J.Y. Wang; S.-M. Ip; H.-K. Ng; A. Stadlin; A.L.M. Yu and W.-S. Poon.** "The Time Course and Regional Variations of Lipid Peroxidation after Diffuse Brain Injury in Rats". *Acta Neurochirurgica* vol.139, pp.464-468. 1997.
- <P974930> **Leong, H.T.; W.T. Siu and M.K.W. Li.** "Complication with the Soehendra Lithotripter". *The Official Journal of the Society of Endoscopic & Laparoscopic Surgeons of Asia* vol.2 no.4, p.91. 1997.
- <P974934> **Izzat, Mohammad Bashar; Anthony P.C. Yim and John E. Sanderson.** "Minimally Invasive Direct Coronary Artery Bypass: Too Young for a Trial". *Heart* vol.78, pp.533-534. UK, 1997.
- <P974941> **Chan, A.C.W.; S.F. Leung; J. Griffith; Y.H. Lam; C.C.H. Lam; W.K. Wong; D.W.H. Lee; B.K.B. Law; E.K.W. Ng; J.Y.W. Lau and S.C.S. Chung.** "Preoperative Adjuvant Chemo-Irradiation for Operable Oesophageal Cancer-Early Results". *Abstracts of the 9th Wilson TS Wang International Surgical Symposium* p.109. Hong Kong/Guangzhou, 1997.12.
- <P974942> **Chan, A.C.W.; S.F. Leung; J. Griffith; Y.H. Lam; C.C.H. Lam; W.K. Wong; D.W.H. Lee; B.K.B. Law; E.K.W. Ng; J.Y.W. Lau and S.C.S. Chung.** "Chemo-Irradiation as the Curative Treatment for Cervical and Upper Third Oesophageal Cancer-Early Results". *Abstracts of the 9th Wilson TS Wang International Surgical Symposium* p.71. Hong Kong/Guangzhou, 1997.12.
- <P975027> **King, Walter Wing Keung and Edward Wai-Hei To.** "Trauma to the Head and Neck Region". *Hong Kong Dental Association-Newsletter: 9/10 1997* p.12. Hong Kong, 1997.
- <P975028> **Chan, E.C.K.; E.W.H. To; V.M.K. Cheong and W.W.K. King.** "Submental Cystic Swelling-Diagnostic and Treatment Challenge". *Abstracts of the 9th Wilson T S Wang International Surgical Symposium* p.77. Hong Kong&Guangzhou: The Chinese University of Hong Kong, 1997.12.
- <P975029> **Chan, Eric S.Y. and Walter W.K. King.** "Skin Care and Cutaneous a Laser Surgery". *Abstracts of PAN/Asian European Tissue Repair Society, Wound Healing Meeting Phuket, Thailand: PAN/Asian European Tissue Repair Society*, 1997.10.

- <P975047> 廖傳佳、劉允怡。〈肝轉移癌的手術治療〉。《普外基礎臨床雜誌》第4卷第3期,頁169-171。中國,1997。
- <P980924> **Chen, Helen X.Q.; Michael C.F. Tong and C. Andrew van Hasselt.** "Decision Making in the Management of Deaf Children in China". *Abstracts of the 6th Asia-Pacific Congress on Deafness* p.77. China, 1998.08.
- <P980925> **Leung, Eric K.S.; Terence K.C. Wong; Michael C.F. Tong and C. Andrew van Hasselt.** "Steady-State Evoked Potential (SSEP) in the Audiological Assessment of Infants and Young Children: Preliminary Study". *Abstracts of the 6th Asia-Pacific Congress on Deafness* p.35. Cguba, 1998.08.
- <P980926> **Cheung, Dilys M.C.; Becky Y.T. Chan; Kathy Y.S. Lee; Micheal C.F. Tong and C. Andrew van Hasselt.** "Cochlear Implantation in Chinese Children". *Abstracts of the 6th Asia-Pacific Congress on Deafness* p.51. China, 1998.08.
- <P981035> **Izzat, Mohammad Bashar; Anthony P.C. Yim; M. Hazem El-Zufari and Kim S. Khaw.** "Upper T Mini-Sternotomy for Aortic Valve Operations". *Chest* vol.114 no.1, pp.291-294. USA, 1998.07.
- <P981786> **Li, P.; Ting S.M.; Chan Y.K. and Lau F.L.** "Perception or A&E Staff on the Needs of the Suddenly Bereaved in a Local Hospital". *Hong Kong Journal of Emergency Medicine* vol.5 no.1, pp.21-25. Hong Kong, 1998.07.
- <P981801> **Leow, C.K. and W.Y. Lau.** "Clinical Comparison of Water Jet Dissector and Ultrasonic Surgical Aspirator in Hepatic Resection". *Asian Journal of Surgery* vol.21 no.3, pp.223-224. Hong Kong, 1998.07.
- <P981803> **Lai, P.B.S.; P.T. Chui; C.K. Leow and W.Y. Lau.** "Correlation Between Blood Loss and Inferior Vena Caval Pressure During Liver Resection". *British Journal of Surgery* vol.85, pp.1157-1164. UK, 1998.08.
- <P982336> **Ku, Peter K.M.; Walter W.K. King; C.O. Mok and Peter M.L. Teo.** "Nasopharyngectomy in Treatment of Recurrent Nasopharyngeal Carcinoma-A Twelfth-Year Experience in Prince of Wales Hospital". *Abstracts of the 8th Asean ORL-HNS Congress* p.74. The Philippines, 1998.10.
- <P982522> **Izzat, M.B.; Yim A.P.; El-Zufari M.H. and Khaw K.S.** "Upper T Mini-Sternotomy for Aortic Valve Operations". *Chest* vol.114 no.1, pp.291-294. USA, 1998.06.
- <P982558> **Hsiang, John N.K.; Wai S. Poon and Ashley L.M. Yu.** "Postconcussion Syndrome Following Mild Head Injury: How Significant When It is Work-Related?". *Journal of Clinical Neuroscience* vol.5 no.4, pp.399-401. Australia, 1998.
- <P982568> **Tong, Michael C.F. and C. Andrew Van Hasselt.** "The Hong Kong Vascularized Temporalis Fascia Flap for Mastoid Surgery: Long Term Results and Extended Applications". *Abstracts of the Tri-National ORL Conference* p.61. South Africa, 1998.10.
- <P982569> **Woo, John K.S. and C. Andrew Van Hasselt.** "The Use of Lasers in Sino-Nasal Endoscopic Procedures: Applications and Limitations". *Abstracts of the Tri-National ORL Conference* p.29. South Africa, 1998.10.
- <P982607> **Soo, G. and C.A. Van Hasselt.** "Caustic Injury of the Larynx". *Otolaryngology-Head and Neck Surgery* vol.119, pp.425-426. USA, 1998.10.
- <P982671> **Izzat, Mohammad Bashar; Anthony P.C. Yim and M. Hazem El-Zufari.** "Minimally Invasive Left Anterior Descending Coronary Artery Revascularisation in High-Risk Patients with Three-Vessel Disease". *Annals of Thoracic and Cardiovascular Surgery* vol.4 no.4, pp.205-208. USA, 1998.08.

- <P982695> **Lam, Henry C.K.; Victor Abdullah and Andrew Van Hasselt.** "A Revised Protocol for the Investigation of Infant Stridor". *Abstracts of the 8th Asean ORL-HNS Congress* p.75. The Philippines, 1998.10.
- <P982698> **Tong, Michael C.F.; Virgil Yue and C. Andrew Van Hasselt.** "The Efficacy of Ofloxacin Solution in the Bacteriology and Outcome of Patients Undergoing Myringoplasty". *Abstracts of the 8th Asean ORL-HNS Congress* p.58. The Philippines, 1998.10.
- <P982699> **Ku, Peter K.M.; Martin W. Pak and C. Andrew Van Hasselt.** "Combined Transoral and Transnasal Video-Endoscopic Power-Assisted Adenoidectomy". *Abstracts of the 8th Asean ORL-HNS Congress* p.40. The Philippines, 1998.10.
- <P982700> **Ku, Peter K.M.; J.N. Marshall; Sacqueline Kew; Dilys M.C. Cheung and C. Andrew Van Hasselt.** "Dysphagia in Patients with Nasopharyngeal Carcinoma after Radiotherapy". *Abstracts of the 8th Asean ORL-HNS Congress* p.35. The Philippines, 1998.10.
- <P982701> **Marshall, John N.; Peter K. Ku; Jacqueline Kew; Dilys Cheung and C. Andrew Van Hasselt.** "Assessment and Management of Dysphagia in Patients with Nasopharyngeal Carcinoma". *Asian Journal of Surgery* vol.21 no.4, pp.282-287. Hong Kong, 1998.
- <P982706> **Soo, Gordon; Victor Abdullah; Y.K. Wing; Fiona N.Y. Ho and C. Andrew Van Hasselt.** "Analysis of Nasoendoscopic CPAP Titration Correlated Against Polysomnographic CPAP Titration for Obstructive Sleep Apnea". *Abstracts of the 8th Asean ORL-HNS Congress* p.61. The Philippines, 1998.10.
- <P982707> **Lam, Henry C.K.; Victor Abdullah; Anthony P.C. Yim and C. Andrew Van Hasselt.** "Tracheobronchial Stenting - The Hong Kong Experience". *Abstracts of the 8th Asean ORL-HNS Congress* p.74. The Philippines, 1998.10.
- <P982708> **Lam, Henry C.K.; Victor Abdullah; Fiona N.Y. Ho and C. Andrew Van Hasselt.** "Validation of the Combined Olfactory Test in a Chinese Population". *Abstracts of the 8th Asean ORL-HNS Congress* p.75. The Philippines, 1998.10.
- <P982762> **Lee, Wai Chung.** "Turbinectomy - The Final Hurdle Overcome". *Abstracts of the 8th Asean ORL-HNS Congress* p.29. The Philippines, 1998.
- <P982763> **Lee, Wai Chung.** "Quilting of Mucoperichondria Versus Drainage of the Inter-Mucoperichondrial Space in Septoplasty Procedure". *Abstracts of the 8th Asean ORL-HNS Congress* p.29. The Philippines, 1998.
- <P982790> **Tong, Michael C.F.; Terence K.C. Wong; Dilys M.C. Cheung; Kelly Lai and C. Andrew Van Hasselt.** "Patient Selection and Surgery for Paediatric Cochlear Implantation". *Abstracts of the 8th Asean ORL-HNS Congress* p.34. The Philippines, 1998.10.
- <P982804> **Lam, H.C.K.; V. Abdullah; P.J. Wormald and C.A. Van Hasselt.** "Internal Carotid Artery Hemorrhage and Osteoradionecrosis of the Skull Base after Irradiation for Nasopharyngeal Carcinoma". *Abstracts of the 8th Asean ORL-HNS Congress* p.35. The Philippines, 1998.10.
- <P982805> **Mok, Johnny S.W.; J.N. Marshall; Michael Chan and C. Andrew Van Hassel.** "Percutaneous Embolization to Control Intractable Epistaxis in Nasopharyngeal Carcinoma". *Abstracts of the 8th Asean ORL-HNS Congress* p.36. The Philippines, 1998.10.
- <P982806> **Mok, Johnny S.W.; Michael C.F. Tong and C. Andrew Van Hasselt.** "Video-Assisted Microlaryngoscopy with Tubeless Anesthesia". *Abstracts of the 8th Asean ORL-HNS Congress* p.39. The Philippines, 1998.10.
- <P982807> **Lam, Henry C.K.; Victor Abdullah; Jacqueline Kew and C. Andrew Van Hasselt.** "Correlation Between 3-D Spiral Computerized Tomography of the Airway and Video-Assisted Rigid Bronchoscopy in Patients with Obstructive Tracheobronchial Disease". *Abstracts of the 8th Asean ORL-HNS Congress* p.47. The Philippines, 1998.10.

- <P982808> **Soo, Gordon; Philip Scott; S.F. Leung; John K.S. Woo; Victor Abdullah and C. Andrew Van Hasselt.** "Upsit Study of Smell Changes Following Radiotherapy for Nasopharyngeal Cancer". *Abstracts of the 8th Asean ORL-HNS Congress* p.61. The Philippines, 1998.10.
- <P982840> **Izzat, Mohammad Bashar; M. Hazem El-Zufari and Anthony P.C. Yim.** "Training Model for 'Beating-Heart' Coronary Artery Anastomoses". *The Annals of Thoracic Surgery* vol.66 no.2, pp.580-581. USA, 1998.08.
- <P982883> **Pak, Martin Wai; Eric Sun Yin Chan and Charles Andrew Van Hasselt.** "Late Complications of Nasal Augmentation Using Silicone Implants". *The Journal of Laryngology and Otology* vol.112, pp.1074-1077. UK, 1998.
- <P982984> **Poon, W.S. and K.Y.C. Goh.** "The Impact of Teleradiology on the Inter-Hospital Transfer of Neurosurgical Patients and Their Outcome". *Hong Kong Medical Journal* vol.4 no.3, pp.293-295. Hong Kong, 1998.09.
- <P982998> **Lee, D.W.H.; A.C.W. Chan; C.W. Lai; Y.H. Lam and S.C.S. Chung.** "Endoscopic Management of Postpolypectomy Perforation". *Endoscopy* vol.30 no.7, p.S84. USA, 1998.09.
- <P982999> **Chung, S.C.S.; S.S. Li and K.O. Poon.** "Teleconferencing in Endoscopic Surgery". *Hong Kong Medical Journal* vol.4 no.3, pp.296-299. Hong Kong, 1998.09.
- <P983032> **Yim, Anthony P.C.; M.B. Izzat and Song Wan.** "Video Assisted Thoracic Surgery: Its Role in Current Thoracic Surgical Practice Worldwide". *Chest* vol.114 no.4, p.390S. 1998.10.
- <P983033> **Yim, Anthony P.C.; Mohammad Bashar Izzat; Hui-Ping Liu and Chan-Chung Ma.** "Thoracoscopic Major Lung Resections: An Asian Perspective". *Seminars in Thoracic and Cardiovascular Surgery* vol.10 no.4, pp.326-331. 1998.10.
- <P983034> **Leung, W.K.; K.I.K. Lei; A. Yim; Y.K. Sit; C.K.W. Lai and R. Leung.** "Sarcoidosis in a Hong Kong Chinese Woman". *Hong Kong Medical Journal* vol.4 no.3, pp.333-336. 1998.09.
- <P983035> **Yim, Anthony P.** "Appendix A. Conference Discussion". *European Journal of Cardio-thoracic Surgery* vol.14 no.4, pp.351-352. 1998.10.
- <P983058> **Yim, A.P.C.** "Minimal Access Cardiothoracic Surgery". *Hong Kong Medical Journal Supplement - Hong Kong Academy of Medical 1st International Congress* vol.4 no.4, p.81. 1998.12.
- <P983078> **Wan, I.Y.P.; T.W. Lee; M.B. Izzat and A.P.C. Yim.** "Video-Assisted Thoracoscopic Procedures on Reoperated Chests". *Hong Kong Medical Journal Supplement - Hong Kong Academy of Medicine 1st International Congress* vol.4 no.4, p.69. Hong Kong, 1998.12.
- <P983186> **Wan, Song; M.B. Izzat; T.W. Lee; I. Wan and A. Yim.** "Cytokine Responses to Off-Pump Multivessel Coronary Artery Bypass Grafting". *Chest* vol.114 no.4, p.388S. 1998.10.
- <P983190> **Wan, S.; I.Y.P. Wan; M.B. Izzat; T.W. Lee; A.D.L. Sihoe and A.P.C. Yim.** "Cytokine Responses to Off-Pump Multivessel Coronary Artery Bypass Grafting". *Hong Kong Medical Journal Supplement - Hong Kong Academy of Medical 1st International Congress* vol.4 no.4, p.66. Hong Kong, 1998.12.
- <P983191> **Wan, I.Y.P.; ADL Sihoe; M.B. Izzat; T.W. Lee; S Wan and A.P.C. Yim.** "Upper Mini-Sternotomy for Aortic Valve Operations". *Hong Kong Medical Journal Supplement Hong Kong Academy of Medical 1st International Congress* vol.4 no.4, p.66. Hong Kong, 1998.12.
- <P983192> **Sihoe, A.D.L.; T.W. Lee; I.Y.P. Wan; M.B. Izzat; S. Wan and A.P.C. Yim.** "CT Study to Select Candidates for Elective Surgery Following Primary Spontaneous Pneumothorax". *Hong Kong Medical Journal Supplement Hong Kong Academy of Medical 1st International Congress* vol.4 no.4, p.65. Hong Kong, 1998.12.

- <P983193> **Sihoe, A.D.L.; I.Y.P. Wan; M.B. Izzat; T.W. Lee; S. Wan and A.P.C. Yim.** "Early Experience with Partial Left Ventriculectomy for End-Stage Dilated Cardiomyopathy". *Hong Kong Medical Journal Supplement Hong Kong Academy of Medical 1st International Congress* vol.4 no.4, p.67. Hong Kong, 1998.12.
- <P983194> **Wan, I.Y.P.; A.D.L. Sihoe; M.B. Izzat; T.W. Lee; S. Wan and A.P.C. Yim.** "Favorable Scanning Electron Microscopy Findings of Stapled Saphenous Vein to Artery Anastomoses". *Hong Kong Medical Journal Supplement Hong Kong Academy of Medical 1st International Congress* vol.4 no.4, p.18. Hong Kong, 1998.12.
- <P983195> **Sihoe, A.D.L.; I.Y.P. Wan; M.B. Izzat; T.W. Lee; S. Wan and A.P.C. Yim.** "External Stenting Reduces Neointimal and Medial Thickening in a Pig Model of Saphenous Vein Bypass Grafting". *Hong Kong Medical Journal Supplement - Hong Kong Academy of Medicine 1st International Congress* vol.4 no.4, p.43. Hong Kong, 1998.12.
- <P983196> **Wan, I.Y.P.; A.D.L. Sihoe; M.B. Izzat; T.W. Lee; S. Wan and A.P.C. Yim.** "Experience with Minimally Invasive Coronary Artery Bypass Surgery and Its Quality Assessment". *Hong Kong Medical Journal Supplement - Hong Kong Academy of Medicine 1st International Congress* vol.4 no.4, p.18. Hong Kong, 1998.12.
- <P983208> **Ku, K.M. Peter; Martin W. Pak and Charles A. Van Hasselt.** "A Dislocated Incus Protruding Through a Traumatic Perforation". *Ear, Nose and Throat Journal* vol.77 no.10, p.804. USA, 1998.10.
- <P983211> **Ho, W.S.; E.W.H. To; E.S.Y. Chan and W.W.K. King.** "Burn Injuries During Paint Thinner Sniffing". *Burns* vol.24, pp.757-759. UK, 1998.12.
- <P983275> **Pak, M.W. and Van Hasselt, C.A.** "Speech Rehabilitation after Laryngectomy". *Annals of the College of Surgeons of Hong Kong* vol.2 no.3, p.102. Hong Kong, 1998.
- <P983276> **Van Hasselt, C.A.** "Laser Applications in Otorhinolaryngology". *Hong Kong Medical Journal Supplement* vol.4 no.4, p.65. Hong Kong, 1998.
- <P983277> **Mok, J.S.W.; J.N. Marshall; Michael Chan and C.A. Van Hasselt.** "Percutaneous Embolization to Control Intractable Epistaxis in Nasopharyngeal Carcinoma". *Annals of the College of Surgeons of Hong Kong* vol.2 no.3, p.105. Hong Kong, 1998.
- <P983278> **Ku, P.K.M.; M.C.F. Tong; A. Kwan and C.A. Van Hasselt.** "Video-Assisted Rigid Tele-Laryngo-Tracheo-Broncho-Endoscopy with Tubeless Anaesthesia in Assessment of Patients with Head and Neck Cancer". *Annals of the College of Surgeons of Hong Kong* vol.2 no.3, p.103. Hong Kong, 1998.
- <P983310> **Wan, Song; Mohammed Bashar Izzat and Anthony P.C. Yim.** "Reducing Inflammatory Reactions by Heparin-Coated Circuit". *The Annals of Thoracic Surgery* vol.66 no.5, p.1868. Texas, USA, 1998.11.
- <P983311> **Izzat, Mohammad Bashar; Anthony P.C. Yim and M. Hazem El-Zufari.** "Snaring of a Coronary Artery Causing Distal Atheroma Embolization". *The Annals of Thoracic Surgery* vol.66 no.5, pp.1806-1808. Texas, USA, 1998.11.
- <P983312> **Yeung, C.K.; W.Y. Lau and Arthur K.C. Li.** "Liver Transplantation in Children: The Chinese University of Hong Kong Experience". *Essence of Modern Medicine* vol.2, pp.1-19. China, 1998.
- <P983549> **Ku, K.M.; Michael C.F. Tong and Virgil Yue.** "Polyotia - A Rare External Ear Anomaly". *International Journal of Pediatric Otorhinolaryngology* vol.46, pp.117-120. 1998.
- <P983600> **To, E.W.H. and G.M. Chu.** "Transconjunctival Approach to the Orbit". *Hong Kong Medical Journal Supplement-Abstract of 1st International Congress, Hong Kong Academy of Medicine* vol.4 no.4, p.158. Hong Kong, 1998.11.

- <P983601> **To, Edward W.H.** "Update in the Management of Facial Fractures". *Abstracts of the Philippine Centennial International Trauma Forum* p.47. The Philippines: Phillipine Society for the Surgery of Trauma jointly with Department of Health, Philippines & the Philippin, 1998.11.14.
- <P983617> **Chan, E.S.Y.; Wong W.K.; Chan J.; Chan E.C.K.; Chen Z.Y.; Lau W.Y. and Woo J.** "A Comparison of Fatty Acids Composition of Adipose Tissue from Chinese Breast Cancer Patients - A Preliminary Report". *Abstracts of the 4th Congress of Parenteral and Enteral Nutrition Society of Asia(Pensa)* p.55. Hong Kong: The Chinese University of Hong Kong, 1998.12.
- <P983629> **Lai, P.B.S.; C.K. Leow; W.Y. Lau and J.A. Ross.** "Down Regulation of Beta-1 Integrins by Eicosapentaenoic Acid on a Hepatoma Cell Line". *Hong Kong Medical Journal Supplement (Hong Kong Academy of Medicine 1st International Congress)* vol.4, p.17. Hong Kong, 1998.12.04.
- <P983631> **Leung, K.L.; W.Y. Lau; R.Y.C. Yiu; P.B.S. Lai; W.C.S. Meng and C.K. Leow.** "Conservative Approach with Selective Intervention in the Management of Spontaneous Rupture of Hepatocellular Carcinoma". *Hong Kong Medical Journal Supplement (Hong Kong Academy of Medicine 1st International Congress)* vol.4, p.19. Hong Kong, 1998.12.
- <P983673> **Chan, Eric S.Y. and Walter W.K. King.** "Comparison of the Inferior Pedicle Technique with the New Modified Technique in Breast Reduction". *Abstracts of 9th Asean Congress of Plastic Surgery* p.57. Penang, Malaysia, 1998.02.25.
- <P983763> **Cheuk, Lun Sham; John Kong Sang Woo and Charles Andrew Van Hasselt.** "Endoscopic Resection of Inverted papilloma of the Nose and Paranasal Sinuses". *The Journal of Laryngology and Otolaryngology* vol.112, pp.758-764. UK, 1998.08.
- <P983764> **Chan, Wai-Kwong; Koon-Ngai Lam; Fei-Lung Lau and Ho-Ming Tang.** "Starting Thrombolytic Therapy for Patients with Acute Myocardial Infarction in Accident and Emergency Department: From Implementaion to Evaluation". *Chinese Medical Journal* vol.111 no.4, pp.291-294. China, 1998.
- <P983776> **Leung, M.F.; L.K. Ho; P.F. Chan; P.B. Lai; C.K. Leow and W.Y. Lau.** "Mutation in Codon 249 of the P53 Tumor Suppressor Gene in Hepatocellular Carcinoma of Hong Kong". *Hong Kong Medical Journal Supplement (Hong Kong Academy of Medicine 1st International Congress)* vol.4, p.14. Hong Kong, 1998.12.
- <P983882> **Izzat, Mohammad Bashar; Anthony P.C. Yim and Anthony M. Calafiore.** "What's in a Name?". *Heart Surgery Forum* vol.1, issue 2, pp.99-100. 1998.08.01.
- <P983923> **Izzat, Mohammad Bashar; M. Hazem El-Zufari and Anthony P.C. Yim.** "Intraoperative 'Direct' LIMA Angiography for Beating Heart Operations". *The Annals of Thoracic Surgery* vol.66, pp.1431-1432. USA, 1998.10.
- <P983953> **Goh, Keith Y.C. and Wai S. Poon.** "Recombinant Tissue Plasminogen Activator for the Treatment of Spontaneous Adult Intraventricular Hemorrhage". *Surgical Neurology* vol.50, pp.526-532. USA, 1998.
- <P983999> **Wong, Tai Hing Bill; Sit King Ching Angela and Szeto Shek Petrus.** "Prostatic Stent for Urinary Retention in Patients with Advanced Prostatic Carcinoma". Poster Presentation at the 4th Asian Congress in Urology of Singapore Urological Association and Urological Association of Asia. Singapore, 1998.09.20.
- <P984003> **Sit, A.K.C.; B.T.H. Wong; T.K.M. Chung and J.S.T. Hwang.** "Renal Injuries: A Retrospective Analysis of the Role of Investigations in Initial Management". Paper presented in the 4th Annual Scientific Meeting of the Hong Kong Urological Association. Hong Kong, 1998.11.15.
- <P984004> **Chu, S.K.; A.K.C. Sit and B.T.H. Wong.** "Comparison of Twice-Daily Prazosin Versus Once-Daily Doxazosin in the Treatment of Symptomatic Benign Prostatic Hyperplasia". Paper

presented in the 4th Annual Scientific Meeting of the Hong Kong Urological Association. Hong Kong, 1998.11.15.

- <P984005> **Szeto, S.; C. So and B.T.H. Wong.** "Megaureters in Children: Clinical Outcome of Management". Paper presented in the 4th Annual Scientific Meeting of the Hong Kong Urological Association. Hong Kong, 1998.11.15.
- <P984007> **Wong, Tak Hing Bill; Que Bon We Manuel; Szeto Shek and Chan Kwok Keung.** "Establishing a 'Reference Range' of Serum Prostate Specific Antigen for Asians - A Clinical Study". Paper presented in the 4th Asian Congress in Urology of Singapore Urological Association and Urological Association of Asia. Singapore, 1998.09.19.
- <P984008> **Chu, Sau Kwan; Sit King Ching Angela and Wong Tak Hing Bill.** "Preliminary Report of a Double Blind Study to Compare the Efficacy and Side Effects of Prazosin & Doxazosin in the Treatment of Men with Symptomatic Benign Prostatic Hyperplasia". Poster Presentation at the 4th Asian Congress in Urology of Singapore 1998.09.18.
- <P984009> **Ho, Shing Chee and Wong Tak Hing Bill.** "A Multidisciplinary Approach to Management of Erectile Dysfunction in Hong Kong". Poster Presentation at the 4th Asian Congress in Urology of Singapore Urological Association and Urological Association of Asia. Singapore, 1998.09.18.
- <P984010> **Wong, Tak-Hing Bill; Ho Shing-Chee and Chan Kwok-Keung.** "Interstitial Laser Coagulation as an Alternative Treatment for Benign Prostatic Hyperplasia: Our Initial Experience". Poster Presentation at the 4th Asian Congress in Urology of Singapore Urological Association of Asia Association and Urological Association 1998.09.18.
- <P984011> **Wong, Bill T.H.; Ida S.F. Mah; S.K. Chu and K.H. Wong.** "Post-Radiation Bladder Complications". Poster Presentation at the 4th Asian Congress in Urology of Singapore Urological Association and Urological Association of Asia. Singapore, 1998.09.20.
- <P984012> **Wong, Bill T.H.; C. So; Ida S.F. Mah; S.K. Chu; K.Y. Chan and Shirley Ho.** "Bladder Dysfunction in Children: A Retrospective Analysis". Poster Presentation at the 4th Asian Congress in Urology of Singapore Urological Association and Urological Association of Asia. Singapore, 1998.09.19.
- <P984013> **Que, Bon We Manuel and Wong Tak Hing Bill.** "Transurethral Dissection of Distal Ureter - Its Role in Single Incision Nephro-Ureterectomy". Poster Presentation at the 4th Asian Congress in Urology of Singapore Urological Association and Urological Association of Asia, Singapore, 1998.09.20.
- <P984014> **Wong, Tak Hing Bill and Que Bon We Manuel.** "Adenocarcinoma of Prostate: A Review of Clinical Presentation and the Initial Experience with Radical Retropubic Prostatectomy in Chinese". Poster Presentation at the 4th Asian Congress in Urology of Singapore Urological Association and Urological Association of Asia 1998.09.20.
- <P984512> **Siu, W.T.; Tsang W.W.C.; Tang C.N.; Law W.Y.C.; Yu C.F. and Li M.K.W.** "Minimal Access Approach to Incurable Periapillary Carcinoma with Duodenal Obstruction". Paper presented in the 2nd International Gasless Laparoscopy Meeting, 98', ELSA, China, organized by Endoscopic & Laparoscopic Surgeons of Asia ELSA. China, 1998.11.
- <P984513> **Siu, W.T.; Leong H.T. and Li M.K.W.** "Laparoscopic Treatment of Perforated Peptic Ulcers". *Surgical Endoscopy and Ultrasound* vol.21, pp.22-25. 1998.
- <P984514> **Siu, W.T. and Li M.K.W.** "Laparoscopic Treatment of Perforated Peptic Ulcer". Paper presented in the 6th Annual Scientific Meeting of HKSMAS and MIS Symposium of Guangdong Province, organized by Hong Kong Society of Minimal Access Surgery. Hong Kong and Macau, 1998.12.

- <P984515> **Ha, J.P.Y.; Kong J.H.B. and Li M.K.W.** "Pace Lift Approach for Parotidectomy: An Aesthetic Scar". Poster presented in the 6th International Congress of Oriental Aesthetic Plastic Surgery. Hong Kong, 1998.12.
- <P984516> **Chung, C.C.; Leung K.L.; Lai P.B.S.; Leow C.K. and Lau W.Y.** "A Prospective Randomized Trial to Compare Early and Interval (delay) Appendectomy for Appendiceal Mass". Paper presented in the World Congresses of Gastroenterology. Vienna, Austria, 1998.09.
- <P984517> **Chung, C.C.; Liew C.T.; Hewitt P.W.; Lau W.Y. and Li A.K.C.** "Endometriosis of the Liver". *Surgery 1998* pp.106-108. 1998.
- <P984518> **Chung, C.C.; Lau W.Y.; Leow C.K.; Leung K.L. and Lai P.B.S.** "Evacuation of the Pleural Cavity with an Infant Feeding Catheter Following en Bloc Resection of Hepatocellular Carcinoma and Involved Diaphragm an Institutional Experience". *HBP Surgery* vol.11, pp.71-74. Malaysia, 1998.
- <P984519> **Hou, S.M.S.; Cheung H.Y.; Li S.K. and Li M.K.W.** "Retroperitoneoscopic Adrenalectomy: A New Minimal Invasive Approach for Adrenal Surgery". Paper presented in the Hong Kong Urological Association, 4th Annual Scientific Meeting. Hong Kong, 1998.09.
- <P984521> **Li, S.K.; Hou S.B.M. and Li M.K.W.** "Retroperitoneoscopic Radical Nephrectomy (PRN): Technical Highlights". *Journal of Endourology* vol.12, pp.S151(7-12). USA, 1998.09.
- <P984522> **Lam, D.T.Y.; K.H. Kwong; C.W. Lam; H.T. Leong and S.P.Y. Kwok.** "How Useful is Colonoscopy in Locating Colorectal Lesions?". *Surgical Endoscopy and Ultrasound* vol.12, pp.839-841. New York, USA, 1998.
- <P984523> **Chan, Eric S.Y. and Walter W.K. King.** "The First Asia-Pacific Conference on Cutaneous Surgery and Laser Therapy". *Plastic and Reconstructive Surgery* p.1786. USA, 1998.10.
- <P984530> **Chui, A.K.K.; K. Haghighi; D. Painter; M. Jayasundera; G. Hall; A.R.N. Rao; D.J. Verran; G.W. McCaughan and A.G.R. Sheil.** "Donor Fatty (Steatotic) Liver Allografts in Orthotopic Liver Transplantation". *Transplantation Proceedings* vol.30, pp.3286-3287. USA, 1998.
- <P984531> **Chui, A.K.K.; C. De Leon; A.R.N. Rao; D.J. Verran; O.P. Pathania; G.W. McCaughan and A.G.R. Sheil.** "Single-Center Experience of Combined Liver and Kidney Transplantation". *Transplantation Proceedings* vol.30, pp.3256-3257. USA, 1998.
- <P984532> **Sheil, A.G. Ross; Albert K.K. Chui; Deborah J. Verran; John Boulas and Lloyd S. Ibels.** "Evaluation of the Loin Pain/Hematuria Syndrome Treated by Renal Autotransplantation or Radical Renal Neurectomy". *American Journal of Kidney Diseases* vol.32 no.2, pp.215-220. USA, 1998.08.
- <P984533> **Chui, A.K.K.; J.F. Thompson; D. Lam; N. Koutalistras; L. Wang; D.J. Verran and A.G.R. Sheil.** "Cadaveric Liver Procurement Using Aortic Perfusion Only". *Aust. N.Z.J. Surg* vol.68, pp.275-277. Australia, 1998.
- <P984534> **Liu, Kelvin K.W.; T.K. Chow; Edward H. Paterson and S.P.Y. Kwok.** "Changing Trends in the Management of Cleft Lip and Palate in Hong Kong - The Evolution of Multidisciplinary Care". *The Annals of the College of Surgeons of Hong Kong* ed. by K.K.W. Liu. vol.2, pp.118-121. Hong Kong: The College of Surgeons of Hong Kong, 1998.
- <P984535> **Lam, D.T.Y. and S.P.Y. Kwok.** "Radially Expanding Trocar: A Less Painful Way". Paper presented in the 6th Annual Scientific Meeting 1998 of Hong Kong Society of Minimal Access Surgery and Minimally Invasive Surgery Symposium of the Guangdong Province, Hong Kong & Macau. Macau, 1998.12.20.
- <P984536> **Liu, K.K.W.; P.K. Ma and W.M. Wong.** "The Experience of Parents in Caring for Babies with Cleft Lip and Palate: Implications in Management". *Hong Kong Academy of Medicine 1st*

- International Congress (Hong Kong Medical Journal Supplement)* ed. by K.K.W. Liu. vol.4, p.146. Hong Kong, 1998.11.
- <P984537> **Lam, D.T.Y.; S.C.W. Lam and S.P.Y. Kwok.** "Hereditary Colorectal Cancer Registry-Its Conception and Management Hierarchy". *Abstract Book of the Hong Kong Hospital Authority Convention 1998* p.54. Hong Kong: Hong Kong Hospital Authority, 1998.05.24.
- <P984538> **Liu, K.K.W.; K.F. Yip and S.P.Y. Kwok.** "Surgical Treatment of Buried Penis". *Hong Kong Academy of Medicine 1st International Congress (Hong Kong Medical Journal Supplement)* ed. by K.K.W. Liu. vol.4, p.105. Hong Kong, 1998.11.
- <P984539> **Liu, K.K.W.; K.F. Yip and S.P.Y. Kwok.** "Surgical Treatment of Buried Penis". *Proceedings of the 10th Wilson T.S. Wang International Surgical Symposium* ed. by K.K.W. Liu. p.64. Hong Kong & Chengdu: The Chinese University of Hong Kong, 1998.08.
- <P984540> **Liu, K.K.W. and S.P.Y. Kwok.** "Retroperitoneoscopic Nephrectomy in Infancy". *Proceedings of the 10th Wilson T.S. Wang International Surgical Symposium* ed. by K.K.W. Liu. p.65. Hong Kong & Chengdu: The Chinese University of Hong Kong, 1998.08.
- <P984541> **Lam, D.T.Y.; C.Y.W. Lam; H.S. So; S.C.W. Lam and S.P.Y. Kwok.** "Familial Colorectal Cancer in Hong Kong Chinese: Early Experience". *Proceedings of the 10th Wilson T.S. Wang International Surgical Symposium* p.100. Chengdu: Department of Surgery, The Chinese University of Hong Kong, 1998.08.24.
- <P984544> **Chui, A.K.K.; M.V. Jayasundera; K.S. Haghighi; A.R.N. Rao; D. Koorey; G.W. McCaughan; S.K. Rajaratnam; S. Eberl; G. Bautovich and A.G.R. Sheil.** "Octreotide Scintigraphy: A Prerequisite for Liver Transplantation for Metastatic Gastrinoma". *Aust N.Z.J. Surg* vol.68, pp.458-460. Australia, 1998.
- <P984756> **Siu, W.T.; Tai Y.P.; Li S.K.; Lo S.F.; Luk Y.W.; Fung K.H. and Limrw.** "Minimal Access Surgery Training Centre in Hong Kong". Paper presented in the 2nd International Gassess Laparocopy Meeting 98', organized by Indoscopic & Laparoscopic Surgeons of Asia (ELSA). China, 1998.11.
- <P984837> **Li, S.K.; Hou S.S.M. and Li, M.K.W.** "Retroperitoneoscopic Urological Surgery: The Pamela Yonde Nethersole Eastern Hospital Experience". *Journal of Endourology* vol.12 suppl.1, p.S151. USA, 1998.09.
- <P984838> **Li, S.K.; Hou, S.S.M. and Li M.K.W.** "Retroperitoneal Radical Nephsectomy(RRN): Technical Highlights". *Journal of Endourology* vol.12 suppl.1, p.S151. USA, 1998.09.
- <P984839> **Siu, W.T.; Tai Yp; Li, S.K.; Lo S.F.; Luk Y.W.; Fung K.H. and Limrw.** "Minimal Access Surgery Training Centre in Hong Kong". Paper presented in the 2nd International Gasless Laparoscopy Meeting 98', organized by Indoscopic & Laparoscopic Surgens of Asia. China, 1998.11.
- <P990001> **Yim, Anthony P.C., Richard L.C. Kay, Mohammad Bashir Izzat and S.K. Ng.** "Video-Assisted Thoracoscopic Thymectomy for Myasthenia Gravis" *Seminars in Thoracic and Cardiovascular Surgery* vol.11, pp.65-67. USA, 1999.
- <P990025> **Yim, Anthony P.C.; Richard L.C. Kay; Mohammad Bashir Izzat and S.K. Ng.** "Video-Assisted Thoracoscopic Thymectomy for Myasthenia Gravis". *Seminars in Thoracic and Cardiovascular Surgery* vol.11 no.1, pp.65-73. 1999.01.
- <P990075> 劉允怡. <我怎樣做肝臟切除術>. 《中華普通外科雜誌》第 14 卷 第 1 期, 頁 69-70. 中國, 1999.01.
- <P990087> **Pak, Martin Wai; Ka Lai Chan and Charles Andrew Van Hasselt.** "Retropharyngeal Abscess. A Rare Presentation of Nasopharyngeal Carcinoma". *The Journal of Laryngology and Otolaryngology* vol.113, pp.70-72. UK, 1999.

- <P990127> **Yim, Anthony P.C.; Mohammad Bashar Izzat; T.W. Lee and Song Wan.** "Video-Assisted Thoracoscopic Thymectomy". *Annals of Thoracic and Cardiovascular Surgery* vol.5 no.1, pp.18-20. Japan, 1999.02.
- <P990135> **Mok, Johnny S.W.; John N. Marshall; Michael Chan and C. Andrew Van Hasselt.** "Percutaneous Embolization to Control Intractable Epistaxis in Nasopharyngeal Carcinoma". *Head and Neck* vol.21, pp.211-216. USA, 1999.
- <P990150> **Leow, C.K. and J.W.Y. Lau.** "Management of Specific Tumor Complications". *Hepatocellular Carcinoma: Diagnosis, Investigation and Management* ed. by Anthony S.Y. Leong, Choong-Tsek Liew, Joseph W.Y. Lau and Philip J. Johnson. pp.193-203. UK: ARNOLD, 1999.
- <P990151> **Lau, J.W.Y. and C.K. Leow.** "Surgical Management (Including Liver Transplantation)". *Hepatocellular Carcinoma: Diagnosis, Investigation and Management* ed. by Anthony S.Y. Leong, Choong-Tsek Liew, Joseph W.Y. Lau and Philip J. Johnson. pp.147-172. UK: ARNOLD, 1999.
- <P990152> **Yu, S.C.H.; M.S.Y. Chan and J.W.Y. Lau.** "Diagnostic Imaging". *Hepatocellular Carcinoma: Diagnosis, Investigation and Management* ed. by Anthony S.Y. Leong, Choong-Tsek Liew, Joseph W.Y. Lau and Philip J. Johnson. pp.44-74. UK: ARNOLD, 1999.
- <P990157> **Ku, Peter K.M.; Jacqueline Kew and Charles Andrew Van Hasselt.** "Paranasal Sinus Enlargement in Sturge-Weber Syndrome". *The Journal of Laryngology and Otology* vol.113, pp.177-178. UK, 1999.02.
- <P990168> **Lau, W.Y.; T.W.T. Leung; S.K.W. Ho; M. Chan; D. Machin; J. Lau; A.T.C. Chan; W. Yeo; T.S.K. Mok; S.C.H. Yu; N.W.Y. Leung and P.J. Johnson.** "Adjuvant Intra-arterial Iodine-131-labelled Lipiodol for Resectable Hepatocellular Carcinoma: A Prospective Randomised Trial". *The Lancet* vol.353, pp.797-801. UK, 1999.03.
- <P990197> **Wan, S. and A.P.C. Yim.** "Rationale Behind 'Off-pump' Coronary Surgery: Why Patients Tolerate it Better?" ed. by J. L. Vincent. pp.594-600. *Yearbook of Intensive Care and Emergency Medicine 1999* Springer, 1999.
- <P990198> **Wan, Song; Mohammad Bashar Izzat and Anthony P.C. Yim.** "Cytokines and Myocardial Injury: Is There a Scope for Magic Bullets?". *Journal of Thoracic and Cardiovascular Surgery* vol.117 no.2, pp.409-410. 1999.02.
- <P990236> **Ku, Peter K.M.; Michael C.F. Tong; C.Y. Leung; Martin W. Pak and C. Andrew Van Hasselt.** "Nasal Manifestation of Extranodal Rosai-Dorfman Disease-Diagnosis and Management". *The Journal of Laryngology and Otology* vol.113, pp.275-280. UK, 1999.
- <P990237> **Leung, Eric K.S.; Terence K.C. Wong; Michael C.F. Tong and C. Andrew Van Hasselt.** "Changes in Residual Hearing after Cochlear Implantation". *Abstracts of the 2nd Congress of Asia Pacific Symposium on Cochlear Implant and Related Sciences* p.55. Korea, 1999.
- <P990238> **Tong, M.C.F.; Yue V.; Cheung D.M.C.; Wong T.K.C.; Lee K.Y.S.; Leung E.K.S. and van Hasselt C.A.** "Cochlear Implantation in Chinese Children". *Abstracts of the 2nd Congress of Asia Pacific Symposium on Cochlear Implant and Related Sciences* p.75. Korea, 1999.
- <P990239> **Scott, P.M.J.; W.K. Loftus; J. Kew; A. Ahuja; V. Yue and C.A. Van Hasselt.** "Diagnosis of Peritonsillar Infections: A Prospective Study of Ultrasound, Computerized Tomography and Clinical Diagnosis". *The Journal of Laryngology and Otology* vol.113, pp.229-232. UK, 1999.03.
- <P990240> **Tong, Michael C.F. and C. Andrew Van Hasselt.** "Cochlear Implantation Surgery: Problems and Solutions". *Abstracts of the 2nd Congress of Asia Pacific Symposium on Cochlear Implant and Related Sciences* p.35. Korea, 1999.
- <P990258> **Wong, S.K.H.; S.C.H. Yu; Y.H. Lam and S.S.C. Chung.** "Percutaneous Cholecystostomy and Endoscopic Cholecystolithotripsy in the Management of Acute Cholecystitis". *Surgical Endoscopy* vol.13, pp.48-52. USA, 1999.

- <P990259> **Lau, J.Y.W.; Joseph J.Y. Sung; Yuk-Hoi Lam; Angus C.W. Chan; Enders K.W. Ng; Danny W.H. Lee; Francis K.L. Chan; Roamy C.Y. Suen and S.C. Sydney Chung.** "Endoscopic Retreatment Compared with Surgery in Patients with Recurrent Bleeding after Initial Endoscopic Control of Bleeding Ulcers". *The New England Journal of Medicine* vol.340 no.10, pp.751-756. USA, 1999.03.11.
- <P990266> **Lam, Desmond Wang Leuk; Victor Abdullah and Charles Andrew Van Hasselt.** "Inubation Granuloma in a Neonate". *Otolaryngology Head and Neck Surgery* vol.120, pp.447-448. USA, 1999.
- <P990288> **Yim, Anthony P.C.; Mohammad Bashar Izzat; Tak-Wai Lee and Song Wan.** "Video-Assisted Thoracic Surgery: A Renaissance in Surgical Therapy". *Respirology (Official Journal of the Asian Pacific Society of Respirology)* vol.4, pp.1-8. Japan, 1999.01.
- <P990292> **Izzat, Mohammad Bashar; Anthony P.C. Yim; Kenny C.H. Ho; Carmen S.Y. Chan; David Yew and Louis T.C. Chow.** "Favorable Scanning Electron Microscopic Findings of Stapled Saphenous Vein-Carotid Artery Anastomoses". *The Annals of Thoracic Surgery* vol.67, pp.85-88. USA, 1999.
- <P990301> **Wormald, Peter John and C. Andrew Van Hasselt.** "A Technique of Mastoidectomy and Meatoplasty That Minimizes Factors Associated with a Discharging Mastoid Cavity". *Laryngoscope* vol.109, pp.478-482. USA, 1999.
- <P990302> **Hasselt, C.A. Van; J. Kew and Anil Ahuja.** "Clinical, CT and MRI Evaluation of Neck Nodes". *Abstracts of the International Head and Neck Oncology Congress* p.6. South Africa, 1999.
- <P990303> **Hasselt, C.A. van.** "The Origins of Nasopharyngeal Carcinoma and Their Clinical Implications". *Abstracts of the International Head and Neck Oncology Congress* p.30. South Africa, 1999.
- <P990318> **Izzat, Mohammad Bashar and Anthony P.C. Yim.** "Intracardiac Surgery". *Minimally Invasive Cardiac Surgery* ed. by Mohammed Bashar Izzat, John E. Sanderson and Martin G. St. John Sutton. pp.257-264. USA: Isis Medical Media Ltd, 1999.
- <P990326> **Ku, Peter K.M.; John N.Marshall and Andrew Van Hasselt.** "Keratinized Epithelial Folds in the External Auditory Canal". *Ear, Nose and Throat Journal* vol.78 no.2, pp.76-78. USA, 1999.
- <P990336> **Yim, Anthony P.C.** "Paradigm Shift in Empyema Management". *Chest* vol.115 no.3, pp.611-612. USA, 1999.03.
- <P990338> **Izzat, Mohammad Bashar; Anthony P.C. Yim; Song Wan and Wassim Atassi.** "A Survey on Partial Left Ventriculectomy in the Asia-Pacific Region". *Ann Thorac Surg 1999* vol.67, pp.387-391. USA, 1999.
- <P990386> **Wan, Song; Jean-Louis LeClerc; Chi-Hoang Huynh; Denis Schmartz; Jean-Marie DeSmet; Anthony P.C. Yim and Jean-Louis Vincent.** "Does Steroid Pretreatment Increase Endotoxin Release during Clinical Cardiopulmonary Bypass?". *Journal of Thoracic and Cardiovascular Surgery* vol.117 no.5, pp.1004-1008. USA, 1999.05.
- <P990388> **Wan, Song; Anthony P.C. Yim; Ahmed A. Arifi; Tak Wai Lee; Chi-Hoang Huynh; Jean-Marie DeSmet; Jean-Louis LeClerc and Jean-Louis Vincent.** "Can Cardioplegia Management Influence Cytokine Responses during Clinical Cardiopulmonary Bypass?". *Annals of Thoracic and Cardiovascular Surgery* vol.5 no.2, pp.81-85. Japan, 1999.04.
- <P990478> **Lai, P.B.S.; P. Wang; J.F.Y. Lee; M.F. Leung; C.K. Leow and W.Y. Lau.** "Eicosapentaenoic Acid Induces Apoptosis Via a CD95-Dependent Pathway in a Hepatoma Cell Line". *British Journal of Surgery (Abstracts for the Annual Scientific Meeting of the Association of Surgeons of Great Britain and Ireland with the Surgical Research)* 1999.06.01.

- <P990497> **Ku, Peter K.M.; John N. Marshall and Charles Andrew Van Hasselt.** "A Mentally Retarded Man with a Nasal Discharge". *Postgraduate Medical Journal* vol.75 no.884, pp.367-369. UK, 1999.
- <P990505> **Wan, Song and Anthony P.C. Yim.** "Why the off-Pump Approach Reduces Myocardial Injury Following Open Heart Surgery". *Annals of the College of Surgeons of Hong Kong* vol.3, pp.40-43. 1999.05.
- <P990547> **Ng, Enders K.W.; Stuart A. Thompson; Guillermo I. Perez-perez; Imad Kansau; Arie Van Der Ende; Agnes Labigne; Joseph J.Y. Sung; S.C. Sydney Chung and Martin J. Blaser.** "Helicobacter Pylori Heat Shock Protein A: Serologic Responses and Genetic Diversity". *Clinical and Diagnostic Laboratory Immunology* vol.6 no.3, pp.377-382. USA, 1999.05.
- <P990553> **Ng, Enders K.W. et. al.** "Geographic Distribution of vacA Allelic Types of Helicobacter Pylori". *Gastroenterology* vol.116, pp.823-830. USA, 1999.
- <P990620> **Izzat, Mohammad Bashar; Song Wan; Innes Y.P. Wan; Kim S. Khaw and Anthony P.C. Yim.** "Ministernotomy for Aortic Valve Replacement in a Patient with Osteogenesis Imperfecta". *The Annals of Thoracic Surgery* vol.67, pp.1171-1173. USA, 1999.04.
- <P990621> **Tong, Michael C.F.; Virgil Yue; Peter K.M. Ku; Terence K.C. Wong; Phoebe S.Y. Lo; John K.S. Woo and C. Andrew van Hasselt.** "The Prevalence and Natural History of Otitis Media with Effusion in Chinese School Children in Hong Kong". *Otitis Media Today, Proceedings of the 3rd Extraordinary Symposium on Recent Advances in Otitis Media* ed. by M. Tos, J. Thomsen, V. Balle. Kugler Publications, 1999.
- <P990624> **Chu, C.M.; P.W. Ng and P.K.M. Ku.** "An Unusual Cause of Obstructive Sleep Apnoea". *Hospital Medicine* vol.60 no.3, pp.214-215. UK, 1999.
- <P990647> **Ng, Enders K.W. and S.C. Sydney Chung.** "Differences in Diagnostic Criteria for Gastric Carcinoma between Japanese and Western Pathologists". *Gastrointestinal Endoscopy* vol.49 no.2, pp.268-269. USA, 1999.
- <P990650> **Izzat, Mohammad Bashar; John E. Sanderson and Martin G. St. John Sutton. ed.** *Echocardiography in Adult Cardiac Surgery.* 380 pgs. UK: ISIS Medical Media Ltd, 1999.
- <P990656> **Izzat, M.B. and A.P.C. Yim.** "Echocardiography in Left Ventricular Volume Reduction Surgery". *Echocardiography in Adult Cardiac Surgery* pp.263-269. UK: ISIS Medical Media Ltd, 1999.01.
- <P990657> **Wan, Song and Anthony P.C. Yim.** "A Chinese Thoracic Surgeon and His Two Decisions". *The Annals of Thoracic Surgery* vol.67, pp.1190-1193. USA, 1999.04.
- <P990689> **Izzat, Mohammad Bashar; Kim S. Khaw; Wassim Atassi; Anthony P.C. Yim; Song Wan and M. Hazem El-Zufari.** "Routine Intraoperative Angiography Improves the Early Patency of Coronary Grafts Performed on the Beating Heart". *Chest* vol.115 no.4, pp.987-990. USA, 1999.04.
- <P990713> **Wan, Song; Mohammad Bashar Izzat; Tak Wai Lee; Innes Y.P. Wan; Nelson L.S. Tang and Anthony P.C. Yim.** "Avoiding Cardiopulmonary Bypass in Multivessel CABG Reduces Cytokine Response and Myocardial Injury". *Annals of Thoracic Surgery* vol.68, pp.52-57. USA, 1999.
- <P990718> **Yim, Anthony P.C.; Richard L.C. Kay and S.K. Ng.** "Video Assisted Thoracoscopic Thymectomy". *Grand Rounds in Surgery* vol.2, pp.149-155. Hong Kong: Chinese University Press, 1999.
- <P990739> **Yim, Anthony P.C.; Thomas Leung and S.F. Leung.** "Lung Cancer Revisited-Where Do We Go From Here?". *Grand Rounds in Surgery* ed. by Samuel P.Y. Kwok, Clarke B. Hazlett and James Y.W. Lau. vol.II, pp.107-122. Hong Kong: Chinese University Press, 1999.

- <P990740> **Hayes, Nick; Enders K.W. Ng; Simon A. Raimes; Trevor J. Crofts; Simon D.S. Woods; S. Michael Griffin and S.C. Sydney Chung.** "Total Gastrectomy with Extended Lymphadenectomy for 'Curable' Stomach Cancer: Experience in a Non-Japanese Asian Center". *Journal of the American College of Surgeons* vol.188 no.1, pp.27-32. USA, 1999.
- <P990743> **Izzat, Mohammad Bashar; Sami S. Kabbani; Hisayoshi Suma; Kaushal Pandey; Kiyofumi Morishita and Anthony P.C. Yim.** "Early Experience with Partial Left Ventriculectomy in the Asia-Pacific Region". *Annals of Thoracic Surgery* vol.67, pp.1073-1707. USA, 1999.06.
- <P990744> **Lee, D.W.H.; A.C.W. Chan; S.P.Y. Kwok and S.C.S. Chung.** "Ports, Don't Slip Out!". *Surgical Endoscopy* vol.13, p.628. USA, 1999.
- <P990763> **Goh, K.Y.C.; J.N.K. Hsiang; X.L. Zhu and W.S. Poon.** "Intraventricular Recombinant Tissue Plasminogen Activator for Treatment of Spontaneous Intraventricular Haemorrhage in Pregnancy". *Clinical Neuroscience* vol.6 no.2, pp.158-159. UK, 1999.
- <P990764> **Hasselt, C. Andrew and Sing Fai Leung.** "Screening". *Nasopharyngeal Carcinoma 2nd Edition* ed. by C.A. van Hasselt and A.G. Gibb. Chapter 19, pp.315-320. Hong Kong: The Chinese University Press, 1999.
- <P990765> **Hasselt, C. Andrew Van and Alan G. Gibb.** "Related Ear Problems". *Nasopharyngeal Carcinoma 2nd Edition* ed. by C.A. van Hasselt, A.G. Gibb. Chapter 17, pp.297-308. Hong Kong: The Chinese University Press, 1999.
- <P990766> **Hasselt, C. Andrew Van and Michael C.F. Tong.** "Recent Treatment Modalities". *Nasopharyngeal Carcinoma 2nd Edition* ed. by C.A. van Hasselt and A.G. Gibb. Chapter 16, pp.287-295. Hong Kong: The Chinese University Press, 1999.
- <P990767> **Hasselt, C. Andrew Van and Sing Fai Leung.** "Clinical Picture". *Nasopharyngeal Carcinoma 2nd Edition* ed. by C.A. van Hasselt and A.G. Gibb. Chapter 6, pp.105-110. Hong Kong: The Chinese University Press, 1999.
- <P990768> **Hasselt, C. Andrew Van and A.G. Gibb.** "Preface to Nasopharyngeal Carcinoma 1st and 2nd Edition". *Nasopharyngeal Carcinoma 2nd Edition* ed. by C.A. van Hasselt and A.G. Gibb. pp.ix-xi. Hong Kong: The Chinese University Press, 1999.
- <P990772> **Leung, Ka Lau; William C.S. Meng; Janet F.Y. Lee; Kin Hoi Thung; Paul B.S. Lai and Wan Yee Lau.** "Laparoscopic-Assisted Resection of Right-Sided Colonic Carcinoma: A Case-Control Study". *Journal of Surgical Oncology* vol.71, pp.97-100. 1999.
- <P990794> **Woo, John K.S.** "Clinical Diagnosis". *Nasopharyngeal Carcinoma* ed. by C.A. van Hasselt and A.G. Gibb. Chapter 7, pp.111-125. Hong Kong: The Chinese University Press, 1999.
- <P990805> **Chan, Eric S.Y.; Anil T. Ahuja; Ann D. King and W.Y. Lau.** "Head and Neck Cancers Associated with Madelung's Disease". *Annals of Surgical Oncology* vol.6 no.4, pp.395-397. USA, 1999.
- <P990820> **Lau, W.Y.** "History of Liver Surgery". *Proceedings of European Congress I.H.P.B.A. "Budapest 1999"* pp.125-127. Italy: Monduzzi Editore, International Proceedings Division, 1999.05.
- <P990827> **Lau, W.Y.** "Targeted Therapy for Liver Cancer". *Proceedings of European Congress I.H.P.B.A. "Budapest 1999"* pp.129-132. Italy: Monduzzi Editore, International Proceedings Division, 1999.05.
- <P990879> **Izzat, M.B. and A.P.C. Yim.** "Echocardiography in Minimally Invasive Cardiac Surgery". *Echocardiography in Adult Cardiac Surgery* ed. by Mohammad Bashar Izzat, John E. Sanderson and Martin G.St John Sutton. pp.255-261. UK: ISIS Medical Media Ltd., 1999.

- <P991059> **Pak, M. Wai; S. Hui and C.A. Van Hasselt.** "Mechanisms of Apnoea in Children with Obstructive Sleep Apnoea Syndrome: Prospective Study by Sleep Nasendo-Scopy". *The Journal of Laryngology and Otology* vol.113 Suppl.23, p.54. UK: Headley Brothers Ltd, 1999.
- <P991094> **Hasselt, C. Andrew van. ed.** *Nasopharyngeal Carcinoma 2nd Edition.* 337 pgs. Hong Kong: The Chinese University Press, 1999.
- <P991119> **Ku, Peter K.M.; Michael C.F. Tong; Ricky W.K. Ho and Charles Andrew van Hasselt.** "Reinke's Edema". *Ear, Nose and Throat Journal* vol.78 no.5, pp.332-334. USA, 1999.
- <P991191> **Wong, Simon K.H.; W.S. Ho; William K. Loftus and Walter W.K. King.** "A Giant Isolated External Iliac Artery Aneurysm Causing Hydronephrosis and Lower Extremity Weakness". *Vascular Surgery* vol.33 no.4, pp.435-438. USA, 1999.
- <P991198> **Lau, James Y.W.; Ka-Lau Leung; S.C. Sydney Chung and Wan-Yee Lau.** "Endoscopic Management of Major Bile Leaks Complicating Hepatic Resections for Hepatocellular Carcinoma". *Gastrointestinal Endoscopy* vol.50 no.1, pp.99-101. USA, 1999.
- <P991273> **Chan, Angus C.W.; Franklin G. Shin; Yuk H. Lam; Enders K.W. Ng; Joseph J.Y. Sung; James Y.W. Lau and S.C. Sydney Chung.** "A Comparison Study on Physical Properties of Self-Expandable Esophageal Metal Stents". *Gastrointestinal Endoscopy* vol.49 no.4, pp.462-465. USA, 1999.04.
- <P991290> **Wong, J.; Leung K.L.; Ho P.L.K.; Meng W.C.S.; Chung C.C.; Lai P. and Lau W.Y.** "Interleukin-6 and C-Reactive Protein after Laparoscopic Assisted Resection of Rectosigmoid Carcinoma: A Prospective Randomized Trial". *Annals of the College of Surgeons of Hong Kong 1999* vol.3, p.A6. Hong Kong, 1999.
- <P991292> **Li, M.K.W.** "The Use of Ultrasonic in Advanced Laparoscopic Procedure". Paper presented in the 4th Asia Pacific Conference of Minimally Invasive Surgery Endosurgery 99', organized by ELSA. India, 1999.02.19.
- <P991293> **Li S.K.; Hou S.M.S. and Li M.K.W.** "Retroperitoneoscopic Nephrectomy: How to Improve the Operative Step of Specimen Entrapment". *Abstracts of the 7th International Congress of the European Association for Endoscopic Surgery EASE Linz Austria June 99* p.35. Australia, 1999.06.
- <P991302> **Verran, Deboran; Leanne Hawken and Albert Chui.** "Comparative Experience of a Simple Technique for Laparoscopic Chronic Ambulatory Peritoneal Dialysis Catheter Placement: Comment". *Aust N.Z.J. Surg* vol.69, p.398. Australia, 1999.
- <P991303> **Chui, A.K.K.; K. Herbertt; L.S. Wang; G. Kyd; G. Hodgeman; D.J. Verran; C. Deleon and A.G.R. Sheil.** "Risk of Tumor Transmission in Transplantation from Donors with Primary Brain Tumors: An Australian and New Zealand Registry Report". *Transplantation Proceedings* vol.31, pp.1266-1267. USA, 1999.
- <P991344> **Faylona, J.M.V. and S.C.S. Chung.** "Abdominal Tuberculosis Revisited". *Annals of the College of Surgeons of Hong Kong* vol.3, pp.65-70. Hong Kong, 1999.
- <P991345> **Chan, Angus C.W.; James F. Griffith; Sing F. Leung and Sydney Chung.** "Multimodality Treatment Strategy for Squamous Cell Oesophageal Cancer". *Annals of the College of Surgeons of Hong Kong* vol.3, pp.59-64. Hong Kong, 1999.
- <P991541> **Liu, K.K.W.; T.K. Chow; E. Poon; M. Tong; H.B. Chan; P.K. Ma; W.M. Wong and S.P.Y. Kwok.** "Changing Trends in the Management of Children with Cleft Lip and Palate at United Christian Hospital: The Evolution of Multidisciplinary Care". *Hong Kong Medical Journal Supplement /Hong Kong Academy of Medicine First International Congress* vol.4. 1999.
- <P991546> **Lau, J.Y.W.; J.J.Y. Sung; K.K.C. Lee; M.Y. Yung; J.C.Y.; E.K.W. Ng and F.K.L. Chan.** "Intravenous Omeprazole Infusion after Endoscopic Ulcer Hemostasis: A Double-Clind Placebo-

- Controlled Ransomized Trial". *Gastroenterology* vol.116 no.4, p.A232. Orlando, USA: WB Saunders, 1999.05.23.
- <P991591> **Chung, S.C. S.** "Therapeutic Endoscopy - Recent Advances". *Surgical Endoscopy* vol.13, pp.637-638. USA, 1999.
- <P991669> **Yeung, C.K.; H.N. Chiu and F.K.Y. Sit.** "Sleep Disturbance and Bladder Dysfunction in Enuretic Children with Treatment Failure: Fact or Fiction?". *Scandinavian Journal of Urology and Nephrology* vol.202, pp.20-23. Sweden, 1999.
- <P991890> **Yeung, C.K.; K.W. Liu; W.T. Ng; H.L. Tan; Y.H. Tam and K.H. Lee.** "Laparoscopy as the Investigation and Treatment of Choice for Urinary Incontinence Caused by Small 'Invisible' Dysplastic Kidneys with Infraspincteric Ureteric Ectopia". *British Journal of Urology* vol.84, pp.324-328. UK, 1999.
- <P991938> **Leung, K.L.; R.Y.C. Yiu; P.B.S. Lai; J.F.Y. Lee; K.H. Thung and W.Y. Lau.** "Laparoscopic-Assisted Resection of Colorectal Carcinoma". *Diseases of Colon & Rectum* vol.42, pp.327-333. USA, 1999.03.
- <P991955> **Tang, C.N.; Tsang W.W.C.; Siu W.T.; Luk Y.W. and Li M.K.W.** "Endoscopic Management of Post-Operative Bile Leakage". Paper presented in the 12th Biennial Congress of Asian Smgical Association. Australia, 1999.03.
- <P991956> **Tsang, W.W.C.; Tang C.N.; Siu W.T.; Luk Y.W. and Li M.K.W.** "The Role of Early Post-Operative ERCP in the Management of Complications after Biliary Surgery". *Proceedings of the Annual Scientific Meeting, The College of Surgeons of Hong Kong* p.24. Hong Kong, 1999.05.30.
- <P991957> **Tang, C.N.; Yau K.K.K.; Tsang W.W.C.; Siu W.T.; Chau C.H. and Li M.K.W.** "Use of Diagnostic Laparoscopy and Laparoscopic Ultrasound in Management of Upper Gastrointestinal Malignancy". *Proceedings of the Annual Scientific Meeting the College of Surgeous of Hong Kong* p.21. 1999.05.30.
- <P991958> **Chung, C.C.; Chau C.H.; Tai Y.P. and Li M.K.W.** "Laparoscopic Assisted Colorectal Resection: Experience with the First Hundred Cases". Paper presented in the Joint Meeting of the Royal Colleges of Physicians and Surgeons of Edinburgh with the College of Medicine of South Africa. South Africa, 1999.02.
- <P991959> **Chan, E.S.W.; Yip P.K.F.; Kong J.H.B. and Li M.K.W.** "Megaclinic: Quality and Efficiency en Masse". Paper presented in the Hospital Authority Contention 99, organized by Hospital Authority. Hong Kong, 1999.04.18.
- <P991960> **Yip, K.F.; Liu K.W.K.; Yeung C.K. and Li M.K.W.** "Ventral Preputial Flap Penoplasty for Buried Penis". Paper presented in the 12th Biennial Congress of Asian Surgical Association. Australia, 1999.03.
- <P991961> **Yip, K.F.; Yeung C.K.; Kong J.H.B. and Li M.K.W.** "Ruptured Retroperitoneal Lymphangiovenous Malformation in a 6-Year-Old Child: A Case Report". Paper presented in the 12th Biennial Congress of Asian Surgical Association. Australia, 1999.03.
- <P991962> **Yip, K.F.; Yeung C.K.; Kong J.H.B. and Li M.K.W.** "Duodenal Atresia with Anomalous Biliary Connection: Report of Two Cases". Paper presented in the 12th Biennial Congress of Asian Surgical Association. Australia, 1999.03.
- <P991963> **Siu, W.T.; Law B.K.B.; Leong H.T.; Luk Y.W.; Chau C.H.; Lao W.C.; Tang C.N.; Tsang W.W.C and Li M.K.W.** "Management of Foreign Bodies Ingestion by Upper Gastrointesinal Endoscopy". Paper presented in the Americian Gastroenterological Association Annual Meeting. USA, 1999.05.
- <P991964> **Chung, C.C.; Kong J.B.H. and Li M.K.W.** "The New Mortality & Morbidity Meeting in a Regional Hospital-'A Revolution/Evolution of a Traditional Format'". Paper presented in the

Hospital Authority Clinical Audit Conference, organized by Hospital Authority. Hong Kong, 1999.02.

- <P991967> **Li, F.T.W.; Chan K.H.; Lao W.C.; Luk Y.W.; Siu W.T. and Li M.K.W.** "Endoscopic Treatment of Dieulafoy's Disease". Paper presented in the Joint HKSDE, HKSDE HKSCP Scientific Meeting. Hong Kong, 1999.03.
- <P991968> **Leung, C.M.; Li F.T.W.; Luk Y.W.; Leong I.S.; Chan K.H.; Lao W.C.; Siu W.T. and Li M.K.W.** "Clinical Practice of Treating H. Pylori-Associated Duodenal Ulcer with one Week PPI-Based Triple Therapy". *Abstracts of the 2nd Internal Workshop on Helicobacter Pylori* p.65, Hong Kong: The Chinese University of Hong Kong and Hong Kong Society of Digestive Endoscopy, 1999.04.
- <P991969> **Siu, W.T.; Luk Y.W.; Kowk A.S.Y. ; Law B.K.B.; Chau C.H.; Lao W.C.; Chan K.H.; Pang S.W. and Li M.K.W.** "Ulcer Healing Drugs is Not Necessary After Eradication of Helicobacter Pylori in Bleeding Duodenal Ulcer". Paper presented in the American Gastroenterological Association Annual Meeting. USA, 1999.05.
- <P991970> **Tang, C.N.; Hung W.K.; Lau Y. and Li M.K.W.** "The Efficacy of Ranitidine Bismuth Citrate in Treatment of Helicobacter Pylori Associated Peptic Ulcer Disease". Paper presented of the 12th Biennial Congress of Asian Surgical Association. USA, 1999.03.
- <P992004> **Yim, Anthony P.C.; Richard L.C. Kay; Mohammad Bashar Izzat and S.K. Ng.** "Video-Assisted Thoracoscopic Thymectomy for Myasthenia Gravis". *Seminars in Thoracic and Cardiovascular Surgery* vol.11 no.1, pp.65-73. 1999.
- <P992052> **Izzat, Mohammad Bashar; Kim S. Khaw; Wassim Atassi; Anthony P.C. Yim; Song Wan and M. Hazem El-Zufart.** "Routine Intraoperative Angiography Improves the Early Patency of Coronary Grafts Performed on the Beating Heart". *Chest* vol.115 no.4, pp.987-990. 1999.04.
- <P992109> **Poon, Wai; Clarence Leung and Joseph Lam.** "Management of Neurosurgical Emergencies who are Unfit for Transfer: Is a Mobile Neurosurgeon a Feasible Option". Paper presented in the 8th International Symposium on Brain Oedema and Mechanisms of Cellular Injury / Joint Meeting of the British Neurosurgical Research Group, organized by Regional Neurosciences Centre, Newcastle General Hospital. Newcastle, UK, 1999.06.
- <P992377> **Yeung, C. K.; H.K. Lee and Y.H. Tam.** "The Use of Laparoscopy in the Management of Adnexal Pathologies in Children". *BJU International* vol.83 suppl.3, p.99. UK: International Children's Continence Society, 1999.04.
- <P992379> **Yeung, C. K.; K. W. Liu; W. T. Ng; H. L. Tan and K. H. Lee.** "Laparoscopy Should be the Investigation and Treatment of Choice for Urinary Incontinence Due to Small 'Invisible' Dysplastic Kidneys with Vaginally Ectopic Ureters". *BJU International* vol.83 suppl.3, pp.115-116. UK: International Children's Continence Society, 1999.04.
- <P992417> **Chan, Angus C.W.** "Endoscopic Management of Intrahepatic Stones". *Techniques in Gastrointestinal Endoscopy* vol.1 no.1, pp.33-39. USA, 1999.01.
- <P992685> **Yeung, C.K.; K.W. Chan; F.K.Y. Sit; L. Lund; H.N. Chiu; L. To; D. Roebuck and C. Metreweli.** "Combined Natural-Filling Istoppe Cystography and Urdynamic Study for the Evaluation of Vesico-Ureteric Reflux in Infants and Children". *BJU International* vol.83 suppl.3, p.70. UK: International Children's Continence Society, 1999.04.

see also <P980806>, <P980891>, <P982542>, <P982563>, <P982662>, <P982664>, <P982670>, <P982678>, <P982682>, <P982758>, <P982789>, <P982803>, <P982959>, <P982985>, <P983048>, <P983067>, <P983088>, <P983241>, <P983252>, <P983372>, <P983412>, <P983471>, <P983477>, <P983486>, <P983630>, <P983638>, <P983780>, <P983781>, <P983782>, <P983890>, <P983950>, <P983952>.

<P984033>, <P984198>, <P984219>, <P984260>, <P984278>, <P984355>, <P984357>, <P984358>, <P984384>, <P984757>, <P984795>, <P990036>, <P990037>, <P990051>, <P990065>, <P990133>, <P990163>, <P990179>, <P990245>, <P990486>, <P990503>, <P990551>, <P990655>, <P990679>, <P990703>, <P990721>, <P990933>, <P991054>, <P991057>, <P991248>, <P991275>, <P991309>, <P991535>, <P991580>, <P991581>, <P991582>, <P991695>, <P991696>, <P991697>, <P991698>, <P991699>, <P992198>

RESEARCH PROJECTS

The Effect of Analgesia on the Expression of Leucocyte Adhesion Molecules Following Injury

✉ RAINER Timothy Hudson • COCKS Robert Anthony • CHEUNG Nai Kwong

□ 1 July 1998

❖ CUHK Research Committee Funding

Background: Alteration of the expression of leucocyte adhesion molecules will affect the inflammatory response to trauma. In some circumstances this may be beneficial as an excessive inflammatory response may result in organ failure. Both opiates and non-steroidal anti-inflammatory drugs (NSAID's) alter the expression of leucocyte L-selectin *in vitro* and may have a role in the prevention of excessive inflammation following injury. However there are no known reports of the effect of NSAID's or opiates in the expression of leucocyte adhesion molecules *in vivo*.

Objective: To investigate firstly, the effects of intravenous analgesia on the expression of adhesion molecules following limb injury, and secondly, the role of circulating catecholamines and cortisol in regulating this expression.

Study Design: Double blind, randomised trial comparing intravenous ketorolac and morphine.

Participants: Thirty adult patients sustaining painful isolated blunt injury to a limb brought to the Emergency Department of The Prince of Wales Hospital. There will be ten patients in each intervention group and ten non-randomised control subjects.

Laboratory Methods: Flow cytometry; High Performance Liquid chromatography; Radioimmunoassay

Outcome Measures: Primary outcome measures: changes in expression (percentage expression and mean channel fluorescence) of L-selectin on the surface membranes of leucocytes; correlation of the expression of L-selectin and circulating catecholamines and cortisol.

Secondary outcome measures: Correlation between pain score and circulating catecholamines and cortisol.

(MD98001)

Analgesic Efficacy and Cost-effectiveness of Morphine Compared with Ketorolac in the Treatment of Pain Following Limb Injury in an Emergency Department: A Double-blind, Randomized Controlled Trial

✉ RAINER Timothy Hudson • COCKS Robert Anthony • CHEUNG Nai Kwong • LAM Kwok Wai (Centre for Clinical Trials & Epidemiological Research) • JACOBS Philip* • NG Ying Chu*

□ 1 December 1998

❖ CUHK Research Committee Funding

Background: The current gold standard for the treatment of pain following long bone fractures is iv morphine titrated according to the patient's requirements. However such pain is frequently undertreated in Emergency Departments (ED's) possibly because of physician held beliefs of opiate side effects. Recent studies suggest that, from a physicians viewpoint, the non-steroidal anti-inflammatory drug, ketorolac, may be more effective, and may have less side effects than iv morphine. However ketorolac is more expensive and although this will concern Health Administrators, the appropriate early reduction of pain within the ED may result in earlier patient discharge. Therefore, in the management of blunt limb injury in an ED in Hong Kong a cost-effectiveness analysis (CEA) of ketorolac and morphine has important financial implications in the management of pain in an ED.

Objective: To investigate whether iv Ketorolac is a more cost-effective option than iv morphine in the management of pain in patients with limb injuries presenting to an ED.

Design: Prospective double blind randomised study.

Participants: 100 subjects having sustained isolated blunt limb injury presenting to The Prince of Wales Hospital.

Main outcome measures: Pain relief and overall cost effect.

(MD98021)

Please refer to previous issues of this publication for more details of the following ongoing research at the department:

<u>Edition</u>	<u>Title/Investigators</u>
1997-98	Haemostasis Following Trauma (MD97109) ✉ COCKS Robert Anthony • LAM Yuk Lan • RAINER Timothy Hudson • NG Heung Ling Margaret (Anatomical & Cellular Pathology) • MAYCOCK Paula*

RESEARCH OUTPUTS AND PUBLICATIONS

- <P982773> **Cocks, Robert A.; Tina Y.F. Chan and Timothy H. Rainer.** "Leukocyte L-Selectin is Up-Regulated After Mechanical Trauma in Adults". *The Journal of Trauma: Injury, Infection, and Critical Care* vol.45 no.1, pp.1-6. USA, 1998.07.
- <P982965> **Rainer, T.H.; Lam N. and Cocks R.A.** "Adrenaline Upregulates the Expression of L-Selection on Monocytes *in vitro*" *Journal of Accident and Emergency Medicine* vol.15 no.6, p.415. 1998.11.
- <P983072> **Rainer, T.H.; N. Lam and R.A. Cocks.** "Monocyte Surface L-Selectin Correlates with Post-Traumatic Multiple Organ Failure". *Journal of Accident and Emergency Medicine* vol.15 no.6, p.405. 1998.11.
- <P983073> **Rainer, T.H.; R.A. Cocks; M. Tam; K. Law; P. Lam and E. Wong.** "Injury Severity Scores and Prediction of Post-Traumatic Complications". *Journal of Accident and Emergency Medicine* vol.15 no.6, p.387. 1998.11.
- <P983074> **Rainer, T.H.; R.A. Cocks; C.Y. Man; N.K. Cheung; P. Lam and E. Wong.** "Derivation of Prediction Rules for Post-Traumatic Lung Injury". *Journal of Accident and Emergency Medicine* vol.15 no.6, pp.392-393. 1998.11.
- <P983081> **Rainer, T.H.; S.Y. Chan; K. Kwok; T.K. Suen; W. Lam and R.A. Cocks.** "Severe Trauma Presenting to the Resuscitation Room of a Hong Kong Emergency Department". *Journal of Accident and Emergency Medicine* vol.15 no.6, p.405. 1998.11.
- <P983099> **Moulton, Chris and Tim Rainer.** "The Recovery from Severe Alcohol Poisoning: Report of a Pilot Study". *Journal of Accident and Emergency Medicine* vol.15 no.6, pp.411-412. 1998.11.
- <P983115> **Cocks, Robert A.; Timothy H. Rainer; Paula F. Maycock; Tina Y.F. Chan and Nicole Y.L. Lam.** "Cyclic-AMP: The Missing Link in Neutrophil Mobilisation after Trauma?". *Journal of Accident and Emergency Medicine* vol.15 no.6, p.387. 1998.11.
- <P983273> **Stainer T.H.; J. Griffiths; R.A. Cocks and C. Metreweli.** "Implementing the Ottawa Ankle Rules in an Asian Accident and Emergency Medicine Department. What Potential for Saving?". *Journal of Accident & Emergency Medicine* vol.15 no.2, p.132. UK, 1998.03.
- <P983857> **Rainer, T.H.; Griffiths J.; Cocks R.A. and Metreweli C.** "Would the Ottawa Ankle Rules be Effective if Implemented in Hong Kong Accident and Emergency Medicine Departments?-A Preliminary Report". *Hong Kong Journal of and Emergency Medicine* vol.5 no.2, pp.77-80. Hong Kong, 1998.12.
- <P990488> **Cocks, Robert Anthony and Siu Kau Tong.** "Police Medical Support in Hong Kong". *Prehospital and Disaster Medicine* vol.14 suppl.1, p.S22. Madison, WI, USA: Wadem (World Association for Disaster & Emergency Medicine), 1999.
- <P990489> **Law, Kam L.; Timothy H. Rainer; James F. Griffith; Constantine Metreweli and Robert A. Cocks.** "Does Ultrasound Have a Role in the Clinical Diagnosis and Management of Fractured Ribs?". *Academic Emergency Medicine* vol.6 no.5, p.480. USA: Hanley & Belfus, Inc., 1999.05.
- <P990490> **Cocks, Robert.** "Yesterday's Emergency - Today's Lessons". *Today's Emergency* vol.5 no.1, pp.22-24. UK, 1999.
- <P990957> **Cheung, Nai K.; Timothy H. Rainer; Michael M. Tam; Wah S. Ng; Paulina S. Mak; Peggo K. Lam and Robert A. Cocks.** "Efficacy and Safety of Titrated Doses of Intravenous Ketorolac Tromethamine Compared with Intravenous Morphine Sulphate after Limb Injury". *Academic Emergency Medicine* vol.6 no.5, p.526. USA: Hanley & Belfus Inc, 1999.05.

<P991014> **Rainer, T.H.; T.Y.F. Chan and R.A. Cocks.** "Do Peripheral Blood Counts Have any Prognostic Value Following Trauma?". *Injury* vol.30, pp.179-185. UK, 1999.

<P991343> **Cocks, Robert A.** "Medical Care in Civil Disorder". *Trauma* vol.1, pp.255-263. UK, 1999.

see also <P982724>, <P982926>, <P983157>, <P983158>, <P983244>, <P983913>, <P983950>, <P990601>

RESEARCH PROJECTS

Post-program Survey for the "AIDS and the Workplace" Project

- ✉ LAU Tak Fai Joseph • SIAH Poh Chua
- ☐ 1 March 1999
- ❖ Hong Kong AIDS Foundation

The study evaluates the "AIDS and the Workplace" Project carried out by the Hong Kong AIDS Foundation, which aims at Removing misconception and AIDS-related discriminatory attitudes in the Workplace. It is also compared to a baseline Study to describe any changes that may have occurred in the past three years. (SS98071)

Evaluation of a program for Frequent Travellers Crossing the China-Hong Kong Border

- ✉ LAU Tak Fai Joseph • SIAH Poh Chua
- ☐ 1 April 1999
- ❖ AIDS Concern Foundation Limited

The study evaluates the "Cross-border Travelers" AIDS Prevention Program carried out by the AIDS Concern, which aims at reducing unsafe border sex across the border and increase AIDS-related knowledge and awareness. (MD98147)

Please refer to previous issues of this publication for more details of the following ongoing research at the department:

<u>Edition</u>	<u>Title/Investigators</u>
1996-97	Hong Kong Adult Vision Study: A Cross-Sectional Epidemiological Study of Eye Diseases in the 40 Years of Age and Over Population of Hong Kong (MD96016) ✉ LAU Tak Fai Joseph • MICHON John Joseph (Ophthalmology and Visual Sciences)#
1996-97	Hong Kong AIDS Information Net Project (MD96133) ✉ LAU Tak Fai Joseph
1997-98	Understanding the Adolescent Project - Pilot Implementation and Evaluation Study (ED97026) ✉ LAU Tak Fai Joseph • CHOI Yuen Wan* • LAI Yee Ching Kelly (Psychiatry) • OBORNE David* • HOH Ying*
1997-98	The Development of Indicators to Track Awareness, Attitude and Behaviours (MD97129) ✉ LAU Tak Fai Joseph • LEE Shiu Hung

RESEARCH OUTPUTS AND PUBLICATIONS

- <P964286> **Lo, Peng Iok; Patrick C.P. Ho; Joseph T.F. Lau; Albert Y.K. Cheung; Ernst Goldschmidt and Mark O.M. Tso.** "Relationship between Myopia and Optical Components - A Study Among Chinese Hong Kong Student Population". *Eye Science* vol.12 no.3, pp.121-125. 1996.
- <P982839> **Joe, Thomas.** "Ethical Challenges of HIV Clinical Trials in Developing Countries". *Bioethics* vol.12 no.4, pp.320-327. Oxford, UK, 1998.10.
- <P983219> **Liu, Joseph L.Y. and Jin-Ling Tang.** "Doctors are Ethically Obligated to Advise Patients to Quit Smoking". *British Medical Journal* vol.317, p.1588. UK, 1998.12.05.
- <P990134> **Lau, J.; W.S. Chan; Y.W. Choi; Kelly Lai; K.K. Chan; P. Lam; David Osborne; Ying Hoh and C.K. Wong.** "The Re-Examination of the Scaling Properties of an Existing Large Scale Screening Instrument for Potentially At-Risk Adolescents in Hong Kong by Multilevel Method Taking Cluster and School Information". Paper presented in the 2nd International Amster 1999.03.
- <P990396> **Lau, Joseph T.F.; Joseph L.Y. Liu; Jacky C.K. Cheung; Aaron Yu and C.K. Wong.** "Prevalence and Correlates of Physical Abuse in Hong Kong Chinese Adolescents: A Population-based Approach". *Child Abuse & Neglect* vol.23 no.6, pp.549-557. USA, 1999.

<P990747> **Lau, Joseph Tak-Fai and Chau-Kiu Cheung.** "Public Evaluation of an Announcement of Public Interests Communicated by an AIDS Patient". *Journal of Health & Social Policy* vol.11 no.1, pp.77-90. 1999.

see also <P974926>, <P975053>, <P980713>, <P982512>, <P982556>, <P982558>, <P982597>, <P982871>, <P983073>, <P983074>, <P983636>, <P983791>, <P983955>, <P990168>, <P990551>, <P990677>, <P990752>, <P990957>, <P991120>, <P991309>, <P992688>

RESEARCH PROJECTS

Generation of Monoclonal Antibodies Against the Epstein-Barr Virus Latent Membrane Protein 1 Variants in Hong Kong Nasopharyngeal Carcinoma

✉ CHUI Yiu Loon • HUANG POON Wai Sin Dolly (Anatomical & Cellular Pathology) • CHEUNG Siu Tim (Anatomical & Cellular Pathology)# • LO Kwok Wai (Anatomical & Cellular Pathology)

□ 1 January 1999

❖ Research Grants Council

Epstein-Barr virus (EBV) is consistently found in the nasopharyngeal epithelial cancer (NPC) cells. Its role in the development of the cancer is strengthened by the finding that the virus produces a protein with known cell transformation capability inside the cancer cells. This protein is called the latent membrane protein 1 (LMP1). LMP1 proteins from different EBV isolates show sequence variation. There is evidence that some LMP1 variants which show a loss of a string of 30 nucleotides near the end of the gene can transform cells more readily than the others which do not have the loss. Indeed, the predominant LMP1 variants present in the NPC of the South China region, where the incidence of this cancer is remarkably higher than most other parts of the world, share this sequence deletion feature. Using a polymerase chain reaction technique to analyze the LMP1 gene sequence in Hong Kong NPC, we have observed a particular variant which shows a strong association with the cancer. This variant has not been described before. It has the aforementioned deletion, but in addition an amino acid change at the sequence position 335, resulting in an aspartic acid. Majority of the NPC (87%) were found to carry this variant which was harboured by less than 30% of the healthy carriers. In contrast, another almost identical variant but without this amino acid change at position 335 was found in majority of the healthy carriers, but only 5% of the NPC. We have resolved to further this study by using monoclonal antibodies to investigate the expression and function of our Hong Kong NPC LMP1 protein variants. As the present available antibodies were raised against a LMP1 variant present in the Caucasians, and stain poorly to our NPC samples, we propose to raise a panel of monoclonal antibodies specific to the Hong Kong NPC LMP1. We are also interested in producing those antibodies that have potential immunotherapeutic value to the cancer. (CU98271)

Production of Recombinant Human Telomerase and Anti-Telomerase RNA Probe to Examine Their Diagnostic Utility in Autoimmune Disease

✉ LIM Pak Leong • LEUNG Tze Ming • WONG Kong Chiu (Medicine & Therapeutics)

□ 1 April 1999

❖ CUHK Research Committee Funding

The recent cloning of human telomerase has aroused great interest because this could enable scientists to look more critically into the biological role played by this enzyme in cancer and ailments linked to ageing, and possibly, in other disease states not looked into hitherto. We hope to exploit this discovery as immunologists and examine whether telomerase has any role or clinical use in autoimmune disease. We will produce the enzyme in our laboratory by re-cloning the gene and expressing this as a recombinant protein, and use the protein in an immunoassay to see whether patients with autoimmune disease such as lupus (a common disease in Hong Kong) produce antibodies to it as some of them do with other enzymes in the body. Nothing is known about this. If they do, this may be diagnostically or biologically important. We will also investigate whether the circulating leucocytes of autoimmune patients have heightened expression of the telomerase gene, and if so, what is the significance or use of this. (MD98097)

Please refer to previous issues of this publication for more details of the following ongoing research at the department:

<u>Edition</u>	<u>Title/Investigators</u>
1995-96	Transgenic Study of Immunoglobulin Gene Hypermutation: Using Selectable, Chimeric <i>E. coli</i> gpt-VJ Gene Constructs to Investigate the Role of Rearranged VJ in Hypermutation (MD94123) ✉ CHUI Yiu Loon • LIM Pak Leong
1996-97	Molecular Mechanism of Immunoglobulin Gene Hypermutation: Does It Resemble the Transcription-DNA Repair System? (CU96664) ✉ CHUI Yiu Loon • LIM Pak Leong
1995-96	Cloning and Expression in Bacteriophage of Immunoglobulin Genes from Lupus (SLE) Patients Which Encode and Anti-idiotypic Antibody (CU95638) ✉ LIM Pak Leong • CHUI Yiu Loon • WONG Kong Chiu (Medicine & Therapeutics)

RESEARCH OUTPUTS AND PUBLICATIONS

- <P980820> **Lim, Pak-Leong; Frankie C.H. Tam; Yuet-Meng Cheong and M. Jegathesan.** "One-Step 2-Minute Test to Detect Typhoid-Specific Antibodies Based on Particle Separation in Tubes". *Journal of Clinical Microbiology* vol.36 no.8, pp.2271-2278. USA, 1998.08.
- <P980993> **Chan, C.L. and H.Y.A. Lau.** "Effects of PGD₂ and Its Agonists on Rat Peritoneal Mast Cells Activated by Different Secretagogues". *Archives of Pharmacology* vol.358 no.1(suppl.2), pp.17-22. Germany, 1998.07.
- <P991661> **Ching, Arthur Kar-Keung; Pik-Shan Li; Wood-Yee Chan; Chun-Hung Ma; Susanna San-Tuen Lee; Pak-Leong Lim and Yiu-Loon Chui.** "The Strand Bias of Somatic Hypermutation is not Locally Determined by Substrate DNA Sequence". *Proceedings of the 8th International Symposium of Society of Chinese Bioscientists in America (SCBA)* p.167. Hong Kong, 1999.

see also <P980930>, <P990068>

RESEARCH OUTPUTS AND PUBLICATIONS

<P983306> **Cheung, W.H.; K.M. Lee; S.H. Cheng; K.P. Fung and K.S. Leung.** "A Study of *in vitro* Inhibition on Endothelial Cells by Growth Plate Chondrocytes Secretory Factors During Tumor Spreading". *Proceedings of the 18th Annual Congress of the Hong Kong Orthopaedic Association* pp.100-101. Hong Kong, 1998.11.

see also <P975062>, <P982890>, <P982892>, <P983047>, <P983305>, <P984117>, <P984118>, <P984120>, <P984581>, <P984588>, <P984979>, <P990994>, <P991079>, <P991081>, <P991121>, <P991328>, <P991539>, <P992087>, <P992529>

RESEARCH OUTPUTS AND PUBLICATIONS

<P964291> **Kwok Samuel P.Y.; Clarke B. Hazlett and James Y.W. Lau.** *Grand Rounds in Surgery.* vol.2, 245 pgs. Hong Kong: THC Press Ltd, 1996.

<P982525> **Hazlett, C.B.** "Improving the Interface of Health Promotions and Family Practice". *The Hong Kong Practitioner (The College of Family Physicians)* vol.20 no.10, pp.529-531. Hong Kong, 1998.10.

see also <P982503>, <P983048>, <P990208>, <P990679>, <P990715>