香港中文大學醫學院
Faculty of Medicine
The Chinese University of Hong Kong

CU Medicine HONG KONG

35th Anniversary 三十五週年

H E A L T H
Li Ka Shing Institute of Health Sciences
李 嘉 誠 健 康 科 學 研 究 所

Seminar:
Towards the Ultimate Diagnostics:
NGS of Immune Repertoire, Method and Applications

Date: 7 March 2017 (Tuesday)
Time: 11:00 am – 12:00 noon
Venue: Room 407-408, 4/F, Li Ka Shing Medical Sciences Building, Prince of Wales Hospital, Shatin, New Territories

Speaker: Dr. Jian Han, MD, PhD

Faculty Investigator,
HudsonAlpha Institute for Biotechnology
Huntsville, Alabama, USA

Abstract:

In general, all diagnostics are developed by asking the same question: "what is the cause of the disease?" By answering this question, we hope to identify some signals that are specific to the disease. This is a logical approach, however, it is limited by our knowledge and technical capabilities, as it is usually very difficult to learn the real cause of the disease and obtain a qualitative signal from a non-invasive sample. Here, we introduce a new approach: by sequencing patients immune repertoires, we can learn from the most skilled diagnosticians, i.e., our immune system, about how to diagnose diseases. This approach may lead to the development of the ultimate diagnosis: taking one blood sample, perform one experiment, diagnosing many diseases.

Speaker Profile:

Dr. Jian Han, MD, PhD, is a faculty investigator at the HudsonAlpha Institute for Biotechnology. Dr. Han has more than 30 years of experience developing molecular diagnostic technologies and products. He is interested in developing integrated solutions for molecular differential diagnosis and developing a technology platform that allows multiplex molecular differential diagnoses to carried out in a fashion that is high throughput, semi-quantitative, automatic, and in a closed system. He studies the immunorepertoire of different autoimmune diseases and cancers using multiplex PCR and high-throughput gene sequencing. As the director of the R10K project, Dr. Han leads a team that is sequencing 10,000 samples and studying biomarkers for 100 diseases.

Dr. Han obtained his MD from ShuZhou Medical College in China in 1983 and his PhD in clinical molecular genetics from the University of Alabama at Birmingham in 1991. He was founder, CEO and CSO of Geneco Biomedical Products before joining HudsonAlpha in 2007. He founded two HudsonAlpha associate companies, iRepertoire and iCubate, in 2009.

All are welcome. For enquiries, please contact Mr. Jonathan Lee at 3763 6005.