Program Title:

LAI4BM: International Workshop on Large AI Models for Biomedicine

Date:

July 12, 2025

Introduction:

The International Workshop on Large AI Models for Biomedicine (LAI4BM) is a dedicated forum for exploring the transformative role of large-scale AI and foundation models in biomedical research and healthcare. This workshop brings together researchers, clinicians, computational scientists, and industry leaders to share cutting-edge advances, discuss challenges, and foster collaborations in applying powerful AI techniques to critical biomedical areas. Key topics include but are not limited to AI-driven drug discovery, genomic interpretation, clinical diagnostics, medical imaging, Internet of things (IoT) for biomedical applications, and ethical deployment. LAI4BM aims to catalyze innovation and accelerate the responsible integration of large AI models to solve pressing biomedical challenges and advance human health.

Organizing Units:

Department of Computer Science and Engineering,
Department of Chemical and Biological Engineering,
HKUST Collaborative Center for Medical and Engineering Innovation,
State Key Laboratory of Nervous System Disorders,
Center for Medical Imaging and Analysis,
The Hong Kong University of Science and Technology (HKUST)

Organizers:

Prof. Hao Chen, Assistant Professor of CSE, CBE and LIFS, HKUST
Prof. Jiguang Wang, Padma Harilela Associate Professor of CBE and LIFS, HKUST
Prof. Kai Liu, Cheng Professor of Life Science, HKUST
Prof. Yingcong Chen, Assistant Professor at AI Thrust, Information Hub of HKUST (Guangzhou)
Prof. Can Yang, Dr Tai-chin Lo Associate Professor of Mathematics, HKUST
Prof. Xiaofang Zhou, Otto Poon Professor of Engineering & Chair Professor of CSE, HKUST

Venue:

Kaisa Group Lecture Theater (IAS LT), Lo Ka Chung Building, Lee Shau Kee Campus, The Hong Kong University of Science & Technology, Clear Water Bay, Kowloon, Hong Kong

Registration:

International Workshop on Large AI Models for Biomedicine - Registration Form (google.com)

Program:

Time	Session	Host
9:00-9:10	**Opening Remarks** (Prof. Xiaofang Zhou)	*Prof. Hao Chen*
9:10-9:35	**Invited Talk: Beyond Assistance: Rethinking AI-Human Integration in Radiology** *Prof. Pranav Rajpurkar (Harvard University)*	
9:35-10:00	**Invited Talk: Multi-modal Foundation AI for Precision Oncology** *Prof. Ruijiang Li (Stanford University)*	
10:00-10:25	**Invited Talk: Reimagining Healthcare with AI: A Real-World Application of Clinical Management Systems in Hong Kong Hospital Authority** *Mr. Dennis Lee (Hong Kong Hospital Authority)*	
10:25-10:35	Coffee Break	
10:35-11:00	**Invited Talk: Magnetic Resonance Live imaging：from Photograph to Videography** *Prof. Dong Liang (SIAT, Chinese Academy of Sciences)*	*Prof. Yingcong Chen*
11:00-11:25	**Invited Talk: Clinical Implementation of AI in Radiology** *Prof. Kyongtae Tyler Bae (HKU)*	
11:25-12:15	**Panel Discussion: Are We There for Deploying Large AI Models in Biomedical Applications?** 1. **Clinical Adoption:** What must change in healthcare workflows, incentives, and clinician-AI collaboration to achieve meaningful adoption of large AI models at scale? 2. **Benefits vs. Risks:** Where do large biomedical AI models offer the most transformative benefits today—and what risks demand urgent safeguards to prevent harm? *Panelists:* *- Mr. Dennis Lee* *- Prof. Dong Liang* *- Prof. Kyongtae Tyler Bae* *- Prof. Vince Vardhanabhuti* *- Prof. Neeraj Ramesh Mahboobani* *- Prof. Jing Qin* *- Dr. Tsougenis Efstratios*	*Prof. Hao Chen*
12:30-14:00	Lunch (Invitation Only)	
14:00-14:25	**Invited Talk: Building Foundation Model-Powered Multimodal Sensing Systems for Daily Healthcare** *Prof. Xiaomin Ouyang (HKUST)*	*Prof. Yingcong Chen*
14:25-14:50	**Invited Talk: What Doctors Think, Want and Fear About the Large AI Model?** *Prof. Cheong Kin Ronald Chan (CUHK/Hospital Authority)*	
14:50-15:15	**Invited Talk: Intelligent Surgical Assistive Robots** *Prof. Zheng Li (The Chinese University of Hong Kong)*	
15:15-15:25	Coffee Break	

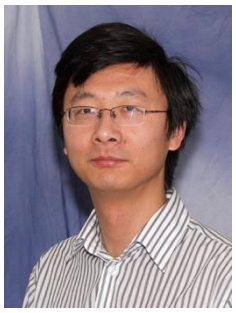
15:25-15:50	**Invited Talk: Deep Learning Models for Cancer Subtype Classification to Advance Precision Oncology** *Prof. Xin Wang (The Chinese University of Hong Kong)*	*Prof. Jiguang Wang*
15:50-16:15	**Invited Talk: Charting the AI Pathway: Opportunities and Challenges in Pharma Development** *Dr. Yang Cheng (AstraZeneca)*	
16:15-16:40	**Invited Talk: Artificial Intelligence Meets Medical Imaging: From Signals to Interpretation** *Prof. Chen Qin (Imperial College London)*	
16:40-17:30	**Panel Discussion: How Will Large AI Models Reshape the Future of Biomedicine?** 1. **Technical Challenge:** How do we overcome core technical hurdles—like computational demands, model interpretability, and real-world reliability—to deploy large AI models safely in clinical settings? 2. **Interdisciplinary Collaboration:** What must fundamentally change to turn AI-bio-clinician collaboration from aspiration to reality? *Panelists:* *- Prof. Cheong Kin Ronald Chan* *- Prof. Zheng Li* *- Prof. Xin Wang* *- Dr. Yang Cheng* *- Prof. Tiffany Y SO* *- Mr. Wayne Tan*	*Prof. Hao Chen*
17:30-17:40	**Closing Remarks**	
18:30-20:00	Dinner (Invitation Only)	

Acknowledgements:

The workshop is partially sponsored by the Department of Computer Science and Engineering (HKUST), State Key Laboratory of Nervous System Disorders, Global Engagement and Communications Office (HKUST), and the HKUST–HKUST(GZ) 20 for 20 Cross-campus Collaborative Research Scheme.

Biographies:
Speakers

Prof. Pranav Rajpurkar, PhD, is an Associate Professor at Harvard University and a researcher in the field of medical artificial intelligence. With a focus on medical image interpretation, Dr. Rajpurkar's research lab strives to develop AI models that can match the proficiency of top-tier medical doctors. His research group is at the forefront of developing "Generalist Medical AI" systems that can closely resemble doctors in their ability to reason through a wide range of medical tasks, incorporate multiple data modalities, and communicate in natural language. He has written over 100 academic articles with more than 24K citations in notable journals like Nature, NEJM, and Nature Medicine. His work has been recognized by MIT Tech Review's Innovator Under 35 in 2023, Nature Medicine Early-career Researcher. To Watch in 2022, and the Google Research Scholar Program in 2023, Forbes 30 Under 30 in 2022. Dr. Rajpurkar leads educational initiatives including the Harvard-Stanford Medical AI Bootcamp Program, and CS197: AI Research Experiences at Harvard.

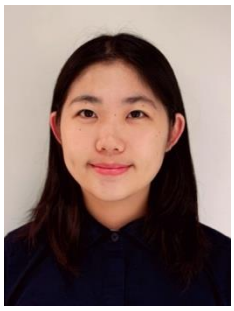


Prof. Ruijiang Li is an Associate Professor of Radiation Oncology at Stanford University School of Medicine. He is also a faculty member of Stanford Institute of Human-Centered Artificial Intelligence and Stanford Cancer Institute. Dr. Li's research is focused on AI for precision oncology, specifically developing digital pathology and imaging-based biomarkers to predict treatment response and patient outcomes. As the senior author, Dr. Li has published research articles in Nature, Nature Machine Intelligence, Nature Communications, Cell Reports Medicine as well as high-impact medical journals including Journal of Clinical Oncology, Annals of Oncology, JAMA Oncology, Lancet Digital Health, Annals of Surgery. Dr. Li has been the Principal Investigator on a total of 7 NIH R01 grants and has served on numerous NIH study sections and grant review panels. Dr. Li has received nationally recognized awards, including the NIH Pathway to Independence Award and ASTRO Clinical/Basic Science Research Award.

Mr. Dennis Lee currently serves as the Business Development Manager under EHP Digital. He is currently helping to setup the Data Services offering and the corresponding product and services portfolio to unlock healthcare technology and capabilities HA and IT&HI have developed in many years. Before the current role, Dennis had been the Senior System Manager for Artificial Intelligence Systems of the Hong Kong Hospital Authority. His past work involved developing the Artificial Intelligence and Big Data Platform to streamline data acquisition for facilitating HA data analysis, develop Hospital Command Center dashboards, and solution deployment for Artificial Intelligence. Mr. Lee led the AI Lab, AI delivery Center, and also Data Collaboration Lab.

Prof. Dong Liang is a Full Professor at the Institute of Biomedical and Health Engineering (IBHE), Shenzhen Institutes of Advanced Technology (SIAT), Chinese Academy of Science. He serves as Vice President of SIAT, Director of IBHE, and Deputy Director of State Key Laboratory of Biomedical Imaging Science and System. He received the Ph.D. degree from Shanghai Jiaotong University in 2006. His primary research focuses on AI in medical imaging, with a particular emphasis on AI-empowered magnetic resonance imaging (MRI) technologies and systems. He has led several major research projects, including the National Science Fund for Distinguished Young Scholars, and NSFC Key Programs, etc. He published 100+ journal papers in IEEE-TMI, MIA, MRM, etc. He served as the Associate Editor of IEEE TMI 2014-2024, and the Annual Meeting Program Committee of ISMRM 2021-2023. He is a recipient of multiple awards, including the first prize of the National Science and Technology Progress Award (2021).

Prof. Kyongtae Ty Bae, PhD, MD, MBA, is Clinical Professor and Head of the Department of Diagnostic Radiology and Global STEM Professor at the University of Hong Kong. He is also the Director of the Jockey Club STEM Lab of Innovative Medical Imaging Research. He was Professor and Chairman of the Department of Radiology and Associate Dean at the University of Pittsburgh, USA. He was also a Professor of Bioengineering and the Director of the Imaging Biomarker Lab at the University of Pittsburgh. He graduated from Seoul National University with a BS in Chemical Engineering. He received a MS in Chemical Engineering from the University of Iowa, MS and PhD in Bioengineering from the University of Pennsylvania, and a MD from the University of Chicago. Dr. Bae did his Radiology residency and fellowship training at the Mallinckrodt Institute of Radiology, Washington University in St Louis and rose through the academic ranks before moving to University of Pittsburgh. He also received MBA from Wharton School of Business at University of Pennsylvania. Dr. Bae's JC STEM Lab of Innovative Medical Imaging Research at HKU specializes in developing novel image-guided intervention, developing and analyzing morphological and functional imaging biomarkers from medical images, and improving the quality and efficiency of radiology practice by use of AI and machine learning. Dr. Bae has published over 700 papers, proceedings, and abstracts including over 280 peer reviewed journal publications (H-index 87). Dr. Bae has received numerous research awards throughout his academic career, including the 2021 Lillian Jean Kaplan International Prize for Advancement in the Understanding of Polycystic Kidney Disease. He has also supervised clinical and research training of numerous students, residents, postdoctoral fellows and visiting scholars during his academic career. At the USA national level of radiology organizations, Dr. Bae served as Chair of the Academic Radiology Research Council and Chair of the Radiological Society of North America Research Grant Review Study Sections. Dr. Bae holds sixteen patents and founded companies in the field of medical device and informatics. Nine of his patents were licensed for commercial implementations.



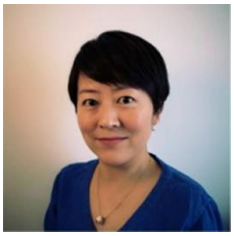
Prof. Xiaomin Ouyang is an Assistant Professor at the Department of Computer Science & Engineering, Hong Kong University of Science and Technology. Previously, she was a postdoctoral researcher at UCLA and received her Ph.D. degree from CUHK in 2023. Her research interests include embedded AI, Internet of Things (IoT), and smart health, with a primary focus on building AI-powered mobile and IoT systems for home and community-based healthcare. She received Distinguished TPC members at ACM SenSys 2025, ACM MobiSys 2023 Best Paper Award and ACM SIGBED China Outstanding Doctoral Dissertation Award. She was named one of EECS Rising Stars in 2023 and mHealth Scholars by NIH in the U.S. in 2024. She has served on the technical program committees and organizing committees of top conferences in mobile computing and IoT, including ACM MobiCom, MobiSys, and SenSys.

Prof. Cheong Kin Ronald Chan is a Consultant at the Hospital Authority, NTEC (Pathology), and Lab Director of North District Hospital, as well as an Honorary Clinical Associate Professor at the Department of Anatomical and Cellular Pathology, The Chinese University of Hong Kong. He leads the Pathology Artificial Intelligence Development and Assessment Laboratory. Dr. Chan has published numerous papers in reputable journals and conferences, contributing significantly to the fields of digital pathology and artificial intelligence. His work includes over 30 publications, with notable journals such as Diagnostic Cytopathology, The Oncologist, and Advanced Science. He has received several awards, including the Teachers of the Year Awards from the Faculty of Medicine, CUHK in 2021 and 2023. Dr. Chan has also been involved in multiple grants related to digital pathology and AI, serving as Principal Investigator on several key projects.

Prof. Zheng LI received his B.S and M.S degrees in Mechanical Engineering from Beihang University, China, and his Ph.D. degree in Mechanical and Automation Engineering from The Chinese University of Hong Kong, Hong Kong SAR. After that, he joined the National University of Singapore as a research fellow. Currently, he is an associate professor in the department of surgery, Multi-scale Medical Robotics Centre, Chow Yuk Ho Technology Centre for Innovative Medicine, and Li Ka Shing Institute of Health Sciences, The Chinese University of Hong Kong. His research mainly focuses on the area of intelligent medical robots, including flexible surgical robots, magnetically actuated medical robots, and soft medical robots/devices. He is a senior member of IEEE, and a member of ASME, RAS, and EMBS. In the past years, he served as topic editor of Frontiers of Robotics & AI, IEEE BioRob, and associate editor of TMRB, RA-L, ICRA, IROS, RoboSoft, BioRob, etc. In addition, he is a committee member of several conferences, such as Robio, ICIA, and CCECE, and a reviewer of journals, including Advanced Sciences, Science Advances, IEEE TRO, SORO, IJRR, IEEE/ASME T-MECH, Cybernetics, TIE, etc. He is the author of one book, three book chapters, over 180 peer-reviewed journal/conference papers, and several patents/copyrights with several been licensed. He received the WIPO National Award for Inventors, Gold of International Exhibition of Inventions Geneva, Gold of

International Invention Fair in the Middle East, Gold of Emedic Global 2019, WRRC 2024 best paper award, IEEE Robio 2022 best paper in robotics, IEEE CCECE 2015 conference paper award, best paper finalist of IEEE Robio 2012, and best poster finalist of IEEE ICRA 2017, etc.

Prof. Xin Wang is an Associate Professor at the Department of Surgery, Chinese University of Hong Kong, directing the Division of Biomedical Informatics and MPhil-PhD Programme in Translational Genomics. He is currently also leading the Laboratory of Translational Bioinformatics at LI Ka Shing Institute of Health Sciences as a Principal Investigator. He obtained his PhD in 2014 from the University of Cambridge Department of Oncology and Cancer Research UK Cambridge Institute. From 2013 to 2015, Prof. Wang did his postdoctoral research at the Department of Biomedical Informatics, Harvard Medical School. Prof. Wang's major research field is cancer bioinformatics. Since 2012, he has been focusing on mechanistic and translational research in major human cancers by developing novel methodologies integrating bioinformatics, systems biology, machine learning and artificial intelligence. His group has also been dedicating to multi-center studies about molecular and image-based biomarkers for cancer early detection, diagnosis, prognosis and subtyping. Prof. Wang published > 90 papers in well-known journals such as Nature Medicine, Gastroenterology, Science Advances, and Nature Communications, with > 12,000 citations. His work is currently supported by significant research funds by Research Grants Council of Hong Kong, Shenzhen City and Guangdong Province, as well as National Natural Science Foundation of China.



Dr. Yang Cheng is Senior Director and Head of Data Science at AstraZeneca R&D China, with a background in medical and bioinformatics. Yang has led a broad portfolio of data science initiatives aimed at advancing drug discovery and development through innovative analytics and informatics platform development. She is particularly interested in harnessing molecular insights and real-world data to inform clinical development decision-making and support more personalized approaches to treatment. Throughout her career, Yang has held leadership roles in informatics and data science at several pharmaceutical R&D organizations, including Novartis Institute for Biomedical Research and Johnson & Johnson Innovative Medicine R&D. In these positions, she has led teams collaborating with multidisciplinary partners to integrate advanced analytics and data-driven strategies into the drug discovery and development pipeline. Yang values the opportunity to work with colleagues across diverse sectors and share her insights within academic and professional communities. She is grateful to participate in this conference and looks forward to learning from peers and contributing to the exchange of ideas in the field.

Prof. Chen Qin is an Assistant Professor in Computer Vision and Machine Learning at Department of Electrical and Electronic Engineering and I-X, Imperial College London. She obtained her Ph.D. in Computing Research from Imperial College London in January 2020. Dr Qin's research is at the intersection between machine learning and medical imaging, with focus on

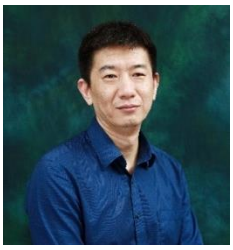
the development of effective and trustworthy machine learning algorithms for medical image computing and analysis, including MR image reconstruction, medical image segmentation and registration, and integration of imaging and non-imaging data, with clinical applications in neurology and cardiovascular medicine. Overall, she has published more than 80 papers in top-tier peer-reviewed engineering and medical imaging journals and conference proceedings (Google Scholar citation: 4486, h-index: 29), such as in IEEE-TMI, MedIA, MICCAI, IPMI, CVPR, ECCV, etc. She was awarded the UKRI EPSRC New Investigator Award. She serves as the Associate Editor for SPIE Journal of Medical Imaging and Journal of Pattern Recognition and the Guest Editor for Magnetic Resonance Materials in Physics, Biology and Medicine, Journal of Machine Learning for Biomedical Imaging (MELBA), and Frontiers in Medicine. She has also served as an area chair for MICCAI 2022-24, a session chair for MICCAI/ISMRM/CMR and a member of organising and programme committee at several international workshops, e.g., CMRxRecon 2023-25 and UNSURE 2022-25.

Panelists

Prof. Vince Vardhanabhuti obtained his medical degree from Guy's, King's and St Thomas' School of Medicine, London, UK, in 2005. He subsequently completed his radiology residency and PhD at Imperial College London. Dr. Vardhanabhuti is currently a Clinician Scientist at the University of Hong Kong, where he serves as Clinical Assistant Professor and co-director of the Medical AI Lab (MAIL) at HKUMed. His research centres on leveraging artificial intelligence in medical imaging to address complex age-related diseases, such as atherosclerotic cardiovascular disease, cancer, and metabolic syndrome, with the goals of outcome prediction and early biomarker identification for subclinical disease. He is also actively engaged in the advancement of deep learning methods for medical imaging reconstruction. A central aim of his work is to accelerate the clinical adoption of emerging technologies to improve patient outcomes. Dr. Vardhanabhuti has authored over 110 peer-reviewed publications, including articles in high-impact journals such as Lancet Oncology, Lancet Digital Health, npj Digital Medicine, JAMA Open Network, IEEE Transactions in Medical Imaging, Investigative Radiology, European Radiology, and EJNMMI, among others. He has contributed more than 100 abstracts and presentations and has been invited as a keynote speaker at numerous local and international conferences.

Prof. Neeraj Ramesh Mahboobani is a clinical assistant professor in the Department of Imaging & Interventional Radiology, Faculty of Medicine, The Chinese University of Hong Kong and honorary consultant radiologist in the Department of Imaging & Interventional Radiology at Prince of Wales Hospital in Hong Kong SAR. He obtained his fellowship in 2017, upon which he was awarded the Dr FL Chan medal by the Hong Kong College of Radiologists for his outstanding performance during his training. He was also awarded the Certificate of Excellence as a Distinguished Young Fellow by the Hong Kong Academy of Medicine in 2018, the Hospital Authority Young Achiever Award in 2023, and was recognized as one of the Ten Outstanding Young Persons of Hong Kong in 2023. He also received the Vocational Service Excellence Award from The Rotary Club of Kowloon

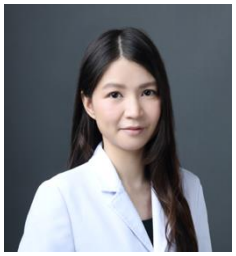
Golden Mile and the Community Service Award from The India Association Hong Kong in 2024. His main area of work is in neuroradiology. In diagnostic neuroradiology, his interests are in MRI imaging of neurovascular and neuro-oncological diseases, as well as advanced MRI techniques including use of MR perfusion and functional MRI. In interventional neuroradiology, he performs a wide range of procedures for neurovascular diseases including carotid stenting, thrombectomy for acute ischaemic stroke, embolization of aneurysms and arteriovenous shunts including brain arteriovenous malformations. In recent years he has been actively involved in the use and adoption of Artificial Intelligence in Radiology. He is the Convenor of the Task Force on Artificial Intelligence under the Hong Kong Academy of Medicine and the Chairman of the Artificial Intelligence Subcommittee of Hong Kong College of Radiologists. He actively uses the RAPID AI software in the management of acute ischaemic stroke patients. He played a central role in the recent implementation of Annalise AI software for the detection of acute intracranial haemorrhage and midline shift on non-contrast CT brain scans in 17 public hospitals in Hong Kong.



Prof. Jing Qin (Harry) is a professor and the director of The Centre for Smart Health, School of Nursing, The Hong Kong Polytechnic University. He also serves as the director of CAS-Hong Kong Joint Laboratory for Multimodal Medical Molecular Imaging, and the director of the Program of Master of Science in Health Informatics, The Hong Kong Polytechnic University. He received his PhD in the Department of Computer Science and Engineering in The Chinese University of Hong Kong in 2009. Prof. Qin's research interests are innovatively harnessing advanced artificial intelligence (AI) and extended reality (XR) techniques in various medicine and healthcare applications. Prof. Qin has secured around 30 competitive research projects as PI/Co-PI, including RGC TRS, RGC CRF, RGC GRF, ITF ITSP, ITF MHKJFS, ITF TCFS, ITF RTH, NSFC, MOST 973, and so on. Prof. Qin has published more than 300 papers in major journals and conferences in his research field, with more than 30,000 Google Scholar Citations and an H-index of 82. Prof. Qin has won the Higher Education Outstanding Scientific Research Output Awards (Science and Technology) to Chinese Ministry of Education (Second Prize) in 2022, as well as many other academic and industrial awards.

Dr. Efstratios Tsougenis (Stratos) is an experienced full-stack AI leader with over 15 years of expertise in the field. After obtaining his PhD in 2013, he has contributed to numerous AI projects across various sectors, such as healthcare, financial services, and smart city initiatives. He currently holds the position of Global Head of Data and AI Strategy at Prudential plc, where he oversees the implementation of AI solutions across all markets. His responsibilities also include AI governance and ensuring responsible AI practices. Previously, Dr. Tsougenis led the AI Lab at Hong Kong Hospital Authority, successfully launching multiple AI solutions in public hospitals. His experience includes also involvement in several healthcare-related AI startups. As part of his academic career, he served as a post-doctoral fellow in the Computer Science and Engineering department at Hong Kong University of Science and Technology. Additionally, Dr. Tsougenis has published several deep learning articles in top conferences and journals, and he currently serves as an Honorary Lecturer for the Faculty of Medicine at the

University of Hong Kong.



Prof. Tiffany Y So is a Clinical Assistant Professor at the Department of Imaging and Interventional Radiology, The Chinese University of Hong Kong and an academic neuroradiologist and researcher in advanced magnetic resonance imaging (MRI) and medical artificial intelligence. She received her medical degree and specialty training in Melbourne, Australia, and is a board-certified specialist in Diagnostic Radiology in Hong Kong, Australia, and New Zealand. Her research focuses on the development of quantitative MRI biomarkers to detect structural and functional brain changes and the application of deep learning techniques for image-based diagnosis, characterisation and prognostic modelling in neurological disease.

Mr. Wayne Tan is a seasoned professional with over 30 years of experience in commercial development, business innovation, and licensing in the biopharmaceutical industry. Currently, he serves as the Head of Biomedical and Healthcare at the Knowledge Transfer Office of the Hong Kong University of Science and Technology (HKUST). In this role, Mr. Tan supports biomedical-related projects in knowledge transfer, licensing, commercialization, and fundraising for startup companies. Under his leadership at HKUST, Mr. Tan has successfully facilitated five projects to be awarded the prestigious RAISe+ scheme—a HKD 10 billion initiative by the ITIC of HKSAR. Notably, only 49 projects from eight universities in Hong Kong have received this award to date. Mr. Tan's extensive career includes pivotal roles in international pharmaceutical firms, global Clinical Research Organizations (CROs), and investment entities, where he played a significant role in regulatory affairs, clinical trial development, and market commercialization. His expertise in licensing is exemplified by his orchestration of a major out-license agreement, transferring a pioneering antibody from a Taiwanese firm to a global pharmaceutical leader. In addition to his professional commitments, Mr. Tan actively volunteers as a Biotech Advisor to the GBA for the Shenzhen Pingshan District Government Science and Technology Innovation Bureau and contributes his expertise to the HK Bio-Med Innotech Association.

Organizers

Prof. Hao Chen is an Assistant Professor at the Department of CSE&CBE, and Division of Life Science, The Hong Kong University of Science and Technology. He leads the Smart Lab focusing on large and trustworthy AI for healthcare. He serves as Director of Collaboration Center for Medical and Engineering Innovation and Associate Director in Center of Medical Imaging and Analysis, HKUST. He received the Ph.D. degree from The Chinese University of Hong Kong (CUHK) in 2017. He has 100+ publications (Google Scholar Citations 34K+, h-index 77) in Nature Biomedical Engineering, Nature Communications, Lancet Digital Health, Nature Machine Intelligence, MICCAI, IEEE-TMI, MIA, CVPR, ICCV, AAAI, etc. He also has rich industrial research experience (e.g., Siemens and Startups), and holds a dozen of patents in AI and medical image analysis. He received several premium awards such as Asian Young Scientist Fellowship,

MICCAI Young Scientist Impact Award, and several best paper awards. He serves as the Associate Editor of multiple journals including IEEE TMI, TNNLS, JBHI, CMIG, etc. He serves as the Program Committee of multiple international conferences including Area Chair of ICLR 2025, CVPR 2024-2025, MICCAI 2021-2023&2025, ACM MM 2024-2025, etc. He also led the team winning 15 medical grand challenges.

Prof. Jiguang Wang received his Ph.D. in Applied Mathematics from Academy of Mathematics and Systems Science, Chinese Academy of Sciences (CAS), and won the Special Prize of President Scholarship and Excellent PhD thesis Award of CAS. Between 2011 and 2015, he was a Postdoctoral Research Scientist at Columbia University. From 2015, he was named as the Precision Medicine Fellow and promoted to an Associate Research Scientist. He established the Wang Genomics Laboratory @HKUST in 2016, focusing on the application of data science in biology and medicine. He has made substantial contributions to (1) characterization, modelling, and prediction of cancer evolution from genomics (Nat Genet 2016; Nat Genet 2017; Nat Commun 2021); (2) discovery, elucidation, and clinical application of MGMT fusion (Nat Genet 2016; Nat Commun 2020) and METex14 in adult gliomas (Nat Genet 2018; Cell 2018); (3) Discovery of MAP3K3-I441M in CCM (AJHG 2021) and elucidation of EndMT in bAVM (Circ Res 2021); (4) reconstruction of RNA Exosome-regulated non-coding transcriptomes (Nature 2014; Cell 2015). He won the Excellent Young Scientist Award of NSFC (2019), School of Engineering Young Investigator Research Award (2019), School of Science Research Award (2021), and the Zhong Nanshan Youth Science and Technology Innovation Award (2021).

Prof. Kai Liu received his Bachelor degree from School of Life Sciences at Peking University in 1998, and received his Ph.D. from Rutgers University at New Brunswick in 2006. Then he did his postdoc research at Children's Hospital Boston/Harvard Medical School. He joined Division of Life Science at HKUST as Assistant Professor in 2011. His research interest focuses on the intrinsic mechanisms regulating axonal regeneration and functional repair after central nervous system injuries.

Prof. Yingcong Chen is an Assistant Professor in the Artificial Intelligence Thrust at The Hong Kong University of Science and Technology (Guangzhou). He is a recipient of the National Youth Talent Program. He received his Ph.D. from The Chinese University of Hong Kong and subsequently worked as a postdoctoral researcher at the Massachusetts Institute of Technology (MIT). Dr. Chen has been dedicated to research in computer vision, with a particular focus on visual generative models. He has published over 50 papers in top-tier conferences and journals such as TPAMI, CVPR, ICCV, and ECCV. His research emphasizes both the foundational aspects and practical applications of visual generative models. He has delivered oral presentations as first or corresponding author at leading conferences multiple times. His work has been recognized as an ESI Highly Cited Paper and was nominated for the Best Paper Award at ICCV 2023. He has received several honors,

including the First Prize of the Natural Science Award from the China Society of Image and Graphics, the Scientific Progress Award from the Guangdong Artificial Intelligence Society, and the Guangdong Industrial Software Science and Technology Award. Dr. Chen serves as an Area Chair or Program Committee Member and reviewer for top academic venues such as TPAMI, IJCV, CVPR, ICCV, ECCV, NeurIPS, AAAI, and IJCAI. His research has also gained significant recognition in industry and has been supported by leading tech companies including SmartMore, Huawei Noah's Ark Lab, Quwan Technology, Kuaishou, and Adobe, with whom he has established deep collaborative partnerships.

Prof. Can Yang is currently a professor in the Department of Mathematics, and a faculty member of the Big Data Research Institute, The Hong Kong University of Science and Technology. He serves as an associate editor for Annals of Applied Statistics, associate editor for Genetics, and academic editor for PLOS Computational Biology. His research focuses on the development of statistical and AI methods and their applications in large-scale data analysis. He has published a number of papers in top journals, including Nature, Nature Machine Intelligence, Nature Computational Science, Nature Communications, and PNAS.

Prof. Xiaofang Zhou is Otto Poon Professor of Engineering and Chair Professor of Computer Science and Engineering (CSE) at The Hong Kong University of Science and Technology (HKUST). He received his BSc and MSc degrees in Computer Science from Nanjing University in 1984 and 1987 respectively, and PhD in Computer Science from University of Queensland (UQ) in 1994. From 1994 to 1999, he worked as a Senior Research Scientist in Commonwealth Scientific and Industrial Research Organisation (CSIRO) in Australia, leading its Spatial Information Systems group. He joined University of Queensland in 1999 and became a Professor of Computer Science in 2004. From 2006 to 2020, he was Head of UQ Data and Knowledge Engineering (DKE) research group and Data Science discipline. His research focus is to find effective and efficient solutions for managing, integrating, and analysing large-scale complex data for business, scientific and personal applications. He has been working in the area of spatiotemporal and multimedia databases, data mining, data quality management, big data analytics, and machine learning. He received the Best Paper Awards at WISE 2012&2013, ICDE 2015&2019, DASFAA 2016 and ADC 2019. He was a Program Committee Chair of IEEE International Conference on Data Engineering (ICDE 2013), ACM International Conference on Information and Knowledge Management (CIKM 2016), and International Conference on Very Large Databases (PVLDB 2020). He was a General Chair of ACM Multimedia Conference (MM 2015). He was the Chair of IEEE Technical Committee on Data Engineering from 2015-2018. Professor Zhou is a Fellow of IEEE.