

Department of Biomedical Sciences
presents a seminar

Unveiling the Hidden Action of the Natural Compound Andrographolide

Prof. WONG Wai Shiu, Fred

Visiting Professor, Department of Biomedical Sciences
City University of Hong Kong

Date : 24 November 2022 (Thursday)

Time : 9:15am - 10:45am

Venue: Tin Ka Ping Lecture Theatre LT1, 4th Floor,
Yeung Kin Man Academic Building (Red Zone)



Biography

Dr. W.S. Fred Wong received his BPharm from the St. Johns' University in New York and his PhD in Pharmacology from the Ohio State University in Columbus, Ohio. He moved to Lilly Research Laboratories at Indianapolis as a postdoctoral scientist with research focus on respiratory drug development and then to Respiratory and Critical Care Medicine Division at the Brigham and Women's Hospital in Boston as a Research Fellow in Medicine. After that, Dr. Wong joined the Department of Pharmacology at The National University of Singapore (NUS) and since built the Respiratory Pharmacology Laboratory.

Dr. Wong is a Professor of the Department of Pharmacology, former Head of the Department (2014-2020), and former Assistant Dean and Vice Dean (2009-2014) of the Yong Loo Lin School of Medicine, National University of Singapore. He is the Director of the Drug Discovery and Optimization Platform (DDOP) in the Yong Loo Lin School of Medicine. He is the Principal Investigator of the Singapore-HUJ Alliance for Research and Enterprise (SHARE). Dr. Wong is the founding President of the Singapore Pharmacological Society.

Dr. Wong's research interest is to identify therapeutic targets and to discover and develop pharmacological agents for the treatment of airway inflammation, oxidative and DNA damage and remodeling in asthma and in COPD, using small molecule drugs, herbal medicinal bioactive molecules, antisense oligonucleotides (ASO)/siRNA technology, and pharmacoproteomics and metabolomics approaches. He has published a series of mechanism-based drug discovery studies targeting at tyrosine kinases, MAPK, PI3K, GSK-3 β , RIP2, RPS3 and AT2R responsible for asthma and COPD pathogenesis, that has paved the way for further investigation and innovative development of specific therapeutic strategies for asthma and COPD. Natural compounds like the diterpenoid lactone andrographolide and calcaratarin D, vitamin E isoform γ -tocotrienol, isthmin 1 (ISM1), and anti-malarial drug artesunate were first reported by his laboratory to possess anti-inflammatory actions in both asthma and COPD. His laboratory has also identified lungkine, ApoL2 and HDM-induced DNA damage as potential mechanisms for asthma development.

Enquiries:

Mr Hei Chan (3442-4985, hei.chan@cityu.edu.hk),
Ms Joyce Tan (3442-2924, joyce.tan@cityu.edu.hk)

All are welcome!