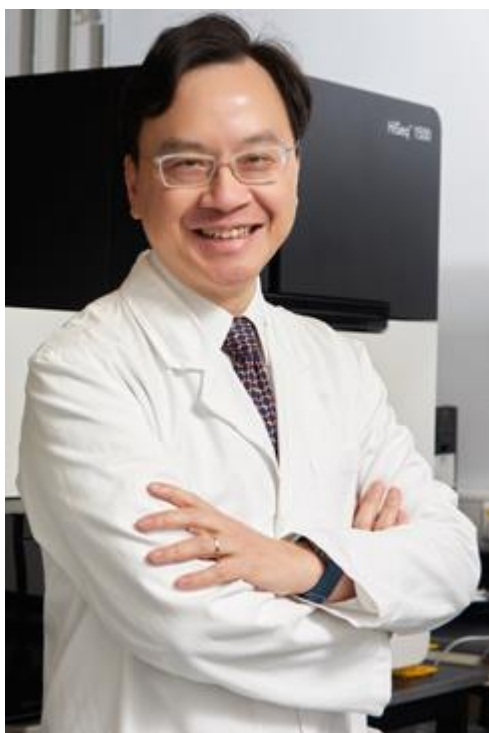




Prof. Yuk Ming, Dennis LO

Associate Dean (Research)

Chairman, Department of Chemical Pathology

Li Ka Shing Professor of Medicine

Dennis Lo is the Director of the Li Ka Shing Institute of Health Sciences, the Li Ka Shing Professor of Medicine and Professor of Chemical Pathology of The Chinese University of Hong Kong (CUHK). He is also the Associate Dean (Research) of the Faculty of Medicine of CUHK. Dennis Lo received his Bachelor of Arts degree from the University of Cambridge and the Doctor of Medicine and Doctor of Philosophy degrees from the University of Oxford.

Following his training at Oxford, he was appointed as the University Lecturer in Clinical Biochemistry and Honorary Consultant Chemical Pathologist at the John Radcliffe Hospital, the teaching hospital of the University of Oxford Clinical School. He was also a Fellow at Green College, Oxford.

Dennis Lo returned to Hong Kong in 1997. In the same year, he discovered the presence of fetal DNA in maternal plasma. His group has since remained at the forefront of this field. His group was the first to report the presence of cell-free fetal RNA and fetal epigenetic markers in maternal plasma and pioneered the use of such markers for

noninvasive prenatal diagnosis. Dennis Lo and his colleagues were also the first to show that cell-free fetal nucleic acids in maternal plasma could be used for the noninvasive prenatal diagnosis of fetal trisomy 21 and had devised multiple solutions for this hitherto difficult diagnostic problem, including methods based on plasma RNA-SNP allelic ratios, plasma epigenetic markers, digital PCR and massively parallel DNA sequencing. With the use of massively parallel sequencing and the development of novel bioinformatics strategies, Dennis Lo's group succeeded at deciphering a genome-wide genetic map of the fetus through the analysis of the small amounts of fragmented DNA floating in the blood of pregnant women. This scientific achievement lays the foundation for developing non-invasive prenatal diagnostic tests for multiple genetic diseases in a non-invasive way.

In the area of cancer detection, Dennis Lo has pioneered a number of approaches to cancer liquid biopsy, especially for the detection of nasopharyngeal carcinoma and genomewide approaches for screening multiple types of cancer.

In recognition of his work, Dennis Lo has been the recipient of numerous awards, including the King Faisal International Prize in Medicine in 2014, the Future Science Prize - Life Science Prize in 2016 and the 2021 Breakthrough Prize in Life Sciences. He was elected as a Fellow of the Royal Society in 2011, as a Foreign Associate of the US National Academy of Sciences in 2013 and as a Founding Member of the Academy of Sciences of Hong Kong in 2015.