



The Chinese University of Hong Kong

Commercialization of Interactive Weight Bearing Exercise Platform

In August 2010, 40 prototypes of the Interactive Weightbearing Exercise Platforms (iWE Platform) developed by Professor LEUNG Kwok-Sui of the Department Orthopaedics and Traumatology were deployed to 18 community centers in Hong Kong. The iWE Platforms will also be commercially available by the end of 2010.



(from left to right) Mr. WM Sung, CEO of V Health Ltd; Ms. Alice Ngan, Director of Technology Licensing Office; Ms. Chan, Director of Evangelical Lutheran Church Shatin Multi-Service Centre for the Elderly; and Professor KS Leung, Department of Orthopedics and Traumatology

Affordable Exercise Platform

Interactive Weightbearing Exercise is a kind of mechanical stimulation to induce musculoskeletal system to respond actively and has been proven as a treatment and prevention of some age-related problems of bone and muscle weakness. Breakthrough technology developed by Professor Leung and his research team places this valuable resource within the reach of community consumers.

Elderly at Risk

Osteoporosis is a disease of bones that leads to an increased risk of fracture. It is very common among the elderly, esp. postmenopausal women. The fractures often occur in the hips and wrists, as a result of fall. These fractures may affect mobility or even cause mortality.

Weakening of the bones is not the only factor that increases the risk of fracture in the elderly. Muscle weakness and slow response time also contribute to balance difficulties thus increasing the risk of falls. Widespread inactivity and lack of weight-bearing exercise among the elderly is a major cause of such muscle-related degeneration.



Proven Benefit

A wealth of scientific data has demonstrated the effectiveness of Interactive Weightbearing Exercise in reducing these risks of fracture. A few groups of researchers, including experts at the University, have found improvement in bone mineral density after a period of daily treatment with the exercise platform. Even more significant is the beneficial effect on muscle tone and their response time. These multi-factorial effects on both bone and muscle have proven positive functional outcomes for elderly users. Clinical trials have also shown a potential advantage for patients' recovery from fractures, as well as the improvement in balancing ability and bone quality of postmenopausal women. User only needs to stand on the platform for 20 minutes for each session of treatment, which most people, including elderly can easily cope with.

Commercialization by the Technology Licensing Office

The Technology Licensing Office ("TLO") worked closely with the team in the patent application and commercialization process. The research team was successful in securing funding from the University Patent Committee's Seed Fund in 2009 to speed up the development of the research prototypes of platform.. The TLO is pleased that the technology has since been successfully licensed to V-Health Ltd, a Hong Kong company with manufacturing base in China and it is also attracting interest from overseas companies.

Benefit to CUHK Staff and students

The iWE Platform will be launched in Hong Kong in the 4th quarter of 2010. University's staff and student will enjoy special discount offered by V-Health Ltd. For more information on the iWe Platform, patent application, technology transfer and the Seed Fund, please contact the Technology Licensing Office at 2609 8884.