# 2022 OHDSI APAC SYMPOSIUM



Taipei Medical University, Taipei, Taiwan







#### Co-organizer :

Office of Data Science, Taipei Medical University Office of Human Research, Taipei Medical University College of Management, Taipei Medical University

For more information, please visit | ohdsi.org/2022-apac-ohdsi-symposium/



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## 2022 OHDSI APAC SYMPOSIUM



#### Welcome to the 2022 OHDSI APAC Symposium

from Chair Local Host Committee Jason C. Hsu,

On behalf of the local host committee, I sincerely welcome your participation in the 2022 OHDSI APAC Symposium, which is being held on 12th-13th November 2022 in Taipei, Taiwan. This year's program is highlighted by a diverse offering of pre-conference tutorials, keynote talks on the vision of OHDSI Global & OHDSI APAC, plenary insight on the research challenges addressed by OHDSI APAC, exciting panel discussions on the implication experiences in the region, the latest APAC regional adaption to standardization, and rich and varied poster presentations accompanied by a networking session.

This symposium affords unique opportunities to learn important common data model standards and tools, multinational and multi-center collaborative research strategies, and insight into completed large-scale multinational research projects. I am confident that you will thoroughly enjoy the symposium and have many takeaways!

I would like to thank OHDSI Global Headquarters for their support. OSDHI Taiwan and Taipei Medical University for their careful planning, cooperation, and hard work. Last but not least, thank you to our sponsors from both government and enterprise. The combinations of all your efforts are why this annual meeting can be held smoothly and successfully!





#### Welcome Remark

from Taipei Medical University Vice-President Cheng-Yu Chen,

Welcome to all distinguished guests participating in the 2022 OHDSI APAC Symposium! Taipei Medical University (TMU) is honored and pleased to host this year's symposium. I would like to express my gratitude to all the speakers, scholars, and participants for joining us in person and virtually.

Covering 330 locations across 74 countries, OHDSI leads the charge for standardizing international hospital clinical data, analysis, and application of healthcare databases to improve the quality of medical care. Its community fosters innovation, global partnership, and development by sharing results, effective methods, and evidence-informed practices.

Taipei Medical University Clinical Research Database modified its practices to meet international standards, which has afforded the University additional opportunities to collaborate with various hospital databases globally. Established in 2019, TMU's Office of Data Science started working towards joining OHDSI the following year and successfully organized OHDSI Taiwan in March of 2022. TMU's motivation for hosting this symposium is to promote OHDSI Taiwan and the University's desire for further other multinational research cooperation and the advancement of health information technology.

From the depth of my heart, I would like to thank OHDSI Taiwan, TMU's Office of Data Science, and TMU's Office of Human Research for organizing this symposium. It is also my pleasure to



see numerous speakers, scholars, and attendees participate in the 2022 OHDSI APAC Symposium. Following the spirit of OHDSI, use this experience not only to learn but also to foster collaborations to push the field forward. In closing, I hope you all enjoy the symposium!

Thank you!





#### Welcome Remark

from Taiwan OHDSI's President Min-Huei Hsu,

Thanks for coming to the 2022 OHDSI Asia Pacific Annual Meeting!

Taipei Medical University (TMU) has participated in the OHDSI community since its establishment in 2014. Previously, Dr. Martijn Schuemie, a core member of OHDSI, visited TMU to guide an OMOP CDM practice workshop. TMU has continued it's dedication to creating and disseminating value-added big health data through conducting research using health insurance data. Currently, we conduct large-scale research within the Taipei Medical University Clinical Research Database (TMUCRD) system. This is thanks to the University's efforts and success in promoting the integration of its three affiliated hospitals' (Taipei Medical Affiliated Hospital, Wanfang Hospital, and Shuang-Ho Hospital) electronic medical record databases.

In 2019, Taipei Medical University established the first Office of Data Science in Taiwan and began to develop a data value-added and domestic data alliance journey. The TMUCRD is our multi-site cooperation, interoperability, and database management framework. It includes both structured and unstructured data aggregated into analyzable data from 1998 to 2020. At present, TMUCRD has accumulated medical information for nearly 3.8 million patients.



In 2020, TMU's Office of Data Science formally joined the OHDSI Community to lead Taiwan's health data system development, foster international cooperation, and keep pace with the advancement and innovations of other countries in the health industry. We established OHDSI Taiwan, making Taiwan the sixth Asia-Pacific (APAC) branch. The University's TMUCRD will be our demonstration for international standards integration and act as a guide to other regional medical care entities. I am excited to share that this month, November 2022, Taiwan's Ministry of the Interior agreed to establish the "Taiwan Observational Health Data Science and Informatics Society." This society will promote value-added big health data in our country and act as a catalyst to connect the multiple sectors, including but not limited to the service industry, government, academia, and medical research, to accelerate horizontal and vertical cross-institutional, cross-domain exchanges, cooperation, and the integration of personalized health data to drive precision medical applications.

I am very grateful to my colleagues from TMU for co-organizing the first, but not the last, OHDSI APAC Symposium held in Taiwan. I sincerely welcome the scholars and experts from OHDSI Headquarters and OHDSI APAC who provide hands-on guidance in Taiwan. I want to thank everyone, online and offline, who took time out of their busy schedules to participate.

I know this conference will be a huge success. I look forward to more exchanges and cooperation with OHDSI partners at home and abroad.

Thank you!



### **OHDSI APAC 2022 SYMPOSIUM**

Venue: Taipei Medical University Comprehensive Medical Building (Front Building), 4F Cheng-Pu Conference Hall (250 Wu-Hsing Street, Taipei City, Taiwan 110)

Time: November 13th, 2022

#### Day 1, Saturday, November 12<sup>th</sup> (Tutorial)

Time	Schedule	Remark
08:30-09:00	Registration	
09:00-09:30 (30 mins)	<b>Overview of the OHDSI Journey: Where are we going</b> <i>Patrick Ryan,</i> Vice President, Observational Health Data Analytics, Janssen Research and Development	
09:30-10:20 (50 mins)	OMOP Common Data Model and vocabulary Mengling 'Mornin' Feng, Ass. Director of Research (Healthcare), Institute of Data Science, National University of Singapore; OHDSI Singapore Chapter Chair Mui Van Zandt, Vice President and General Manager, Real World Data and Technology, IQVIA	
10:20-10:30 (10 mins)	Break	
10:30-11:20 (50 mins)	<b>ETL a source database into OMOP CDM</b> <i>Alex PA. Nguyen</i> , Assistant Research Fellow, Office of Data Science, Taipei Medical University <i>Mui Van Zandt</i> , Director of Product Development, IQVIA	
11:20-11:30 (10 mins)	Break	
11:30-12:20 (50 mins)	<b>Creating cohort definitions</b> <i>Seng Chan You</i> , Assistant Professor, Department of Biomedicine Systems Informatics, Yonsei University College of Medicine	



12:20-13:30 (70 mins)	Lunch	
13:30-14:20 (50 mins)	<b>Phenotype evaluation</b> <i>Patrick Ryan</i> , Vice President, Observational Health Data Analytics, Janssen Research and Development	
14:20-14:30 (10 mins)	Break	
14:30-15:20 (50 mins)	<b>Characterization</b> Sarah Seager, Director of Data Science, OMOP, IQVIA Martijn Schuemie, Observational Health Data Analytics, Johnson & Johnson and Department of Biostatistics, UCLA	
15:20-15:30 (10 mins)	Break	
15:30-16:20 (50 mins)	<b>Estimation</b> <i>Nicole Pratt</i> , Associate Professor, University of South Australia <i>Marc Suchard</i> , Professor, Departments of Biomathematics and Human Genetics, UCLA; Department of Biostatistics, UCLA;	
16:20-16:30 (10 mins)	Break	
16:30-17:20 (50 mins)	<b>Prediction</b> <i>Cynthia Yang</i> , Graduate student, Department of Medical Informatics, Erasmus MC <i>Chungsoo Kim</i> , Ph.D. candidate, Department of Biomedical Informatics, Ajou University	
17:20-17:30 (10 mins)	<b>Recap of the OHDSI Journey: Where do we go from here</b> <i>Jason C. Hsu</i> , Associate Professor, International Ph.D. Program in Biotech and Healthcare Management, College of Management, Taipei Medical University	



#### Day 2, Sunday, November 13<sup>th</sup> (Main Symposium)

Time	Schedule	Remarks
08:00-09:00 (60 mins)	Registration	
	Welcome Session	
09:00-09:20 (20 mins)	Jen-Hsiang Chuang, Deputy Director-General, Taiwan Centers for Disease Control	MC
	Cheng-Yu Chen, Vice-President, Taipei Medical University	
	<i>George Hripcsak</i> , Chair of Biomedical Informatics, Columbia University Medical Center	
09:20-09:40 (20 mins)	Group Photo	
	Session 1: Envisioning of OHDSI Global & EU	<b>Kick-off</b> Yu-Chuan Li
09:40-10:00	Keynote - OHDSI Global Presentation	<b>Chair:</b> Yu-Chuan Li
(20 mins)	<i>Patrick Ryan</i> , Vice President, Observational Health Data Analytics, Janssen Research and Development	
10:00-10:20	DARWIN EU	
(20 mins)	<i>Peter Rijnbeek</i> , Professor and Chair of the Department of Medical Informatics of the Erasmus MC, The Netherlands	
10:20-10:30 (10 mins)	Coffee Break	
S	ession 2: The Challenges of Research in OHDSI APAC	Kick-off: Min-Huei Hsu
10:30-10:50 (20 mins)	OHDSI APAC Introduction	<b>Chair:</b> Nicole Pratt
	Mui Van Zandt, VP & GM, RW Data and Tech, IQVIA	



10:50-11:30	Research in OHDSI APAC (10min each)	
(40 mins)	4 Studies of OHDSI APAC - <i>Nicole Pratt, Seng Chan You,</i> <i>Chungsoo Kim, Celine Chui</i>	
11:30-11:45 (15 mins)	Research using Taiwan National Data	
	Alex PA. Nguyen, Clinical Data Center, Office of Data Science, Taipei Medical University	
11:45-12:00	Research using TMUCRD Data	
(15 mins)	Jason C. Hsu, Director, Clinical Data Center, Office of Data Science, Taipei Medical University	
12:00-13:00 (60 mins)	Lunch & Poster Presentation	
Se	ssion 3: The Implication Experiences in OHDSI Region	Kick-off: Jason C. Hsu
	Panel – Standardization & Common Data Models (CDM)	
	OMOP - Christian Reich, OHDSI PI	
13:00-14:00 (60 mins)	FHIR - <i>Adam Chee</i> , Chief of Smart Health Leadership Centre, National University of Singapore	<b>Chair:</b> Mengling 'Mornin' Feng
	HL7 - <i>Min-Huei Hsu</i> , Professor and Dean, Office Data Science, Taipei Medical University	
	HADES - <i>Martijn Schuemie</i> , Observational Health Data Analytics, Johnson & Johnson and Biostatistics, UCLA	
14:00-15:00 (60 mins)	Panel - APAC Regional Adaption to Standardization	<b>Chair:</b> Mui Van Zandt
	Taiwan - <i>Jason C. Hsu</i>	
	Australia - Nicole Pratt	



	China - Hua Xu/Mui Van Zandt	
	Japan - <i>Tatsuo Hiramatsu</i>	
	Korea - Seng Chan You	
	Singapore - Ngiam Kee Yuan	
15:00-15:15 (15 mins)	Coffee Break	
15:15-16:15 (60 mins)	Poster Session/Network Session	
	Closing Remarks	
	<i>Patrick Ryan</i> , Vice President, Observational Health Data Analytics, Janssen Research and Development	
16:15-17:00 (45 mins)	Min-Huei Hsu, Professor and Dean, Office of Data Science, Taipei Medical University	МС
	Shian-Ying Sung, Professor and Dean, Office of Human Research, Taipei Medical University	
	Nai-Wen Kuo, Professor and Dean, College of Management, Taipei Medical University	





#### George Hripcsak, M.D., MS.

#### Professor and Chair

Department of Biomedical Informatics, Columbia University

George Hripcsak, MD, MS, is Vivian Beaumont Allen Professor and Chair of Columbia University's Department of Biomedical Informatics and Director of Medical Informatics Services for NewYork-Presbyterian Hospital/Columbia Campus. He is a board-certified internist with degrees in chemistry, medicine, and biostatistics. Dr. Hripcsak's current research focuses on the clinical information stored in electronic health records and developing next-generation health record systems. He is developing the methods necessary to support clinical research and patient safety initiatives using nonlinear time series analysis, machine learning, knowledge engineering, and natural language processing. For his work in precision medicine, he serves as a PI on Columbia's eMERGE grant, as a PI on Columbia's regional recruitment center for the All of Us precision medicine program, and as site PI for Columbia's role on the All of Us Data and Research Center. He co-chaired the Meaningful Use Workgroup of the U.S. Department of Health and Human Services Office of the National Coordinator of Health Information Technology; it defines the criteria by which healthcare providers collect incentives for using electronic health records. He led the effort to create the Arden Syntax, a language representing health knowledge that has become a national standard. Dr. Hripcsak is a fellow of the National Academy of Medicine, the American College of Medical Informatics, and the New York



Academy of Medicine. He chaired the U.S. National Library of Medicine's Biomedical Library and Informatics Review Committee. He has published over 350 papers.

Dr. Hripcsak serves as PI–with co-PI David Madigan–of OHDSI's Coordinating Center, which is based at Columbia University. His recent pharmacovigilance research has included medication-wide association studies, treatment pathways, large-scale observational studies, and next-generation phenotyping better to exploit electronic health record data for observational research.





#### Patrick Ryan, Ph.D.

Vice President

Observational Health Data Analytics Janssen Research and Development

Patrick Ryan, Ph.D., is Vice President, Observational Health Data Analytics at Janssen Research and Development, leading efforts to develop and apply analysis methods to understand medical products' real-world effects better. He is an original collaborator in Observational Health Data Sciences and Informatics (OHDSI), a multi-stakeholder, interdisciplinary collaborative to create open-source solutions that bring out the value of observational health data through large-scale analytics. He served as a principal investigator of the Observational Medical Outcomes Partnership (OMOP), a public-private partnership chaired by the Food and Drug Administration, where he led methodological research to assess the appropriate use of observational healthcare data to identify and evaluate drug safety issues.

Patrick received his undergraduate degrees in Computer Science and Operations Research at Cornell University, his Master of Engineering in Operations Research and Industrial Engineering at Cornell, and his Ph.D. in Pharmaceutical Outcomes and Policy from the University of North Carolina at Chapel Hill. Patrick has worked in various positions within the pharmaceutical industry at Pfizer and GlaxoSmithKline and in academia at the University of Arizona Arthritis Center.





### Peter Rijnbeek, Ph.D.

#### Medical Informatics Professor and Chair Department of Medical Informatics Erasmus University Medical Center

Peter Rijnbeek is a Medical Informatics Professor and the Chair of the Department of Medical Informatics of the Erasmus MC, The Netherlands. Peter leads the research line Health Data Science. Peter obtained his MSc in Electrical Engineering from Technical University Delft. His Ph.D. thesis, received from the Erasmus University Rotterdam, was on developing a computer program to interpret pediatric electrocardiograms automatically.

The HDS team has a leading role in the Observational Health Data Sciences and Informatics by co-leading the Patient-Level Prediction workgroup and contributing to methods and tool development in the OHDSI eco-system. His team addresses issues that deal with the quality of data, the translation of data to other formats, mechanisms to access data in a federated fashion, and the development of analytical pipelines for characterization, population-level effect estimation, and patient-level prediction. Prof. Rijnbeek is the lead of the European OHDSI Chapter that promotes and enables the adoption of the OMOP-CDM in Europe. He is the coordinator of the European Health Data and Evidence Network IMI project that builds a federated network of health databases across Europe standardized to the OMOP. Furthermore, Prof Rijnbeek is the executive director of the DARWIN EU® Coordination Centre, which manages a network of real-world healthcare data sources across the EU to conduct scientific studies requested by the European Medicines Agency (EMA).





### Yu-Chuan Li, M.D., Ph.D.

#### Professor

Graduate Institute of Biomedical Informatics, Taipei Medical University President, IMIA

Prof. Li, one of the top 2% of scientists in the world, is a pioneer of artificial intelligence in medicine and translational biomedical informatics. He has devoted himself to evolving the next generation of Al in patient safety and prevention ("Earlier Medicine"). He has also been deeply involved in international collaborations for biomedical informatics development in Asia, America, Europe, and Africa.

He is currently President of the International Medical Informatics Association (IMIA) and previously served as Vice President of IMIA and President of the Asia-Pacific Association for Medical Informatics. In addition, he was elected as a fellow of the Australian College of Health Informatics in 2009, the American College of Medical Informatics in 2010, and the International Academy of Health Science Informatics in 2017.





#### Mui Van Zandt, BS.

## Vice President/General Manager Real-World Data & Technology IQVIA

Mui Van Zandt, BS, is Vice President/General Manager, Real World Data & Technology at IQVIA. She leads efforts utilizing real-world data and technology to understand a patient's medical journey better. Mui's background includes software development, data management, and data standardization. Mui has extensive knowledge working on large patient databases globally using different technology/architecture designs to standardize into the OMOP CDM, the standard vocabularies, and ensure high-quality data. Mui also serves as the leader of the OHDSI (Observational Health Data Science and Informatics) Asia Pacific community, where she drives strategic objectives across the APAC region.





#### Nicole Pratt, Ph.D.

Professor and Deputy Director Quality Use of Medicines and Pharmacy Research Centre, University of South Australia Fellow of the International Society of Pharmacoepidemiology (FISPE)

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, specializing in developing methods to study the effects of medicines and medical devices in large linked healthcare datasets. She is a chief investigator of the NHMRC Medicines Intelligence Centre of Research Excellence and leads NHMRC Project Grants, including; Large scale evidence generation for the utilization and safety of biological medicines and Enhancing joint replacement outcomes through national data linkage.

Nicole is a long-term collaborator on Observational Health Data Sciences and Informatics (OHDSI), a multi-stakeholder, interdisciplinary collaborative to create open-source solutions that bring out the value of observational health data through large-scale analytics. Nicole is a member of the Drug Utilisation Sub-Committee of the PBAC and a core member of the International Society of Pharmacoepidemiology Task Force on Real-World Evidence Reproducibility and Transparency.





### Seng Chan You, M.D., MS., Ph.D.

#### Assistant Professor

Department of Biomedicine Systems Informatics, Yonsei University College of Medicine

Seng Chan You is a medical doctor who majored in internal medicine from Severance Hospital in Seoul, South Korea. He received his Master of Medical Science at the same University. He earned his Ph.D. in the Department of Biomedical Informatics at Ajou University and has been a leader in the OHDSI community over the last several years. Honored with the 2018 OHDSI Titan Award for Clinical Application, Chan has led the expansion of the OHDSI network into the Asia-Pacific (APAC) region, including hosting the 2019 OHDSI Korea Symposium and assisting in the development of the 2020 OHDSI APAC Symposium.

Chan, a leader in several OHDSI workgroups, recently led the effort to have South Korean HIRA data available to the OHDSI global community during the COVID-19 study-a-thon. He co-led the study "Association of Ticagrelor vs. Clopidogrel With Net Adverse Clinical Events in Patients With Acute Coronary Syndrome Undergoing Percutaneous Coronary Intervention, " published in JAMA in October 2020, and has co-authored many OHDSI network studies, including the LEGEND Hypertension study published in The Lancet.



He recently shared thoughts on this new role, OHDSI's growth in the Asia-Pacific region, leading the COVID-19 data-sharing efforts, and plenty more in the latest edition of the OHDSI Collaborator Spotlight.





### Chungsoo Kim, PharmD.

#### Graduate Student, Department of Biomedical Informatics Ajou University

Chungsoo Kim is a graduate student in the Department of Biomedical Informatics at the Ajou University School of Medicine. He holds his PharmD from Ajou University College of Pharmacy in 2019. His research interests include comparing and predicting individual drug effects through a standard data model. He joined OHDSI in 2019 and participated in several medical informatics-related projects. He presented posters at the OHDSI European Symposium and the OHDSI U.S. Symposium in 2019.





### Celine Chui, Ph.D.

#### Assistant Professor School of Nursing and School of Public Health, HKU

Dr. Chui is an Assistant Professor jointly appointed by the School of Nursing and School of Public Health at HKU. She is an epidemiologist by training and specializes in applying new observational study designs in medication safety research using Big Data. Celine obtained her Ph.D. from the Department of Pharmacology and Pharmacy at HKU in 2017. She was a visiting scholar at the London School of Hygiene and Tropical Medicines in the United Kingdom. She completed her post-doctoral training in the School of Public Health at HKU in 2019.

Dr. Chui is one of the lead researchers in the COVID-19 Vaccines Adverse Events Response and Evaluation (CARE) Programme, a comprehensive surveillance program to monitor known and potential adverse events of COVID-19 vaccines. She is also a Co-principal investigator of AI and Pharmaceuticals in Non-Communicable Diseases at the Laboratory of Data Discovery for Health (D<sup>2</sup>4H), the convener and active member of NeuroGEN (Neurological and Mental Health Global Epidemiology Network).

Dr. Chui aims to utilize Big Data from multi-regional/national large healthcare databases collected in the community to improve public health. Her current research focuses on cardiovascular disease risk prediction and evaluation using artificial intelligence (AI), Big Data for antimicrobial resistance, and improving the care of people living with dementia. She has



published more than 70 articles in peer-reviewed journals such as The Lancet Infectious Disease, JAMA Internal Medicine, BMJ, Journal of the American College of Cardiology, and Neurology.





### Alex PA. Nguyen, Ph.D.

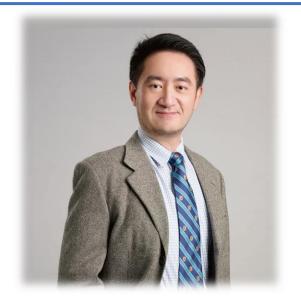
Assistant Research Fellow Clinical Data Center, Office of Data Science, Taipei Medical University

Alex PA. Nguyen is an Assistant Research Fellow at the Clinical Data Center, Office of Data Science at Taipei Medical University (TMU) in Taiwan. He is a member of the OHDSI Taiwan Chapter.

Alex has 10+ years of experience in Healthcare Informatics, has developed HIT products, and implemented HIT projects for clients from enterprise to ministry. Project scope has been covered in different levels (from small to huge; from enterprise to national level); it is defined in fields such as ICT, Healthcare. Especial, Alex has many lessons learned when he has faced the complex matters of the project in several roles (engineering, researcher, manager). It is a valuable experience to help him to manage projects successfully.

Alex holds a Bachelor of Engineering of Science (Major in Information Technology) from Hanoi Open University, Hanoi, Vietnam. Afterward, he graduated with a Doctor of Philosophy in Biomedical Informatics at National Yang-Ming University, Taipei, Taiwan.





#### Jason C. Hsu, Ph.D.

#### Associate Professor

International Ph.D. Program in Biotech and Healthcare Management, College of Management, Taipei Medical University

Jason C. Hsu, Ph.D., is an Associate Professor at International Ph.D. Program in Biotech and Healthcare Management at Taipei Medical University (TMU) in Taiwan, and he is also the director of the Clinical Data Center, Office of Data Science at TMU, the Director of the Research Center of Data Science on Healthcare Industry, College of Management at TMU, and the Director in Clinical Big Data Research Center at Taipei Medical University Hospital. He is also a member of the OHDSI Taiwan Chapter.

Jason specializes in clinical data analysis and precision pharmacotherapy. He is skilled in using multiple big data and scientific research methods such as statistics, economics, and artificial intelligence to research disease management, drug management (prescription behavior and drug utilization), and policy management (health insurance drug payment policy).

Before joining TMU, Jason was a Fulbright research fellow and a postdoctoral researcher focusing on Pharmaceutical Policy Research at the Department of Population Medicine at Harvard Medical School (HMS) in the USA. He was also a faculty at the School of Pharmacy and Institute of Clinical Pharmacy and Pharmaceutical Sciences, College of Medicine at National Cheng Kung University (NCKU) in Taiwan.





#### Min-Huei Hsu, M.D., Ph.D.

Professor and Dean Graduate Institute of Data Science Office of Data Science, Taipei Medical University

Min-Huei (Marc) Hsu serves as the Director Office Of Data Science and Professor and Director of the Graduate Institute of Data Science of the Taipei Medical University. He is the President of the OHDSI Taiwan Chapter.

Before arriving at the Taipei Medical University, Director of the Office of International Cooperation, Ministry of Health and Welfare.

He earned his Ph.D. and Master's at the Graduate Institute of Biomedical Informatics at Taipei Medical University.





### Christian Reich, M.D., Ph.D.

## VP Real World Analytics Solutions IQVIA

At IQVIA, Christian is responsible for building open OHDSI study networks for RWE generation as a service, including building enabling technology solutions. Christian is also the Principal Investigator of OHDSI and served as Program Manager and Principal Investigator at OMOP. He is responsible for designing and constructing the OMOP Standardized Vocabularies and leads the Common Data Model Working Group.

Christian has more than 15 years of experience in life science research and medicine. He received his bachelor's degree in preclinical training from Humboldt University in Berlin. Christian held his M.D. and doctorate from the Medical University of Lübeck, Germany, where he focused his research on T-cell activation and regulation. He was a practicing physician in Berlin and Ulm, Germany, before moving to the European Bioinformatics Institute to work on the Human Genome Project. He then joined the biotech industry in 1998, where he worked in various positions on typical challenges in drug research and development, such as gene sequence and expression analysis, clinical trial design and analysis, systems biology, and outcome research, applying computational methods to large scale biological data.





### Adam Chee, Ph.D.

Chief, Smart Health Leadership Centre, Institute of Systems Science, National University of Singapore

Currently serving as Chief Smart Health Leadership Centre, Institute of Systems Science, National University of Singapore, Dr. Adam CHEE has more than 20 years of health informatics, digital health, innovation, technologies, and business experience. Prior to joining the National University of Singapore, he was the Director of BinaryHealthCare, spearheading many significant and notable projects across the Asia Pacific and the Middle East through the provision of digital health transformation expertise to both health(care) and solution providers via consulting assignments, executive coaching, training, leadership and speaking engagements.

His unique background includes working in business, market development, and product management with established organizations, including AGFA Healthcare and CrimsonLogic; innovative startups; and leading the Health IT and Medical Imaging practice within Frost & Sullivan Asia Pacific. He 'earned his stripes as an industry pioneer, implementing and managing clinical information solutions during his tenure with Singapore Health Services (SingHealth), and has since worked across the healthcare ecosystem, including the primary care sector, private and public tertiary hospitals, research institutes, government health agencies and



NGOs across the globe. He had also worked in IT technical, system, and technology management earlier in his career.

Adam serves on several relevant committees, including (but not limited to):

- Chair, Health Level Seven (HL7) Singapore
- Founding Co-Chair, HL7 Korea-Singapore Research & Innovation Alliance (HKSRIA)
- Chair, Technical Committee for Health Informatics, Singapore Standards Council

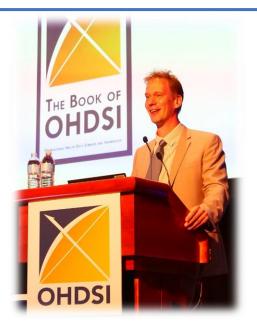
A firm believer in lifelong learning, Adam is a "Specialized Generalist" with a Doctor of Industrial Technology (Health Informatics), Master of Business Administration, Master of Public Health, and Master of Science (Applied Computing).

A recognized Subject Matter Expert, Adam serves as an Expert (Digital Health) with WHO. He holds faculty positions with institutes of higher learning in the region, including a (Distinguished) Visiting Professorship with Taipei Medical University, Swansea University, has published three books and numerous articles, and frequently advises and speaks at international conferences (including HIMSS, Harvard, etc.). Adam also holds the following professional fellowships;

- FRSPH Fellow of the Royal Society of Public Health (RSPH)
- FHIMSS Fellow of Healthcare Information and Management Systems (HIMSS)
- FACHI Fellow of Australasia College of Health Informatics (ACHI)

Adam's detailed profile is available at www.BinaryHealthCare.com/Adam





### Martijn Schuemie, Ph.D.

#### Observational Health Data Analytics, Johnson & Johnson and Biostatistics, UCLA

Dr. Martijn Schuemie received his Master's degree in Economics with a major in Information Management. He completed his Ph.D. in Computer Science on human-computer interaction in virtual reality systems for phobia treatment. In the past, he was employed as an assistant professor at the Erasmus University Medical Center of Rotterdam. He started by researching the application of text-mining scientific literature in support of molecular biology. He later moved to pharmacoepidemiology and was one of the lead investigators in the EU-ADR project tasked with building a prototype drug safety signal detection system using population-level observational data. In 2012 he received a one-year fellowship from the FDA and became an active OMOP investigator.

In 2013 Martijn joined Janssen Research and Development, where he continued his research in OMOP and later in OHDSI. Martijn is heading the OHDSI Population-Level Methods workgroup together with Marc Suchard. He is working on methods for estimating average effect sizes in the observational, calibration of effect size estimates, and patient level prediction, as well as supporting the conversion of databases to the OMOP CDM. Within OHDSI, Martijn has developed the White Rabbit and Rabbit in a Hat tools, and is contributing to the OHDSI Methods Library.





### Mengling 'Mornin' Feng, Ph.D.

#### Assistant Director Research Institute for Data Science at NUS

Dr. Feng is a faculty member at Saw Swee Hock School of Public Health and the Assistant Director of Research at the Institute for Data Science at NUS. He is also the Senior Assistant Director of the National University Hospital, championing big data analytics and healthcare AI initiatives. His research is to develop machine learning algorithms to extract actionable knowledge from large amounts of data to improve healthcare quality. His research brings together concepts and tools across deep learning, optimization, signal processing, statistical causal inference, and extensive data management. Dr. Feng's work was recognized by wellestablished journals, such as Science Translational Medicine, JAMA, and top international conferences, such as KDD, AAAI, and AMIA.





### Hua Xu, Ph.D.

### Robert H. Graham Professor Entrepreneurial Biomedical Informatics and Bioengineering University of Texas Health Science Center at Houston

Hua Xu, Ph.D., is a UTHealth School of Biomedical Informatics professor. He directs the Center for Computational Biomedicine at UTHealth. He was the Chair of the American Medical Informatics Association natural language processing working group for 2014-2015. In 2008, Dr. Xu received his Doctor of Philosophy in biomedical informatics from Columbia University. In addition, he holds a Bachelor of Science in biochemistry from Nanjing University in China and a Master of Science in computer science from the New Jersey Institute of Technology. Dr. Xu is an expert in biomedical text processing and data mining. His primary research interests include 1) natural language processing of clinical text; 2) text mining of biomedical literature; and 3) healthcare data mining. He is the author of many publications on biomedical NLP and text mining, and his research on medication extraction received the Homer Warner Award from AMIA in 2009. Dr. Xu has been the principal investigator on a number of grants, including R01s from The National Library of Medicine and The National Cancer Institute.





# Tatsuo Hiramatsu, M.D., Ph.D.

Professor International University of Health and Welfare Representative, OHDSI Japan

Dr. Hiramatsu is a professor of the Innovation & Research Support Center at the International University of Health and Welfare (IUHW), Japan. He has been seeking a fusion of medical informatics and epidemiology and is working on an OMOP database network with other university hospitals in his research project. Before moving to IUHW, he was at the University of Tokyo Hospital. He served as its site administrator of MID-NET (Sentinel-like project in Japan) conducted by PMDA (Pharmaceuticals and Medical Devices Agency) and the Ministry of Health, Labor and Welfare.

Various professional experiences represent the journey of his life. He was engaged in an epidemiological investigation of a resident-based cohort and received his Ph.D. based on nutritional epidemiological research. However, before all that, he had had a long experience of being a patient himself :-), longer than that of being a clinician, including six months of hospitalization with multiple complications and a decade of a restricted lifestyle. Dr. Hiramatsu has a wealth of experience in PC software development with several horizontal software packages as an R&D engineer, a team manager, or the senior executive director of a PC software company. Another one of his strengths has been in the area of Internet connection and server construction/operation. In 1990, he started his Internet experience at the WIDE



project (Widely Integrated Distributed Environment), which operated as Japan's Internet backbone in the early days; it also aimed to coordinate academia and industry into an autonomous group that acts across organizational boundaries with new technologies in order to create a better society.





### Ngiam Kee Yuan, MBBS., MRCS., Mmed., FRCS.

Associate Professor Group Chief Technology Officer National University Health System (NUHS)

Associate Professor Ngiam Kee Yuan is the Group Chief Technology Officer of the National University Health System (NUHS) Singapore, overseeing technology deployment in the Western Healthcare Cluster of Singapore. In this role, he implements new technologies throughout NUHS and serves as the Chief Advisor to the Center for Innovation in Healthcare at NUHS. Dr. Ngiam is concurrently the Deputy Chief Medical Informatics Officer at the National University Hospital of Singapore with a special focus on artificial intelligence research and implementation in healthcare. He has certification training from the American Medical Informatics Association and has published in computing and medical journals on healthcare AI applications and technology topics.

Dr. Ngiam is Head and Senior Consultant at the Division of Thyroid and Endocrine Surgery, Department of Surgery, National University Hospital, Singapore. He specializes in thyroid oncology and minimally invasive endoscopic and robotic thyroid surgery. Dr. Ngiam obtained his undergraduate degree from the Royal Free and University College Medical School, London (now University College London). He entered Advanced Surgical Training in General Surgery and was awarded a fellowship from the Royal College of Surgeons of Edinburgh upon completing his training. He is accredited as a general surgery specialist by the Specialist



Accreditation Board, Singapore, and received the Higher Manpower Development Award to complete a fellowship in Metabolic Surgery in Taiwan. He received further training in robotic thyroid surgery at the Seoul National University Hospital, South Korea.

As an Associate Professor Department of Surgery at Yong Loo Lin School of Medicine, National University of Singapore, Dr. Ngiam engages in research into endocrine and metabolic surgery and artificial intelligence applications in healthcare. He promotes interdisciplinary collaboration throughout the NUS campus, particularly between the schools of medicine, engineering, and computer science, for various healthcare applications. He was awarded the ExxonMobil-NUS Research Fellowship for Clinicians and numerous teaching awards for his work in research and education.

Dr. Ngiam is also active in volunteerism and is the Mission Chief for many ground-up surgical missions to regional countries such as Myanmar and Indonesia; under the auspices of the Surgical Outreach to Underserved Localities (SOUL) program with the NUH Department of Surgery.





# Sarah Seager, BS.

# Director of Data Science, OMOP

Sarah is the Director of Data Science for IQVIA. She leads a team of data scientists who create and execute a number of studies using IQVIA's converted OMOP data assets. It is also her mission to increase her and her team's presence within the OHDSI community, contributing technical expertise and knowledge sharing.

Prior to joining IQVIA, Sarah has built her career over the last 20+ years within the UK health sector – conducting large-scale Public Health analytics within the NHS, leading in data management both for the Department of Health and the General Medical Council, as well as designing and implementing data lakes and the creation of a new Data Science function for a UK Private Medical Insurance company.

Sarah joined the OHDSI community in 2018 and is an active member of various OHDSI working groups. She strives to extend her OHDSI collaboration further by offering further community support and performing OMOP tutorial training. She also enjoys bringing her more creative side to the community.





# Cynthia Yang, MS.

### Graduate student, Department of Medical Informatics, Erasmus MC

Cynthia obtained her BSc (2017) and MSc (2019) in Econometrics from Erasmus University Rotterdam, where she focused on quantitative problem-solving using machine learning techniques. Her thesis concerned creating personalized purchase frequency predictions in a business-to-business setting.

Her current interests include methodological research on best practices in clinical prediction modeling.



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# 2022 OHDSI APAC Symposium - Organizing Committee

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Seng Chan You	Ajou University, Korea
Nicole Pratt	University of South Australia, Australia
Mengling 'Mornin' Feng	National University of Singapore, Singapore
Hua Xu	University of Texas Health Science Center at Houston, USA
Tatsuo Hiramatsu	International University of Health and Welfare, Japan
Gyeol Song	IQVIA, USA
Craig Sachson	Columbia DBMI/OHDSI

### 2. Host Committee (Taipei Medical University, Taiwan)

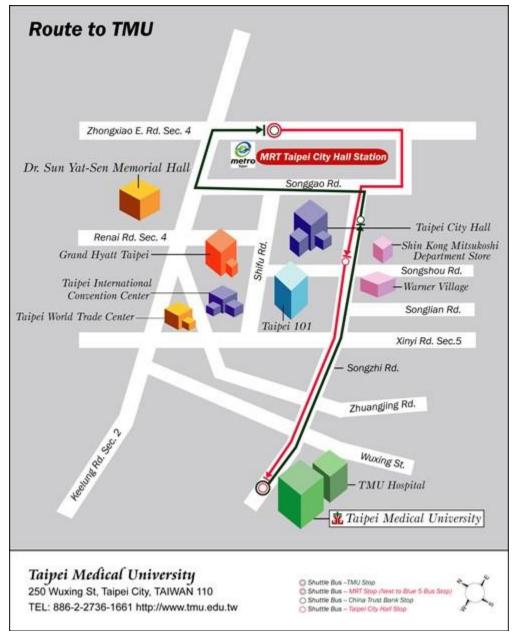
主席 (Chair)	徐之昇 (Jason C. Hsu)
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場地組 (Venue)	鄭惠鑫、楊莉娌、張峻毓、莊乃貞、莊明蒼、廖佩君
住宿組 (Accommodation)	江昌旭、江韋辰
財務組 (Finance)	鄭吉村、林宜錚、林郁竺、馮安慈、張婷、陳美蓉



# 2022 OHDSI Location, Transportation, and Accommodation

### 1. Location

- Main Venue: Taipei Medical University Comprehensive Medical Building (Front Building) 4F Cheng-Pu Conference Hall.
- Address: 250 Wu-Hsing Street, Taipei City, Taiwan 110
- **Telephone** : 02-2736-1661





### 2. Transportation

### By the Taipei Metro

- Take the MRT Bannan Line (Blue line) to Taipei City Hall Station Exit 2 and then take the shuttle bus to school every 10 min.
- Take the MRT Wenhu Line (Brown Line) to Liuzhangli Station and then take the shuttle Bus at the bus stop near Keelung road to School every 15 min.
- Take the MRT Tamsui-Xinyi Line (Red Line) to Taipei 101/World Trade Center Station and then take the shuttle Bus to School every 40 min.
- The school is located near MRT Taipei 101/World Trade Center (Red Line), Taipei City Hall (Blue Line), and Liuzhangli (Brown Line) stations, and TMU provides shuttle services to MRT Taipei City Hall and Liuzhangli stations.

### By Car

- By National Highway No. 3: Get off Xinyi Expressway and enter Xinyi Road, turn left on Songren Road, turn right on Songqin Street, turn left on Songzhi Road and go straight through Zhuangjing Road for about 300 meters; you will see the Taipei Medical University campus on the left.
- Huandong Avenue: Get off Keelung Road, go straight towards Taipei City Hall, turn left on Songgao Road, turn right on Songzhi Road, then go straight across Zhuangjing Road for about 300 meters; you will see the Taipei Medical University campus on the left.

### By Bus

• Public transportation to TMU includes bus lines 266, 288, 226, 1, 235, 22, 33, and Blue 5.

### 3. Accommodation

### **Pacific Business Hotel**

- Address: 11F, No. 495, Guangfu South Road, Xinyi District, Taipei, 11074, Taiwan
- **Tel**: +886-2-8780-8000
- Official Website: <u>http://www.businesscenter.com.tw/en/</u>

### Taipei Fullerton – South

- Address: No.41, Sec. 2, Fuxing South Rd., Taipei City, Taiwan
- Tel: +886-2-2703-1234
- Official Website: <u>http://www.taipeifullerton.com.tw/south/en/about.html</u>