

Anti-cancer properties found in Chinese herb

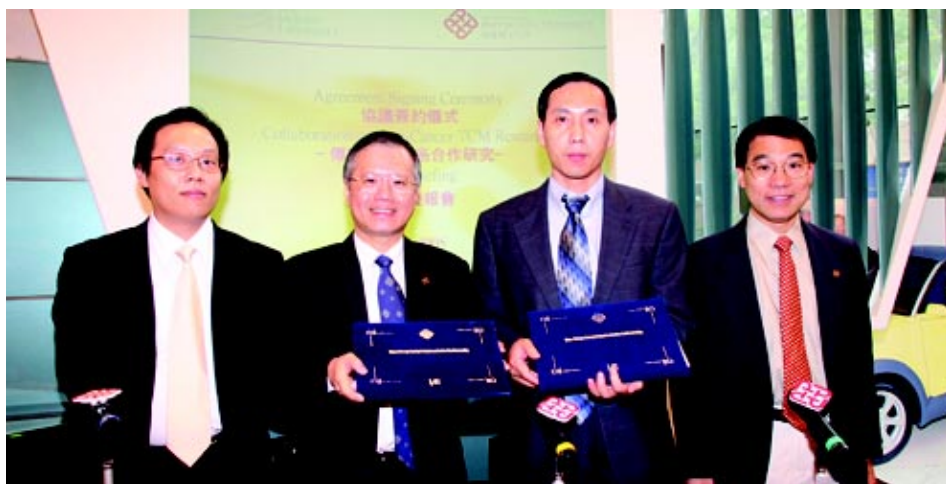
A recent study conducted by PolyU researchers has proved that extracts of the Chinese herb

Gleditsia sinensis (皂莢) can significantly inhibit the growth of leukemia cells and certain human solid tumors, including those

of leukemia, breast cancer and nasopharyngeal carcinoma. The results have been published in several authoritative journals including the *International Journal of Molecular Medicine* (March 2005).

To further explore the future use of this Chinese herb in relation to its anti-cancer properties, the Department of Applied Biology and Chemical Technology (ABCT) has joined force with the Jackson Laboratory to conduct animal testing and other related mechanistic studies. The study has been supported by the Peking University, Chinese University of Hong Kong and the Prince of Wales Hospital.

The Jackson Laboratory, founded in 1929, is one of the 21 cancer centres designated by the US National Cancer Institute. ❖



(From right) Prof. Albert Chan Sun-chi, Member of the Chinese Academy of Sciences and Dean of PolyU's Faculty of Applied Science and Textiles; Dr Li Shaoguang, Associate Staff Scientist of the Jackson Laboratory; Dr Lui Sun-wing, PolyU Vice President; and Dr Tang Cheuk-on, Lecturer of ABCT.

Better care for Alzheimer's patients

Sharing a common concern over the issue of elderly health in the local community, PolyU and Hong Kong Alzheimer's Disease Association (HKADA) recently signed an agreement to advance research and services related to the diagnosis and management of Alzheimer's disease, and to provide better care and services to the patients.

With the rapid development of information technology, the use of the Internet has played an increasingly important role in the promotion of health. The collaboration between PolyU's Telehealth and Telecare Centre and HKADA thus helps advance the research and services for the disease, not only through the exchange of expertise and experience, but also the application and development of telehealth.



The agreement was signed by Prof. Nelson Chow Wing-sun, Chairman of Advisory Steering Committee of HKADA (left), and Prof. Thomas Wong, Dean of FHSS.

The collaborative projects concerned include the development of a wandering and lost person registry system for dementia patients and the promotion of early detection service for mild cognitive impairment and early dementia. ❖



An elderly lady presents flowers to Ms Salina Yan, Deputy Secretary for Health, Welfare and Food (Elderly Services and Social Security), to thank her for officiating at the ceremony.

Anti-counterfeiting solution for premium fashion products

Using advanced Radio Frequency Identification (RFID) technology, researchers of the Institute of Textiles and Clothing (ITC) have developed a high security anti-counterfeiting system for use with premium fashion products and accessories.

The high security level is achieved by developing encryption on up to 96-bit computing platform, which is more compact than common RFID systems running on 64-bit platform. In designing the system, researchers Dr Allan Chan, Dr Patrick Hui and Mr Kirk Wong have made use of a “smart chip” embedded in an RFID tag measuring only 0.25 square millimetre in size.

The tag, which contains tiny antenna to transmit and receive useful data such as product codes and IP owner identification, can be built in with premium fashion products during the manufacturing process. The RFID system is ideal for brand owners, industry distributors and retailers who are concerned with protection of intellectual property. ❖



Led by Dr Allan Chan (right), the research team demonstrates that RFID can be implemented in handbags and shoes as an anti-counterfeiting solution for premium fashion products.

Applying RFID in pharmaceutical production



This summer, PolyU's Industrial Centre collaborated with Siemens to offer four trainees from the Department of Mechanical Engineering the opportunity to design and produce a Pharmaceutical Production Line Model as their training project.

By applying and integrating RFID, machine vision, industrial communication network and controllers into a pharmaceutical production line in an innovative way, the four students together won a \$6,000 book coupon under the Siemens Student Award Programme – Automation System Applications Design. ❖

Projects win support from Construction Industry Institute-Hong Kong

A close partner of PolyU, the Construction Industry Institute-Hong Kong (CII-HK), recently lent their support for two of our research projects:

Safety involving Work at Height for Residential Building Repair

Having identified the fall of persons from height as a major problem in construction projects, the study is launched to improve construction safety involving work at height for residential building repair and maintenance works. The research team is led by Associate Head Prof. Albert Chan and Head Prof. Francis Wong of the Department of Building and Real Estate.



The agreement was signed by Mr Otto Poon, Member of Executive Board of CII-HK (fourth from left), and Prof. Ko Jan-ming, PolyU Vice President (third from left).



Mr Thomas Kwok, Chairman of the Working Group on Construction Site Safety and Employees' Compensation Insurance of the government-appointed Provisional Construction Industry Co-ordination Board, also Vice Chairman and Managing Director of Sun Hung Kai Properties Limited, speaks at the agreement signing ceremony.



The agreement was signed by Mr Tsang Chiu-kwan, Member of the Executive Board of CII-HK (second from right), and Prof. Ko, in the presence of Mr Yue Chi-hang, Director of Architectural Services of the HKSAR Government (centre).

Best Practices in Managing Specialist Sub-contracting Performance

The one-year study aims at identifying the best practices in managing subcontractors for specialist works in buildings so as to improve the efficiency and competitiveness of the local construction industry. Led by Prof. Francis Yik of the Department of Building Services Engineering, the research will identify key problems that affect regulation, procurement and coordination of specialist subcontractors. Results of the study will enable developers to implement effective management of specialist subcontractors. ❖

Alliances team up to promote technologies

The International Strategic Technology Alliance (ISTA), an institutional network initiated by PolyU to foster applied research and technology transfer among 22 leading tertiary institutes in the Chinese mainland, UK and US, recently signed an agreement with the Australian Technology Network (ATN).

Under the agreement, ISTA and ATN will work together for the promotion of strategic exchange, applied research and development, technology transfer, and institutional improvement in areas of common interests.

The members of ATN are: University of South Australia, Queensland University of Technology, University of Technology, Sydney, RMIT University and Curtin University of Technology. ❖



The Memorandum of Understanding was signed by Dr Lui Sun-wing, Chairman of ISTA and PolyU Vice President (right); Prof. Denise Bradley, Chair of ATN, Vice Chancellor and President of University of South Australia; in the presence of Mr Alexander Tzang, Honorary Founding Chairman of ISTA and PolyU Deputy President (left).

Hotel school joins forces with WTO and MCT to promote tourism



Mr Xu Jing, WTO's Regional Representative for Asia and the Pacific (left), and Prof. Kaye Chon, Head of SHTM

The School of Hotel and Tourism Management (SHTM) and the World Tourism Organization (WTO) have recently signed a pact to foster co-operation in research and industry support activities relating to tourism in Asia and the Pacific region.

Under the agreement, the two parties will jointly publish a research-based monograph about tourism trends in the region. The publication will be disseminated to WTO members as a periodical report.

Since 1999, the School has been designated by WTO as its only Education and Training Network Centre in Asia. The School has also received WTO's TedQual Certification, a quality assurance system for tourism education, training and research.

In addition, SHTM and the Ministry of Culture and Tourism (MCT) of the Republic of Korea have signed an agreement to foster co-operation in research and educational programmes. Following the signing of the agreement, the Ministry sent forth 15 senior executives to our hotel school in August to attend a two-week Executive Development Programme on Meetings, Incentives, Conventions and Exhibitions Management. ❖