Three HKUST Distinguished Scholars Receive Croucher Senior Research Fellowship and Innovation Awards 2018

10-12-2018

Hong Kong University of Science and Technology (HKUST) scientists won three of the seven awards presented by the Croucher Foundation this year. They are Prof. WEN Zilong, Professor of Division of Life Science, who received the Croucher Senior Research Fellowship 2019; and Dr. NGUYEN Tuan Anh, Assistant Professor of the Division of Life Science as well as Dr. PAN Ding, Assistant Professor of the Department of Physics and Department of Chemistry, both of whom received the Croucher Innovation Awards 2018. The presentation ceremony was officiated by Mr. Matthew CHEUNG Kin-chung, GBM, GBS, JP, Chief Secretary of the HKSAR Government.

A group photo of HKUST members at the ceremony. (From left) Prof. ZHANG Mingjie, winner of Croucher Senior Research Fellowship last year; Dr. NGUYEN Tuan Anh, winner of Croucher Innovation Award 2018; Prof. Wei SHYY, HKUST President; Prof. WEN Zilong, winner of Croucher Senior Research Fellowship 2019; Dr. PAN Ding, winner of Croucher Innovation Award 2018 and Prof. WANG Yang, Dean of Science.

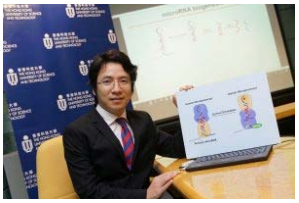
Prof. Wen is a renowned geneticist and developmental biologist in hematopoiesis. He has made substantial contributions to understanding the development of blood cell lineages. His team pioneered in using simple animal models – such as zebrafish, to answer challenging questions in hematopoiesis. For 20 years, his team has resolved many mysteries regarding the origin, developmental regulation and tissue-specific function of hematopoietic stem cells, lymphocytes and microglia (a type of macrophages in the central nervous system).

His findings shed light on the cellular and molecular mechanisms underlying different diseases such as leukemia and neurodegenerative disorders, offering important insights to the development of relevant drugs and treatments. Going forward, Prof. Wen will use the Croucher grant to explore the molecular mechanism that controls the development of hematopoietic stem cells and microglia, and to elucidate the function of endothelium-hematopoietic precursor-derived T cells.

Prof. WEN Zilong

Prof. Wen obtained his Bachelor of Medicine from the First Military Medical University (Southern Medical University) in Mainland China and PhD degree in Molecular Biology from The Rockefeller University. He joined HKUST in 2007.

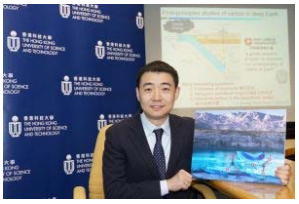
Another awardee in Life Science, Dr. Nguyen, is dedicated to the understanding of how modulated and structured elements of pri-miRNAs are recognized and interact with multiple RNA-interacting proteins, enzymes and small chemical molecules. His research offers a fundamental understanding of miRNA-caused human diseases and leads for the design of artificial pri-miRNAs in gene knockdown technology.



Dr. NGUYEN Tuan Anh

Born and raised in Vietnam, Dr. Nguyen joined HKUST in 2017. He completed his Bachelor degree at Vietnam National University and later moved to Korea. He obtained his PhD in Biochemistry from Korea Advanced Institute of Science and Technology (KAIST) and subsequently worked as a postdoctoral fellow at Seoul National University. Dr. Nguyen will use the grant to explore the biogenesis process of microRNAs and roles of RNA helicases in this process, in order to figure out the fundamental causes of human diseases – including cancer and different virus infections associated with microRNA biogenesis and RNA helicases.

The third awardee Dr. Pan is an expert in global carbon cycle and Hong Kong`s first and only member of the Deep Carbon Observatory (DCO) – A global community of more than 1,000 scientists on a ten-year quest to understand the quantities, movements, forms, and origins of carbon inside earth. Using first principles – algorithms from basic physics theories, Dr. Pan's team recently discovered that carbon dioxide (CO_2) in water would vanish under extreme high pressure and temperature in deep earth. This finding contradicts with the common belief that CO_2 exists in underground water. The discovery may bring new ways of storage or eradication of CO_2, and provide a foundation for future research into the formation of oil and diamonds.



Dr. PAN Ding

Dr. Pan joined the Department of Physics and Chemistry at HKUST in 2016. He received his bachelor and PhD degree in Physics from University of Science and Technology of China, and Institute of Physics Chinese Academy of Sciences in 2005 and 2011 respectively. With the help of the Croucher Innovation Award, Dr. Pan will study the physics and chemistry of carbon-bearing phases at extreme conditions, and seek to understand better the deep carbon cycle and its impact on global climate change and human energy consumption.

About The Hong Kong University of Science and Technology

The Hong Kong University of Science and Technology (HKUST) (www.ust.hk) is a world-class research university that focuses on science, technology and business as well as humanities and social science. HKUST offers an international campus, and a holistic and interdisciplinary pedagogy to nurture well-rounded graduates with global vision, a strong entrepreneurial spirit and innovative thinking. HKUST attained the highest proportion of internationally excellent research work in the Research Assessment Exercise 2014 of Hong Kong's University Grants Committee, and is ranked as the world's best young university in Times Higher Education's Young University Rankings 2018. Its graduates were ranked 16th worldwide and top in Greater China in Global University Employability Survey 2018.

For media enquiries, please contact:

Anita Lam
Tel: 2358 6313
Email: anitalam@ust.hk

Sam Li
Tel: 2358 6317
Email: liyongning@ust.hk