### CUHK 2025: Excellence with Purpose and Responsibility

中大2025: 力臻卓越, 任重志遠

Strategic Plan 2021–2025

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#### Foreword by the Council Chairman



For 58 years, The Chinese University of Hong Kong (CUHK) has been a powerful force in both the local and international higher education sectors. We have always been guided by our mission to assist in the preservation, creation, application and dissemination of knowledge to serve the well-being of the citizens of Hong Kong, China and beyond. We aspire to become a first-class comprehensive research university whose scholarly output and contributions to the community meet the highest standards of excellence. And I am glad to note that CUHK is ranked 7th in Asia by the Times Higher Education Rankings and 39th in the world by the Quacquarelli Symonds World University Rankings. It is ranked third in AWRU Top Universities in Greater China, and came up first among Hong Kong's universities. All this is a fine tribute to the members of the University community who have turned this institution into one of Asia's—and the world's—finest.

But there is no room for complacency. To keep the momentum going, we have prepared and implemented strategic plans that aim to steer us through the challenges of a fast-changing world, set forth new goals for tomorrow's young leaders and chart new directions in the areas of teaching, research and knowledge transfer.

I am delighted to report that all of our strategic plans have served us well and laid a firm foundation for our development through the years. A strategic plan is more than a wish list; it includes an in-depth analysis of our opportunities and strengths and offers ways

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to leverage these to meet future challenges and thus benefit our students, staff, alumni, donors, supporters and other stakeholders. A strategic plan outlines our shared goals and the actions required to realize them. In summary, it contains the guidelines that will take us to a higher plane.

The Strategic Plan 2021–2025 ('CUHK 2025') is a good example of such an action plan. This comprehensive and insightful new plan sets forth new directions in key areas of the University's development over the next five years. During this period, we must continue to navigate through challenges and realize our visions of a better tomorrow. Although we do not underestimate the difficulty involved, we earnestly cherish the opportunity to take the University to new heights.

I would like to thank all those who have played their part in the preparation of 'CUHK 2025': Prof. Rocky Tuan, Vice-Chancellor and President, for his insights and leadership; Prof. Alan Chan, Provost, for his stewardship and careful craftsmanship; and the Chairpersons and Members of the seven sub-groups of the key areas for their hard work and tireless collaboration. Of course, this thank-you list would not be complete without my giving a vote of thanks to the staff and faculty members, students, alumni, donors, supporters and other stakeholders of the University who have lent their expertise and advice to make 'CUHK 2025' possible.

I therefore present this Strategic Plan to all of you who take an interest in the progress of this University. You can also contribute to this roadmap to further success by participating in or supporting our initiatives. Thank you.

Dr. Norman Leung Nai-pang

Council Chairman

#### Foreword by the Vice-Chancellor and President



I am proud and pleased to present to you the new five-year Strategic Plan of The Chinese University of Hong Kong (CUHK) for the 2021–2025 period, after extensive consultations with university stakeholders. Building on the strong foundation laid by the preceding Strategic Plan with many rising challenges and opportunities identified, 'CUHK 2025' charts out a refined roadmap that will guide us further to fulfill our vision and ambitions as we carry out the role of a civic university that contributes to Hong Kong, our country, the region and the rest of the world, and lead us to achieve "Excellence with Purpose and Responsibility".

'CUHK2025' was drafted amidst the aftermath of the social unrest that rocked Hong Kong in 2019 and the throes of the COVID-19 pandemic and economic doldrums in 2020. While there is no silver bullet or magic wand to fix all the complex challenges, problems and pains that the University is facing, we hold the faith that "when the going gets tough, the tough gets going", as much as we hold dear to our founding mission, vision and shared values that have guided CUHK through for over half a century. This Strategic Plan was deliberated and drafted in a positive spirit that believes in and endeavours to achieve a better tomorrow.

Recent challenges have illustrated the significant roles of universities, as institutions of higher learning and knowledge, for the incubation of actionable knowledge, the nurturing of global citizens with civic-mindedness and compassion for sustainable

development, as well as the championing of innovation and international cooperation. 'CUHK 2025' reflects our commitment in: (1) delivering education that fosters whole-person development; (2) providing student experience that widens students' horizons; (3) undertaking research and innovation that create social impact; (4) fostering global engagement that brings the world to the University and the University to the world; (5) nurturing human capital that values ingenuity and diversity; (6) strengthening alumni engagement and institutional advancement that promote the future growth of the University; and (7) fulfilling social responsibility and supporting sustainable development that actualize CUHK's ethos. These seven areas cover a wide spectrum of university life, and each area is precisely designed to achieve specific goals conducive to the long-term and sustainable growth of the University, as well as the well-being of mankind. In fact, our motto, 'Through learning and temperance to virtue', precisely echoes the equal importance we attach to academic excellence and civic responsibility.

I would like to express my sincere gratitude to all the faculty, staff, alumni, students, members of the Council, donors and supporters, and other stakeholders, who have pitched in to make a difference. Their unstinting support and continued contributions are essential to making this Strategic Plan a viable and synergistic project as we look to scale new heights. The success of the plan depends on the spirit of unity that we share. I am sure that, by all of us acting collaboratively and synergistically, the coming five years will be productive and fruitful and will lay the foundation for further growth. While we will surely face challenges on the road ahead, I am confident the University will continue to flourish and prosper, as our past history has consistently demonstrated.

Finally, I would like to reiterate my heartfelt thanks to all who have worked hard to help develop this Strategic Plan. The future development of the University will bear witness to their efforts.

#### Prof. Rocky S. Tuan

Vice-Chancellor and President

## Introducing 'CUHK 2025'



#### 1. Introducing 'CUHK 2025'

Founded in 1963, with fewer than 1,400 students and 300 staff, CUHK is home to over 30,000 students and 8,000 staff members today. Recognized globally as a leading comprehensive research university, and one of the finest in Asia, CUHK has come a long way.



CUHK cherishes the vision of achieving excellence with purpose and responsibility, seeking to forge a better future for all and, in particular, contribute to the development of Hong Kong and mainland China, through education, research, innovation and service.

With the largest campus among all the universities in Hong Kong, and by far the most lush and green, CUHK is also the only university in Hong Kong that offers a collegiate experience, with unique college-based learning programmes forming an integral part of the undergraduate curriculum. Over 9,000 students now reside on campus, across nine Colleges and six Postgraduate Halls of Residence. This number will grow to more than 10,000 in the near future, when the construction of three new hostels is completed. By 2027, another three hostels will open their doors, which will further enhance the campus environment, as well as learning experience, making CUHK a destination of choice for both local and international students.

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The University launched a five-year plan in 2016, which set out its key strategies for expansion. Progress over the past five years has been encouraging. Although the validity of university rankings may be open to doubt, the fact that CUHK has risen from 138th place in 2016 to 56th in 2021 in the Times Higher Education World University Rankings, and from 51st in 2016 to 39th in 2022 (published in 2021) in the Quacquarelli Symonds (QS) rankings should be taken in a positive light. Among the universities in mainland China, Taiwan, Hong Kong and Macau, CUHK was ranked third in the 2020 Ranking of Top Universities in Greater China, behind Tsinghua and Peking University. This ranking, which grew out of Shanghai Jiao Tong University, relies on bibliometrics and institutional statistics, unlike some of the other rankings that make use of academic reputation. In 2016, CUHK garnered HK\$644.5 million in research funding. In 2020, the figure has grown to HK\$1,178.4 million, and the number of PhD students has grown about 23% to nearly 2,500 during the past five years. Reflecting the University's effort in promoting internationalization, over 40% of our students enjoy some form of global learning exposure, supported by a network of nearly 300 partners. This effort did not go unnoticed, as CUHK is ranked the third most international university in the world based on the Times Higher Education World University Rankings. These improvements are not trivial given the highly competitive environment and bode well for the University's future.

The time has come for a new strategic plan, charting the direction of the University in its next phase of development.

#### Road Map to Excellence

A strategic plan is a road map, not a straitjacket. In an era of rapid change and significant disruptions, universities need to remain nimble and agile in anticipating future trends and responding to emerging conditions. The COVID-19 pandemic is a case in point, forcing universities worldwide to make drastic adjustments. Nevertheless, the goals and ambitions outlined in a strategic plan help focus attention and resources, while remaining committed to achieving excellence in all areas across the University. One may want to identify and achieve certain peaks, but for a great university there must be a high level of excellence across the board. This is the context in which the CUHK Strategic Plan 2021–2025, or 'CUHK 2025' for short, is set.

Seven key areas are addressed in 'CUHK 2025':

- Education
- Student Experience
- Research and Innovation
- Talent Attraction and Development
- Global Engagement
- Alumni Engagement and Institutional Advancement
- Social Responsibility and Sustainable Development

These focal points may be conceptually distinct, but they form a holistic whole, and must thrive together to create and nourish an ecosystem that is conducive to the flourishing of human development as well as knowledge creation, dissemination, exchange and application.

## Education and Student Experience: Meeting the Challenges of Tomorrow

University education cannot remain stagnant but must prepare students well for a fast-changing and often contested global landscape. Whole-person development is a hallmark of CUHK education. Enabled by the University's emphasis on bilingualism and multiculturalism, ethical responsibility, diversity and inclusion, a curriculum of both breadth and depth, global readiness, professional attachment, community engagement and a vibrant college experience, this will continue to drive our educational agenda.

New educational technologies will enhance learning experience, and in this regard CUHK will continue to invest in strengthening not only its e-learning capacity but also pedagogical innovations. The General Education (GE) curriculum has contributed significantly to broadening our students' intellectual horizons. Nevertheless, some eight years have passed since it was last set, and a fresh review seems timely. CUHK students already have an advantage in being bilingual, but in a globalized world the mastery of another foreign language would afford them an added competitive edge. College residential learning is an asset that similarly deserves enhancement. As the

new knowledge economy takes hold, the need for upskilling and retooling will become more pronounced. Specially curated postgraduate programmes, and more importantly the nurturing of sound habits and discipline of mind that would fuel lifelong learning, will have an even more critical role to play in the future. The sections on Education and Student Experience below will highlight the initiatives that will better equip our students and graduates not only to take on the challenges of tomorrow but also to seize the many exciting opportunities that beckon.

#### Research and Innovation: Focus on Matters that Truly Matter

Increasingly, especially given the accelerated rate of technological change, research and innovation create new opportunities not only for economic development but also social impact. At the same time, the attendant ethical issues require careful attention in a world where technology is shaping the ways we live, work and play.

In the CUHK Strategic Plan 2016–2020, four thematic areas were identified as particularly important to the University's development, namely, China Studies, Translational Biomedicine, Information and Automation Technology, and Environment and Sustainability. The importance of these areas has not diminished.

Building on the success of the previous strategic plan, 'CUHK 2025' will continue its push for deeper understanding and engagement with the mainland, which has been rendered more complex under shifting geopolitical dynamics, where economic and technological advances have also taken on political overtones. *China is multidimensional*; its evolution is characterized by both continuity and change. Any reductionistic or essentializing caricature should be resisted. With nearly 200 faculty members and researchers pursuing various aspects of China research, with The Chinese University of Hong Kong, Shenzhen developing according to plan, and given our geographical and cultural advantage that few other universities possess, CUHK can be a world leader in setting the agenda and spearheading research on "China: Tradition and Modernity".



The importance of building a *Healthy City* can hardly be overemphasized. The devastation brought by COVID-19 only makes it more poignant. While translational biomedicine will continue to be a pillar of strength in CUHK research and innovation, the need for interdisciplinary collaboration that brings together biomedical science and engineering, as well as behavioural, socioeconomic and policy research is evident. This effort will be spearheaded under the rubric of "Innovative Biomedicine" in 'CUHK 2025'.

Interdisciplinary research is equally important to developing *Information and Automation Technology*, which has its sight on creating *Smart City* solutions that would benefit the people of Hong Kong, the Greater Bay area and beyond. This is another pillar of strength in the vibrant CUHK research landscape. However, while technological innovation is crucially important and must be supported, it is necessary but not a sufficient condition to building a profitable future. If technology adoption and its impact on behaviour and society are not well understood, and without appropriate regulatory regimes, for example, technological solutions will not be able to achieve their intended outcomes and may yield unintended consequences that adversely impact the flourishing of humanity. If the climate crisis is not resolved, and if the degradation of the environment persists, the effort in nurturing healthy and smart living would be negated. More than ever, research on *Environment and Sustainability* demands our full attention. In these and other areas, collaboration with government

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and industry will take on growing importance, in order to maximize impact and bring tangible benefits to society.

Research at CUHK aims at contributing to global issues that truly matter, and to matters that affect Hong Kong and Greater China. In this regard, China matters, health matters, technology matters, and certainly earth matters.

#### Investment in Human Capital

The greatest strength of CUHK has always been its people. Bringing in the best and bringing out the best in our people will continue to shape the University's strategy.

Talent attraction and development not only impacts education and research, but also, from a higher vantage point, is critical to Hong Kong's continued success. Resources devoted to building human capital is not a cost but an investment that, if managed properly, promises handsome returns.

Passive recruitment is never optimal, and especially so in a highly competitive talent market. Recruitment defined by narrow teaching or administrative needs rarely results in attracting the best. At both senior and junior ranks, efforts must be made to identify and attract proven leaders, as well as nurture future ones. To that end, new strategic recruitment programmes will be developed, as will be detailed in the section "Building Human Capital for Excellence with Purpose" below. Furthermore, cumbersome processes should be streamlined, and conditions of service made more amenable to achieving impactful outcomes, while maintaining the highest academic and ethical standards, and accountability. Unlike a research institute, a great university affirms the equal importance of education and research. This has been a core value of CUHK and will continue to guide the University into the future.



Today, ground-breaking research comes more often than not from the interstices of different disciplines. Crossing disciplinary boundaries is not simply a matter of developing competence in more than one field, but rather fosters creativity and helps open new vistas. Multiple academic citizenship should be encouraged and academic silos removed. At the same time, mentorship will need to be strengthened, as interdisciplinary excursions may also result in aimless meandering and unproductive digression. For a large organization, leadership succession can hardly be left to chance, for which a CUHK Leadership Programme will be established for both academic and professional/administrative staff. Exposure to different aspects of university operations for high-performing administrative staff will help groom future leaders and should be explored. At all levels, CUHK must aim to be known for its excellent service, with a helpful "no-wrong-door" culture, while the introduction or replacement of selected automated systems will further enhance administrative efficiency.

Quality is ultimately the only true measure of a great institution. An environment that is conducive to cultivating a culture of excellence among its people serves as the bedrock of CUHK's development. Good people attract other good people—obvious as this may seem, the amplifying effect of this basic principle nonetheless should not be underestimated. Diversity and inclusion, with zero tolerance for any form of harassment including hate speech and cyberbullying, is an important feature of 'CUHK 2025'. In a knowledge community, hierarchical barriers should give way to a collegial culture that values the contributions of all its members. Coupled with open

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communication channels, this will go a long way in steering CUHK towards an even brighter future.

#### Global Community and Engagement

Knowledge does not grow well in insularity. The global economy is deeply interconnected, despite occasional flashes of protectionism. Future managers require a deep multicultural sensitivity and the ability to recruit and lead top talent from around the world. Internationalization is particularly crucial to Hong Kong's development. To advance the knowledge enterprise and better prepare students for the global economy, CUHK has been active in providing international learning opportunities and developing research collaboration with key overseas partners. Global engagement will continue to drive the University's development over the next five years, with particular focus on engaging the mainland, and specifically the Greater Bay Area.

In addition to expanding global learning opportunities, it is also important to diversify the student as well as staff population at the University. The presence of different cultural currents helps raise awareness, develop cross-cultural sensitivity, and create a more vibrant campus. A global community will also help talent recruitment, build networks, and forge new partnerships in research and innovation. The pressing challenges we face cannot be resolved by any individual or group but require global collaboration free of prejudice or distrust. To build trust, there must be understanding, which is part and parcel of university business.

CUHK can and should play a greater leadership role in international networks and alliances. The University has been an active member of a number of prominent international academic alliances such as the Association of Pacific Rim Universities (APRU). In response to COVID-19, which has halted practically all forms of international student exchange, CUHK initiated a Virtual Student Exchange Programme under APRU. This has been warmly received and should continue even after the pandemic has subsided. The way in which academic content and cultural exposure are combined through this programme may establish a model for future virtual exchanges. CUHK is also a key member of The Guangdong-Hong Kong-Macau University Alliance and The Association of University Presidents of China, which bring together the best universities in mainland China and Hong Kong.



On the strength of such deep and extensive regional and global partnerships, the University has identified several priorities in its engagement strategies and plans for the next five years. These are: (1) to build and maintain a comprehensive university-wide brand by which the University will be known and remembered; (2) to hire and groom international faculty members whose expertise and connections would in turn further strengthen internationalization in both education and research; (3) to make use of the resources and opportunities available particularly in the mainland for further collaborations and partnerships on national and international fronts; (4) to continue to increase the quantity and quality of students' overseas learning and internship experience; and (5) to more proactively and strategically recruit students from overseas countries and regions, especially those from which no students have hitherto been recruited, and continue to enhance and enrich their campus experience.

#### Alumni Engagement and Institutional Advancement

Great universities are invariably marked by a successful and supportive alumni family. With over 240,000 alumni around the world, CUHK is extremely fortunate in enjoying the strong support of our alumni. There are three principal reasons behind alumni engagement. First, it enables the University to continue to provide learning opportunities for its graduates, which is particularly important as lifelong learning becomes increasingly important. Second, the mutual support of alumni is equally

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important. Successful alumni communities work together to provide business, investment, employment and other opportunities. Alumni, too, come together to contribute to worthwhile charitable causes. Finally, alumni engagement enables support for the University, leading to further advances in education and research, helping needy students, attracting talent, improving facilities, thereby raising the value of a CUHK degree, in a virtuous cycle.

Great universities are also marked by a mature and forward-looking culture of giving. CUHK has been fortunate in that its vision is widely shared by private donors and corporate sponsors, whose support has been instrumental to the remarkable progress of the University over the past 50 plus years. Going forward, the dedicated team of CUHK advancement professionals will work even more closely with the Faculties and the Departments as well as the Alumni Affairs Office to garner further support for the University's educational and research objectives, which remain critical to realizing concrete benefits for the people of Hong Kong and creating a better future for all. Harnessing the power of technology and finding new ways to engage donors, alumni and friends of the University will be critical to institutional advancement over the next few years, with a series of planned events and campaigns leading up to the University's 60th anniversary celebrations in 2023.

#### Social Responsibility and Sustainable Development

Social responsibility is not an option or peripheral undertaking, but cuts to the core of CUHK's value and self-understanding as a university. Social responsibility for sustainable development is now even more critical in the face of a growing climate crisis. CUHK is the home to the world's first museum of climate change and a co-host of the Hong Kong Chapter of the United Nations' Sustainable Development Solutions Network. Public education and dedicated research will further contribute to sustainable development. Service learning is another area that will receive added attention under 'CUHK 2025'. Well-known for its contributions to society, whether in social work, education, medicine, culture or other domains, CUHK will continue its community engagement in its next chapter of development.

The new Social Responsibility and Sustainable Development Office established in January 2021 signals the University's commitment in this regard. The new Office will

spearhead new initiatives and coordinate existing efforts in promoting sustainable development on campus. Support for education and research in social responsibility for sustainable development will focus on generating impact, nurturing future champions, and partnering industry to develop concrete solutions that would meet societal needs and help address the challenges of tomorrow.

## Continuity and Change: Excellence with Purpose and Responsibility

CUHK is proud of its traditions. 'CUHK 2025' is in one sense a continuation of the University's previous strategic plan. However, continuity always finds itself amidst change; the human condition is never static. "To combine tradition with modernity; to bring together China and the West (結合傳統與現代 融會中國與西方)" —this stands at the heart of the mission of CUHK and will continue to guide our aspirations.



At the same time, tradition must seek fresh interpretation in every age for it to stay relevant, truly alive, resulting in a fusion of horizons that garners and distills the wisdom of tradition in addressing current issues constructively and creating value for present and future generations. This is the spirit that underlies the formulation of 'CUHK 2025', not to attract attention with novelties that often fade away as quickly as they arrive, but to focus and enhance the strength of our community to further the fundamental goals of the University.

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The external environment poses serious challenges for university development at this juncture. There are global issues such as climate change and the emergence of new infectious diseases that cry out for urgent attention. There are equally critical local concerns. Demographic shifts, geopolitical fissures and inequality add to the complexity of the higher education landscape. In this context, there is every need for the University to focus on its core business in achieving excellence in education, research and service.

The theme of 'CUHK 2025' is excellence with a deep sense of purpose and responsibility. This does not drive a wedge between theoretical and practical knowledge, or between basic and applied research. Rather, excellence with purpose, which entails responsibility, sharpens our vision and emphasizes the impact and contributions we make towards a better future.

Excellence is as much a process as it is a desired end. As an end, excellence is marked by achievements of the highest quality. As a process, it extends beyond operational success that measures the execution of business strategies by short-term results. As a process, excellence defines the self-understanding, aim and sustained effort of individuals and institutions in achieving the best possible outcomes. Excellence with purpose and responsibility renders explicit that these outcomes serve the interests of humanity. Excellence is not an accolade we seek, but a commitment to making a positive difference through education, research, engagement and everything we do.



In modern Chinese, the word *xin* (心) means the heart. However, in classical Chinese philosophy, *xin* signifies the seat of cognition, emotions and ethical dispositions, and as such it is often translated into English as the "heart-mind". This points to a holistic understanding of the self and personal growth, bringing into view the perceived integral nature of intellectual and ethical excellence. The CUHK motto, "博文約禮" or "Through learning and temperance to virtue", reflects a similar view. While recognizing the need for new interpretation and application, the University is committed to staying true to its roots, in the belief that, as the Confucian *Analects* aptly puts it, "Once the roots are established, the Dao or Way will grow."

In the final analysis, this is the kind of excellence we seek, of both heart and mind, with purpose and responsibility, exemplifying the highest standards, and as a process of building a community that embraces diversity and stays united in its effort to enrich the lives of the people of Hong Kong and beyond. World recognition will come because of this commitment and the results we achieve, which is a consequence but not the reason for engaging in the pursuit of excellence. Through 'CUHK 2025', which involved extensive consultations with the University community, we hope to be able to take another firm step in that direction.

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# Education: Meeting the Challenges of Tomorrow



#### 2. Education: Meeting the Challenges of Tomorrow

#### A Rewarding Journey

CUHK prides itself in its dedication to education. From the University's inception in 1963, the commitment to providing an education of the highest quality has not waivered. CUHK was a pioneer in developing the four-year undergraduate curriculum in Hong Kong. The University saw the need for lifelong learning and started providing extramural studies as early as 1965. It established a Graduate School—the first of its kind in Hong Kong—in 1966, and launched its first PhD programmes in 1980, as the University built on its strong foundation and began to integrate education and research.

Over the past decades, continual enhancement has resulted in a balanced undergraduate curriculum of both breadth and depth, anchored by an award-winning General Education curriculum. Non-formal education programmes contribute significantly to a well-rounded education and whole-person development. Postgraduate programmes bloomed. The University's coursework and research postgraduate programmes are much sought after by local, mainland and international students. Considerable effort has been put into expanding professional and continuing education, which provides opportunities for upskilling and enrichment and in so doing, serves the needs of society.

The steady progress of CUHK education is underpinned by an evidence-based quality assurance system that relies on feedback, self-assessment, formal reviews, and benchmarking. On that basis, the University has been able to identify the weaker links and effect improvements. One indicator of success is found in the University's Performance Measures (PM) compiled by the University Grants Committee (UGC). CUHK's ratings in the domain of "the quality of student experience of teaching and learning" in the PM have remained high if not the highest among all local universities. In its December 2020 compilation, CUHK is the only university that has achieved a rating of 4 on a 5-point scale, the highest score since the measures were introduced by the UGC.

Six major strategies for enhancing teaching and learning were identified in the CUHK Strategic Plan 2016–2020. While much has been accomplished, as will be briefly

described in the following paragraphs, they remain vital to CUHK education and will require continued effort as the University embarks on a new phase of development.

#### Entrepreneurship and Innovation

The Entrepreneurship and Innovation Minor Programme (EPIN) was successfully launched. EPIN courses have been well received—in the 2019–20 academic year, 18 courses were offered under EPIN, enrolling some 470 students—and they have the support of CUHK alumni and other external partners. For example, with the support of our alumni and the larger community, internship places have been made available to students and a series of workshops under the banner of creativity@CUHK, successfully completed. Beyond Hong Kong, international programmes such as study missions have proven to be particularly attractive and helpful to students. These include the "Tsinghua and Fudan iCenter Bauhinia Valley Programme" and a summer study mission to the University of Cambridge.

EPIN has become an integral part of the University's entrepreneurship education ecosystem. Since 2020, the EPIN Office has been relocated to the new "InnoPort" of the University. As intended, the resultant collaboration with the other InnoPort occupants has provided new opportunities for students to test their ideas or inventions, work with successful entrepreneurs, and begin their business journey. On this solid foundation, entrepreneurship and innovation will continue to grow over the next five years as a key component of CUHK education.

#### eLearning Comes of Age

The eLearning initiative envisioned in the previous strategic plan focused on developing new pedagogical approaches such as micro-modules to facilitate teaching in flipped classrooms. This has progressed exceedingly well with encouraging outcomes. Supported by teaching development grants provided by the University, for example, more than 300 micro-modules or IT-related teaching development projects were implemented in the past few years. They add to the already formidable pedagogical arsenal for blended learning. An increasing number of CUHK teachers have become seasoned practitioners of technology-assisted teaching and learning.

Adept in the use of sophisticated IT tools such as AR, VR and MR, they not only strive to enhance their own teaching but also serve as change agents, developing and sharing innovative practices in the education arena.



The COVID-19 pandemic has brought unprecedented challenges to the University. CUHK was one of the first universities in the world to decide to conduct real-time synchronous online teaching for all scheduled classes. Within a few short weeks after the start of Term in January 2020, more than 8,600 lectures and tutorials were moved online. The entire University clicked into gear, as it were, to ensure that learning objectives were not compromised. Online teaching and learning, despite a few teething problems, has received good evaluation from both students and teachers. The investment in strengthening the University's eLearning capacity in previous years has paid off. More than serving as a response to the COVID-19 pandemic, the successful experience has changed attitudes and nurtured new skills, which places CUHK in a good position to be a leader in pedagogical innovation under the New Normal.

#### Improving Language Proficiency

Bilingual competency has been a mark of distinction of CUHK graduates. This is the competitive edge that CUHK education offers. No effort has been spared to strengthen the language training of our students. For example, CUHK has made extensive use of the Teaching Development and Language Enhancement Grant (TDLEG) made

available by the UGC to support language enhancement activities. Under this scheme, 26 selected projects have been launched over the past five years. Targeted workshops and peer tutoring sessions complemented the formal language courses to benefit a large number of students. The English Across the Curriculum (EAC) programme, in particular, which aims at integrating language awareness and proper language use in the disciplines, is the largest project supported by TDLEG, involving more than 24 academic departments.

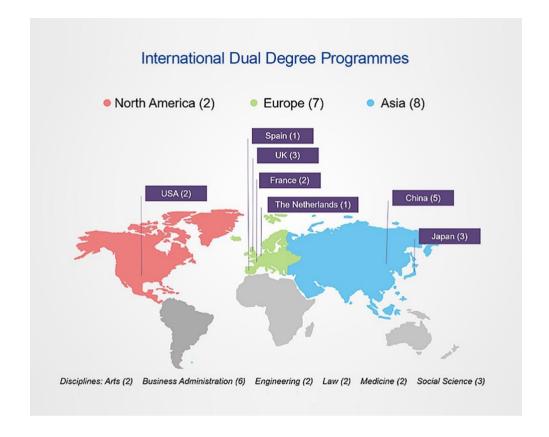
The importance of English and Chinese language proficiency cannot be understated, for Hong Kong remains an open economy and a meeting point between China and the West. Emphasis on language competence will continue over the next five years. The mastery of a third modern language besides Chinese and English will further sharpen the competitive advantage of our students. This is an area that will be strengthened under 'CUHK 2025'.

#### Joint Programmes with Strategic Partners

From its inception, CUHK recognizes the value of global learning and has forged strategic partnerships with selected mainland and international universities. The first student exchange programme at CUHK was launched in 1965. In recent years, substantial effort has been devoted to establishing collaborative programmes, including dual degree programmes, with mainland and overseas partners.

To date, a total of eight undergraduate and nine postgraduate dual degree programmes have been established. The rich cross-cultural learning experience that these programmes offer benefits not only those students who take part in them, but also the larger student body as the incoming students from partner universities add to the diversity of the CUHK environment and enrich the intellectual life of the University.

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#### Redefining the Role of Continuing and Professional Studies

Since 1965, the University has been offering professional and continuing education programmes through the then Department of Extramural Studies, which was renamed the School of Continuing and Professional Studies (CUSCS) in 2006. Today, CUSCS offers a rich array of courses and programmes at different levels, including some 80 award-bearing programmes, distance learning and corporate training courses. To enhance access, its classes are held in several conveniently located centres in the city. These programmes are subject to the same rigorous oversight and quality assurance scrutiny as the University's degree courses.

CUSCS serves an important social function, offering retooling and upskilling opportunities for working adults that are increasingly demanded by a fast-changing economy. Intellectual enrichment also contributes significantly to the goal of healthy living as the ageing population increases.

#### Outreach to Local and International Communities

As a responsible institution of higher learning, CUHK has developed a series of Massive Open Online Courses (MOOCs) since 2013, which are available free of charge to the global learning community. Some 30 CUHK MOOCs are now offered on various platforms, such as Coursera, CNMOOC, XueTangX, and the Guangdong-Hong Kong-Macau University Online Open Course Alliance, with a wide regional and global reach.

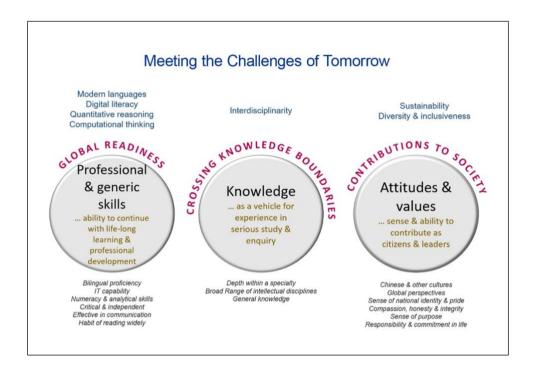
Locally, CUHK is also taking a leading role in knowledge dissemination. The Knowledge & Education Exchange Platform (KEEP) is a platform established by the University in collaboration with all UGC-funded institutions to provide teachers and students with access to eLearning resources and tools. As of November 2020, KEEP has hosted more than 120 events and over 500 courses. Seventeen of its courses have enrolled over 1,000 students, and the highest enrolment for a single course was 13,032. KEEP is also accessible to a global network of over 5,000 institutions, attracting over 85,000 active users.

Furthermore, a variety of impactful activities and projects targeting school students and teachers have also been organized by the Faculties and Schools of the University, some reaching several thousand students and hundreds of teachers. For example, in collaboration with the Hong Kong Jockey Club, 16 professors from the Faculty of Engineering and the Faculty of Education have joined hands to design an Al education curriculum for secondary school students.

#### The Next Lap

While CUHK has much pride and confidence in the quality of education it has been delivering in the past decades, it has not rested on its laurels and is very much alert to the challenges of the 21st century, whether in the local educational scene or in that of the world at large. To meet the challenges of tomorrow, CUHK graduates must be globally ready, be able to cross knowledge boundaries, and aspire to become competent leaders and make lifelong contributions to society. The University recognizes that, to achieve these ends, the curricula at all levels and their constituent components, the programme structure and pedagogy, as well as the University's

infrastructure should be enhanced to create an even better teaching and learning environment to engage and encourage the students to step out of their comfort zone and take ownership of their learning.



The University has been conducting rigorous reviews on its strengths, weaknesses, opportunities and threats to chart its way forward. Notwithstanding the accomplishment of the strategic goals in the last five years, which saw an enhanced curriculum with an increased emphasis on entrepreneurship and innovation, language proficiency and collaborative programmes, programme structures and pedagogy need to be made more adaptive and responsive to the potential risks and threats in the New Normal and in an increasingly complex and fast-changing politico-economic landscape.

While the undergraduate curriculum framework with well-structured requirements has paved a clear study path for the students to pursue, it may not be effective enough in motivating students to take ownership of their learning and to step out of their comfort zone. The rigorous major programme structure that requires the students to immerse fully in a subject discipline can sometimes become a hurdle for the fostering of interdisciplinary learning, which may turn out to be a weakness that needs to be addressed.

Secondly, 'CUHK 2025' seeks to build on the high-quality postgraduate education that has contributed to the success of the University as a bastion of cutting-edge research and trailblazing discoveries. The University aims to raise the number and quality of its postgraduate students with enhanced internationalization and research initiatives. This will help push research and innovation to a higher level and contribute to talent development.

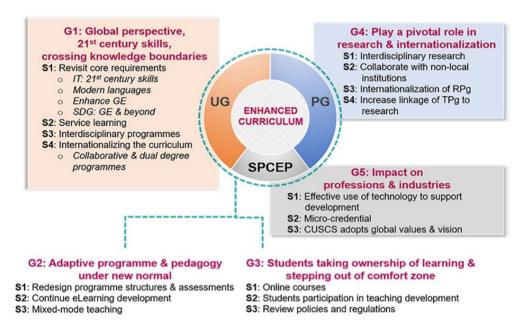
Lastly, CUSCS has also undergone major development in recent years, following the implementation of its five-year plan formulated in 2016. With a robust quality assurance system in place, CUSCS is in a strong position to promote lifelong learning, in line with the Government's strategy in response to changing conditions in the employment scene.

To prepare our students for the challenges of tomorrow, to equip them with the knowledge, skills and values through formal and non-formal learning, the University must set clear goals and devise appropriate strategies to bring them to fruition. The goals we have set for ourselves in the years 2021–2025 are:

- To develop integrative programmes that cross disciplinary boundaries, enhance global perspectives and inculcate 21st century skills
- To adapt programme structure and pedagogy to excel in the New Normal
- To enable students to take ownership of their learning and stepping out of their comfort zone
- To strengthen postgraduate education as a key to building research and internationalization
- To expand CUHK's leading role and positive impact on the professions and industry as well as the larger community through high-quality sub-degree, professional and continuing education programmes (SPCEP)

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#### Goals and Strategies



<sup>\*</sup> UG (Undergraduate); PG (Postgraduate); SPCEP (Sub-degree, Professional and Continuing Education Programmes);
GE (General Education); TPg (Taught Postgraduate); RPg (Research Postgraduate); SDG (Sustainable Development Goal)

#### **Bold Steps Ahead**

#### Undergraduate Curriculum Enhancement

To better enable students to analyze complex issues, address global challenges and thrive in a fast-changing world, the undergraduate curriculum, particularly its core required components, will be enhanced.

Although University students today are already in some sense "digital natives", a confident command of big data and digital technology is clearly required to succeed in the 21st century. The current compulsory IT course will be revamped, expanding its coverage to bring about a higher degree of digital literacy, which encompasses also quantitative reasoning and computational thinking.

The General Education curriculum, long a hallmark of CUHK education, will be recalibrated to expose students to global issues. The Sustainable Development Goals (SDGs) of the United Nations are of critical concern, as is the development of modern China from a global perspective. Online courses on modern languages will also be introduced into the General Education curriculum. Credit-bearing service learning

courses will be promoted, with a view to implementing service learning as a compulsory undergraduate requirement in the long term. The portfolio of undergraduate programmes will be enriched by more integrative interdisciplinary programmes, balanced in both breadth and depth, crossing knowledge boundaries.

The University will work to remove barriers to encourage multidisciplinary studies, including double majors. Internationalization will continue despite the challenges posed by the COVID-19 pandemic in the near term. There is room for a larger international student body on campus. More collaborative programmes including dual degree programmes at both undergraduate and postgraduate levels will be jointly developed with strategic partners, with a view to benefiting a greater number of students.



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Goal 1:	Curriculum enhanced with global perspectives, 21st century skills, interdisciplinary learning and integrative programmes crossing knowledge boundaries			
Strategies	Revisit design of core-required courses	2. Promote service learning	Enhance portfolio of interdisciplinary majors	Redouble effort in internationalizing the curriculum
Actions	Redesign required     IT course to     encompass digital     literacy, quantitative     reasoning and     computational     thinking	Engage     Colleges and     Departments to     develop credit-     bearing service     learning courses	Launch more integrative programmes	Continue     development of     collaborative     programmes (Ug,     Pg, dual degrees)     with strategic     partners
	Introduce modern languages in GE curriculum	2. Consult stakeholders and conduct feasibility study to introduce service learning as compulsory Ug requirement	Develop specially curated double majors aimed at enhancing employment prospects	Continue promotion of internationalization of curriculum at home
	3. Enhance the four specific areas of University GE (Chinese Cultural Heritage, Nature, Science and Technology, Society and Culture, Self and Humanity) and College GE			
	4. Incorporate Sustainable Development Goals into course/ programme design in GE and beyond			

#### Education in the New Normal

The challenges posed by COVID-19 to higher education worldwide need no repeating. At CUHK, considerable resources have been set aside to support teaching and learning in the face of the pandemic. With positive response from faculty members, many teaching development projects were launched during the difficult year of 2020,

which will generate important insight into teaching and assessment under the New Normal. The desired learning outcomes cannot be compromised, regardless of the circumstances. Education in the New Normal must remain robust and yet nimble, with timely adjustments to course design and pedagogies, making full use of technology, so as to ensure that learning flourishes even under the most trying conditions.

Learning is more than the acquisition of certain knowledge or skill. Education is also a process of socialization. The personal interaction between students and teachers, and among students, constitutes an important aspect of learning, essential to personal growth. As such, the question is not whether eLearning can replace face-to-face interactive learning, but rather how technology can be exploited fully to enhance learning outcomes. In this respect, educational technologies do play an important part, freeing up precious time and intellectual space for meaningful interaction and enriching the learning experience. Over the next five years, the University will continue to promote blended learning, experimenting with new learning designs and investing in educational technologies. Professional and administrative support will be enhanced. Moreover, to ensure that no students will be left behind in the rapid advancement of eLearning, attention must be given to providing additional support to students with special educational needs (SEN).

Goal 2:	2: Adaptive programme structure and pedagogy to excel in the New Normal			
Strategies	Revisit and redesign programme structures and assessments	Develop eLearning to enhance teaching and learning with emphasis on adaptability of pedagogy and student assessment	3. Enable mixed- mode (synchronous online + in- person) teaching	
Actions	1. Facilitate the introduction of new learning designs and adoption of educational technologies, which apply to not only lectures but also lab courses, capstone projects, practicums and internships	Expand eLearning capacity and improve IT infrastructure, including 5G networks	Revise teaching     plans to embrace     blended learning	
		Support development of innovative pedagogy, including research in learning science     Enhance eLearning for students with special educational needs (SEN)	and raise the level of preparedness for future emergencies	

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#### Taking Ownership and Stepping out of Comfort Zones

The importance of students taking ownership of their learning journey has long been recognized. Being risk averse and not venturing beyond one's comfort zone do not make for a good recipe of independent learning and leadership ability. Handholding, to be sure, is comforting, but in the long run, we will be doing our students a disservice if we do not help them develop positive attitudes, stay curious and become self-directed learners.

Carefully calibrated online courses of short duration offer opportunities for students to explore their interests and acquire knowledge and skills at their own pace and of their own choice. This should be encouraged. The University will build on its existing pool of quality online micro-modules over the next few years, especially in modern languages, to cultivate cross-cultural sensibility and expand the intellectual horizon of our students. Apart from IT-related initiatives, the University will also continue to develop innovative pedagogical approaches, including peer-assisted learning which is conducive to independent learning and has been adopted in many disciplines.

The next phase of educational development will build on the solid foundation already laid with a greater emphasis on engaging students, including postgraduate students, as partners in the learning process. To facilitate the planned changes and new initiatives, a comprehensive review of University policies and regulations governing student learning will be conducted. As is often the case, rules and regulations that stem from a different era under different conditions may stand in the way of pedagogical innovation. Potential barriers to programme design and collaborative teaching and learning, for example, will need to be removed, in order to encourage students to take bolder steps in their learning journey.

Goal 3: Students taking ownership of their learning and stepping out of their comfort zone					
Strategies	Develop online courses to attract students to step out of their course selection comfort zone and to cultivate lifelong learning	Involve students     as partners in     teaching and     learning     development	Conduct comprehensive review of policies and regulations governing student learning to enhance flexibility and to provide students with incentives		
Actions	Develop one-unit online courses in modern languages, to encourage subsequent immersion     Develop other high-quality micro-modules and full online courses (e.g., positive psychology)	Engage student     assistants in     pedagogical     conferences and     projects	Review policies and regulations governing Pass/Fail option, double majors and other areas of student learning		

## A Strong Postgraduate Community to Spearhead Research and Internationalization

High-quality research is promoted through postgraduate education and vice versa. A strong postgraduate community is critical to academic talent attraction, and the University also has a responsibility to nurture the next generation of academic and research leaders. Both the number and scope of research postgraduate and taught postgraduate programmes have expanded extensively in the past decade, reflecting the University's growing stature in research and education. Going forward, postgraduate studies will be further strengthened as an engine for the University's development in research and internationalization.

More collaborations with mainland and overseas strategic partners will be established or strengthened to encourage interdisciplinary research. While there is a large talent pool in the mainland that the University can draw from, it is also important to diversify the sources of postgraduate students. Increasing scholarship support will be a challenge, as the number of postgraduate places funded by the UGC will remain limited. Research grants will be a principal source of support, but collaboration with industry will become increasingly important, as the experience of many countries has shown. The nexus between research and innovation, in other words, should extend to postgraduate education. The University's policies and regulations governing admission,

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overseas research attachment and joint supervision will also be reviewed, to raise our competitiveness. Priority support will be given to interdisciplinary research areas aligned with the strategic direction of the University.

Goal 4: Pg education to play a pivotal role in research and internationalization				
Strategies and Actions	Encourage     interdisciplinary     research to align     with the     University's     strategic areas	2. Promote RPg collaborations with non-local institutions and foster internationalization of RPg education	3. Diversify student source and research scholarship funding	4. Enrich TPg programmes with increased linkage to research strengths

#### Lifelong Learning and Professional Education

Sub-degree, Professional and Continuing Education Programmes (SPCEP) can no longer be seen as peripheral to the University's mission. Lifelong learning for CUHK alumni and the community at large plays an important role in the University's development. Over the years, CUSCS has grown into an institution of good repute, a trusted brand, providing professional and continuing education of the highest quality. This needs to be safeguarded and strengthened.

In addition to the higher diploma programmes offered by CUSCS, a number of similarly well-regarded programmes have also been designed and offered by the Faculties to equip students with industry-specific knowledge and professional skills. Building on this strength, CUSCS and the Faculties will work even more closely with government and industry to mount professional programmes that best serve the needs of the economy, while remaining committed to the goal of lifelong learning. We should not forget that there is a growing elderly population that will benefit from intellectually enriching and challenging programmes. Healthy living is a matter of both body and mind. In lifelong learning and professional education, as it is the case for degree programmes, technology will play an increasingly important role. CUSCS is well positioned to leverage the considerable know-how of the University to further its mission.

Goal 5:	SPCEP as a driver of lifelong learning and a complement to degree programmes to expand CUHK's leading role in education and positive impact on the economy and society		
Strategies and Actions	Effective use of technology to support SPCEP courses/programmes	2. Enable the use of micro- credential qualifications as advanced standing for other programmes (e.g., graduate programmes)	A global CUSCS to extend the University's influence and contribution to global development

## From Now to 2025

Strategic planning is a process of identifying goals, strategic direction, and specific actions to guide the University in its pursuit of excellence. The goals, strategies and initiatives presented herein for formal education will be articulated into an overall teaching and learning action plan for the University. Responsible owners will be assigned to take charge of specific initiatives and action areas according to a clearly defined timeline. The University will monitor and report on its performance, to ensure successful outcomes. The following Key Performance Indicators will be used to facilitate the collection of evidence, and for the University to assess the effectiveness of its programmes and initiatives.

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	Goal 1	Goal 2	Goal 3	Goal 4	Goal 5
KPI 1	Core-required courses redesigned with positive results	Enhanced programme structures and increased use of formative assessments	Number of quality online courses developed	Number of co- supervisions across disciplines and between non- local institutions	Effective use of technology to support SPCEP courses and programmes
KPI 2	Credit-bearing service learning programmes implemented in the undergraduate curriculum	The degree of mastery of up-to-date technologies and pedagogies among teachers	Number of students taking modern languages courses	Quality and quantity of student publications	Number of quality micro-credential programmes introduced
KPI 3	Number and quality of integrative, double major, dual degree and collaborative programmes	Advancement of eLearning for SEN students (e.g., new tools adopted or developed, projects implemented)	Number of students taking online courses	RPg education enhanced by TPg education	Number of community lifelong education initiatives implemented with global strategies and vision
KPI 4	Number of general education courses with SDG and/or Internationalization of the curriculum incorporated	Improved infrastructure to support teaching and learning, incl. the availability of e-Assessment and BYOD exams options for teachers	Number of projects with students participating in teaching development		
KPI 5		Effective use of mixed-mode teaching in programmes and courses	Number of students taking more courses beyond their respective major programmes		
KPI 6			Policies and regulations governing students learning revised		

The pursuit of excellence with purpose and responsibility is an ongoing process, and the journey to excellence itself is of intrinsic importance. Education is central to the University's vision and mission and must work in tandem with research, student experience and the other equally important components of 'CUHK 2025' to propel the University forward. With a strong foundation, there is every confidence that CUHK will be known for its exacting standards and innovative programmes, enabling our students to meet the challenges of tomorrow. With the support of faculty members, staff, students, alumni and friends of the University, and working closely with industry and government, the future is bright.

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# Student Experience: Nurturing Excellence of Both Heart and Mind



## 3. Student Experience: Nurturing Excellence of Both Heart and Mind

Nurturing our students to become responsible global citizens and leaders is deeply embedded in the vision of the University. Through formal educational programmes and non-formal experiential learning activities, as the CUHK Strategic Plan 2016–2020 spells out, the University aims to serve as a cradle for future global leaders, who are imbued with strong moral character, emotional resilience, entrepreneurial mindset, creative and innovative spirit, and competencies to make lifelong contributions to society.

In the 2019–20 academic year, some 4,300 young men and women in the freshmen cohort were welcomed into a caring and culturally diverse campus. Undergraduate student enrolment stood at 17,611 in 2019, of which 2,477 were non-local students, representing about 14.1% of the undergraduate population. Among the non-local students, the majority (1,504 or 60.7%) came from the mainland, while the remaining (39.3%) hailed from overseas—50 countries, regions or cities, to be exact. The ratio of non-local students in the postgraduate sector is considerably higher. Out of a total of 13,183 postgraduate students in 2019, 6,065 (46.0%) were non-local students, most of whom from the mainland. In all, in 2019, CUHK was home to 30,794 students, of whom 8,542 (27.7%) were non-local students.

Exchange students further add to the international mix of the student population. With 282 exchange partners from 36 countries and regions, CUHK has grown into a global university.



Global and Local: A Fusion of Horizons

According to the United Nations Educational, Scientific and Cultural Organisation (UNESCO), "global citizenship" may be defined as "a sense of belonging to a broader community and common humanity. It emphasizes political, economic, social and cultural interdependency and interconnectedness between the local, the national and the global."

The Organisation for Economic Co-operation and Development (OECD) underscores "global competence" as a key to education in a globalized world. It defines "global competence" as the capacity to "analyze global and intercultural issues critically and from multiple perspectives, to understand how differences affect perceptions, judgements, and ideas of self and others, and to engage in open, appropriate and effective interactions with others from different backgrounds on the basis of a shared respect for human dignity." The OECD framework emphasizes that while knowledge, skills and values form the building blocks, global competency is complete only when they are translated into action and applied to solving problems and improving the collective well-being of humanity.

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<sup>1 &</sup>lt;u>https://unesdoc.unesco.org/ark:/48223/pf0000232993</u>

https://www.oecd.org/education/2030project/contact/The E2030 Conceptual learning framework as a tool to build common understanding o f\_complex\_concepts.pdf

The emphasis on "common humanity" or "interconnectedness" across spatial boundaries and the set of competencies highlighted offer additional insight into our effort to promote internationalization at CUHK. Global learning prepares our students for successful careers, but the more important point is that it cultivates a set of desired values and attitudes.

In promoting internationalization, the University does not lose sight of the students' understanding of the nation and local society. Global competence and local knowledge are not mutually exclusive. Rather, they are mutually reinforcing. A widened intellectual horizon and sound knowledge of one's own culture enable students to avoid the pitfalls of parochialism and equip them with the ability to comprehend and critically appraise global issues. This is the kind of "glocal" learning experience we provide for both local and non-local students on campus.

Currently, a variety of courses and activities are on offer to enhance the learning experience of both the local and non-local students. Many of these focus on China and Hong Kong society, including its history, culture, language, as well as contemporary development and challenges. Courses on foreign languages and cultures are also available, and they are generally well subscribed. In addition, to facilitate student integration, the Colleges and various service units have been working together to promote inter-cultural understanding and mutual respect through non-formal learning and cultural activities, including celebrations of major festivals of different cultures, and student-led interest classes such as handicraft and cooking with an international flavour.

While such initiatives generally receive very positive feedback from the participants, there is room to expand their reach. The need to redouble our effort in creating a vibrant and harmonious campus is heightened by the social unrest in Hong Kong in the second half of 2019 and the COVID-19 pandemic. While the University responded in exemplary fashion to maintain its educational programmes through e-learning, the disruptions to campus life have taken a heavy toll on the mental well-being of many students.

The University has devoted much effort and resources over the past few years to improving student mental wellness through credit-bearing positive psychology courses,

enhanced services at the Wellness and Counselling Centre of the Office of Student Affairs (OSA), and the revitalization of Sunshine@CUHK (originally a campaign to raise student awareness of the importance of mental wellness). Nevertheless, given the difficult circumstances, it is necessary to do even more to foster student well-being and strengthen their resilience so that they can better cope with adversity.

Acrimony on campus arising from political disputes in the larger society is another issue that requires the urgent attention of the University. Efforts in promoting diversity and inclusiveness with a view to building a harmonious campus are in place and will form a key component of 'CUHK 2025'.

Equally important, the University will ensure that students with special educational needs (SEN) are given all the necessary help and support. While the majority of the students are adept at online learning, SEN students will not be left behind, as the University prepares for teaching and learning under the New Normal. More will be said on this below.

### A Fourfold Plan

In this context, with continued uncertainty and challenging conditions, the University will adopt a fourfold strategy in the next five years, to provide a rewarding student experience that nurtures excellence with purpose and responsibility. The four-pronged approach encompasses the intra-personal, inter-personal and personal-societal dimensions of student experience. They are:

- Humanistic concern across local, national and global communities
- Social engagement
- Creative and adaptive life planning
- A growth mindset

## Humanistic Concern across Local, National and Global Communities

A deep concern for human welfare pervades the CUHK ethos. This is a core value of the University shared among generations of CUHK members and will continue to guide us into the future. Indeed, this concern extends to the natural environment, which in the Chinese tradition is never seen to be apart from human well-being.

Especially at a time when rancor fills many societies and inequalities run both deep and wide, the CUHK spirit of care and respectful concern must be upheld, to prepare our students to go forth into the world with a "glocal" passport—i.e., while being rooted in and embodying the uniqueness of their own culture and society, they embrace diversity and extend their know-how and concern for humanity, exemplifying excellence of both mind and heart, to contribute to a better future in local, national and global contexts.

To that end, they must be provided with an education of the highest quality, which would enable them to understand their local and national cultures, the global landscape and, above all, themselves.

A series of curricular and co-curricular programmes will be rolled out over the next few years to broaden our students' intellectual horizon, instill sound habits of mind, and cultivate the fundamental ethical values of humaneness and proper conduct that make us truly human. This is but another way of reaffirming the CUHK motto: "Through learning and temperance to virtue".

The programmes may focus on Chinese history and culture, world civilizations, and the interaction between cultures in history and in today's globalized world. The development of contemporary China should be of particular interest. The Greater Bay Area provides exciting opportunities for engagement with China, especially as the University is able to mobilize support from CUHK-Shenzhen and our many Chinese partner universities. The theme may also revolve around major issues such as global health, diversity and security. It is important that students understand the development of Hong Kong, the mainland and the world in their full complexity, so that they can better define their roles and responsibilities as responsible citizens. Such programmes could be delivered in various modes, including but not limited to exhibitions, field trips,

projects, and seminars, online or in person. Student bodies will also be encouraged to develop related programmes in creative ways to reach out to more students, including non-local students.

The Colleges play an important role in enhancing student experience, and programmes that bring together local and non-local students to promote diversity and inclusion will be fully supported. The I-CARE Centre for Whole-person Development (I-CARE Centre) has started a "Dialogue on Character" series to raise ethical awareness and foster positive attitudes among students. More character building programmes could be introduced targeting different student groups by the Colleges and other units.

The importance of nurturing ethical character that embodies understanding and respect for diversity cannot be overstated. Diversity is essential to the flourishing of humanity, just as biodiversity is essential to the health of the natural environment. Diversity calls for openness and inclusion, which finds expression in mutual understanding, fairness, and respectful exchange. The spirit of humanistic concern eschews any bifurcation that pits one group against another based on differences and seeks to break open any "us-vs.-them" mental straitjacket that is detrimental to human progress. This is the value that the University cherishes and will endeavour to instill in our students.

## Social Engagement

Under the OECD's global competence framework, one should be equipped with the ability not just to understand but also to act. The actions could cover a full spectrum, from the environment, sustainability and social harmony, to the well-being of people or their quality of life. Students should be engaged, individually or collectively, for active involvement in and giving back to the society and the wider community through participating in local, national, and international campaigns. The University has increased its support to students to be engaged in these meaningful activities over the past years and will continue to do so in the future.

With funding from UGC for three years from 2019–20, the University has rolled out a new scheme to support students in taking up internships in international organizations.

Efforts have been made to arrange internship opportunities at the World Health Organization, the World Trade Organization, the United Nations, the United Nations Children's Fund, etc. The key objective of the scheme is to encourage students to embrace engagement and enable them to benefit from placements in these international NGOs.

In parallel, plenty of service learning opportunities are being offered by the Colleges and the I-CARE Centre. Coordination and collaborations among these units will be strengthened to align objectives, improve workflow, and ensure the fulfillment of the desired learning outcomes.

## Creative and Adaptive Life Planning

To prepare our students for an increasingly uncertain future, we need to equip them with a creative and flexible attitude, an open and extensible perspective over and beyond any conventional understanding of post-university life course development. Over the next five years, sustained effort will be made to introduce life course planning to help students to enhance their self-understanding, identify personal aptitudes, abilities and aspirations, and be ready to adapt and adopt alternatives as they confront changes and uncertainty.

Different learning opportunities, such as social innovation projects, local or global internships, or entrepreneurship experience through the trial programmes run by different business associations, will be provided so that the students can critically reflect on, review and adjust their life course planning.

In this direction, the University plans to revisit the current career planning framework with reference to the life planning framework introduced by the Education Bureau, where a four-stage approach is adopted to provide a clear road map for students' reference. The emphasis is on the "positive feedback" which takes the form of a dedicated staff member trained to walk with the students through reflections and adjustments at the stage of "career planning and management", with a view to setting achievable goals. This helps develop creative and adaptive life planning, which should serve the interests of students well long after they graduate. This framework will be shared with the Faculties, the Colleges, the Graduate School and relevant units. A

mobile app will be developed to support students in their journey of career and life planning from preparation to evaluation and adjustment, diagrammatically represented in Figure 1 below.

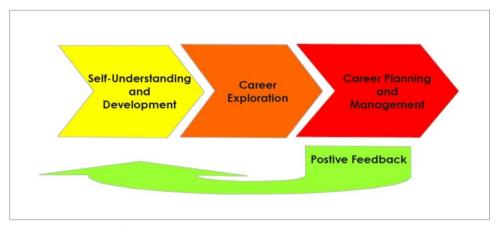


Figure 1: Adaptive life planning approach

### A Growth Mindset

A "growth mindset" is always important, and even more so after difficult times that dampen optimism and weaken confidence. Strong and resilient as our students may be, it is important to help them to refocus on their life goals, rebuild confidence in themselves and in the future, and be prepared to sail through rough waters throughout their lives. A growth mindset will help strengthen their ability in facing adversity and managing uncertainty, as well as resilience and self-healing.

In addition to the current credit-bearing positive psychology courses, the University will explore other non-formal means, e.g., workshops, projects, exhibitions, or a university-based programme combining training and activities. One such model is the Penn Resilience Programme (PRP), a campus-wide resilience building programme which has been shown to reduce depression, anxiety and behavioural problems, and lower the rate of substance abuse.

The PRP is devised with reference to the framework of PERMA—a positive psychology model developed by Professor Martin Seligman which emphasizes Positive Emotion, Engagement, Positive Relations, Meaning and Accomplishment. PERMA programmes have been shown to result in improved physical health and mental well-being. To enhance student experience, the University will explore introducing a customized train-

the-trainer resilience programme for dedicated staff of the OSA, the Colleges, the Graduate School and relevant units, so that programmes conducive to positive growth could be integrated into activities offered by these offices in a coherent and concerted manner. The Department of Sports Science and Physical Education and the Physical Education Unit would serve as principal collaborators to promote the concept of "lifelong exercise" conducive to physical health, which is as important as mental health.

## A Road Map

The four-pronged approach described above combines into a road map that will prepare our students well for their life journey, from the initial point of engagement to the destination of a flourishing life. The road map takes into consideration the intrapersonal, inter-personal and personal-societal levels of student experience.

## Engage

- Engage students with ideas and practice of (a) humanistic concern across local, national and global communities; (b) social engagement; (c) creative and adaptive life planning and (d) a growth mindset
- Activities designed to develop desirable values, attitudes and skills as a part of enhanced student orientation and first-year experience programmes

## Explore

- A phase for students to explore their interests and aspirations and hone their skills, through career planning, social engagement at local, national and international levels, and other opportunities provided through the Colleges, I\*CARE Centre and other units
- Overseas exposures and global learning opportunities to explore different cultures and environments, reflect on national and global issues, and acquire intercultural sensibility and skills

## Embrace

- A phase for further development of values and attitudes, with the benefit of experience and reflection
- Translating insight gained into practice, with University support for students to design their action plans for self-engagement, relating to others, and serving the community through social engagement

## Evolve

- Continuous support to students to apply their knowledge, values and plans to real-life situations, with the aim of developing further self-enhancement and ability to contribute to society
- A dynamic life plan constituted and reconstituted

## Flourish

- Reaping the benefit of development and empowerment in the process, students can grow with the desired values and skills to become responsible and productive members of society
- Our graduates will (a) be mature adults equipped with the competence to navigate social and cultural diversity and complexities; (b) embrace a growth mindset and be adaptive and creative; (c) possess strong ethical character marked by a deep concern for human welfare, and engage in activities contributing to the betterment of humanity

Figure 2: Student experiences road map

Depending on the character, strengths, orientations and readiness of individual students, they can embark on this process from any entry point.

## A Collaborative Venture

It takes time for students to flourish, and effort and help for them to succeed in life. The University will create opportunities and provide support for students to explore and experiment with their visions and plans. Experiential learning programmes that promote an enriched student experience as described above will be developed. To nurture responsible citizens and future leaders will take the combined effort of the entire University. 'CUHK 2025' is committed to providing the best experience for our students.

To that end, all the administrative and professional services units with students as their service target (e.g., OSA, Office of Academic Links, Office of Academic Links (China) and I-CARE Centre), the Faculties, the Colleges and the Graduate School will work closely together. The University's goal of student development requires full commitment, alignment, and clear communications across all the units concerned. Engagement and experience sharing sessions will be conducted regularly to ensure that the different units move in the same direction. The established platforms such as the Committee on Student Affairs, Committee on Psychological Counselling, and the Disability Service Coordination Committee will aim to promote coordination and collaboration across the University. While the individual units may devise programmes and activities specific to their mandates and functions, they act in concert to help realize the vision and values of the University.

New platforms will also be set up to enhance collaboration. For example, to enable the development of creative and adaptive life planning, and also to encourage cross-Faculty collaboration, a platform involving the Faculties and the Career Planning and Development Centre of the OSA will be established to provide more tailor-made services to better support diverse student needs. To equip students with a growth mindset, and to align efforts in promoting resilience and mental wellness, a series of train-the-trainer workshops and sharing sessions will be launched by the Wellness and Counselling Centre with the support of the Department of Psychology. The latter is

also collaborating with the Office of University General Education to design a new credit-bearing online course in essential positive psychology.

A periodic review will be conducted to track progress and make further improvements. Providing an enriching student experience is a continuing process, for which there is always room for improvement.

## No One Gets Left Out: Students with Special Educational Needs

Students with special educational needs (SEN) will receive additional support over the next five years under 'CUHK 2025'. The University will strive to eliminate hurdles that impede learning and campus enjoyment for SEN students, so that they can realize their full potential. As e-learning plays an increasingly important role in education, for example, enhancing the online learning platforms, making use of assistive technologies, and providing other related services (e.g., captioning service, facilities that improve sound reception) will be important in ensuring that the needs of SEN students are met. The University will also continue to provide individualized career and adaptive life planning programmes for SEN students. Accessibility will be improved, as the University continues its effort in building a barrier-free campus.



Students with SEN have diverse needs. External professional services will be sought to provide additional support (e.g., focused workshops on different needs such as integration into university life, learning strategies, emotional resilience, and social skills). The University has plans to organize small-group consultations or training sessions conducted by professionals to staff of academic departments and service units or members of student groups who lend support to SEN students.

Feedback from SEN students, service providers, employers and other stakeholders will enable the University to assess the effectiveness of the various initiatives, with the view of seeking further improvements.

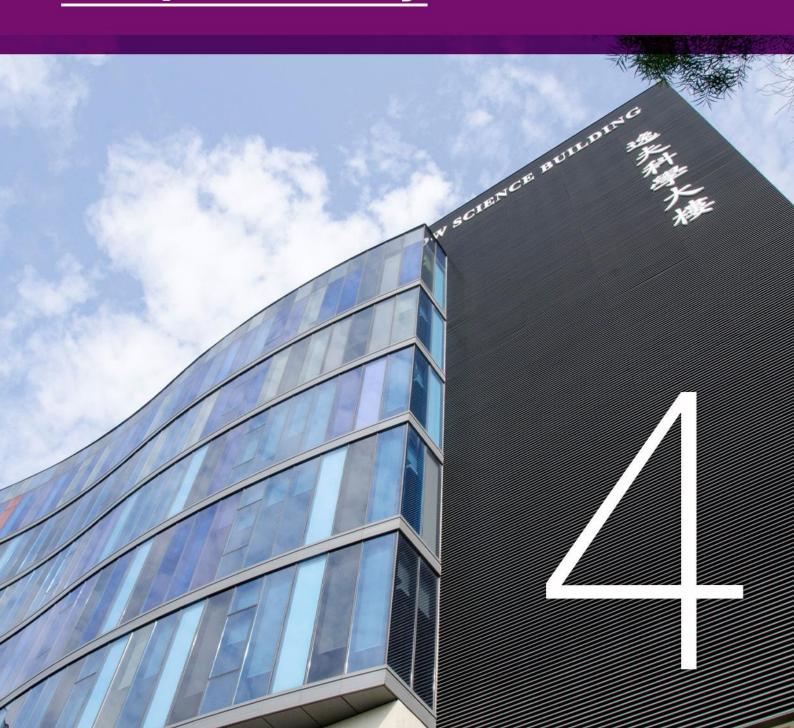
Peer support has been a valuable component in facilitating students with SEN in their university life and studies. It also helps to promote a caring campus. The University will continue its effort in raising awareness of students with SEN, which not only facilitates understanding but also cultivates empathy among our students. Interaction with individuals with special needs, their caregivers or support staff would provide valuable learning experiences for students. The University will also strengthen the scope and reach of the peer support programmes, including the well-received one-on-one "buddy services" programme, making full use of the available technologies and providing more training for student volunteers.

For the fulfillment of the University's vision, obstacles must be removed and every effort made to enable students to develop into caring individuals, responsible citizens and future leaders.

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## From Discovery to Innovation:

Research Excellence with Purpose and Responsibility



## 4. From Discovery to Innovation: Research Excellence with Purpose and Responsibility

Research lies at the heart of the vision and mission of CUHK. A champion of research and innovation that create value and bring benefits to society, CUHK is recognized today as a leading research university in Asia and among the best in the world. In the coming years, the University will continue its effort in developing a culture of research excellence, with purpose and responsibility, making a positive difference to the lives of the people of Hong Kong and beyond.

The ideas and inventions that change our lives for the better only come to fruition after years of dedicated effort in guiding research from discovery to innovation. Discovery begins with fundamental research. This will be strengthened. Talent attraction and development forms an important ingredient in this endeavour, and will be detailed in a later section of this Strategic Plan. International collaboration is also a strength of the University, and this will be expanded to further amplify our research prowess. Indeed, cutting-edge research is very much a team sport, as the challenges the world faces are complex and require global cooperation. While the University strives to achieve high research standards in all disciplines, and will support excellent research in all areas, it will build on the strong foundation laid over the past five years under the previous strategic plan and focus on four key areas, which will be presented below.

Innovation and enterprise translate research into practical outcomes, be they in the form of technologies, solutions, products or services, that help build better societies and overcome global challenges. In the coming five years, CUHK will focus on integrating research, innovation and enterprise into a dynamic and productive continuum, a superhighway that enables the translation of research into tangible benefits and the delivery of innovation to the world.

Research under 'CUHK 2025' sets its sight not only on the many new opportunities in Hong Kong but also the rapidly growing Greater Bay Area. The University recognizes the need to work closely with industry and government to strengthen its innovation ecosystem. To unlock the translational potential of CUHK research, agile support will be needed every step of the way, from proof of concept, incubation, raising venture capital to commercialization. The University will also engage its alumni, whose

unwavering support of their alma mater makes CUHK an envy of its peers and who share the vision that research and innovation will lead to positive change and meaningful progress, to mentor our staff and students and help them establish their start-up companies.

## Matrix of Excellence: 4 Areas x 19 Themes

CUHK has a strong research community with demonstrable excellence in a wide range of research areas across disciplines and subjects. Focused effort will be made in prioritized research areas to drive strategic advancement, while an inclusive approach to support research diversity will continue to be adopted.

With a clear and pronounced emphasis on interdisciplinary research that crosses the boundaries of individual academic units, the University seeks to optimize opportunities to generate impactful outcomes. The CUHK Strategic Plan 2016–2020 identified four research foci, which are of critical importance to the flourishing of humanity in the 21st century. Considerable resources have been devoted to developing these areas, and they will continue to guide the University's research under 'CUHK 2025'. The four areas, which will be broadened to encourage even more interdisciplinary collaboration, are:

- China: Tradition and Modernity
- Innovative Biomedicine
- Information and Automation Technology
- Environment and Sustainability

Within the strategic areas, 19 research themes that are principally of an interdisciplinary and/or translational nature have been identified. Some of these reflect our current strengths, which will be developed further, while the others are emerging strengths that warrant dedicated support, and new thematic areas of strategic importance that require capacity building.

Another important point to note is that these four areas do not constitute vertical silos, so to speak, but work together in a matrix and mutually enrich one another. Biomedicine and AI and robotics, for example, offer much room for collaboration. Sustainable development, to name but one other example, must take into account

social developments such as demographic shifts and economic growth. Cross-fertilization fuels research breakthroughs and innovation.

## Strategic Area 1 — China: Tradition and Modernity

As China takes centre stage in the world's economic, cultural and political arenas, fast becoming, in fact, the largest economy in the world, understanding and engaging China is of critical importance to global development. CUHK has been a leader in China research, with over 200 faculty members working on and a good number of centres and institutes devoted to various aspects of China Studies. The research effort is complemented by educational programmes that attract many international students to the University, at both the undergraduate and postgraduate levels.



Research on China at CUHK is bilingual and multi-disciplinary. This is a distinguishing feature of the University's China research, which few other universities can rival. There is clear strength in the Humanities and Social Sciences, encompassing a wide spectrum of research from language and literature, art, history, philosophy and religion, to economics and politics. The CUHK Faculty of Law and Business School are similarly at the forefront of China research. Other exemplary progress, such as research on public health in China and Chinese medicine, can be mentioned. The CUHK Art Museum holds one of the best collections of Chinese art in the world, and is contributing to both research and education on China. However, the important point to

underscore is that "China: Tradition and Modernity" eschews disciplinary divides and seeks to focus research on key issues from multi-disciplinary perspectives, to foster understanding and identify the challenges and opportunities in China's development.

China is multidimensional. Misunderstanding can lead to political tension and potential conflict. China's culture and traditions are rich. It faces serious challenges and offers tremendous opportunities for global economic development. China is playing an increasingly important role on the global stage. Over the next five years, the University will seek to bring together the various institutes and centres that are devoted to different aspects of China research, strengthen international collaboration, and give special attention to areas of research that bear on China's socioeconomic development, including what has come to be described as a process of "glocalization" and the ways in which technology is reshaping Chinese culture and society.

Theme 1	Understanding Chinese Culture
	Linking China's strong cultural roots to contemporary development
	Understanding modern China
	Making Chinese culture understandable and relevant in contemporary societies
	Multidisciplinary research on the Chinese language

Chinese culture is not monolithic but harbours rich varieties. Both continuity and change mark the development of Chinese culture. Research on Chinese culture is an area of strength at CUHK, from the very founding of the University. Researchers in the programme on Lingnan culture, for example, have done much to illuminate the distinctive features of southern Chinese history and culture. With the combined strength of the Faculties, Art Museum and the CUHK Library, CUHK is well placed to shape the direction of China research globally. This will include the further development of digital China Studies. The Institute of Chinese Studies is well known for its digitalization of ancient Chinese texts. Going forward, big data analytics will play an increasingly important role in research on China, offering opportunities for new insight and methodological innovation.

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Theme 2	China's Global Challenges
	Contemporary China: society, economy, politics and law
	Business and finance, governance and regulatory regimes, trade, supply chains and logistics
	Intercultural relations and socio-political issues in the context of a globalizing China

Chinese business and commercial law and Chinese legal history are focused research areas for which CUHK has been well recognized both regionally and internationally. Finance related research, e.g., Fintech, is another area that holds significant promise. As the financial services sector continues to grow in both Hong Kong and Shenzhen, there will be many exciting opportunities for collaboration with the private sector in research and innovation.

Theme 3	Greater Bay Area (GBA)
	<ul> <li>History, society, culture, economy, law and the environment in the development of the GBA</li> </ul>
	Hong Kong's role in the GBA and beyond

CUHK will promote impactful research on the GBA over the next five years. The geographical and cultural advantage of Hong Kong in GBA research should be exploited fully. The spectacular growth of the GBA is not only a political story, though state planning is evidently important. To understand the growth of the GBA and its future development, a firm grasp of the region's history and culture remains critical. Understanding the legal framework and the other factors such as environmental protection that bear on the economic development of the GBA is equally important to business and investment in the region.

## Strategic Area 2 — Innovative Biomedicine

With an ageing population in many parts of the world and with the sporadic emergence of global infectious disease threats, biomedical research is essential to defending, upkeeping and enhancing public health. Biomedical innovations will also create opportunities for commercialization and have the potential to become a key engine in the economic development of Hong Kong.



CUHK is a world leader in genetic, genomic and precision medicine. It is a pioneer in, among other things, non-invasive prenatal testing, cancer liquid biopsies and genomics of cancers common in Asia (e.g., nasopharyngeal carcinoma (NPC) and liver cancer). The HKSAR government has launched a series of initiatives related to translational biomedicine. The healthcare cluster of the "InnoHK" initiative and the Hong Kong Genome Project are prime examples in this regard. There are also opportunities for the commercialization of biomedical inventions, e.g., the availability of funding and space for start-up companies offered by the Hong Kong Science Park, and the new initiative at the Hong Kong Stock Exchange for public listing of prerevenue biotechnology companies. CUHK will make use of these opportunities and resources to build on its successes and lay claim to being one of the most innovative universities in the world.

Within the broad area of Innovative Biomedicine, six priority themes have been identified, some extending from the previous strategic plan. CUHK will leverage its existing strengths, enhance its competitiveness, expand cross-Faculty collaborations, strengthen its international research links, and recruit and nurture talent in all these thematic areas.

Theme 4	Genetic, Genomic and Precision Medicine
	<ul> <li>Application of genomics information and technologies in the study, diagnosis, prevention, and treatment of diseases</li> </ul>
	Pre-implantation, pre-natal and post-natal genetic diagnosis and counselling

CUHK has multiple projects in the areas of circulating fetal and tumoral DNA, diabetes and cancer supported by the most competitive funding schemes, including the Research Grants Council (RGC) Theme-based Research Scheme and Areas-of-Excellence Scheme. Notable achievements include advances in non-invasive prenatal testing (NIPT) which has now been commercialized worldwide and has created a paradigm shift in prenatal medicine, the development of cancer liquid biopsies (e.g., for NPC), and elucidation of the NPC and liver cancer genomes. CUHK's efforts in the next few years will include nurturing the next generation of talent and to expand its competitive edge in these areas.

Theme 5	Stem Cell Biology and Regenerative Medicine
	Cell reprogramming and stem cell differentiation
	Induced pluripotent stem cells as disease models
	Neural and musculoskeletal regeneration
	Tissue engineering and biomechanics
	Cell therapies
	Perspectives from philosophy and the humanities

CUHK has built a solid foundation in stem cell biology and regenerative medicine over the last few years. One example is the establishment of the Institute for Tissue Engineering and Regenerative Medicine (iTERM). Further investment in the next few years would be critical for these initiatives to realize their full potential.

Theme 6	Brain and Mind
	<ul> <li>Mechanisms and functions of cognition, behaviour and the nervous system, and associated disorders and therapies</li> </ul>
	Brain neurotechnologies and neuroimaging

Human longevity and other factors have brought about many motor-neuronal degenerative diseases unheard of a century ago. The secrets of the brain are being revealed in leaps and bounds. Neuroscience and related research are well established in the University. CUHK will invest more effort and resources in basic neuroscience, neuroimaging and translational applications over the next five years.

Theme 7	Integrative Medicine
	Integration of traditional Chinese medicine and Western medicine
	Standardization, characterization and pharmacological studies of medicinal herbs
	Application of integrative medicine to the existing healthcare system

CUHK has a long track record of research in Traditional Chinese Medicine (TCM). The incorporation of the School of Chinese Medicine into the Faculty of Medicine has created opportunities for further combining the theories and practices of TCM with Western medicine for better cures and treatments of diseases.

Theme 8	Medical Devices
	Robots in medicine
	Tele-health sensing devices
	Nano-scale medical devices

CUHK has long been recognized for its contribution to the development of innovative surgical devices. More recently, robotic surgery has become an emerging strength at CUHK. This is an important interdisciplinary field with tremendous potential for innovation leading to better healthcare for all. The invention of surgical devices ranging from robots to nano-scale devices will form a primary research focus of the University under 'CUHK 2025'.

Theme 9	Microbiology and Health
	Emerging human and zoonotic infections
	Health, chronic diseases and microbes
	Public health microbiology, including epidemiology, transmission, infection control, environmental and behavioural factors
	Novel diagnostics, therapeutics and vaccines
	Chemical and synthetic biology for development of therapeutics

CUHK gained a strong reputation in its response to emerging infections during the Severe Acute Respiratory Syndrome (SARS) epidemic in 2003. However, it is competing with many other institutions for talent, especially with the many rapidly developing institutions in mainland China including the GBA. Microbiology and Health, especially in chemical and synthetic biology for medical interventions in public health hazards such as the coronavirus, is an area where the University needs to boost its competitiveness in the coming years.

## Strategic Area 3 — Information and Automation Technology

Information pervades all aspects of human life. Whether or not data is the new gold, as it has been said, perhaps it is no exaggeration to say that information is the dominant currency in the era of "Industry 4.0". The Internet, mobile networks and data centres are the most obvious manifestations of information technologies. However, data itself is blind. The value of data lies in how it is collected, organized, processed, interpreted and disseminated. Data is the new oil, as another common saying now has it, which points to the fact that like oil, raw data need to be refined before they can become valuable. In this context, the key to harnessing the power of information lies in artificial intelligence (AI).

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Applications of AI and machine learning are already creating a significant impact on multiple fields, in both STEM (Science, Technology, Engineering and Mathematics) and non-STEM disciplines. For instance, leaving aside the more obvious examples drawn from engineering or medicine, machine learning-based analysis and pattern recognition tools can be put to good use in the analysis of legal contracts and literary works, as well as informing public health strategies.

CUHK is already a leading institution in Asia in machine learning and AI research. It has attested expertise in data networks, information coding, network security, big data analytics, robotics, financial technologies, optimization, renewable energy, optical communications and computer-aided design automation, and biomedical imaging. This list is by no means exhaustive.

The potential of information and automation technology in contributing to healthy and smart living is immense. CUHK will capitalize on its strength and further raise its research capabilities in this area, e.g., through growing the talent pool in hardware-based approaches for advancing AI, upgrading facilities to support nano research and nanotechnology applications, building a critical mass in quantum science, and establishing a succession plan to sustain long-term development. To this end, five strategic themes have been identified to bring about concrete achievements in terms of competitive grants, knowledge transfer and social impact.

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Theme 10	Artificial Intelligence and Applications
	Intelligent computing for earth, climate, atmosphere, space, energy and materials
	<ul> <li>Machine learning in advanced engineering applications and multidisciplinary applications in health care, climate sciences and business</li> </ul>
	<ul> <li>Advanced hardware for scalable energy-efficient implementations of artificial neural networks</li> </ul>
	Theoretical and mathematical foundations of deep learning methods
	Automated knowledge acquisition, representation, inference, visualization and utilization

The staggering volumes of data collected via the Internet of Things and massive distributed sensor networks present both challenges and opportunities. The ability to make intelligent use of information will be critical to the development of societies in the future. CUHK will focus on studying the underlying science and technologies, both software and hardware, for AI, which can bring about further advances in how we process information and make intelligent interpretations of data in recognizing patterns, objects and trends.

Theme 11	Robotics
	<ul> <li>Advanced materials and technologies for robotics, including control systems, advanced sensors, actuators and biocompatible systems</li> </ul>
	Applications of robotics in health care, manufacturing, home and high-risk environments, autonomous vehicles and exploration

The development of automation technologies is equally important to smart and healthy living. Robotics, defined in its broadest sense, can include automatic machines which can assist human beings in their daily activities, and replace humans in performing surgical procedures, logistical operations, manufacturing processes such as welding and the piloting of vehicles such as drones and autonomous cars. Automation technologies, which include sensor technologies, batteries and other means of energy storage, mobile computing and transducer technologies for robotics, will be a main driver of tomorrow's economy. The potential applications are virtually limitless. For example, these technologies can potentially revolutionize the way we travel and save lives, by using machines to replace humans in hazardous situations such as firefighting or rescues in high-risk environments.

Theme 12	Big Data and Data Analytics
	Data science and technological foundations for applications of big data
	Internet-of-Things (IoT) technologies
	Applications of big-data analytics with societal impact on health, environment, logistics, finance, education and social media

Theme 13	Data Networks and Telecommunications
	<ul> <li>Next-generation data communications, telecommunications and information networks and their enabling technologies</li> </ul>
	Smart-grids, network economics and optimization
	<ul> <li>Information security technologies (including cyber-security technologies to identify and protect against cyberattacks, cloud/IoT security, blockchains, secure software engineering, applied cryptography)</li> </ul>

Theme 14	Quantum Sciences and Technologies
	<ul> <li>Quantum computing, quantum simulations and quantum information processing and their applications</li> </ul>
	Quantum communications, quantum key distribution, quantum signatures and quantum money
	Quantum metrology

Quantum science and technologies have the potential for developing a new paradigm for computers based on quantum information processing, capable of performing complex quantum simulations beyond the capacity of present-day classical computers. Quantum computing may bring about revolutionary advances in many different fields, as diverse as large-scale weather forecasting, predicting climate change or simulating molecular interactions of drugs in treating diseases on the nanoscale.

Cutting across all the research themes identified here is a deep concern for the ethical use of information and automation technology. The possibility of intentional abuse is real. Unintentional consequences that may adversely affect human development also cannot be ignored. This is where multi-disciplinary collaboration is needed most, and CUHK is committed to ensuring that technology serves the fundamental interests of society.



Strategic Area 4 — Environment and Sustainability

For good reasons, practically all the top universities in the world focus on research and innovation in the area of environment and sustainability. The world is facing a climate emergency. Rapid urbanization and the growth of megacities pose complex challenges for development. These are but the most obvious examples. Environment and sustainability, as an integral research area, was identified as a key focus in the CUHK Strategic Plan 2016–2020. Good progress has been made and 'CUHK 2025' will continue to develop research and innovation in this area, under five priority themes.

Theme 15	Smart and Sustainable Cities
	<ul> <li>Smart mobility: transport, urban informatics, location intelligence, urban big data analysis of human and vehicle movement and decision-making</li> </ul>
	Smart building: building technologies
	Clean and renewable energy
	Green and sustainable technology for low-carbon society
	Smart environment and smart grid
	Smart economies

Theme 16	Exposome and Healthy Urban Living
	Influence of social, built and physical environments on health at the city level
	Links of exposome to internal (biological, genetic) factors of diseases
	Urban planning and urban design to address health issues
	Preparedness for epidemics
	Health disparities and environmental justice

Plant and Agricultural Biology and Food Security
Plant genomic studies for crop improvement
Plant cell biology and organelle function
Plant stress molecular biology and physiology
Food production and climate change

Theme 18	Planetary Health and Climate Change
	<ul> <li>Planetary health focusing on human health impacts caused by human disruptions of Earth's natural systems</li> </ul>
	Climate change, indoor/outdoor air quality and environmental sustainability
	Marine resources

Theme 19	Population Sustainability
	Migration and urbanization, and social and economic integration of immigrants
	Youth identity, values transitions into labour market, social and political participation and youth development
	<ul> <li>Population healthy ageing indicators, physical and psychological well-being, elderly- friendly environment</li> </ul>
	Social equality

These themes align with many sustainable development goals (SDGs) of the United Nations. CUHK has developed particular strengths in research related to the SDGs of "No Poverty", "Zero Hunger", "Climate Models" and "Particulate Matter, Air Pollution, Air Pollutants". There are also promising areas, including "Good Health and Wellbeing", "Reduced Inequality (including gender inequality)", and "Climate Action". The recently established Institute of Health Equity signals the University's commitment to improve health equity in society, through research, education and knowledge transfer.

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CUHK has also been able to employ advanced methods in remote sensing, geospatial imaging and computational modelling to develop impactful research on, for example, the high density and high mobility in Hong Kong. Over the next five years, the University will aim to position itself as a global thought leader in research on environment and sustainability in densely populated and highly mobile cities, as well as a global hub in computational approaches to environment and sustainability research.

CUHK has strong ties with mainland universities in environment and sustainability research, which will be further leveraged to develop research in this area in the GBA. The University is also well connected with global partners, in networks such as the Planetary Health Alliance, the UN Sustainable Development Solutions Network, the United Nations Economic and Social Commission for Asia and the Pacific, and the International Geospatial Health Research Network. From these established platforms the University will further identify strategic partners worldwide to expand its regional and global collaboration in action-oriented research, public education and interventions.

In the next few years, the University will also engage more actively with corporate partners and government in this endeavour. Research and innovation in environment and sustainability go beyond institutional development, for the health of the planet and human survival are at stake. Through this effort, we also hope to build a more cohesive community, united in its concern for global sustainable development. More on this will be discussed in the section on Social Responsibility for Sustainable Development in this Strategic Plan.

## Research, Innovation and Enterprise as a Continuum

Innovation is by definition a necessary component of research excellence with purpose, while enterprise extends innovation to the marketplace. Research, Innovation and Enterprise must be taken as a continuum to achieve the University's strategic goal for the next five years, namely, to generate impact based on existing and strategically identified directions of research and innovation, and to capitalize on the opportunities available from both private sectors and the government via Public-Private-Partnership (PPP).

A review of innovation and entrepreneurship at CUHK has elucidated certain strengths and weaknesses as well as available opportunities and emerging challenges. Briefly stated, there are still gaps between research, innovation and enterprise, and more needs to be done to promote innovation, the success of which is measured by its impact beyond academia. The strengths, weaknesses, opportunities and challenges identified are summarized in the following table.

### Strengths Weaknesses • Principal investigators (PIs) with advanced expertise · Limited internal resources (finance, HR, in various fields (medicine, AI, regenerative legal, administrative) to support medicine, diagnostics, cultural studies, sociology, translational research and downstream commercialization activities psychology, etc.) • Strong translational infrastructure (GMP cell Some administrative processes may be processing facility, animal facility, InnoHub, too cumbersome to facilitate innovation InnoPort, Shenzhen Research Institute) • Students as talent pool Opportunities Challenges • Generate multidisciplinary collaborations • Traditional practice hinders collaboration among Pls Expand network with industry leaders, investors and public sector Invigorate PIs' interest to participate · Create training and job opportunities from projects Streamline administrative procedures for • Generate new revenue streams Alignment among multiple stakeholders · Active participation in resolving societal issues and addressing grand challenges with innovative · Availability of seed funds technologies and expertise

One of the core functions of the Office of Research and Knowledge Transfer Services (ORKTS) is to facilitate the transition from research to innovation for researchers, who might otherwise find it too daunting. This can be achieved, for example, by providing professional assistance for patent filing, and by recruiting angels and ventures to provide the necessary capital to fund the start-ups.

The Office of Innovation and Enterprise (OIE) was established to complete the last leg of the Research-Innovation-Enterprise continuum, i.e., to help link CUHK professors and start-ups with appropriate partners, industry and government to bring research to the market for the benefit of society.

Past effort has borne fruit in spawning several innovation successes, some of which began as start-ups founded by students, staff or alumni of the University with the support of the Patent Application Fund (PAF) or the Technology Start-up Support Scheme for Universities (TSSSU). There are also successful collaborations on professional, medical and social innovations with the government, NGOs, academic institutions and private companies.

Going forward, successful Public-Private-Partnerships (PPP) will be vital to the sustained growth of research, innovation and enterprise. The good manufacturing practice (GMP) cell therapy facility, in collaboration with government bodies and private companies, may serve as a pilot case for PPP. The facility will operate on a fee-for-service not-for-profit principle and be open to both internal and external users. It should facilitate the launch of advanced therapeutics such as cell therapies, which eventually would become routine clinical services at the CUHK Medical Centre and other hospitals and clinics in Hong Kong.

'CUHK 2025' sets its sight on establishing the University as a trusted go-to-partner for PPP. We aim to complete two to three partnerships in the coming years, to establish a strong track record. For PPP to work, a mutually beneficial model needs to be worked out. The University should take the lead as it is not motivated by profit but rather by the desire to create value for society.

## Enabling Strategies

In the coming years, CUHK will strengthen existing enabling strategies and seek new ways to realize excellence in research and innovation, with purpose and responsibility, translating ideas and inventions into positive societal impact.

## Broaden and Diversify Research Funding Sources

CUHK will optimize its internal funding schemes to support both individual and group research, regardless of the stages of the research and innovation cycle. While RGC competitive grants are extremely important for various research assessments and are tied to resource allocations, CUHK will take a more proactive approach to explore new funding sources from the public and private sectors to support contract research and knowledge transfer initiatives.

## Build Research Talent Capacity

Without a doubt, people are the most important asset of a university. CUHK will strengthen efforts to retain its leading researchers and enhance the ability to recruit research talent globally (see Section 6 below). It will also invest more in training to nurture the next generation of researchers, inventors, innovators and entrepreneurs, and create opportunities for its students and graduates to explore new perspectives, skills and knowledge to become globally competitive.

## Strengthen Research Infrastructure Support

Investment in state-of-the-art equipment and necessary facilities will continue to support CUHK's world-leading research. The University will explore how to make shared equipment and facilities accessible to all, to make better use of available resources and to help maximize its research capacity.

## Scale Up Professional Services and Supportive Environment

Since the last strategic plan, professional and legal services have been scaled up. Dedicated teams now include ORKTS and OIE which support contract research, intellectual property (IP) and licensing, social innovation, knowledge transfer and enterprise activities. Connection and workflow amongst ORKTS, OIE and the Office of Strategic Developments (OSD) have also been reinforced.

The University will invest in engaging external consultancy and professional services to enhance its patent strategies. Taking an entrepreneurial approach, the next step is to examine how its policies, e.g., those pertaining to human resources, can be reformulated to encourage and give recognition to impact activities.

A supportive environment is underpinned by a culture of research integrity. In the coming years, CUHK will offer more education and training opportunities to promote researchers' awareness of their responsibilities and accountability in the conduct of research and management of research projects.

## Upgrade Knowledge Transfer Platforms and Innohubs

Technology platforms and innovation hubs can deepen the connections with strategic partners locally, nationally and internationally. The newly established Office for Greater Bay Area Developments is a new milestone in CUHK innovation and entrepreneurship. The office will make concerted effort to establish more innohubs in collaboration with the governments of the GBA node cities to further fuel innovation development and promote collaborations between Hong Kong and the mainland.



On the main campus itself, the CUHK InnoPort is now fully operational, serving as an attractive platform for students and staff members to network and interact with incubators and investors. New initiatives will be launched to stimulate ideas and collaborations in the commercialization of technologies, as well as innovative business models and marketing strategies.

## Enhance Global Engagement and Collaborations

The University's global engagement strategies will be detailed in a later part of the Strategic Plan. CUHK will strive to deepen and expand its partnerships with mainland and international institutions to further the goals of research and innovation. This is especially important as tackling complex societal issues and major challenges requires public engagement and global collaboration.

Whether working with individual scholars and researchers, developing grant proposals and projects, or establishing joint research centres or clusters, every support will be provided for CUHK students, research staff and faculty members to flourish in their research. The University will leverage its strong position in international university alliances and research organizations. The University will also endeavour to build a stronger network of investors, start-ups and enterprises in Hong Kong, the GBA, the mainland and the world, to work together and learn from one another in order to find innovative solutions for societal and global challenges.

### Encourage Interdisciplinary Collaboration and Engagement with Alumni

Internally, more opportunities will be created for cross-Faculty collaboration. This is essential as cutting-edge research and innovation thrive in the interstices of different disciplines. Students will also benefit, as the crossing of intellectual boundaries may fuel creativity and open new vistas. Interdisciplinary PhD programmes should be explored.

CUHK has established strong ties with its alumni, an energetic community which takes an active interest in the development of their alma mater. The University's alumni engagement strategies will be presented separately in this strategic plan. In research and innovation, the University will engage its alumni especially in knowledge transfer activities.

#### Measures of Success

In addition to research publications and citations, other key performance indicators—the numbers of patents filed, start-up companies established and recognized PPP launched, and the amount of external funding received for startups and PPP projects—will allow CUHK to track its progress in pursuit of its vision and mission. It is expected that training opportunities will be created, job opportunities generated, emerging technologies and new research strengths developed in the University. CUHK will be known as a key conduit for Technology Start-up Support Scheme for Universities

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(TSSSU) companies and pre-incubation (Pi) Labs to establish a presence in the market, and a Hub of Innovation in Hong Kong, the GBA and greater China.

CUHK is committed to creating a thriving ecosystem to support this generation of researchers and inspire the next. Its source of strength is our diverse pool of talent in cutting-edge research and innovation and our bright and creative students. By investing in facilities and infrastructure, strengthening professional and support services, enhancing policies and mechanisms, increasing training programmes and deepening global engagement, CUHK will be able to make great strides in the next phase of its journey.

# Global Engagement: Spreading our Wings to Add Value and Create Impact



## 5. Global Engagement: Spreading our Wings to Add Value and Create Impact

In a short span of 58 years, CUHK has become a leading institution of higher learning known internationally for its dedication to education, impactful research and global engagement. From its inception, the University has taken to heart its unique advantages in serving as a bridge between China and the West. Much effort has been devoted to internationalization since the founding of the University in 1963, in both learning and research, and especially during the past decade, as a result of which CUHK is widely recognized as one of the most international universities in the world.

The rapid growth of China has created an abundance of opportunities for development in higher education and collaboration between mainland and Hong Kong universities. During the past few years, CUHK has strengthened its presence in Shenzhen and collaborations with mainland institutions, capitalizing on opportunities arising from the Belt and Road (B&R) Initiative and the transformative development of the Greater Bay Area (GBA).



Global engagement will continue to be a major focus of the University under 'CUHK 2025'. The grand challenges facing the world require global collaboration. The jobs of the future will not be confined by borders. Internationalization and engagement of mainland China will continue to be a priority in the University's pursuit of excellence

with purpose and responsibility. In the next five years, the University's global engagement plans aim to:

- Nurture students with a global vision and outlook to prepare them for careers
  in the mainland and around the world through the curriculum, non-local
  experiential learning programmes and a vibrant campus that integrates
  students of all cultures, religions and nationalities
- Promote research collaboration with universities, centres of research excellence, industry, funding and policy agencies, and philanthropic organizations that would lead to world-class and impactful research
- Reinforce the University's reputation nationally and internationally to make
   CUHK the university of choice for students and a magnet for talent

#### Global Engagement 2016–2020

The University has made great strides in global engagement over the past five years, expanding its network of global collaborations and strengthening existing ties, with a clear focus on cementing strategic partnerships with leading educational and research institutions around the world. This has contributed significantly to the development of global education and research programmes and helped raise the reputation of the University.

Over 20 collaborative programmes have been developed during this time with leading universities in China, Japan, France, Spain, the Netherlands, the UK and the US, including dual undergraduate, master's and PhD degree programmes, joint teaching programmes, and combined qualification arrangements. Experiential learning and global exposure are crucial to the all-round development of students. In 2018–19, about 1,160 students took part in term-time exchange, which was close to the University's target of having 30% of the annual graduating undergraduate cohort taking part in such programmes. In addition, about 5,000 students took advantage of the many carefully arranged non-local experiential learning opportunities ranging from internships and thematic studies to field trips and service learning every year. Each year, over 3,000 students venture into the mainland for exchange and interflow activities. CUHK has been participating in the Ministry of Education Ten Thousand

Student Interflow Programme since 2013. Between 2016 and 2019, more than 7,000 CUHK students joined the Programme.

The COVID-19 pandemic has put a halt to almost all cross-border travels. Building on the University's strength in applying technology to teaching and learning, CUHK developed a Virtual Student Exchange programme with the Association of Pacific Rim Universities (APRU) which provides an innovative platform for students from different universities to engage in academic and cultural exchange, and form social networks with peers around the globe. The programme includes academic course offerings, cultural immersion and social activities, providing a dynamic, integrated and interactive virtual global learning experience that compares favourably and perhaps surpasses in some respects that of physical exchange programmes.

To promote internationalization-at-home, CUHK has continued its efforts to expand and diversify student recruitment. Special efforts have been devoted to recruiting students from countries and cities along the B&R region. The University has welcomed many students of nationalities which are new to the campus, including Bangladeshi, Israeli, Jamaican, Jordanian, Mauritian, Slovak, Tunisian, Ukrainian, among many others.

Moreover, to build a truly multi-cultural campus, CUHK has devoted much effort to enhancing students' international perspective and fostering integration between local and non-local students. The "i-Lounge" was set up to provide a welcoming space for students and University offices to organize activities to promote cultural exchange and widen global exposure of the campus community. A wide variety of non-formal learning programmes and cultural events are offered by the Colleges, the Office of Student Affairs and various units to nurture cultural sensitivity and a strong spirit of inclusion among all members of the University. Other initiatives to promote student integration include the Host Family Programme and i-Ambassador Scheme, to name but two.

As a comprehensive research university, CUHK works closely with mainland and international partners on a wide spectrum of research collaborations, many of which are directed at resolving some of the most urgent problems in the world. A wide range of collaborations to promote research in areas such as environment and sustainability, information and automation technology, and innovative biomedicine have been initiated with key partners worldwide. These collaborations take the form of joint

research units, advanced research institutes and joint research funds. To date, some 60 joint laboratories/units in partnership with over 40 mainland and international partners have been established.



Furthermore, the University has established five State Key Laboratories (SKLs) under the Ministry of Science and Technology, as well as three Key Laboratories and two Key Research Institutes in the Humanities and Social Sciences under the Ministry of Education. The SKLs cover various scientific disciplines, including translational oncology, agrobiotechnology, bioactivities and clinical applications of medicinal plants, synthetic chemistry, and digestive diseases. The Key Laboratories examine high confidence software technologies, human-centric computing and interface technologies, and regenerative medicine, while the Key Research Institutes focus on historical anthropology, Chinese linguistics and applied linguistics.

The University already has a sizeable presence in Shenzhen. The Shenzhen Institutes of Advanced Technology (SIAT), the CUHK Shenzhen Research Institute (SZRI), the CUHK Hong Kong-Shenzhen Innovation and Technology Research Institute (Futian) and The Chinese University of Hong Kong, Shenzhen (CUHK-Shenzhen) together form a strong base for developing teaching, research and technology transfer in the GBA. Collaborations with other major mainland institutions such as the Chinese Academy of Sciences, Tsinghua University, Peking University, Fudan University, Shanghai Jiao Tong University and Zhejiang University in both education and research have also blossomed and are continuing to grow. CUHK is a core member of the

Guangdong-HK-Macau University Alliance, the Association of University Presidents of China, the Beijing-HK University Alliance and the Shanghai-HK University Alliance. There will be more synergistic opportunities brought by the development of the GBA and other parts of the mainland, and the University is well placed to capitalize on them.

Globally, CUHK now partners with over 250 universities outside China in some 35 countries/regions, offering a wide range of international educational programmes. The University also takes an active part in the APRU, the Alliance of International Science Organizations in the B&R Region, the China-UK Humanities Alliance for Higher Education, the Worldwide Universities Network, among other networks and alliances. Strong links have been forged with many international partners, including University of Cambridge, University of Oxford, University of Manchester, University of Sydney, University of California at Berkeley, and Utrecht University, to name but a few.

The social unrest in Hong Kong in 2019, the COVID-19 pandemic, and the uncertain geopolitical landscape cannot but impact the University's global engagement activities. There are serious challenges ahead.

Nevertheless, the strong academic culture at CUHK, the successes at internationalization and engagement of mainland China in the past, the University's committed plans to developing education and research, as well as talent attraction under 'CUHK 2025', and the advantages of Hong Kong being a cosmopolitan city and a gateway to the mainland combine to provide good reason for optimism. Over the next five years, the University is confident of regaining the initiative in global engagement and through collaboration spearheading education, research and innovation for the benefit of humanity.

#### Global Engagement 2021–2025

To achieve the University's aim of excellence with purpose, the following mutually reinforcing priorities in global engagement will be pursued:

- Strategic collaboration with national and international partners
- Global learning and experience for students
- Building and supporting a diverse body of students

- Faculty and staff as champions of global engagement
- · Branding and reputation building

#### Strategic collaboration with national and international partners

A fast-growing Chinese knowledge economy that prioritizes research breakthroughs and technological innovations presents distinct opportunities for CUHK to deepen its engagement and foster strategic partnerships in the mainland.

Expand and enhance collaborations with global partners, leveraging CUHK's strength in key areas of education and research, its well-established international reputation as a knowledge enterprise, and its unique role as a bridge between China and the rest of the world.

The long-standing partnership with key universities, major research organizations and government ministries in the mainland will stand the University in good stead as it expands its presence in the GBA and other key regions in the mainland.

CUHK will make full use of its competitive advantage, having established a base in Shenzhen even before the GBA Development Plan was launched and close collaborations with mainland partners, to seize the many opportunities generated by the rise of China as a global knowledge-based economy, including access to mainland research funding, innovation support and new student learning opportunities. Whether in artificial intelligence, quantum information, biomedical sciences or other fields, the potential for breakthroughs in collaboration with mainland institutions is enormous. Equally important, exchanges and other academic programmes will enable our students to understand better the development of the Country and prepare them for future career and business opportunities in the mainland.

Going forward, the University will strengthen collaboration with CUHK-Shenzhen, for which a joint task force has been established. Better coordination among the different research institutes will further aid the University's development in the mainland. The recently established CUHK GBA Office in Shenzhen represents a deliberate step in that direction. While Shenzhen and the GBA will occupy a privileged position, there is a need to position CUHK more prominently in other major cities such as Beijing and

Shanghai. The University's Beijing Liaison Office, located on the campus of Peking University, will be utilized more fully to attract top students to CUHK and promote the University's interests. A centre in Shanghai is being explored, with the support of partners and alumni, to anchor the University's programmes and facilitate access to resources and opportunities in the Yangtze River Delta Area.

While the mainland offers exciting opportunities, CUHK recognizes the importance of international collaboration, in elevating education and research, as well as promoting mutual understanding across cultures.

Historically, CUHK has close links with institutions in the UK and the US. While we will continue to strengthen these ties, effort will be made to build new partnerships with institutions in Europe, Southeast Asia, the B&R region and other parts of the world. This will have the added benefit of attracting top students and talent, including postgraduate research students and postdoctoral fellows. Besides working with the best universities and research organizations in the world, support in capacity building for developing nations also forms a part of the University's vision in global engagement. As detailed in the section on Alumni Engagement and Institutional Advancement in this Strategic Plan, more effort will be devoted to galvanizing support from alumni and donors in support of the University's global engagement goals.

In the next five years, the University will continue to take an active leadership role in national and international academic networks and alliances. Multi-lateral organizations such as the Guangdong-HK-Macau University Alliance and APRU can create greater impact, as members pool their resources and tackle in concert the global challenges that affect all humanity.

#### Global learning and experience for students

Global learning and experience are critical to student success in the 21st century. It is necessary to expose students to diverse cultures, ideas, knowledge and skills that would prepare them for rewarding careers, responsible citizenship and leadership roles in a rapidly changing global environment.

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It is central to CUHK's vision and mission that every student be given opportunities to engage in global learning and experience. The University aims ultimately to have every undergraduate student undertake a learning experience outside Hong Kong before they graduate. These may be term-long student exchange programmes or shorter programmes that expose students to new cultures, languages and societies. The targets set are:

- 30% of the annual graduating undergraduate cohort to undertake a term-long student exchange programme outside Hong Kong
- 70% of the annual graduating undergraduate cohort to undertake a learning experience including term-long student exchange programme and shorter-term programmes outside Hong Kong

CUHK is a leading university in global engagement. It has the professional expertise, well-established policies and mechanisms, as well as a wide network of academic partners, to promote student mobility. Once the COVID-19 pandemic is fully under control, the University will be able to quickly restart its existing programmes and start new ones.

To support global learning, the University will review its bursary and travel support schemes for student exchanges. Support will be sought from the Office of Institutional Advancement to seek more philanthropic support for global education. This is of crucial importance as global education must not be a privilege of the well-heeled but an opportunity that is equally open to all CUHK students.

Entrepreneurship and innovation will be increasingly critical to the success of our graduates in the future. The University will endeavour to forge new partnerships and develop more opportunities for internship and professional attachment for our students, both in the mainland and overseas countries. A campus-wide co-op programme will be explored.

The University will continue to provide virtual global learning opportunities for CUHK and other students. The successful Virtual Student Exchange programme spearheaded by CUHK under the auspices of APRU has generated new insight and opportunities for online learning. Virtual and physical study abroad or exchange programmes should complement each other in the post-pandemic world. They would

also help students to hone their digital skills and prepare them for the global technology-driven workplace of tomorrow. The ability to adapt, engage and lead in cross-cultural and geographically diverse settings will be an important asset for our graduates.

#### Building and supporting a diverse body of students

Central to the University's global engagement mission is to build a diverse body of undergraduate and postgraduate students, attract talent from around the world in both teaching and research, and promote diversity and inclusiveness that would benefit the entire CUHK community and beyond.

In order to attract talent, the University will develop a comprehensive and proactive student recruitment plan in partnership with the Faculties and the Graduate School. Staff recruitment will also be enhanced, the details of which are presented in the section "Building Human Capital for Excellence with Purpose" and will not be discussed here.

For non-local student recruitment, attracting the best students from the mainland and diversification of student sources outside China will be equally important. While top undergraduate degree students from the mainland can be readily identified through the *gaokao* national examination system, and exchange students are selected with the help of our partner universities, which rank among the best in the mainland and the world, recruiting non-local students from overseas will require a coordinated effort. The Office of Admissions and Financial Aid will be developing country-specific strategic maps and work with the Faculties in undergraduate student recruitment.

For postgraduate research students, the Graduate School has put in place incentive schemes for recruitment of students from overseas countries as well as mainland students with offers of admission from leading overseas universities. The Faculties will compete vigorously for the prestigious Hong Kong PhD Fellowship Scheme. In addition, the Office of Institutional Advancement will play an important role in raising more scholarship support for deserving non-local students, without neglecting the needs of our local students.



It is important that non-local students have a positive experience at the University. They are integral to CUHK's internationalization effort and will serve as ambassadors for the University when they complete their studies. Both academic offerings and student experience have a role to play. In the next five years, the University will spare no effort in enhancing student experience, as detailed in an earlier part of this strategic plan. The i-House will be reconceptualized and reconfigured to enhance international student experience.

A welcoming campus environment is obviously necessary to this effort, but it goes beyond improvements to the physical campus, important as that may be. Dedicated effort will be devoted to promoting diversity and inclusion on campus, including activities designed for building cross-cultural sensitivity and student integration, as well as active encouragement in the use of English for teaching and learning wherever feasible, which would benefit both local and non-local students.

Along with, and perhaps even more crucially than the Office of Student Affairs and the Office of Academic Links, the Colleges play an indispensable role in global engagement. The Colleges are in effect the home of our non-local students during their time at CUHK. They make CUHK unique and are key to not only successful internationalization but also the new initiatives in education, student experience and other areas of University development to be pursued under 'CUHK 2025'. With the full support of the Colleges, CUHK can look forward to a period of sustained and notable growth in the next five years. With the University's 60th anniversary coming in 2023,

there is an opportunity for the Colleges to rally support from their alumni to propel the University forward.

A larger international student presence on the CUHK campus will enhance diversity and add to its vibrancy. With the new student hostels now under construction, more support will become available for term-time student mobility programmes in the foreseeable future. More part-time work opportunities would also help students especially those from developing countries to study at CUHK.

#### Faculty and staff as champions of global engagement

CUHK faculty and staff are known for their commitment to excellence in education, research, and service. With our faculty members and professional/administrative staff stepping forward as champions, the University will be able to build on the strong foundation already laid and spread its wings in global engagement for excellence with purpose.

Hong Kong has earned a reputation for its world-class higher-education and research with four of its universities ranked in the top 50 of world universities. It is also a vibrant global city where East meets West, a gateway to China, and an international travel hub. The conditions for attracting international talent remain strong, despite the disruptions that took place in the last two years. The University has been able to maintain a good programme of international academic activities through online platforms during the pandemic. Such activities will increase as we become more adept at conducting online events and even more so, when it is safe to relax social distancing measures and when international travel becomes possible once more. The University also has an ambitious strategic hiring plan for postdoctoral fellows and full-time faculty members. These measures will put the University's global engagement effort back on track over the next few years.

CUHK's faculty members are highly international. Collaboration with international partners in research and education is part and parcel of University life. CUHK is also home to many world-leading scholars and scientists. With their expertise and global connections, faculty members play a central role in the University's global engagement

strategy. In the next five years, they will be empowered further to participate in international meetings, organize international activities on campus, invite collaborators and visiting scholars to the University, and rekindle the kind of academic vibrancy that CUHK is known for. The Faculty Deans, the College Heads and Masters, Department Chairs and Directors of Institutes will be engaged to spearhead this effort. With better coordination, more opportunities for cross-disciplinary collaboration will be created and the impact of every academic event can be amplified.

The University's dedicated professional and administrative staff play an equally important role in this effort. Whether in terms of facilitating global engagement programmes or providing support for academic conferences and activities, they help make an important difference to the University's reputation as a welcoming and forward-looking centre that is conducive to the flourishing of education and research.

#### Branding and reputation building

Develop a stronger CUHK brand to project the University as the partner of choice for education and research, both nationally and internationally.

A rebranding exercise will be pursued to strengthen CUHK's reputation both nationally and internationally. The relationship between the CUHK main brand and the many subbrands of the individual Faculties and Colleges and Institutes will be carefully reviewed. The CUHK website attracts many visitors and requires frequent updating to maintain its freshness and improve its content. The University has been working with Times Higher Education and Quacquarelli Symonds (QS) since 2016 on targeted publicity campaigns and this effort will continue.

Beyond marketing and communications, branding comes ultimately from our people, educational programmes, research and innovation, and service. The achievement of our faculty members, staff, students and alumni should and will be proactively shared with a wider audience. The 240,000-strong CUHK alumni community, many of whom occupy leadership positions in major corporations, can be a potent force in enhancing CUHK's global reputation. As mentioned, CUHK has a good number of world-leading research programmes. At the same time, CUHK is internationally known for its strength

in China Studies. These are truly precious assets. They will be strengthened and serve as a focal point of University branding.

#### Indicators of Success

Implementation details of the above strategies and actions will be developed at all levels of the University, including the measurement of success and appropriate performance indicators. However, it should be noted that global engagement pervades all aspects of University operations and as such, the measures of success suggested here are primarily indicative. Whereas some activities may have measurable outputs, such as the number of international conferences organized, others produce impacts that are tied with the overall performance of the University.

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#### Suggested Indicators

#### Strategic collaboration with national and international partners

- Number of formal global partners and programmes, including joint research units established with institutions, in the mainland, Greater China, and overseas
- · Number of joint publications with researchers outside Hong Kong
- · Number of establishments, projects, and achievements in the GBA
- Scale of involvement in national laboratories, number of approved SKLs and other national entities

#### Global learning and experience for students

- Percentage of undergraduate students obtaining at least one non-local experience before graduation, in particular:
  - Percentage of the annual graduating undergraduate cohort undertaking a term-long student exchange programme outside Hong Kong
  - Percentage of the annual graduating undergraduate cohort undertaking a learning experience including term-long student exchange programme and shorter-term programmes outside Hong Kong
- Number of students undertaking innovation and entrepreneurship learning opportunities outside Hong Kong
- Number of collaborative teaching programmes, including dual degree programmes
- Number of students undertaking collaborative teaching programmes, including dual degree programmes and joint PhD supervision arrangements
- Feedback from students reflecting their experience in global learning and experience programmes
- Number of CUHK students taking up virtual student exchange opportunities

#### Building and supporting a diverse body of students

- Number of mainland and international students enrolled in undergraduate and postgraduate programmes
- Feedback from non-local students on their experience and support needed
- Number of students taking up virtual student exchange opportunities
- Number of visiting students studying at CUHK for term-time exchanges and those of shorter periods

#### Faculty and staff as champions of global engagement

- Number of mainland and international faculty members, including postdoctoral fellows, hired
- Faculty members taking part in global engagement activities such as participating in meetings, organizing conferences, and serving on editorial boards

### Branding and reputation building

World rankings of the University, including performance indicators that
measure CUHK's performance across different areas including teaching,
research, knowledge transfer and international outlook, as well as rankings of
the different academic disciplines. These include the QS World University
Rankings, Times Higher Education World University Rankings and the Academic
Ranking of World Universities

# Talent Attraction and Development



#### 6. Talent Attraction and Development

The measure of a university is always the quality of its people. Bringing in the best and bringing out the best in our people are without question key to CUHK's continued success.

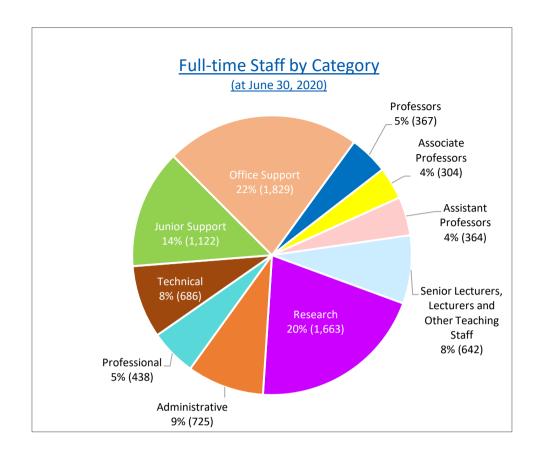
The standing of a university may be measured by its direct impact, in research breakthroughs, for example, but equally if not more important, by how it exerts a pervasive influence on positive social and economic development, across generations. This is a long-term project, or more precisely, a continuing process that requires a strong team, committed to realizing the University's vision, mission and core values, beyond individual accomplishments.

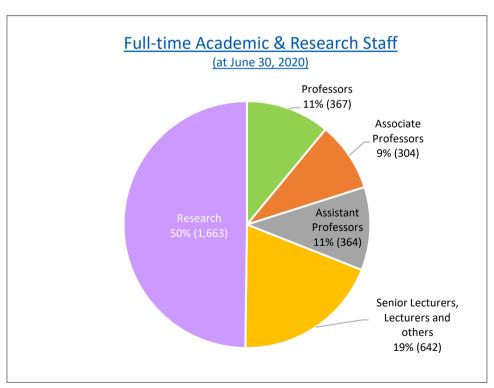
The quality of human capital impacts not only the core business of the University but also the future growth of Hong Kong. In providing education, research and service of the highest standards and quality, the University seeks to nurture future leaders, contribute to Hong Kong's economic development, help strengthen the fabric of society and address complex global challenges. These are the reasons for achieving academic excellence, for which a strong "Team CUHK" is needed.

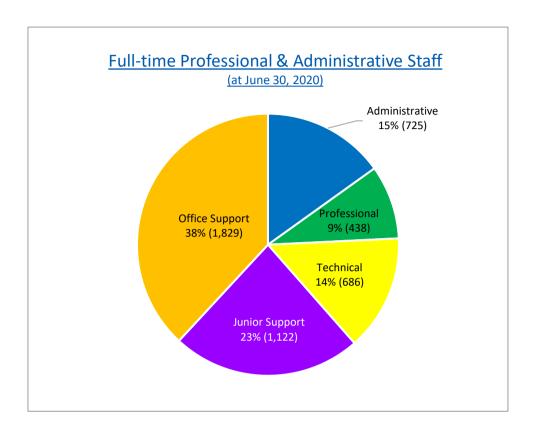
Building human capital for excellence with purpose will be a major focus of the University's strategic development over the next five years.

#### Team CUHK at Present

The number of full-time staff at CUHK stood at 8,140 in June 2020, of which 41% occupy teaching and research positions. 48% of the faculty members at present hail from outside Hong Kong, spanning the globe from over 40 countries. This is one reason why CUHK has been rated the third most international university in the world in 2021 by the Times Higher Education World University Rankings. In terms of gender balance, 65% of the faculty are male, and 35% female.







Among the teaching staff, 62% are on the professoriate, while 38% are appointed to lectureships and other teaching posts. Teaching and research are equally important to the University's mission, and this is a point that should be emphasized. The professoriate staff are evenly distributed across the three ranks of Assistant Professor, Associate Professor and Full Professor.

CUHK has a strong professional and administrative team, the importance of which can hardly be overstated. The ways in which many of our professional and administrative colleagues went beyond the call of duty to ensure that learning continues to flourish during the COVID-19 pandemic speak volumes of the dedication of Team CUHK.

The student-to-faculty ratio at CUHK is 19.3:1, based on the Times Higher Education World University Rankings 2021 data. In comparison, Stanford's is 7.4:1, UC Berkeley's is higher, not surprisingly as it is a large public university, at 19.8:1, and HKU's, 18.2:1. While a lower ratio would be desirable, strength in numbers does not translate directly into quality, which is our principal concern.

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#### Enhancing our Human Capital

In the next phase of the University's development, strengthening Team CUHK in qualitative terms will be essential and a major challenge.

Academic and professional talents are in high demand. Competition between university and industry is intense, and among universities, equally if not more so. Resources are finite. For mature economies, GDP growth will be limited, while public expenditure especially in such areas as health care and infrastructure will continue to increase. Headwinds and uncertainty on the sociopolitical front, as well as shocks to the economy caused by natural or man-made emergencies further cloud the horizon. For a mature economy and ageing society like Hong Kong, the impact of these larger trends on public university funding cannot be ignored.

The HKSAR government has laudably given strong support to higher education in the past, recognizing the critical role talent play in a knowledge economy, and this must be maintained. Nevertheless, to sustain the University's hard-earned upward trajectory, collaboration with industry, innovation and philanthropic support will take on growing importance, and new initiatives in these areas are discussed in the relevant sections of this Strategic Plan. Without a strong team, the goals of the University will remain unfulfilled. Enhancing our human capital is not only a desired outcome but also an urgent task that requires the University's full attention.

A university is a complex organization, with different roles that need to cohere and function not only well but also in concert to advance its interests and ambition. Academic and professional/administrative staff both have an equally important role to play. Under 'CUHK 2025', several key initiatives will be introduced to promote talent attraction and development.

Recruiting the best talent is fundamental to a university's success. If we hire well, half the battle, so to speak, will have been won. If we do not hire well, without exaggeration, no amount of effort will be able to build a great university. At a minimum, any new hire we make should raise the average in performance of the recruiting unit. If we are successful in applying this principle consistently across all departments, there should not be any doubt that CUHK will be able to shine brightly in the global knowledge arena.



Equal attention must be given to bringing in the best academic and research as well as professional and administrative staff. The latter play an enormously important role in the University and their contributions should be recognized. With advances in technology, it can be envisaged that some support functions will disappear. Office automation may enhance university administration in some respects, but it does not replace capable and committed staff, who are instrumental in delivering quality programmes and services.

However, administrative roles will increasingly require strong critical thinking ability, communicative competence, and other 21st century skills. A more international workforce may also be envisaged, as the University expands its global reach. To enable potential leaders in administration to gain a wider understanding of university operations, some exposure measures, e.g., central job posting, rotation across departments, coordinated competencies building, etc., will be explored.

For academic teaching staff, strategic recruitment is important. Specifically, faculty lines are precious and should not be determined by narrowly defined teaching needs; rather, they should align with the development goals of the hiring department. In this regard, the Faculty Deans play a critical role in shaping departmental recruitment strategies. Cluster hiring in key research areas is a helpful way to optimize human resource and promote interdisciplinary learning and research. Furthermore, strategic recruitment should target both proven academic leaders and future stars. At the University level, a flagship Vice-Chancellor's Strategic Recruitment Programme will be established.

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#### Strategic Faculty Recruitment

The Vice-Chancellor's Strategic Recruitment Programme consolidates and transforms several disparate recruitment schemes established previously into a signature global talent attraction platform. It comprises:

- Professorships/Visiting Professorships
- Early Career Professorships; and
- Global STEM Professorships



The Professorships and Visiting Professorships are both intended to attract internationally renowned scholars. At this level, targeted recruitment, as opposed to open searches, is necessary. Suitable candidates will be identified by the Vice-Chancellor, Provost and Deans, or through a search firm. An important strategy will be to tie such appointments with a major gift or programmatic research grant.

The Early Career Professorships will be a key component under the new strategic recruitment programme. Whereas distinguished senior faculty recruitments are often opportunistic and initially may result in more visiting professorships than full-time appointments, the University will be actively pursuing top young talent globally.

The Early Career Professorships will be administered centrally and offered in selected interdisciplinary research fields, aligned with the University's strategic research foci, namely, China: Tradition and Modernity; Innovative Biomedicine; Information and Automation Technology; and Environment and Sustainability.

A prominent international selection panel will be convened. The inaugural competition will be launched in the fall of 2021. Depending on merit, about 10 to 15 assistant professorships are expected to be awarded, to create maximum impact. A group campus visit will be organized for all the finalists, which is as much a knowledge carnival as a series of interviews, intended to generate excitement both within and outside the University.

In addition, the Vice-Chancellor submitted a proposal on talent attraction to the HKSAR government, which has resulted in the recently announced Global STEM Professorship initiative. This is a major development that promises considerable benefit to the local universities. CUHK has submitted a list of potential candidates for consideration.

#### Staff Retention and Development

Recruiting top talent depends on not only attractive terms but also conditions of service that are conducive to achieving excellence.

The University has been reviewing its appointment, annual performance review, promotion and substantiation processes, with the aim of raising competitiveness and adopting best practices. These include simplifying the appointment of junior faculty members and the process of advancement for Professors from "A1/CA1" to "A2/CA2" rank, without compromising academic rigour. Extension of employment beyond the retirement age of 60 for high-performing faculty members who joined the University before 2016 has also been streamlined to align with the terms of employment offered to newer recruits. These efforts will continue. While standards should move up, in tandem with the University's growing stature, clear, well-communicated and efficient processes will help raise productivity.

CUHK conducts regular induction and teaching development programmes for new staff. These are beneficial and help build a cohesive community. They will continue to be enriched, especially with added emphasis on diversity and inclusion. Mentorship plays a critical role in staff development and deserves special mention. While a mentorship scheme is already in place at the University, it should be strengthened and recognized as a basic responsibility of senior faculty members. The Faculties and Administrative

Departments will consider whether mentorship could be integrated into the annual performance review of senior staff.

There cannot be any doubt that interdisciplinarity opens new possibilities and enhances creativity in learning and research. Increasingly, younger scholars would have come through graduate programmes that emphasize interdisciplinary research. Yet, when they join a university, they often find themselves constrained by artificial departmental structures. Breaking down silos and creating pathways for dual or multiple academic citizenship will be a goal of the University in the next few years. Joint academic appointments and cross-listing of courses will go some way in prying open academic barriers and have the full support of the Faculty Deans.

In this connection, as a part of the University's triennial planning exercise proposal to the University Grants Committee, several fully integrated interdisciplinary programmes will be introduced. These have been outlined in the section on Education in this Strategic Plan. Team teaching and collaborative research should be the norm rather than the exception in the future.

Named professorships serve not only to attract but also retain talent. They also provide naming opportunities for donors. The University will explore increasing its stock of named professorships. In addition to professorships named after donors or exemplary individuals, a certain number of Dean's and Provost's Chairs may also be considered for retention purposes.

Unlike a research institute, a great university affirms the equal importance of education and research. This has been a core value of CUHK and will continue to guide the University into the future.

Research support for CUHK faculty is ample. However, career development for staff on the teaching track has not been reviewed for some time. During the next five years, steps will be taken to enhance lectureships, which are of vital importance to the academic ecosystem. These would include providing better support for lecturers to take part in research projects, refashioning Principal Lectureship into a career rank, and aligning the remuneration for lecturers with qualification requirements.

For a large organization, leadership succession can hardly be left to chance, for which a CUHK Leadership Programme will be established for both academic and

professional/administrative staff. Exposure to different aspects of university operations for high-performing administrative staff will help groom future leaders. At all levels, CUHK must aim to be known for its excellent service, with a helpful "no-wrong-door" culture, while the introduction or replacement of selected automated systems will further enhance administrative efficiency. As mentioned, automation will increasingly reshape business processes. The University will devote adequate resources to business reengineering and staff training over the next five years.

Diversity and inclusion will be a key initiative of 'CUHK 2025', as the University continues to develop as a world-leading university. Human capital is precious and must be protected. The University has zero tolerance for any form of harassment. The recently established Diversity and Inclusion Office will coordinate and spearhead efforts in promoting diversity and inclusion and ensuring compliance.

In a knowledge community, hierarchical barriers should give way to a collegial culture that values the contributions of all its members. Coupled with open communication channels, this will go a long way in steering CUHK towards an even brighter future.

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Art Museum of The Chinese University of Hong Kong — Lo Kwee Seong Pavilion under Construction

#### Enhancing the Academic Environment and Campus Life

Lastly, attention will be given to enhancing the academic environment and campus life over the next five years.

Space is a critical factor in university development, not only in terms of raising productivity but also in cultivating a strong sense of belonging. The University Art Museum will be substantially enhanced with a new wing, the Lo Kwee Seong Pavilion now under construction. College residential capacity will be expanded considerably over the next few years, enabling more students to experience residential life on campus. More precisely, capacity will be raised from the current 9,232 places to 10,082 within the coming five years. Academic facilities will also be enhanced, especially laboratory space, and thanks to the support of the HKSAR government, several new building projects will be developed, with careful attention to sustainability and accessibility for individuals with special needs. IT infrastructure and capacity will not be neglected. The rapid advances of technology provide both opportunities and challenges for university development. The University is set to welcome the arrival of 5G computing. At the same time, it will strengthen cyber security on campus.



Future Academic Facilities and Research Complexes

The "soft" infrastructure is equally important in building a world-class university. Over the next five years, the University will develop more programmes to increase campus vibrancy. Staff housing on campus is an asset and serves as an incentive for recruitment. Continual upgrading will further enhance CUHK's attractiveness. However, the geographical location of the University is such that curated events are needed to bring the community together. Specifically, effort will be made to facilitate faculty and staff gathering in relaxed settings to promote cross-fertilization of ideas and community building. The Colleges would provide an ideal location for such gatherings, although cross-College, campus-wide activities are also important. The Staff Club could also be redeveloped into a vibrant hub.



New Hostel under Development

A great campus contributes significantly to talent attraction and retention. Both the hard and soft infrastructure need to be continually improved for CUHK to sustain its upward climb. This is not to be neglected in a strategic plan that aims to build and enhance human capital for excellence with purpose.

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# Alumni Engagement and Institutional Advancement



#### 7. Alumni Engagement and Institutional Advancement

CUHK has long been recognized for its outstanding contribution to education, research and service to the community. Over the years, the University has nurtured generations of leaders in many professions and industries. They remain steadfast supporters of their alma mater, despite the passage of time or physical distance. A strong alumni community is the hallmark of a great university, and CUHK is truly proud of and grateful for the support of its alumni.

The University has been actively stepping up its alumni engagement effort. Providing lifelong learning opportunities for our alumni is a key ingredient of 'CUHK 2025'. It is part and parcel of the University's mission. In a fast-changing world, there is a growing need for acquiring new skills. In an ageing society, there is also a growing need for continued intellectual enrichment. The University takes seriously its responsibility in rendering support for its alumni in their ongoing learning journey.



Alumni engagement also aims to facilitate mutual support among alumni. This, too, is vitally important in an increasingly competitive world. Whether in providing business, investment or employment opportunities, in working together and helping one another our alumni stand to reap substantial benefit. Successful alumni communities come together to contribute to worthy causes that benefit society. Alumni give back to their alma mater in many ways. In giving generously their time and sharing their expertise

and experience with students, they help realize the vision and mission of the University. In supporting research and education, they contribute significantly to the continuing pursuit of excellence with purpose and responsibility.

Education and research are an investment in the future. Institutional advancement supports the University to achieve its goals. It is essential to the University's continued success. Public universities are particularly in need of philanthropic support, as government funding shrinks. It is for good reason that the top universities in the world devote much effort to advancement. By increasing awareness and engagement with various stakeholders, CUHK has maintained strong ties with its alumni, individual and corporate donors, as well as trusts and foundations that have provided the needed support for the University to lead into the future. This effort will continue under 'CUHK 2025'.

#### A Global CUHK Community

Over the last five years, CUHK has made great strides in broadening the reach and deepening the relationship with its alumni through:

- alumni associations and networks
- alumni events and programmes
- communication
- · database management

CUHK takes considerable pride in its active and extensive network of alumni associations, both locally and internationally. To date, there are 136 CUHK alumni associations, of which 90 are based in Hong Kong and the remaining 46 in 29 cities the world over. The number of CUHK alumni stands at over 240,000 today, over 90% of whom can be reached by either emails or postal addresses. That such a large proportion of alumni are still connected with the alma mater is a truly remarkable achievement by international standards.

CUHK alumni participate actively in many of the alumni programmes and events. For instance, the CUHK Alumni Homecoming, a signature event, draws an average of over 5,000 participants annually. In 2019, over 150 presidents and representatives of alumni

associations returned from all over the world to reunite on campus, which speaks volumes of the support of our alumni for their alma mater.

Alumni associations have long played a pivotal role in rallying the support of graduates. They organize countless events for alumni and students, in entrepreneurship, wellness and many other domains. They also galvanize support for giving back to the University. For example, two generous donations of HK\$10 million each were received by the University in 2019 from long-standing alumni supporters actively involved in the Convocation and The Federation of Alumni Associations of CUHK.

With the support of many alumni, to cite but one other example, the CUHK Alumni Torch Fund, established in 2014 to support the future development of the University, has now raised over HK\$8,400,000. In 2020, thanks to the effort of the Special Anniversary Classes Fundraising Committee of the CUHK Alumni Homecoming 2020, HK\$1,120,000 was added to the Fund, and as an initiative of the CUHK Alumni Torch Fund, the CUHK Entrepreneurs Alliance was formed, which exemplifies the mutual support among alumni and the strong support they provide to the University.

2018 marked a milestone in the development of alumni engagement for CUHK. The Vice-Chancellor and President, Professor Rocky Tuan, established the CUHK Vice-Chancellor's Global Alumni Advisory Board to garner the views of alumni on the strategic development of the University. The Board comprises 12 distinguished alumni who came from different fields and parts of the world, bringing with them a wealth of expertise and experience of immeasurable value.

Equally notable is the Distinguished Alumni-in-Residence Programme set up in the same year. The programme provides opportunities for outstanding alumni to return to the University to share their experience, insights and knowledge with students, alumni and staff. Seminars, masterclasses and social gatherings are organized to connect the distinguished alumni with members of the University community.



Signature events and programmes that invite and involve the alumni are held throughout the year, including the annual CUHK Alumni Homecoming, the CUHK Entrepreneurship Day, the CUHK Young Alumni Career Day, and the "Stay Strong Alumni Online Talk Series". This last deserves a special mention. Held at a time when COVID-19 was raging throughout the world, it had the support of seven major alumni associations. In addition to offering comfort and practical advice to alumni members, it also helped pave the way for the wider use of online applications to connect alumni around the world. In celebration of CUHK Homecoming 2020, talented alumni composed a special theme song, "The CU Heart and CU Mind". This is the first CUHK alumni homecoming theme song ever composed and reflects the strong sense of belonging our alumni have for the University. CUHK alumni are connected to the University and to each other by words and images that travel. The Chinese University Alumni Magazine delivers to all corners of the world news of the University as well as alumni updates and achievements. The quarterly celebrated its 100th issue in December 2019. Since June 2020, videos of magazine interviews have been released for more direct impact and farther reach. The "CU Global Activity List for Alumni" (CU GALA), a central calendar of events with enhanced digital features launched in 2016, and the use of social media have further helped to connect our alumni community.

The grand opening of the Alumni Associations Centre was celebrated by the University management and alumni leaders in 2018, signifying the staunch support of the University in promoting the further development of alumni engagement. It is heartening

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to note that the alumni leadership is mobilizing support for a CUHK Alumni Building, the successful completion of which will certainly mark another major milestone in the history of the University.

#### Current Trends and Future Challenges

The world was changing drastically even before the COVID-19 pandemic. Living in a time of rapid changes and unsettling disruptions, it is timely to rethink how we may better engage and what we may be able to offer to our alumni in the future.

The number of alumni has increased by nearly 360% from around 67,000 in 2000 to over 240,000 today. In the five years from 2016 to 2020 alone, 55,084 students graduated from the University. The number of alumni will continue to grow steadily over the next five years. How do we effectively engage this large and increasingly diverse group of stakeholders of the University?

Some 45% of our alumni graduated within the past 10 years, and the proportion of young alumni will continue to grow. It is equally important to note that our postgraduate alumni community is growing strongly. Alumni solely holding postgraduate degrees from the University account for 39% of the entire alumni community.

It is no secret that higher education and the job market have become increasingly regional or even global. CUHK graduates are well placed to excel in this environment, given the University's emphasis on global learning. Maintaining close and meaningful relationships with alumni over geographical distance is vital. In this regard, technological tools, online platforms and creative digital engagement strategies must be applied to further broaden the reach and effectiveness of alumni programmes and services.

Virtual events can result in profitable exchange between alumni and students, for example. With their wealth of expertise and experience, our alumni are a tremendous asset to advancing the educational goals of the University. They can serve as mentors and enhance the students' personal development and their chances of success in today's extremely competitive job market. Reciprocally, our students contribute to this mutually enriching relationship with their creativity and fresh insight. Virtual events, however, can never approximate in-person interactions in terms of the intensity of

emotion or the sense of attachment generated. Upon entering the New Normal, we need to think creatively and explore every possibility of virtual, in-person and "hybrid" or mixed-mode activities. Data analytics is an indispensable tool for understanding the correlations between different forms of alumni engagement to better design and improve alumni programmes, services and communications.

#### The 4 "Es" of Alumni Engagement

In the next five years, alumni engagement will be proactive and aligned with the goals of the University. The changing demographics demand that more targeted programmes will have to be devised, rendering obsolete any one-size-fits-all approach to alumni engagement. The set of strategies proposed here can be summarized as the four Es—Expand, Enrich, Enhance and Enlarge. They reflect the University's commitment to developing even stronger ties with its alumni.

Expand connections with alumni around the world, including local, mainland and overseas alumni communities, while strengthening ties with undergraduate and postgraduate alumni in diverse disciplines

Over 10,000 graduates joined the CUHK alumni family in 2020. To expand connections with alumni, engagement must start from day one when students join the University. The Colleges, the Faculties, the Graduate School and the academic Departments play a vital role in this effort. Different alumni segments do not necessarily share the same interests, although they are all strongly attached to their alma mater. Age is not the only differentiating factor. College and disciplinary affiliation, as well as undergraduate and postgraduate alumni groups all call for differentiated engagement strategies. While some engagement activities must be designed for the entire community, to cultivate a stronger CUHK alumni spirit, these will be complemented by innovative and targeted programming and communications.

Expanding connections with alumni means reaching out not only to new members or those who have not been actively involved, but also to our active alumni. The latter will be instrumental in raising the level of participation of all alumni and ensuring that contact details are kept up to date. Contact is the first point of engagement, and while technology platforms such as customer relationship management systems would help, the active involvement of alumni themselves in reaching out to other alumni can make a significant difference.

The University will also support the expansion of a global alumni network, particularly in strategic cities, and foster the development of local alumni associations. With the input and support of alumni associations, resources can be effectively deployed to develop differentiated engagement programmes, which will help further strengthen the University's ties with undergraduate and postgraduate alumni in diverse disciplines and with different College affiliations.

Enrich and foster a sustained sense of belonging, recognition and pride among alumni through an array of engagement events, communication, alumni associations and networks

A "CUHK Global Alumni Associations Reunion" will be planned as a flagship event for alumni from different parts of the world to gather in one strategic city to celebrate a CUHK milestone, to renew friendships and to forge new ones, and to launch new initiatives or pledges, building a larger and more closely connected network among alumni. Annual signature events such as the Young Alumni Career Week, the CUHK Alumni Homecoming, the CUHK Entrepreneur Day and the Yum Cha Luncheon Series, etc., will be refreshed with added programming features to raise the level of participation of alumni of different age groups and segments.

Digital news and communication will increasingly become the main medium for alumni engagement. The available tools, including social media, will be fully exploited to reach out to the alumni community. Alumni may be interested in learning from fellow alumni and faculty members their expert analyses on important issues; recognizing the contributions and achievements of alumni and other members of the University would be equally important; and other forms of sharing such as major alumni events and successes of the University will help to create a stronger bond between alumni and the

University, as well as among alumni. Going forward, content curation in communication will be a key success factor in alumni engagement.

In addition to cultivating alumni interest through digital communications, customized online engagement programmes will contribute to expanding and enriching alumni ties. These could include anniversary activities designed for specific graduating classes or College-based programmes. Leadership succession in alumni associations is also an important factor in building a strong alumni community. Engaged alumni will be encouraged to take on leadership roles. Orientation and induction programmes specially designed for new executive members of the alumni associations will also be conducted to help strengthen the alumni leadership.

Enhance valuable and positive interactions between alumni and students while capitalizing on alumni's talents, expertise, networks and resources to nurture students' whole-person development and learning experience

Alumni contribute to the growth of universities in many ways. A key objective of alumni engagement is to enlist their support to enhance the learning experience of our students. This will not only enrich student learning but also help nurture present students into future alumni leaders, in a virtuous cycle.

Under 'CUHK 2025', the University will make a concerted and coordinated effort to foster closer connection between alumni and students. Alumni involvement in student events and activities is an important measure of the strength of a university community. The presence of alumni serving as speakers and sponsors at student events, generously giving their time, providing financial support, and sharing their expertise and experience, creates a positive impact on the esprit de corps of the University, in addition to inspiring and enriching student learning.

Mentorship involves a more sustained relationship and students will benefit from having alumni serving as their mentors. The Alumni Affairs Office will facilitate matching students with alumni mentors to ensure fit and effectiveness. Effort at engaging alumni to provide employment and internship opportunities for students will

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also be strengthened. Such opportunities are increasingly important in a competitive economy.

To further develop alumni ties with students, the Distinguished Alumni-in-Residence programme and career-focused programmes such as the Young Alumni Career Week and the CUHK Entrepreneur Day should be enhanced. Similarly, the Alumni Affairs Office will work closely with other offices and units on involving alumni in the delivery of programmes.

With a sizeable number of alumni based overseas, the University will seek their support in international student recruitment as well as student exchanges and overseas study missions. For prospective students not familiar with Hong Kong, and CUHK students studying abroad, alumni contribution can be both meaningful and substantial.

Enlarge partnerships among different internal units to create greater synergy and stronger impact on alumni engagement

It takes a village to engage alumni successfully. The Colleges, the Faculties and the teaching Departments have all been stepping up in their alumni engagement efforts especially over the past few years. In the next five years, one important focus will be to better coordinate and increase collaboration among them, to serve a growing and increasingly diverse alumni community.

Mutually beneficial approaches will be adopted to identify new opportunities and to create unique and structured programmes for alumni to contribute their time and talents and strengthen their ties. The University will also apply AI and big data technology to enhance its database and customer relationship management. Harnessing the power of technology will be critical to meet the long-term development goals of the University, be they in alumni engagement, institutional advancement or other domains.

#### University Advancement in Support of Excellence with Purpose

The University faces considerable challenges in advancing its vision and mission due to increases in the student population, intense competition for talent in teaching and research, cost increases, and diminishing public funding. CUHK is certainly not alone in having to diversify its sources of funding support to provide high-quality education and conduct cutting-edge research. American universities have long been leaders in institutional advancement, but more recently universities in the UK, Australia, Singapore and Hong Kong have also intensified their fundraising efforts. To sustain human progress, investment in higher education and research must continue, especially at a time when the world is beset with so many pressing challenges.

CUHK has had some success in institutional advancement over the years. The number of new donors has been steadily, albeit modestly, increasing. Yearly average donations have also increased in recent years. The HKSAR government's Matching Grant Scheme has provided much needed impetus to encourage giving to institutions of higher learning. In 2018, under the eighth round of the Scheme, donations to the University have reached an encouraging new level. We hope that the Matching Grant Scheme will continue. As similar schemes in other countries have shown, this is an effective mechanism to increase university endowments.



The rising stature of CUHK, now among the best in the world, as the various university rankings have shown, has instilled a great sense of pride in all our members and

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friends. This is a direct consequence of the effort the University has put into developing research and education. It would not have been possible without the support of our donors and alumni, which has enabled the University to attract and retain top talent, enrich campus life, develop new programmes, upgrade infrastructure, and make other improvements, all of which are essential to building a world-class university that would make Hong Kong proud.

Giving comes in different ways, all of which contribute to the work of the University and for which we are grateful. For example, friends of the University have donated precious art works to the University's Art Museum. Alumni have given generously their time and expertise. Students and staff have volunteered to work on different university projects. In 2020, CUHK launched the CU RElief (CURE) Fund to support university members during the COVID-19 pandemic. With the heartwarming support of the community, more than 300 job and internship opportunities were created within two months. All of these, and the countless other examples that can be listed and should be acknowledged, point to the strong support given to the University from its members and the community at large.

In the next five years, the Institutional Advancement team will work closely with the Colleges, the Faculties and the Departments to further advance education and research at the University. There is a need to enhance our bursaries and scholarships, so that no deserving students will be deprived of a quality education. There is a need to develop endowed professorships, to ensure that we can attract the best and brightest to join Team CUHK. International study programmes also deserve support, as we aim to provide more global learning opportunities for our students, which would help them compete in a globalized economy.

Both major gifts and annual giving are important to the University's development. Without exception, the best universities in the world such as Harvard and Oxford have a strong academic culture supported by a culture of giving. This is what CUHK aspires to achieve, for the benefits of our students and to be able to continue to contribute to Hong Kong's development.

The University has a small but dedicated advancement team. The team is instrumental to reaching out to new donors as well as providing stewardship for existing donors. Regular progress updates, meeting with donation recipients, and other points of

connection are central to good advancement practices. Targeted and annual giving campaigns require careful planning and execution. While we are not in a position to build a large advancement team, which typically numbers in the hundreds in major US universities, the University will devote more resources to developing human capital and technology in the next five years to support institutional advancement. Technologies in communication and managing donor relations have proven to be helpful tools and should be exploited to enhance the University's advancement efforts.

#### CUHK Advancement in the Next Five Years

The challenges facing university advancement in the near to medium term are formidable. The impact of COVID-19 on economic growth will be painful and a quick recovery is unlikely. Personal contact was curtailed due to social distancing regulations. While the use of technology helps to mitigate the effect to some extent, personal contacts, e.g., between donors and bursary recipients, are far more meaningful. Competing demands from other organizations that equally deserve support such as hospitals and elderly care homes will impact university fundraising. Donor profiles and preferences are clearly evolving as well. Generational differences are to be expected, and donors generally identify with different causes that they feel passionate about. At the same time, the demand and cost of delivering higher education and research continue to rise. In this context, advancement efforts call for a carefully delineated strategy.

Both capital campaigns and targeted fundraising will play a role in the University's new advancement drive. The needs of the University and donor interests will be carefully mapped out and matched. Priority areas will be identified. The articulation of the University's vision will need to be sharpened, to connect better with foundations and benefactors.

The University will endeavour to expand its donor base. New prospective donors who share the vision and values of the University will be engaged, both within and outside Hong Kong. Mainland China represents a potentially significant source of support for university advancement, especially given our sizeable alumni presence in virtually all parts of the country. With the growth of the alumni community outside China, who can act as our ambassadors besides giving back to the University themselves, the potential

for advancement support in many other countries certainly should not be underestimated.

The University will also aim to cultivate a stronger culture of giving, while continuing its effort to pursue major gifts. Although typically 80% of the funds raised may come from 20% of the donors, as advancement research has shown, it is important to cultivate a culture of giving, which brings other rewards. For example, a student may be inspired to donate the cost of a cup of coffee to a charitable cause each week. Although the amount may not be large, the act of giving would help build ethical character and humane concern for others, the importance of which can hardly be measured in monetary terms.

Academic and administrative/professional staff giving is also important, as it shows the commitment of the entire community to advancing the work of the University and serves to set an example for others. The same applies to our alumni, who without a doubt form the largest pool of current and prospective supporters of the University. CUHK is truly fortunate in having the support of so many of our alumni. Over the next years, the advancement team and the Alumni Affairs Office will work closely together to cultivate an even stronger habit among our alumni of giving back to their alma mater and to sustain that generosity over not only their lifetime but also generations. With strong alumni support, indeed, the University can be assured that it is developing in the right direction and confident about its future.

In sum, under 'CUHK 2025', institutional advancement will seek to enhance the coordination and communication among different internal units to chart a coherent advancement strategy. Uncoordinated fundraising activities will reflect poorly on the University if different units seek support for their respective causes from the same donors at the same time.

The University will prioritize programmes and initiatives articulated in 'CUHK 2025' in its advancement efforts. Advancement programmes and events will be reviewed regularly and critically to ensure impact and effectiveness. Links will be strengthened and deepened with current donors and stakeholders through coordinated outreach and meaningful connection, while the University looks out for new opportunities to grow the donor base by engaging untapped philanthropic potential.

The eagerly anticipated 60th anniversary of CUHK in 2023 will be a momentous occasion. The University will be taking the opportunity of celebrating this landmark moment to draw new interest and support for its future initiatives. Several signature developmental projects and campaigns that will help build interest and support among our students, staff, alumni, benefactors and friends are being planned. These projects will highlight the University's accomplishments, current initiatives, and future goals, and more importantly inspire the wider community to join us in the journey to excellence with purpose and responsibility.

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# Embracing Social Responsibility for Sustainable Development



### 8. Embracing Social Responsibility for Sustainable Development

#### Contributing to a Better Future

As a responsible public institution, CUHK is committed to addressing society's greatest challenges and contributing to the well-being of the global community, through the integration of teaching, research and engagement. University social responsibility (USR) has been a driving force—albeit unacknowledged at times—of its strategies and will be at the forefront of its next five-year vision.

In fact, CUHK has been fulfilling its social responsibility and ensuring sustainable development in all its activities, as it discharges its functions in the creation, dissemination and innovation of knowledge, educating the youth and nurturing them as leaders in the globalized knowledge economy, exchanging knowledge that would impact society, developing and cultivating talent for the pursuit of excellence and engaging alumni and other stakeholders in the advancement of the institution.

CUHK takes a holistic approach to social responsibility, connecting and articulating its vision, goals and priorities to guide planning and management practices. We engage the University community throughout the process to ensure that all members understand and identify with the CUHK values and the quest for a sustainable and just world both for themselves and for those who follow in their footsteps.

### University Social Responsibility

"The term university social responsibility (USR) is explained as the capacity of higher education institutions (HEIs) to disseminate and implement a set of principles, general and specific values aimed at enhancing the educational and social challenges of the society through four key processes: management, teaching, research and extension."

Ramos-Monge, E. L. et al (2017). Universities as corporate entities: The role of social responsibility in their strategic management. In O. L. Emeagwali (Ed.), Corporate Governance and Strategic Decision Making (pp.199–215). IntechOpen, DOI: 10.5772/intechopen.69931.

#### Sustainable Development

"Development that meets the needs of the present, without compromising the ability of future generations to meet their own needs."

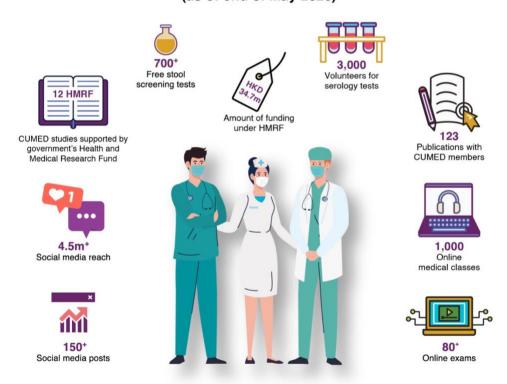
Brundtland, G.H., (1987). Report of the World Commission on Environment and Development: Our Common Future. United Nations General Assembly document A/42/427.

Universities are centres of knowledge discovery, dissemination and transfer, and play a key role in sustainable development. Over the years, CUHK has been among the most socially responsible and an actively engaged campaigner for the purposes of sustainability. The following are but some examples of this concerted effort.

#### How CUMED Takes on COVID-19

The Faculty of Medicine of CUHK is at the frontline in the fight against COVID-19. Their scholars and researchers have made contributions on all fronts: analyzing and testing the virus, advising the government on the science of the pandemic and the strategies of controlling the spread, informing the public on how to stay healthy, and building the portal "CUMED on COVID-19" to greatly extend the scope and reach of the Faculty's engagement.

## COVID-19 in Numbers (as of end of May 2020)



(Adapted from: CU Medicine: The Inauguration Issue)

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#### Climate Change Education in Museum

Education is essential to the formulation of an effective global response to climate change, which determines the University's ability to achieve sustainable development. In 2013, the world's first museum of climate change was established at CUHK with a generous donation of The Hong Kong Jockey Club Charities Trust. The CUHK Jockey Club Museum of Climate Change (MoCC) offers free access to an interactive, multimedia exhibition that showcases valuable collections and the latest information about climate change. It also takes the exhibits to the community through "Mobile MoCC", a mobile mini-museum composed of portable and easy-to-set-up modular structures. "Mobile MoCC" gives a taste of what a visit to the actual museum would entail and has successfully sparked wider interest in climate change in the general public.

MoCC strives to promote positive changes in knowledge, attitudes and behaviour in relation to climate change among members of the public. The museum aligns this mission with a range of educational activities including "Initiative Gaia" (2012–2017) and "Climate Action" (2017–2021) to help people better understand the potentially devastating effects of climate change and to encourage them to propose solutions and take actions to meet the threats.

Since its inception, the museum has attracted donations and funding of HK\$107.4 million and served over a million exhibition visitors. MoCC has become an integral part of CUHK's vision of working hand-in-hand with the community in building a sustainable future for Hong Kong.

#### Think Global: Towards Sustainable Development Solutions

The quest for sustainability is a universal endeavour, in which local communities around the world must all play their parts. To integrate Hong Kong into the wider global community and allow the city to benefit from solutions to contemporary challenges developed elsewhere in the world, the Hong Kong Chapter of the United Nations' Sustainable Development Solutions Network (SDSN Hong Kong) was officially inaugurated in January 2018 on CUHK campus.

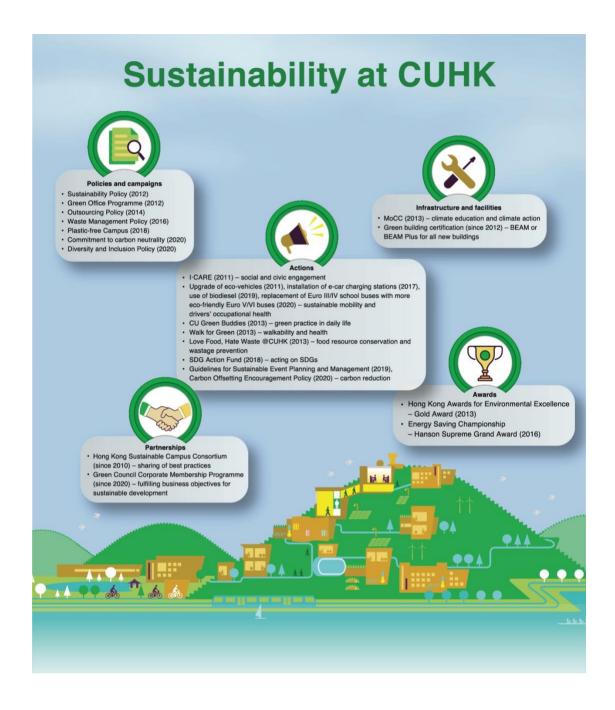
In December 2018, SDSN Youth Hong Kong was launched to raise awareness among young people of the 17 Sustainable Development Goals (SDGs), to enable youth groups to exchange ideas with experts in different fields of sustainability, and to encourage them to champion the cause of sustainable development by exploring innovative solutions to the social, environmental and economic challenges facing Hong Kong.

Co-hosted by CUHK and The Hong Kong Jockey Club Charities Trust, SDSN Hong Kong aims to mobilize universities, research centres, knowledge institutions, civil society organizations and businesses to focus on practical problem-solving for sustainable development, and to localize and advance the SDGs. The Hong Kong chapter is governed by a leadership council composed of experts and community leaders. The leadership council has identified SDG 3: Good Health and Well-being, SDG 4: Quality Education, SDG 12: Responsible Consumption and Production, and SDG 13: Climate Action as most relevant to Hong Kong, which will underpin SDSN Hong Kong's work plan to achieve those goals.

#### Act Local: Leading Sustainability by Action

In 2000, CUHK was the first local tertiary institution to conduct a campus environmental audit. In 2010, the University adopted the Campus Master Plan that set out what it needed to do to build a sustainable campus. Since then, policies and programmes have been implemented that place sustainability at the centre of university life. The various policies, programmes and actions are summarized in the table below.

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CUHK has changed the way it operates now. It has also striven to ensure that every member of the University appreciate what it is doing, and why it is doing it. CUHK students, faculty and staff now vie to contribute ideas for incorporating sustainability into their work and daily lives.

#### Five-year Goals

The next five years is a time of transformation. CUHK aims to establish itself as the premier university embracing social responsibility for sustainable development. The CUHK community espouses the values of people, social, and environmental and economic harmonies in the pursuit of sustainable development, and it is determined to make a difference.

Values and USR Goals

#### People harmony **USR Goal 1** To improve public health through preventive healthcare research and outreach **USR Goal 2** To increase equal access to and the impact of quality education through creativity and technology **USR Goal 3 USR Goal 4** To pursue climate action and commit to To promote diversity, inclusion and partnerships through understanding the ambition of carbon neutrality by 2038 and respect **USR Goal 5** To advocate responsible processes by setting standards and creating scalable solutions

The University has set for itself concrete sustainable development targets in alignment with the United Nations' SDGs, which apply to all areas of the University's endeavours. The SDGs are interconnected, and the progress of one goal will directly or indirectly facilitate that of the others. We have built into our education curriculum contents that present relevant and actionable knowledge for our students, cultivating the spirit of USR and helping them to fulfil their duties as global citizens. All 17 SDGs are addressed by some 40 general education courses as well as courses offered by various Departments across the eight Faculties.

CUHK professors and researchers are actively generating innovative and impactful knowledge for sustainable development through their research and innovation. Their work positively impacts society and creates new opportunities for socioeconomic development. Through interdisciplinary innovation in international initiatives, our researchers strive to contribute to the resolution of global grand challenges, from tackling climate change to building healthy, smart and sustainable communities, and

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from fighting poverty and inequalities to building partnerships and institutions for peace and justice.

#### A Portfolio to Success

The following three overarching strategies will guide the University's pursuit of the five USR goals:

- Promoting research impact for sustainable development
- Nurturing socially responsible future leaders
- Partnering communities in action

The USR portfolio outlines the initiatives and action plans guided by these strategies and focuses resources on relevant SDGs and achievable accomplishments in order to maximize impacts and efficiency.

#### **USR Goal 1**

To improve public health through preventive healthcare research and outreach.







The COVID-19 pandemic has levelled us all. Viruses do not discriminate and put everyone in danger. We must work together to significantly improve public health. CUHK researchers have been working tirelessly to combat the pandemic, and they will continue the effort in influencing and informing public policy and translating their research into action and engagement for better health returns.

The establishment of the Institute of Health Equity, in collaboration with University College London, in 2019 seeks to promote policy-oriented research to improve access to quality healthcare services and effective and affordable essential medicines and vaccines by all. CUHK students will be offered experiential learning and service learning opportunities to reach out to the community to advocate preventive health care and well-being focusing on a variety of themes, from ending substance abuse to increasing resilience to diseases and disasters. In addition to the programmes offered

by the Faculties, the Colleges will provide more opportunities in service learning for their students.

#### **USR Goal 2**

To increase equal access to and the impact of quality education through creativity and technology.





Quality education determines the quality of life, and whether and how we may create a sustainable future. The more knowledge institutions are able to employ technologies creatively to facilitate public access to educational resources, the more hope we can see lying ahead. In addition to providing quality education, both face-to-face and online, to all its students, CUHK stands ready to undertake educational outreach activities, including online lectures and events, beyond the campus to promote lifelong learning in the community. Embracing learning without boundaries, we will engage learners from around the world via a broad variety of Massive Open Online Courses (MOOCs), the SDG Academy of the United Nations' Sustainable Development Solutions Network and a new form of student exchange, the virtual student exchange programme run with strategic partners including those in the Association of Pacific Rim Universities. A firm believer of social inclusivity, CUHK will explore collaborations for organizing flexible and easily accessible teacher training which is currently lacking in developing countries. In full realization that those underprivileged communities' use of educational technologies and how much they benefit from them depend on their digital literacy and access to the technologies in the first place, CUHK will be eager to offer assistance by capitalizing on the opportunities available through its international networks of partners.

#### **USR Goal 3**

To promote diversity, inclusion and partnerships through understanding and respect.





Differences in ethnicity, culture, religion, political belief, gender, sexual orientation and physical ability may pose considerable challenges to constructive interactions and collaborations among people. CUHK strives to create and maintain an inclusive

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community that respects and cherishes differences. The University has developed a Diversity and Inclusion Policy for implementation by a dedicated office to achieve this goal.

Under 'CUHK 2025', CUHK will make its campus environment inclusive for all, by including the provision of facilities that are age, gender and ethnicity sensitive. We will enable all members of the University in the acquisition of knowledge and skills needed for advocacy for human rights, gender equality, cultural diversity and a culture of peace and tolerance. We will present our students with ample opportunities to be ethically and socially informed of the global challenges in sustainable development and support them to address such challenges through partnerships as well as service learning and volunteering.

The University believes in social inclusivity, that every CUHK member deserve equal access to opportunities that facilitate the full realization of his/her potential. We will define and identify the under-represented groups on campus and provide them with the resources and support needed for them to succeed. We will contribute to improve the learning opportunities available for students with special educational needs and disabilities by, for example, the provision of an online platform with free speech training by the Centre for Sign Linguistics and Deaf Studies. We will make use of the results of our policy-oriented research to reduce inequalities in opportunities and outcomes.

#### **USR Goal 4**

To pursue climate action and commit to the ambition of carbon neutrality by 2038.





Scientists have declared an emergency over the climate crisis. Urgent actions and innovative solutions are called for. Alongside the pledges of mainland China and Hong Kong to advance to net zero carbon emissions by 2060 and 2050, respectively, CUHK is making a commitment to the achievement of carbon neutrality by 2038.

Universities always have room for experimentation; potential solutions to climate challenges can be tested on campus and scaled for application in the larger society, or they may lend insight to other initiatives. Researchers from the Faculties of Engineering, Medicine, Science and Social Science are committed to advancing their

multidisciplinary research impacts in the field of climate change and sustainability across multiple domains ranging from public health and health care to politics and government, and from architecture and engineering to sociology and economics.

The University is aware that laboratories produce hazardous waste and consume much energy and water, and will learn from the world's best practices in maximizing the safety and sustainability of laboratories. To reduce the University's carbon footprint, we will invest knowledge and resources to renew and enhance the infrastructure and improve the operational processes to make the campus even more climate-friendly. We will nurture future sustainability leaders by bringing the students together to share ideas and act on the imperative to address climate change. We will reach out to the wider community through our flagship initiatives such as MoCC to initiate, inspire and support climate actions.

#### **USR Goal 5**

To advocate responsible processes by setting standards and creating scalable solutions.





A sustainable economy is an inclusive economy that offers equitable opportunities for decent work. CUHK will share its work, such as that done by the Centre for Business Sustainability, to promote policy-oriented research to help achieve sustainable economic growth and develop sustainable tourism which will create meaningful and gainful employment.

In collaboration with industry, entrepreneurship and innovation for scalable solutions to address different SDGs will be developed. There is a need to experiment and encourage moving towards more sustainable patterns of consumption and production and share the solutions with others. The University will regularly review and update its policies and practices in sustainable and responsible procurement to maximize the positive social, environmental and economic impacts of the related production and consumption activities.

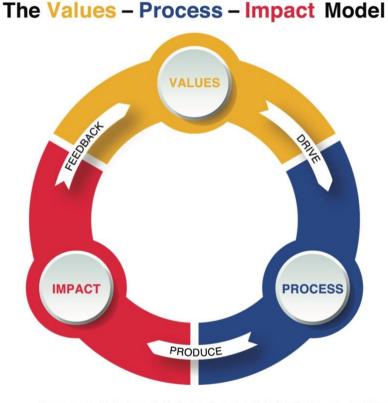
As a public institution of higher learning, CUHK does not take its ethical responsibility lightly. It will ensure strict compliance with the rules and guidelines that set the highest ethical standards in all of its processes and activities, including fair admissions, equal

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opportunity employment, research integrity, intellectual property, outside practice, declaration of interests and acceptance of gifts. Every effort will be made to cultivate a culture of ethical responsibility and accountability that pervades the University and guides all the choices and activities we undertake in pursuit of excellence with purpose and responsibility.

#### Measuring and Communicating Success and Impact

How do we know if we have made a difference? CUHK will evaluate rigorously its efforts in embracing USR, to gain a deeper understanding of the complexity of USR vis-à-vis sustainable development, and accordingly and incrementally adjust the strategies and action plans to maximize their impact. We will collect longitudinal impact data via a dedicated e-platform and, based on a Values–Process–Impact model (see below), track our performance in delivering the five USR goals by the three overarching strategies in relation to research impact, socially responsible graduates, and community outreach and cooperation.



(Source: Lo, C. W. H., Pang, R. X., Egri, C. P., & Li, P. H. Y. (2017). University Social Responsibility: Conceptualization and an Assessment Framework. In *University Social Responsibility and Quality of Life* (pp. 37–59). Springer Singapore.)

The University will measure success and impact in qualitative terms, with reference to the benefits that a socially responsible university is expected to achieve, including student identity, employee commitment, governance and processes, finance performance, corporate image and reputation, competitiveness in talent attraction, and social impact. We will also look at the USR numbers achieved under each of the five USR goals.

With an aspiration to create innovative solutions that address all the 17 SDGs, in particular those most relevant to Hong Kong, CUHK will critically review its progress and achievements in accordance with objective assessment frameworks, such as the Times Higher Education University Impact Rankings and the Hong Kong Green Council's Corporate Membership Programme. The process will involve evidence collection, self-reflection, assessment and reporting, with feedback to the design of our SDG endeavours and action plans.

For effective communication of its USR effort, progress and accomplishments, the University will launch a dedicated website and explore the use of other media platforms. We will communicate and engage with stakeholders by publishing annual reports summarizing the assessments on our USR performance and our contributions to the SDGs. The University will make a dedicated effort in organizing meetings, virtual or inperson, and involving our international partners, to encourage constructive dialogues on shaping our pathways towards sustainable development.

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#### **Appendices A: Planning Process**

The process to develop a new strategic plan for 2021–2025 started in early 2020 with the establishment of a steering committee chaired by the Vice-Chancellor and President. At the same time sub-groups led by the Provost and Pro-Vice-Chancellors were formed to focus on seven areas, namely, Education, Student Experience, Research and Innovation, Talent Attraction and Development, Global Engagement, Alumni Engagement and Institutional Advancement, and Social Responsibility and Sustainable Development.

The launch of the online platform for views solicitation marked the beginning of year-long efforts to engage various stakeholders for development of the Strategic Plan. Focus group discussions were organized through the Sub-groups to ensure both breadth and depth in the coverage. Four town hall meetings in October 2020 were conducted online in spite of the pandemic, which were well attended by staff, students and alumni, with fruitful exchanges. The recommendations were thereafter further elaborated by the Sub-groups for consolidation under the main theme of "Excellence with Purpose and Responsibility".

A University Strategic Planning Workshop with participants comprising members of the Council, Administrative and Planning Committee, Strategic Plan Steering Committee and Sub-groups, senior management, faculties and students was held on 15 January 2021. At this whole day event the Strategic Plan was thoroughly covered by breakout sessions on respective topics after an overview, closing with group presentations for wrap-up. The plan was further refined based on the invaluable input received, and then aligned into a coherent document for final consultation with the stakeholders again.

The development of the Strategic Plan has benefited significantly from the above iterations during which various options were explored and identified. Implementation proposals with further details will be drawn up along the way to see to the realization of the strategic directions enumerated in the plan by phases.

# Appendices B: Steering Committee and Sub-group Memberships

#### **Steering Committee**

- Professor Rocky TUAN, Vice-Chancellor and President (Chairperson)
- Professor Alan CHAN, Provost
- Professor Tai-fai FOK, Pro-Vice-Chancellor (External Affairs and Institutional Advancement)
- Professor Isabella POON, Pro-Vice-Chancellor (Education)
- Professor Dennis NG, Pro-Vice-Chancellor (Student and Alumni Affairs)
- Professor Wai-yee CHAN, Pro-Vice-Chancellor (Strategic Developments)
- Professor Mai Har SHAM, Pro-Vice-Chancellor (Research)
- Mr. Eric NG, Vice-President (Administration)
- Professor Suk-ying WONG, Associate Vice-President
- Professor Daniel LEE, Associate Vice-President (Innovation and Enterprise)
- · Professor Nicholas RAWLINS, Master, Morningside College
- Professor Lutz-Christian WOLFF, Dean, Faculty of Law
- Dr. Maggie KOONG, Lay member of the Council
- Ms. Kitty Yu, Registrar (Secretary)

#### **Sub-group on Education**

- Professor Isabella POON, Pro-Vice-Chancellor (Education) (Chairperson)
- Professor Anthony CHAN, Dean, Graduate School and Master, Wu Yee Sun College
- Professor Cindy SIT, Associate Dean (Undergraduate Studies), Faculty of Education
- Professor Jimmy LEE, Associate Dean (Education), Faculty of Engineering
- Professor Jiang XU, Associate Dean (Academic), Graduate School

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- Professor Mei-yee LEUNG, Director, Office of University General Education
- Professor Gladys TANG, Chairperson, Senate Committee on Language Enhancement
- Professor Jimmy YU, Head, United College
- Professor Cecilia CHUN, Director of Centre for Learning Enhancement and Research
- Professor Irwin KING, Director, Centre for eLearning Innovation and Technology
- Professor Andy WONG, Co-director, Minor Programme in Entrepreneurship and Innovation
- Professor Sek-ying CHAIR, Professor, The Nethersole School of Nursing
- Ms. PEI Fanhui, Internal Vice-President, Postgraduate Student Association
- Mr. HO Ho Kan Nicholas, Student Senator, Faculty of Arts
- Ms. Sally CHING, Head, Academic and Quality Section, Registry (Secretary)

#### **Sub-group on Student Experience**

- Professor Dennis NG, Pro-Vice-Chancellor (Student and Alumni Affairs) (Chairperson)
- Professor Raymond CHAN, University Dean of Students
- Professor Wing-ping FONG, Head, Chung Chi College
- Professor Anthony CHAN, Dean, Graduate School and Master, Wu Yee Sun College
- Professor Andy WONG, Associate Dean (Undergraduate Studies), Faculty of Business Administration
- Professor Stephen WONG, Professor, Department of Sports Science and Physical Education
- Professor Suzanne SO, Associate Professor, Department of Psychology
- Professor Donna CHU, Associate Professor, School of Journalism and Communication
- Ms. Irene NG, Director, I-CARE Centre for Whole-person Development

- Ms. Anson YIP, Chairlady, Chinese University Student Union Representative Council
- Mr. Jacky SO, Member, Chinese University Student Union Provisional Executive Committee
- Ms. Agnes HO, Director of Student Affairs (Secretary)

#### Sub-group on Research and Innovation

- Professor Mai Har SHAM, Pro-Vice-Chancellor (Research) (Co-Chairperson)
- Professor Wai-yee CHAN, Pro-Vice-Chancellor (Strategic Developments) (Co-Chairperson)
- Professor Daniel LEE, Associate Vice-President (Innovation and Enterprise)
- Professor Benny ZEE, Director, Office of Research and Knowledge Transfer Services
- Professor Ying-yi HONG, China Studies Strategic Area Coordinator
- Professor Dennis LO, Translational Biomedicine Strategic Area Coordinator
- Professor Hon-ki TSANG, Information & Automation Technology Strategic Area Coordinator
- Professor Mei-po KWAN, Environment & Sustainability Strategic Area Coordinator
- Ms. Norris LIU, Assistant Director for Research Administration, ORKTS (Secretary)

#### **Sub-group on Talent Attraction and Development**

- Professor Alan CHAN, Provost (Chairperson)
- Professor Teresa KUAN, Associate Professor, Department of Anthropology
- Professor Darwin CHOI, Associate Professor, Department of Finance
- Professor Cindy SIT, Professor, Department of Sports Science and Physical Education
- Professor Ni ZHAO, Professor, Department of Electronic Engineering
- Professor Rehan ABEYRATNE, Associate Professor, Faculty of Law

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- Professor Yun-kwok WING, Professor, Department of Psychiatry
- Professor Fuk-yee KWONG, Professor, Department of Chemistry
- Professor Michael SONG, Professor, Department of Economics
- Ms. Alien WONG, Faculty Secretary, Faculty of Business Administration
- Mr. Kenny HO, Senior Human Resources Manager, Human Resources Office
- Ms. Margaret KOO, Senior Manager, Provost's Office (Secretary)

#### **Sub-group on Global Engagement**

- Professor Tai-fai FOK, Pro-Vice-Chancellor (External Affairs and Institutional Advancement) (Chairperson)
- Professor Wai-yee CHAN, Pro-Vice-Chancellor (Strategic Developments)
- Professor Suk-ying WONG, Associate Vice-President
- Professor Max TANG, Dean, Faculty of Arts
- Professor Lin ZHOU, Dean, Faculty of Business Administration
- Professor Anthony SO, Associate Dean (Student Affairs), Faculty of Engineering
- Professor Irwin KING, Director, Centre for eLearning Innovation and Technology
- Professor Chao XI, Associate Dean (Research), Faculty of Law
- Professor Philip CHIU, Associate Dean (External Affairs), Faculty of Medicine
- Professor Hoi-ying WONG, Associate Dean (Student Affairs), Faculty of Science
- Ms. Shally FAN, Director of Academic Links (Member & Joint Secretary)
- Ms. Wing WONG, Director of Academic Links (China) (Member & Joint Secretary)

#### Sub-group on Alumni Engagement and Institutional Advancement

 Professor Tai-fai FOK, Pro-Vice-Chancellor (External Affairs and Institutional Advancement) (Co-Chairperson)

- Professor Dennis NG, Pro-Vice-Chancellor (Student and Alumni Affairs) (Co-Chairperson)
- Professor Suk-ying WONG, Associate Vice-President
- Professor Anthony CHAN, Dean, Graduate School and Master, Wu Yee Sun College
- Mr. Enders LAM, Chairman, Convocation of The Chinese University of Hong Kong
- Ms. Doris FUNG, President, The Federation of Alumni Associations of The Chinese University of Hong Kong (2019/20)
- Ms. Salome LAM, Bursar and Director of Finance
- Ms. Lavender CHEUNG, Director of Communications and Public Relations
- Mr. Daniel CHENG, Director, Alumni Affairs Office (Member & Joint Secretary)
- Mr. Michael LAU, Manager, Office of Institutional Advancement (Member & Joint Secretary)

#### Sub-group on Social Responsibility and Sustainable Development

- Mr. Eric NG, Vice-President (Administration) (Chairperson)
- · Professor Ying-yi HONG, Choh-Ming Li Professor of Management
- Professor Mei-po KWAN, Choh-Ming Li Professor of Geography and Resource Management
- Professor Sunny KWONG, Associate Professor, Department of Economics
- · Ms. Candice LAM, College Secretary, Shaw College
- Ms. Salome LAM, Bursar and Director of Finance
- Professor Darwin LAU, Assistant Professor, Department of Mechanical and Automation Engineering
- Professor Carlos LO, Professor, Department of Government and Public Administration
- Professor Amos TAI, Associate Professor, Earth System Science Programme
- Mrs. Cecilia LAM, Director, Social Responsibility and Sustainable Development Office (Member & Secretary)

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