# The Tai Chi solution to balancing problems

ai Chi has for generations been a popular sport among Chinese, particularly among the elderly. Scientific studies at PolyU have found that Tai Chi can effectively help elderly people to better their balance control.

Principal Investigator Prof. Christina Hui-Chan, Chair Professor and Head of the Department of Rehabilitation Sciences, explained, "Since the practice of Tai Chi involves a lot of turning movements, weight transfer and even single leg stand, its repeated practice could result in improved balance control."

Using Computerised Dynamic Posturography, Prof. Hui-Chan and her PhD student Mr William Tsang Wai-nam carried out two inter-related studies to examine

the effectiveness of Tai Chi in improving balance control of the elderly.

The first study showed that Tai Chi practitioners with more than seven years of experience had significantly better composite equilibrium score and vestibular ratio than non-Tai Chi practitioners.

But how long does one need to practise in order to gain the desired results? The second, more recent study focused on healthy elderly subjects who have never practised Tai Chi before. The



A technician conducting a balancing test.

results showed that two months of intense Tai Chi practice was sufficient to improve balance control of the elderly.

In this study, a group of 13 elderly people were trained in Tai Chi for 90 minutes six times a week for two consecutive months. They scored 18 per cent higher in balancing tests than a group of nine elderly people who did no exercise, showing less body sway and smoother movements. The results gained were even comparable to seasoned Tai Chi practitioners with seven years of experience. In addition, the effects were maintained within the Tai Chi group even one month after the training has stopped.

Overseas research has shown that 25 to 35 per cent of elderly people aged over 65

fall once or more each year. The control of balance is known to decrease with increasing age, due possibly to degeneration in the sensori-motor systems responsible for balance control.

To prevent potential sufferings and injuries from such falls, Prof. Hui-Chan urged that Tai Chi should be promoted as an effective and low-cost, community-based fall prevention programme for the elderly.

The Tai Chi researches were conducted under the auspices of the Centre for East-Meets-West in Rehabilitation Sciences, which has been designated by the University as an Area for Strategic Development with potential to move into a position of pre-eminence in Hong Kong and in the international arena.





## **Major conferences and seminars**

### Marketing Symposium 2002

Themed "Knowledge Driven Marketing", the Marketing Symposium of 4 January explored how knowledge management enhance the practice of marketing. The keynote speaker was Mr Frederick Ho, Commissioner for Census and Statistics of the HKSAR Government. The event has been organised by the University's Department of Business Studies for the eighth consecutive year.



### Seminar on China's Accounting Standard

Senior mainland government officials addressed key issues related to the future of accounting on the Chinese mainland at a seminar jointly organised by PolyU's Department of Accountancy and the Hong Kong Society of Accountants on 5 January.



#### Game Technology Conference 2002

Based at PolyU, the Hong Kong Digital Entertainment Association hosted the Game Technology Conference, entitled "The Greater China Computer Game and Video Game Summit" from 16-19 January. The event brought together companies and experts from the Chinese mainland, Hong Kong and Taiwan to address issues about the development of video and computer game industry in Greater China.

### International Forum on Role of the Universities in the 21st Century

Organised by the University's Department of Electrical Engineering on 5 March, guest speakers from the US and Switzerland were invited to share their views on the future role of universities. Prof. Philip Yeung Kwok-wing, PolyU Vice President (Academic Development), gave a presentation entitled "Challenge for PolyU: How are we coping?"

### Symposium on Project Management

The Research Centre for Construction and Real Estate Economics of the Department of Building and Real Estate held the symposium "Project Management - Impresario of the Construction Industry" from 22-23 March. The meeting was opened by Dr Cheng Hon-kwan, Chairman of Hong Kong Housing Authority, and Prof. Suleyman Demokan, PolyU Vice President (Research Development).

