

14/03/2000

Collaborative Research Wins HKUST Three Grants

Group research projects led by three Hong Kong University of Science and Technology (HKUST) professors won HK\$13.75 million in the Research Grants Council (RGC)'s Central Allocation 1999-2000 scheme. All three projects draw on expertise from different research institutions and/or disciplines with a view to developing 'critical mass' in Hong Kong for research that is of benefit both locally and to the wider global community.

HK\$5.5 million was awarded to Professor Nancy Ip of HKUST's Department of Biology for research into Mapping Signal Transduction Networks by a Multidisciplinary Approach. Signal transduction-how cells detect and respond to stimuli-is one of the most important emerging fields in biomedical science. Professor Ip's multidisciplinary research team includes scientists from HKUST, the Chinese University of Hong Kong and the University of Cambridge, UK. Their collaborative ability to study changes in living cells is expected to make a significant impact on our understanding of cellular signaling mechanisms in human physiology.

Professor Maria Li Lung, also from HKUST's Department of Biology, received HK\$3.5 million to help fund a Cooperative Nasopharyngeal Carcinoma Research Center to investigate the genetics and treatment of nasopharyngeal carcinoma (NPC), a cancer that is especially prevalent among southern Chinese populations. Professor Lung's research team includes both scientists and medical experts from HKUST, the Chinese University of Hong Kong teaching hospital (Prince of Wales Hospital), and the Hong Kong Baptist University. The findings of their collaborative research are expected to further our basic understanding of the genetic basis of this cancer; and be useful for early diagnosis of NPC, monitoring patients for recurrent or residual tumors, and developing novel therapeutic modalities.

Professor Wilson Tang of HKUST's Department of Civil Engineering was awarded HK\$4.75 million to investigate the Behavior of Loose Fill Slopes and their Stabilization with Soil Nails. This is another highly topical project: the failure of loose fill slopes can cause catastrophic damage in Hong Kong, the Chinese Mainland and Taiwan. Professor Tang's research team of civil engineers from HKUST and the University of Hong Kong will thoroughly analyze and test loose fill slope behavior, and determine the feasibility of soil nails as a cost-effective method of stabilization. The research will include geotechnical centrifuge modeling at HKUST's state-of-the-art Geotechnical Centrifuge Facility.

In 1999-2000, the RGC funded eight projects under its Central Allocation scheme with the total amount of HK\$26.3 million. "Achieving three out of the eight allocations, and more than half the total funding, is HKUST's most encouraging result in the scheme to date. It is also a tribute to the increasing spirit of collaboration among Hong Kong's research institutions. In practical terms, the grants will provide valuable long-term support and capacity building for the researchers and institutions involved," says Professor Tony Eastham, Associate Vice-President for Research and Development at HKUST.