



## SYMPOSIUM 5. Use of Real-World Data in drug repurposing

### Moderators

#### Edward Lai, National Cheng Kung University, Taiwan



Edward is an Associate Professor at the School of Pharmacy, National Cheng Kung University, Taiwan. He has expertise in the use of a variety of healthcare databases across Asia, Oceania, North America and Europe in the conduct of international multi-database pharmacoepidemiologic research. His research interests include safety and comparative effectiveness of psychotropic, rheumatologic and oncologic medications. He has published 90+ research articles on top journals such as BMJ, Annals of Internal Medicine and Lancet Psychiatry. He has served as an Associate Editor of Pharmacoepidemiology and Drug Safety since 2013. He had served as the chair of Asian Pharmacoepidemiology Network (AsPEN) (2016-2018). He is an active member of the Neurological and Mental Health Global Epidemiology Network (NeuroGEN).

#### Darren Toh, Harvard University, USA



Darren Toh, ScD is the DPM Endowed Professor in the Department of Population Medicine at Harvard Medical School and Harvard Pilgrim Health Care Institute. He is a pharmacoepidemiologist with an interest in the comparative safety and effectiveness research of medical products. His research focuses on 1) assessing the risks and benefits of medical products using electronic data collected as part of routine healthcare delivery, and 2) developing and applying privacy-protecting analytic methods to conduct multi-center studies in distributed data networks. Darren is Chief Scientist at the Operations Center of the FDA-funded Sentinel System, a congressionally mandated national medical product safety surveillance system. He is Principal Investigator of projects funded by the National Institutes of Health, the Agency for Healthcare Research and Quality, the Patient-Centered Outcomes Research Institute, and the Food and Drug Administration. Darren received his doctoral degree in Epidemiology from the Harvard School of Public Health.



## Speakers

### Edward Lai, National Cheng Kung University, Taiwan



Edward is an Associate Professor at the School of Pharmacy, National Cheng Kung University, Taiwan. He has expertise in the use of a variety of healthcare databases across Asia, Oceania, North America and Europe in the conduct of international multi-database pharmacoepidemiologic research. His research interests include safety and comparative effectiveness of psychotropic, rheumatologic and oncologic medications. He has published 90+ research articles on top journals such as BMJ, Annals of Internal Medicine and Lancet Psychiatry. He has served as an Associate Editor of Pharmacoepidemiology and Drug Safety since 2013. He had served as the chair of Asian Pharmacoepidemiology Network (AsPEN) (2016-2018). He is an active member of the Neurological and Mental Health Global Epidemiology Network (NeuroGEN).

### Jenni Ilomaki, Monash University, Australia



Dr Jenni Ilomaki is a Senior Lecturer at Monash University, Centre for Medicine Use and Safety with expertise in clinical pharmacy and epidemiology. She leads a research group focused on analyses of administrative claims data and multi-database studies. Dr Ilomaki has published >110 articles in peer-reviewed scientific journals and obtained AUD >\$3.2 million in grant funding. She is the former Chair of the Pharmacoepidemiology Special Interest Group of the Australasian Society of Clinical and Experimental Pharmacologists and Toxicologists. She is a Science Lead of Monash Addiction Research Centre and Executive Editor of British Journal of Clinical Pharmacology. Dr Ilomaki graduated with MSc (Pharmacy) from the University of Kuopio in 2004. In 2000, she was part of the group establishing Finland's first drug information centre KLIK. In 2006-2007, she was a visiting scholar at the University of Florida Department of Pharmaceutical Outcomes and Policy. She was awarded PhD in pharmacoepidemiology at the University of Eastern Finland, School of Pharmacy.



### **Wallis Lau, UCL School of Pharmacy, UK**



Wallis Lau is a Lecturer in Pharmacoepidemiology and Drug Safety at UCL School of Pharmacy. She is a statistician by background and completed a PhD in pharmacoepidemiology. Her research focuses on analysing large electronic healthcare data to answer important clinical questions about the effects of medications, particularly those used in cardiovascular, neurological, and mental health conditions. The results of her work have led to publications in respected journals including JAMA, Annals of Internal Medicine, Lancet Public Health, PLOS Medicine, and Gastroenterology.

### **Nicole Pratt, Quality Use of Medicines and Pharmacy Research Centre, University of South Australia, Australia**



Professor Nicole Pratt is the Deputy Director of the Quality Use of Medicines and Pharmacy Research Centre, University of South Australia, Fellow of the International Society of Pharmacoepidemiology (FISPE). She is an expert in biostatistics specialising in development of methods to study the effects of medicines and medical devices in large linked healthcare datasets.

### **Sio-Hong Lam, National Cheng Kung University, Taiwan**

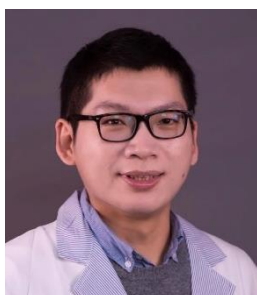


Dr. Sio-Hong Lam received her Ph.D. degree from the School of Pharmacy, National Taiwan University under the guidance of Professor Shoei-Sheng Lee in 2008. Soon after, Dr. Lam became a postdoctoral fellow in NTU and was responsible for the development of new natural products as drug candidate and clarify the active ingredients of herbal medicines commissioned by industry and academic users. After that, she worked in the Advpharma Inc. and was in charge of health food and cosmetics products development. Since August 2017, Dr. Lam has transferred to the School of Pharmacy, National Cheng Kung University as an assistant professor, majoring in bio-active ingredients of Chinese herbal medicine. Dr. Lam has published 15 SCI papers in the past three years, and continues to study the natural products for further lead compounds development, industrial and agricultural applications.





### **Shih-Chieh Shao, Keelung Chang Gung Memorial Hospital, Taiwan**



Shih-Chieh Shao is the pharmacist and director of Evidence-Based Medicine Center in Keelung Chang Gung Memorial Hospital in Taiwan. Under the current PhD training, his research mainly focuses on the real-world drug effectiveness and safety by utilizing the electronic medical records database and epidemiological data of emerging infectious diseases by conducting systematic review with meta-analysis. In the recent 2 years, he has collaborated with several talented ophthalmologists to explore the possible associations between SGLT2 inhibitors and eye diseases, one of which leads him to receiving the 2021 ACPE Rising Star Award.

### **Ju-Young Shin, Sungkyunkwan University, South Korea**



Dr. Ju-Young Shin is current chair professor of department of biohealth regulatory science at school of pharmacy, SungKyunKwan University (SKKU). She also serves as an associate editor of SCIE journal including Pharmacoepidemiology and Drug Safety, Vaccines, and Epidemiology and Health. She received her B.S. in pharmacy from Seoul National University, MPH in health policy and Ph.D. in pharmacoepidemiology from the Seoul National University College of Medicine. She was working as a director at Korea Institute of Drug Safety and Risk Management (KIDS), university of South Australia as a visiting fellow and McGill University as a postdoctoral fellow. She published more than 200 peer-reviewed journal including prominent journal such as British Medical Journal (BMJ), Gut, Diabetes care, and Clinical Infectious Disease. Her area of research was vaccine safety, biologics, and bone related epidemiology. She also led several governmental projects funded by Ministry of Food and Drug Safety, Ministry of Health and Welfare, and Health Insurance Review and Assessment Service and projects sponsored by pharmaceutical industry. She is currently a member of board of directors of Korea society of Pharmacoepidemiology and Risk Management (KoPERM), Korea Society of Epidemiology, and Korea Academy of Social and Managed Care Pharmacy (KASMCP).



**Hsin-Yi Hung, National Cheng Kung University, Taiwan**



Dr. Hung was graduated from Chemical Biology and Medicinal Chemistry Division, Eshelman School of Pharmacy, University of North Carolina at Chapel Hill. Her expertise fields are organic chemistry, medicinal chemistry and natural product chemistry. Her research interest is natural product-derived new drug discovery. Current project in her labs are computer-aided drug design for septins, pyrazole derivatives for reversing taxol-induced multidrug resistance and chromone derivatives for lower lipid accumulation. In ACPE, she will share the concept of protein-based drug design and illustrate the brief process of its application on drug repurposing.