

CUHK Professor Dennis Lo receives America's top biomedical science prize

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Professor Dennis Lo discovered cell-free foetal DNA in maternal blood and developed non-invasive prenatal testing for Down syndrome



Professor Dennis Lo Yuk Ming from The Chinese University of Hong Kong's (CUHK) Faculty of Medicine (CU Medicine) has just been announced as a winner of the Lasker-DeBakey Clinical Medical Research Award.

The Lasker Awards, created more than 75 years ago, are widely regarded as America's top biomedical research prize. Professor Lo was honoured for his revolutionary contribution to medical science by discovering cell-free foetal DNA in maternal blood and developed non-invasive prenatal testing for Down syndrome, laying an important cornerstone for the development of molecular diagnostics.

Based on the similarity he found in cell-free fetal DNA molecules and tumour DNA molecules, Professor Lo has developed

genome-wide genetic and epigenetic approaches for cancer detection. This work has laid the foundation for early detection of multiple types of cancer. Professor Lo and his team have successfully developed technologies that allow the detection of dozens of cancer types and have been working with a biotechnology company in the U.S. for clinical applications.

Professor Lo is the fifth Chinese to win the Lasker Award since it was established more than 75 years ago. He is the only winner of the Lasker Award after Professor Tu Youyou, the 2015 Nobel laureate in Physiology or Medicine, whose research work is based in China. Ninety-five Lasker Prize winners, or 25 percent, have been awarded the Nobel Prize, and seven of the Nobel laureates in the past four years have been awarded the Lasker prize.