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Biotech Pioneers Appointed Croucher Fellows

Two distinguished scientists from the Hong Kong University of Science and Technology (HKUST) are honored to receive Croucher Senior Research Fellowships for their contributions to the fight against cancer and mental illness.

Prof Maria Lung, Professor of Biology and Director of Cooperative Nasopharyngeal Carcinoma Research Center, and Dr Hannah Hong Xue, Associate Professor of Biochemistry and Director of Bioinformatics Center and Applied Genomics Laboratory, are among six scholars to receive this year's Croucher Senior Research Fellowship Awards.

Andrew Li, Chief Justice of Hong Kong's Court of Final Appeal, presented award certificates to the Fellows at a ceremony held by the Croucher Foundation today (16 March 2005).

Prof Lung, a molecular oncologist, focuses her research on deciphering the molecular genetic basis for nasopharyngeal cancer (NPC) and esophageal cancer (ESC). She detected the Epstein-Barr virus in NPC patients, and provided evidence for the direct association of this virus with the cancer. Her laboratory was also the first to provide functional evidence for the presence of tumor suppressor genes (TSGs) mapped to chromosome 3p21.3, and identified two other candidate TSG regions on chromosome 11 that are linked to tumor formation.

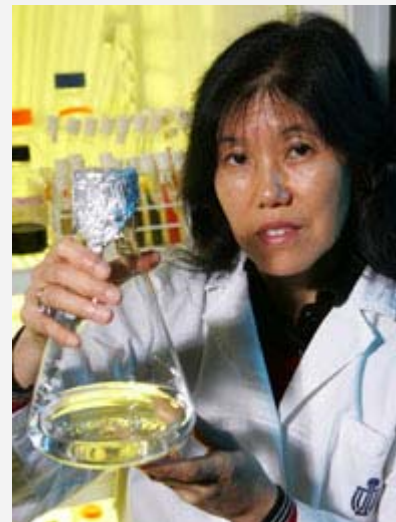
The work conducted on ESC by Prof Lung and her team identified a tumor suppressor gene on chromosome 9 that is essential for the cancer to develop. Her studies have shown that chromosomes 13 and 14 also harbor tumor-suppressing genes.

"Many genes are involved in cancers. Our advances are small but critical steps that will pave the way for discovering effective treatments for the diseases," said Prof Lung.

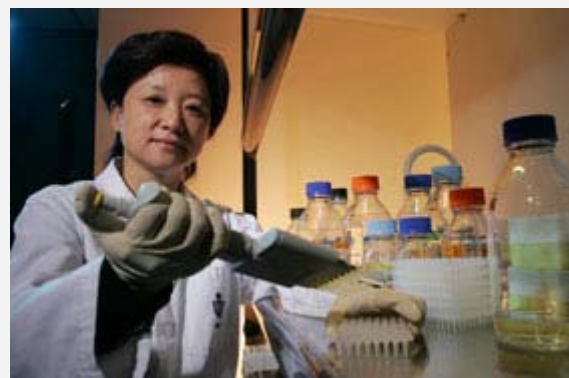
Prof Lung received her PhD in Medical Microbiology from Stanford University in 1978. After 13 years' cancer research including work at the Massachusetts Institute of Technology and the University of Hong Kong, she joined HKUST in 1991 as a founding faculty member.

Dr Hong Xue, a biochemist, focuses her research on tracking down the causative genes of schizophrenia and other neurological diseases, and developing effective treatments.

She and her research team discovered the fifth gene associated with schizophrenia amid a global race to track down the root and treatments applicable to the disease. This world-class breakthrough, published in the Molecular



Prof Maria Lung



Dr Hong Xue

Psychiatry journal, has paved the way for developing an effective treatment for a disease that affects one percent of the world's population, and over 15 million people in China alone.

"The guiding motivation of our work is to explore and uncover the causes of mental disease," said Dr Xue, "and to find effective, safe remedies that will prevent untold millions from suffering such debilitating afflictions."

Dr Xue is also a participant in the international Human Genome Project to construct the haplotype map (HapMap), which could prove an important tool for discovering common genetic diseases including diabetes, cancers and mental disorders.

Dr Xue earned her MD from Shanghai and PhD from the University of Toronto in 1993. She joined HKUST in 1995.

The Croucher Senior Research Fellowships scheme was established in 1997 to recognize research achievements made by local scientists. Awardees are released from teaching and administrative duties for a year to concentrate on research.

