

4 March 2024



Message from the Vice-President and Pro-Vice-Chancellor (Research) and Dean of Graduate School



The University is committed to nurturing research talents and providing holistic educational experiences for students. As we celebrate the 25th anniversary of the Graduate School, we have launched the Future-Ready Series, offering a growing array of academic-focused workshops, profession-oriented sessions and whole-person development training opportunities to cater to the different needs of our students.

The scope of the HKU Research Postgraduate Symposium has been expanded this year to foster greater engagement from our research students. Our Student Organising Committee, comprising enthusiastic students from all ten faculties, has devoted much effort to planning and arranging the Symposium. The event offers new perspectives and ideas presented by our Hong Kong Presidential PhD Scholarship holders and award recipients, alongside intellectually stimulating presentations from our esteemed keynote speakers. I believe the Symposium plays a key role in elevating the intellectual vibrancy and research culture at HKU as a whole.

To recognise the outstanding performance of our students, new awards have been introduced in recent years. The remarkable attainments celebrated today are a testament to their hard work, dedication and outstanding achievements in research. I am impressed by the foresight and commitment of our students. Their inquisitiveness and enthusiasm are invaluable attributes for young researchers, paving the way for novel discoveries and future advancements in their respective fields. I am confident that these exceptional individuals will continue to make significant contributions to their disciplines and emerge as leaders in their areas.

I would like to extend my gratitude to the University of Hong Kong Foundation for Educational Development and Research and the Mrs Li Ka Shing Fund for their generous support in research education over the years. My congratulations to all awardees for your remarkable accomplishments, and my sincerest appreciation to all supervisors for your invaluable guidance and support throughout your students' research journey. Thanks also to the Student Organising Committee for your support, which has been crucial for the success of the event. Through collaboration, knowledge sharing, and a spirit of innovation we will continue to push the boundaries of research excellence.

Professor Max Shen Vice-President and Pro-Vice-Chancellor (Research) and Dean, Graduate School

Message from the Student Organising Committee

On behalf of the Student Organising Committee, it is my pleasure to welcome you to the HKU Research Postgraduate Symposium cum Award Presentation Ceremony 2024. The Symposium is the premier annual event organised by HKU Graduate School to showcase the learning progress of our fellow research postgraduate students and promote the exchange of knowledge and ideas.

Building on the success of the inaugural edition held in 2023, the Symposium has evolved into a student-led event this year. As the first Student Organising Committee, we recognise that this Symposium provides a unique opportunity for our fellow students from all ten faculties with diverse research interests to come together and explore beyond their field of study. We are therefore delighted to have two renowned scholars share their research in contemporary topics with significant impact on our daily lives as well as poster presentations from our HKU Presidential Scholars and awardees of the Publication and Innovation Awards. We hope the keynote speeches and poster presentations will inspire interdisciplinary research and encourage all fellow student attendees to step out of their comfort zones and interact with our guest speakers and presenting students from different research areas.

We are sincerely grateful for the support provided by the Postgraduate Students Conference/Seminar Grants of the Research Grants Council, Hong Kong, and HKU Graduate School. Our heartfelt appreciation also goes to our advisors, Professor Dong-Yan Jin and Professor Billy Chow, and administrative staff from HKU Graduate School for their tremendous help and guidance.

We hope you will enjoy this Symposium and have a memorable time, and warmest congratulations to all awardees honoured at the Award Presentation Ceremony!



Mr Ho Wan CHAN

PhD Candidate, Department of Pharmacology and Pharmacy, Li Ka Shing Faculty of Medicine Chairperson, Student Organising Committee for the HKU Research Postgraduate Symposium 2024

Student Organising Committee



Top row (from left to right):

Mr Jiajun Chen, Miss Lulu Chen, Ms Yihui Cao, Miss Siwei Zhang, Miss Carmen Hoi Kwan Yam Bottom row (from left to right):

Mr Pemananda Thero Rev Unapane, Ms Victoria Elizabeth Amaral, Ms Zhixuan Li, Miss Ya Xiao, Mr Ho Wan Chan

Chairperson:

Mr Ho Wan Chan, PhD, Department of Pharmacology and Pharmacy

Vice-Chairperson:

Ms Zhixuan Li, PhD, School of Humanities

Secretary:

Miss Ya Xiao, PhD, Faculty of Education

Committee Members:

Ms Victoria Elizabeth Amaral, PhD, School of Biological Sciences
Ms Yihui Cao, PhD, Department of Chemistry
Mr Jiajun Chen, PhD, Department of Civil Engineering
Miss Lulu Chen, PhD, Faculty of Business and Economics
Miss Mengyu Huang, PhD, Faculty of Dentistry
Ms Shiqi Peng, PhD, Department of Social Work and Social Administration
Mr Pemananda Thero Rev Unapane, PhD, Centre of Buddhist Studies
Miss Carmen Hoi Kwan Yam, PhD, Department of Law
Miss Siwei Zhang, PhD, Department of Urban Planning and Design

Advisors:

Professor Dong-Yan Jin, Senior Associate Dean, Graduate School Professor Billy K.C. Chow, Associate Dean, Graduate School

Poster Presentation

To showcase the learning progress of research postgraduate students and promote the exchange of knowledge and ideas, awardees of the HKU Presidential PhD Scholar (HKU-PS) Programme admitted in 2022-23 and recipients of the HKU Foundation Publication Award for Research Postgraduate Students 2023 and the Research Postgraduate Student Innovation Award 2023-24 will share their research projects and interim findings through two poster presentation sessions. Students are divided into 13 groups, with 7 groups presenting in Session A and 6 groups in Session B.

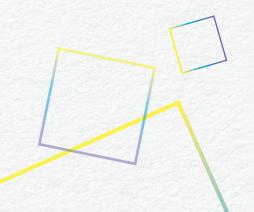
Session A (10:15am – 12:30pm)		Session B (1:40pm – 3:55pm)	
Group 1	Faculty of Science (HKU-PS)	Group 2	Faculty of Science (HKU-PS)
Group 3	Faculty of Architecture / Faculty of Arts / Faculty of Education / Faculty of Law (HKU-PS)	Group 4	Faculty of Arts / Faculty of Business and Economics / Faculty of Social Sciences (HKU-PS)
Group 5	Faculty of Architecture / Faculty of Business and Economics / Faculty of Social Sciences (HKU-PS)	Group 6	Faculty of Engineering (HKU-PS)
Group 7	Faculty of Engineering (HKU-PS)	Group 8	Faculty of Engineering (HKU-PS)
Group 9	Li Ka Shing Faculty of Medicine (HKU-PS)	Group 10	Faculty of Dentistry / Li Ka Shing Faculty of Medicine (HKU-PS)
Group 11	RPg Student Innovation Award	Group 12	HKU Foundation Publication Award for RPg Students
Group 13	HKU Foundation Publication Award for RPg Students		

Please scan for the student lists



Best Poster Presenter Awards

A judging panel will select the best presenter from each group. Each award includes a certificate and a cash prize of HK\$1,000. The Best Poster Presenter Awards will be announced during the award presentation session.



Research Postgraduate Student Innovation Award 2023-24

The Research Postgraduate Student Innovation Award was established in 2022 to promote innovation and interdisciplinary research. Up to ten awards may be made each year to students with the most exciting and innovative research ideas.

SELECTION COMMITTEE

Professor D. Jin, School of Biomedical Sciences (Chairperson)

Professor X. Cui, Department of Physics

Professor R.T.H. Ho, Department of Social Work and Social Administration

Dr M. Tang, Technology Transfer Office

Professor K.K.Y. Wong, Department of Electrical and Electronic Engineering

Professor C. Zhang, Faculty of Dentistry

AWARDEES

Mr Alfred AMRUTH, Department of Physics

Project title: Using Nature's Cosmic Telescopes to Study Dark Matter

Mr Nan CHEN, Department of Mechanical Engineering

Project title: Design and Control of a Single-actuated, Self-rotating Tail-sitter Vertical Take-off and Landing (VTOL) Unmanned Aerial Vehicle (UAV) with Foldable Wings and Ballistical Launch

Mr James Njiraini GACHANJA, Department of Urban Planning and Design

Project title: Mtaa Wetu -Our Neighbourhood Planning App: a web-based urban analysis and citizen level of satisfaction application

Miss Kee Wah LEONG, Department of Mechanical Engineering

Project title: Regulating ion storage for a high performing aqueous magnesium-ion battery

Miss Xueying LYU, School of Clinical Medicine

Project title: Discovery of HBV integration biomarker based on deep learning model for neoadjuvant nivolumab treatment in HBV-associated hepatocellular carcinoma

Mr Ruibin MAO, Department of Electrical and Electronic Engineering

Project title: ReRAM-based in-memory vector database equipped with efficient and versatile search for next-generation Al-powered edge devices

Mr Mengjie WU, School of Clinical Medicine

Project title: Small-molecule inhibition of RNA cytidine acetyltransferase NAT10 as a strategy against liver cancer

Ms Junjing ZHANG, Faculty of Dentistry

Project title: 3D-printed orthodontic appliance with nanodiamond patterned optical strain sensor for monitoring real-time orthodontic data

Mr Yichi ZHANG, Department of Pharmacology and Pharmacy

Project title: Wireless LED-activated drug delivery system for suppression of postsurgical recurrence and metastasis of cancer

HKU Foundation Publication Award for Research Postgraduate Students 2023

The HKU Foundation Publication Award for Research Postgraduate Students was established in 2022-23. Up to twenty awards may be made each year to research postgraduate students who have published a journal article of exceptional quality. The awards are funded by The University of Hong Kong Foundation for Educational Development and Research.

SELECTION COMMITTEE FOR NON-LAB-BASED FACULTIES

Professor C. Cheng, Department of Psychology (Chairperson)

Professor D.W. Arner, Department of Law

Professor K.W. Chau, Department of Real Estate and Construction

Professor M.C.L. Chau, Faculty of Business and Economics

Professor C.M. Hutton, School of English

Professor L.F. Zhang, Faculty of Education

SELECTION COMMITTEE FOR LAB-BASED FACULTIES

Professor D. Jin, School of Biomedical Sciences (Chairperson)

Professor C.H. Chu, Faculty of Dentistry

Professor X. Cui, Department of Physics

Professor X.D. Li, Department of Chemistry

Professor Y. Li, Department of Mechanical Engineering

Professor E.S.W. Nagn, School of Clinical Medicine

Professor W. Tu, Department of Paediatrics and Adolescent Medicine

Professor A. Yan, School of Biological Sciences

AWARDEES

Dr Man Chun CHIU, School of Clinical Medicine

A bipotential organoid model of respiratory epithelium recapitulates high infectivity of SARS-CoV-2 Omicron variant. Man Chun Chiu, Cun Li, Xiaojuan Liu, Yifei Yu, Jingjing Huang, Zhixin Wan, Ding Xiao, Hin Chu, Jian-Piao Cai, Biao Zhou, Ko-Yung Sit, Wing-Kuk Au, Kenneth Kak-Yuen Wong, Gang Li, Jasper Fuk-Woo Chan, Kelvin Kai-Wang To, Zhiwei Chen, Shibo Jiang, Hans Clevers, Kwok Yung Yuen & Jie Zhou, Cell Discovery, 8, 57(2022).

Mr Huanqing CUI, Department of Mechanical Engineering

Dynamic Assembly of Viscoelastic Networks by Aqueous Liquid–Liquid Phase Separation and Liquid–Solid Phase Separation (AqLL-LS PS²). <u>Huanqing Cui</u>, Yage Zhang, Yinan Shen, Shipei Zhu, Jingxuan Tian, Qingchuan Li, Yi Shen, Sihan Liu, Yang Cao, Ho Cheung Shum, *Advanced Materials*, 2022, 34(51).

Mr Beibei HE, Department of Chemistry

Expanded Sequence Space of Radical S-Adenosylmethionine-Dependent Enzymes Involved in Post-translational Macrocyclization. <u>Bei-Bei He</u>, Zhuo Cheng, Zheng Zhong, Ying Gao, Hongyan Liu, Yong-Xin Li, *Angewandte Chemie International Edition*, 2022, 61(48), e202212447.



Mr Bingjie HU, School of Clinical Medicine

Attenuated replication and pathogenicity of SARS-CoV-2 B.1.1.529 Omicron. Huiping Shuai, Jasper Fuk-Woo Chan, Bingjie Hu, Yue Chai, Terrence Tsz-Tai Yuen, Feifei Yin, Xiner Huang, Chaemin Yoon, Jing-Chu Hu, Huan Liu, Jialu Shi, Yuanchen Liu, Tianrenzheng Zhu, Jinjin Zhang, Yuxin Hou, Yixin Wang, Lu Lu, Jian-Piao Cai, Anna Jinxia Zhang, Jie Zhou, Shuofeng Yuan, Melinda A. Brindley, Bao-Zhong Zhang, Jian-Dong Huang, Kelvin Kai-Wang To, Kwok-Yung Yuen & Hin Chu, *Nature*, 2022, 603, pp693-699.

Dr Feng HU, School of Biomedical Sciences

DEPDC1B Promotes Melanoma Angiogenesis and Metastasis through Sequestration of Ubiquitin Ligase CDC16 to Stabilize Secreted SCUBE3. <u>Feng Hu</u>, Ki On Fong, May Pui Lai Cheung, Jessica Aijia Liu, Rui Liang, Tsz Wai Li, Rakesh Sharma, Philip Pun-Ching IP, Xintao Yang, Martin Cheung, *Advanced Science*, 2022, 9(10).

Miss Kee Wah LEONG, Department of Mechanical Engineering

Reversibility of a High-Voltage, Cl⁻-Regulated, Aqueous Mg Metal Battery Enabled by a Water-in-Salt Electrolyte. <u>Kee Wah Leong</u>, Wending Pan, Yifei Wang, Shijing Luo, Xiaolong Zhao, and Dennis Y. C. Leung, *ACS Energy Letters*, 2022, 7(8), pp2657-2666.

Mr Maosu LI, Department of Urban Planning and Design

A room with a view: Automatic assessment of window views for high-rise high-density areas using City Information Models and deep transfer learning. <u>Maosu Li</u>, Fan Xue, Yijie Wu, Anthony G.O. Yeh, *Landscape and Urban Planning*, 226(2022), 104505.

Miss Yuebing LIANG, Department of Urban Planning and Design

Memory-augmented dynamic graph convolution networks for traffic data imputation with diverse missing patterns. Yuebing Liang, Zhan Zhao, Lijun Sun, *Transportation Research Part C: Emerging Technologies*, 143(2022), 103826.

Miss Yun LIN, School of Public Health

Incorporating temporal distribution of population-level viral load enables real-time estimation of COVID-19 transmission. Yun Lin, Bingyi Yang, Sarah Cobey, Eric H. Y. Lau, Dillon C. Adam, Jessica Y. Wong, Helen S. Bond, Justin K. Cheung, Faith Ho, Huizhi Gao, Sheikh Taslim Ali, Nancy H. L. Leung, Tim K. Tsang, Peng Wu, Gabriel M. Leung & Benjamin J. Cowling, *Nature Communications*, 13, 1155(2022).

Mr Chun Yin LIU, School of Humanities

Functional connectivity during orthographic, phonological, and semantic processing of Chinese characters identifies distinct visuospatial and phonosemantic networks. Chun Yin Liu, Ran Tao, Lang Qin, Stephen Matthews, Wai Ting Siok, *Human Brain Mapping*, 2022, 43(16), pp5066-5080.

Miss Hui LIU, Department of Electrical and Electronic Engineering

Realizing High-Detectivity Near-Infrared Photodetectors in Tin–Lead Perovskites by Double-Sided Surface-Preferred Distribution of Multifunctional Tin Thiocyanate Additive. <u>Hui Liu</u>, Lu Zhu, Hong Zhang, Xinjun He, Feng Yan, Kam Sing Wong, and Wallace C. H. Choy, *ACS Energy Letters*, 2023, 8(1), pp577-589. First published on December 19, 2022.

Miss Jinhong LIU, School of Biological Sciences

Bioenergetics of pollen tube growth in *Arabidopsis thaliana* revealed by ratiometric genetically encoded biosensors. <u>Jinhong Liu</u>, Shey-Li Lim, Jia Yi Zhong & Boon Leong Lim, *Nature Communications*, 13, 7822(2022).

Miss Jiahui LUO, Faculty of Education

Qualitative methods to assess intercultural competence in higher education research: A systematic review with practical implications. <u>Jiahui Luo</u>, Cecilia Ka Yuk Chan, *Educational Research Review*, 37(2022), 100476.

Mr Ruibin MAO, Department of Electrical and Electronic Engineering

Experimentally validated memristive memory augmented neural network with efficient hashing and similarity search. Ruibin Mao, Bo Wen, Arman Kazemi, Yahui Zhao, Ann Franchesca Laguna, Rui Lin, Ngai Wong, Michael Niemier, X. Sharon Hu, Xia Sheng, Catherine E. Graves, John Paul Strachan & Can Li, *Nature Communications*, 13, 6284(2022).

Mr Chon Phin ONG, School of Biomedical Sciences

Comparative analysis of SARS-CoV-2 Omicron BA.2.12.1 and BA.5.2 variants. <u>Chon Phin Ong</u>, Zi-Wei Ye, Kaiming Tang, Ronghui Liang, Yubin Xie, Hongzhuo Zhang, Zhenzhi Qin, Haoran Sun, Tong-Yun Wang, Yun Cheng, Hin Chu, Jasper F.-W. Chan, Dong-Yan Jin, Shuofeng Yuan, *Journal of Medical Virology*, 2023, 95(1), e28326. First published on November 21, 2022.

Miss Ngai Yung Nicole TSANG, School of Public Health

Effectiveness of BNT162b2 and CoronaVac COVID-19 vaccination against asymptomatic and symptomatic infection of SARS-CoV-2 omicron BA.2 in Hong Kong: a prospective cohort study. Nicole Ngai Yung Tsang, Hau Chi So, Benjamin J Cowling, Gabriel M Leung, Dennis Kai Ming Ip, *The Lancet Infectious Diseases*, 2023, 23(4), pp421-434. Published online on December 12, 2022.

Mr Yizhou WANG, Department of Social Work and Social Administration

Effectiveness of enhancing contact model on reducing family caregiving burden and improving psychological wellbeing among caregivers of persons with schizophrenia in rural China. <u>Yi-Zhou Wang</u>, Xue Weng, Tian-Ming Zhang, Ming Li, Wei Luo, Yin-Ling Irene Wong, Lawrence H. Yang, Graham Thornicroft, Lin Lu and Mao-Sheng Ran, *Psychological Medicine*, 2022, pp1-11.

Mr Xu ZHANG, Department of Geography

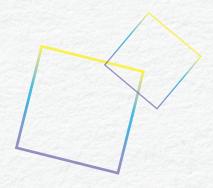
Bridging the gap between GRACE and GRACE-FO using a hydrological model. <u>Xu Zhang</u>, Jinbao Li, Qianjin Dong, Zifeng Wang, Han Zhang, Xiaofeng Liu, *Science of the Total Environment*, 822(2022), 153659.

Mr Hongyu ZHOU, Department of Computer Science

Generalized radiograph representation learning via cross-supervision between images and free-text radiology reports. <u>Hong-Yu Zhou</u>, Xiaoyu Chen, Yinghao Zhang, Ruibang Luo, Liansheng Wang & Yizhou Yu, *Nature Machine Intelligence*, 2022, 4(1), pp32-40.

Mr Yan ZHU, Department of Computer Science

Flexible learning of quantum states with generative query neural networks. <u>Yan Zhu</u>, Ya-Dong Wu, Ge Bai, Dong-Sheng Wang, Yuexuan Wang & Giulio Chiribella, *Nature Communications*, 13, 6222(2022).



Dissertation Year Fellowship

The Dissertation Year Fellowship is a prestigious programme to enable selected outstanding final year PhD students to pursue an additional year of training at the University to bring his/her doctoral research to a higher level before graduation. Only outstanding full-time PhD students who have the thesis rated as top 10% by the Thesis Examining Committee can compete for the Fellowship.

Mr Alfred AMRUTH

Department of Physics

Mr Chok Meng CHAN

School of Chinese

Miss Shuyu CHU

Department of Law

Miss Xunchang FANG

Faculty of Business and Economics

Mr Ronghao JIANG

Department of Geography

Mr Pavel KREJCI

School of Humanities

Mr Chong LIU

Department of Civil Engineering

Miss Runying LONG

School of Clinical Medicine

Mr Jiajun LUO

Department of Law

Mr Qichang MA

Department of Politics and Public Administration

Mr Wimalajothi Thero REV MADIPOLA

Centre of Buddhist Studies

Mr Jun SU

Department of Mathematics

Mr Lars Lund THOMSEN

Department of Physics

Mr Ka Wo WONG

School of Clinical Medicine

Mr Zichen YANG

Department of Mathematics

Mr Zaixuan ZHANG

Department of Psychology

Miss Yajun ZHENG

Faculty of Education



HKU Presidential PhD Scholar Programme 2023-24

The HKU Presidential PhD Scholar Programme was established by the University in 2019 to attract top candidates from around the world to pursue full-time PhD studies at HKU. The programme offers the most prestigious scholarship package to selected students.

FACULTY OF ARCHITECTURE

Department of Architecture

Miss Fei DENG*

Department of Real Estate and Construction

Ms Jiayao LIU* Mr Yi ZHANG

Department of Urban Planning and Design

Ms Sijie DONG*

Miss Ziyuan LI

Miss Bingyu LUO

Miss Linve SONG*

Mr Chaofan WANG

Mr Ziming WANG*

Miss Yiwen ZHU

FACULTY OF ARTS

School of Chinese

Miss Hoi Yan CHU*

Miss Lu Ll

Miss Danqi LU

School of Humanities

Ms Zhixuan Ll

School of Modern Languages and Cultures

Miss Ailin LI*

FACULTY OF BUSINESS AND ECONOMICS

Mr Haotian FENG*

Mr Yiming LI

Miss Xinyi LIANG*

Ms Jiayin SONG*

Mr Junjie XIAO*

FACULTY OF DENTISTRY

Miss Jiusi GUO*

Miss Shuwen HOU*

Mr Yingheng LIU*

Miss Xinyu YAN*

FACULTY OF EDUCATION

Miss Yonghe TI*

Miss Hou Yee TSI*

Miss Yuqi YANG

FACULTY OF ENGINEERING

Department of Civil Engineering

Mr Xu HAN*

Mr Yumin LIANG*

Mr Bin LIU*

Mr Hongzheng SHI*

Department of Computer Science

Mr Chenxin AN

Mr Wei CHEN

Miss Shansan GONG

Mr Jiaxin HUANG

Mr Yuheng LEI*

Mr Dongchen Ll

Mr Junzhe Ll

Miss Yingying LIU*

Ms Ge QU*

Mr Che SHEN

Mr Qianyong WAN*

Mr Yue WANG

Mr Chengyue WU*

Mr Lihe YANG

Mr Yazheng YANG

Mr Dongjie YU*

Mr Shuxiang ZHANG

Department of Electrical and Electronic Engineering

Mr Mingyao CUI*

Mr Zefan LI*

Mr Jiahao MA

Mr Xiangyu MENG*

Mr Shengling QIN*

Miss Kaiyue SUN

Miss Xiaoshan WU*

Miss Yuxin ZHANG

Mr Yangze ZHOU*

Department of Industrial and Manufacturing Systems Engineering

Miss Qian LIN*

Department of Mechanical Engineering

Mr Zhenfei CHANG* Mr Jiashi XING* Mr Zhe ZHANG*

FACULTY OF LAW

Mr Pierce Yiwei LAI Mr Ziyue ZHOU*

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School of Biomedical Sciences

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Mr Songxian OU*
Mr Erfan SHEKARRIZ*
Mr Ilia SIROTKIN*
Miss Yee Lok TSOI*
Miss Clara Shania WONG*
Miss Wing Yan WONG
Miss Shuxin XIAO

Miss Yui Yan Hillary YIP* Miss Hongzhuo ZHANG

Miss Wan XU*

School of Clinical Medicine

Mrs Yi Kai CHAN
Ms Yanghonghong FEI
Miss Qiuya LI
Mr Tianze LIN*
Miss Wing Lam TAM
Mr Dingyuan WANG*
Mr Qingyun WANG
Miss Yibing WU*
Mr Yi ZENG

School of Nursing

Miss Yushen ZUO*

Department of Pharmacology and Pharmacy

Mr Suhas KRISHNAMOORTHY*
Ms Kyung Jin LEE
Miss Yiyang LIU*

School of Public Health

Mr Cheuk Long CHOW Miss Yijia SHI Mr Chengyao ZHANG*

FACULTY OF SCIENCE

School of Biological Sciences

Ms Carolin DAHMS*
Mr Leonardo FROSI*

Ms Xin Ci OOI*

Miss Yan Yi Macy YUEN* Mr Mengjin ZHANG Miss Xiting ZHUANG

Department of Chemistry

Miss Pamela Audrey LIE*
Mr Zelin ZHOU

Department of Earth Sciences

Mr Nikolai TKACH*

Department of Mathematics

Mr Tianyou ZENG*
Mr Jiaming ZHANG*

Department of Physics

Mr Qingyang MO
Mr Soumil ROYCHOWDHURY*
Mr Yifan SUN

Department of Statistics and Actuarial Science

Miss Yueman FENG Mr Jinhong NI Mr Yize WANG* Mr Jiacheng XU* Mr Yu YUN* Mr Mai ZHANG

FACULTY OF SOCIAL SCIENCES

Department of Geography

Miss Ying Jia CHEUNG Miss Zirong LIN

Department of Politics and Public Administration

Mr Xirui GAO Mr Pengfei XIE*

Department of Psychology

Ms Run JIN* Mr Li LIANG*

Department of Social Work and Social Administration

Miss Kewen WANG*

Hong Kong Institute for the Humanities and Social Sciences

Mr Jiarui WU

HKU MUSKETEERS FOUNDATION INSTITUTE OF DATA SCIENCE

Mr Jintao LIN* Mr Xubin REN* Mr Li SUN Mr Junchen YAN Mr Yunchao ZHANG

^{*} Also awardee of the Hong Kong PhD Fellowship Scheme funded by the Research Grants Council

HKU Foundation Award for Outstanding Research Postgraduate Students 2021-22

The award was established in 2002 to give due recognition to students who have submitted a thesis of exceptional quality and demonstrated outstanding performance in other academic aspects. Each year, not more than ten students will receive this award among hundreds of students who have submitted their thesis during the specific academic year. The 2021-22 awards are funded by The University of Hong Kong Foundation for Educational Development and Research.

SELECTION COMMITTEE FOR THE FACULTIES OF ARCHITECTURE, ARTS, BUSINESS AND ECONOMICS, EDUCATION, LAW, AND SOCIAL SCIENCES

Professor C. Cheng (Chairperson)

Department of Psychology

Professor C.M.K. Chan

Faculty of Business and Economics

Professor C.M. Hutton

School of English

Professor L.F. Zhang

Faculty of Education

SELECTION COMMITTEE FOR THE FACULTIES OF DENTISTRY, ENGINEERING, MEDICINE, AND SCIENCE

Professor B.P. Chan (Chairperson)

Department of Mechanical Engineering

Professor A.N.Y. Cheung

School of Clinical Medicine

Professor J. Lu

Department of Mathematics

Professor R.M. Watt

Faculty of Dentistry

Mr Walton Man To CHAN

MPhil, School of Clinical Medicine

Supervisors:

Professor S.K.P. Lau, School of Clinical Medicine Professor K.H. Kok, School of Clinical Medicine

Thesis Title:

The Role of *Candida auris* Extracellular Vesicles on Pathogenesis and Treatment



Mr CHAN's research addressed a pressing issue facing clinicians treating the multidrug-resistant (MDR) superbug *Candida auris*. His research revealed that in nanogram concentrations, naturally secreted particles known as extracellular vesicles could dramatically increase the survival of the fungal superbug against certain drugs. These results suggest that targeting this mechanism could be a viable strategy to combat multidrug resistance not only in this pathogen but also in MDR organisms in general. This work was published in the leading microbiology journal *Emerging Microbes and Infection*.

During his MPhil studies, Mr Chan placed first in two significant competitions — the Three Minute Thesis Competition at HKU and the MIT-HKU Health Hackathon. Such achievements demonstrate that in addition to his research ability, Mr Chan possesses scientifically important skills such as communication, ideation, and leadership. In his spare time, he hosts science workshops and shares his passion for biology with children.

Since finishing his MPhil, Mr Chan has started research into enterovirus neuropathogenesis as a PhD student at HKU.



Dr Man Chun CHIU

PhD, School of Clinical Medicine

Supervisors:

Professor K.Y. Yuen, School of Clinical Medicine Professor J. Zhou, School of Clinical Medicine

Thesis Title:

Establishing Human Respiratory Epithelial Organoid Culture Systems for Modeling SARS-CoV-2 Infection

Dr CHIU's PhD research focused on establishing human respiratory organoid (mini-organ) culture as an advanced experimental model for studying viral infections, particularly SARS-CoV-2. He established a novel human respiratory epithelial organoid culture system to generate nasal, airway, and alveolar organoids. These organoids are robust, universal, and physiologically relevant experimental tools for diverse biomedical and translational applications.

His PhD work has resulted in two first-authored publications and more than 10 co-authored publications, as well as three patents related to organoid technology. He has been awarded the Dr K.P. Stephen Chang Gold Medal, the HKU Foundation Award for Outstanding Research Postgraduate Students, the HKU Foundation Publication Award for Research Postgraduate Students, and a gold medal in the 48th International Exhibition of Inventions of Geneva.

Dr Chiu is now working as a Post-doctoral Fellow in the Centre for Virology, Vaccinology and Therapeutics at HKSTP (the Hong Kong Science and Technology Parks Corporation). He is also taking part in a start-up company, BiomOrgan Limited, to realize the great potential of organoid technology.

Dr Kuo Feng HUNG

PhD, Faculty of Dentistry

Supervisors:

Professor M.Y.Y. Leung, Faculty of Dentistry Professor M.M. Bornstein, Faculty of Dentistry Professor J.P. Matinlinna, Faculty of Dentistry

Thesis Title:

Cone-Beam Computed Tomography Imaging for Detection and Visualization of Anatomical Landmarks and Pathological Findings of the Maxillary Sinus: Possibilities and Limitations



Dr HUNG's research focuses on artificial intelligence (AI), diagnostic imaging, and radiation dose optimization in dento-maxillofacial radiology. His PhD thesis comprises seven studies that explored AI's potential in dentistry, developed AI models for detecting, segmenting, and measuring maxillary sinus landmarks and pathologies on cone-beam computed tomography (CBCT) images, assessed the correlation between sinus characteristics and dental status, and investigated radiation doses and retake rates in CBCT examinations. These findings guide AI development in dentistry, highlight the connection between sinus and dental conditions, and identify areas for optimization in imaging practices to minimize patient dose.

After his PhD, Dr Hung pursued his academic career as a Post-doctoral Fellow and is now an Assistant Professor in HKU's Faculty of Dentistry. He has published over thirty journal articles and three book chapters, and he also serves on editorial boards. When contemplating Al's role in dentistry, Dr Hung says, "We expect that Al will bring us closer to more precise, personalized, predictive, and preventive dentistry in the near future".



Dr Kar Wai LO

PhD, Department of Chemistry

Supervisors:

Professor C.M. Che, Department of Chemistry Professor Y. Chen, Technical Institute of Physics and Chemistry, Chinese Academy of Sciences

Thesis Title:

Luminescent Dinuclear d⁸ Gold(III) and Platinum(II) Complexes. Impact of Metal–Metal Interaction on Photo-physical Properties, Excited State Dynamics and OLED Application

Dr LO's research focuses on developing luminescent metal complexes and their applications in organic lightemitting diodes (OLEDs), a research field attracting much interest in recent years. In particular, his thesis explored the effect of metal-metal interaction on the luminescent properties of metal complexes.

In the first two chapters, Dr Lo described the synthesis of a series of dinuclear Pt^{II} and Au^{III} complexes with emission covering the whole visible light spectrum by varying the intramolecular metal–metal distances. The results from one chapter was published in the prestigious peer-reviewed journal *Angewandte Chemie International Edition* (impact factor: 16.823) as ESI highly cited paper. In his third chapter, he showed the ligand effect on the emission of Au^{III} thermally activated delayed fluorescence complexes, and a related manuscript is under preparation. During his PhD study, Dr Lo was awarded Outstanding Teaching Assistant Awards from his department for two consecutive years in recognition of his enthusiasm and excellence in teaching.

After completing his PhD, Dr Lo joined the AIR@InnoHK programme under the Innovation and Technology Commission, HKSAR, to continue his research work on luminescent materials.

Dr Leisi PEI

PhD, Faculty of Education

Supervisors:

Professor F.K.S. Leung, Faculty of Education Professor G. Ouyang, Faculty of Education

Thesis Title:

How Writing Shapes Cognition: An Investigation of the Neural Underpinning of Human Handwriting Production and Its Influence on Mathematical Cognition



Dr PEI's research investigates the superior performance of Chinese students in mathematics from a new angle — whether the highly skilled visuomotor integration shaped by extensive Chinese handwriting practice (compared with English handwriting) positively influences mathematical abilities.

Specifically, Dr Pei developed an innovative system for real-time synchronization between electroencephalography (EEG) signals and handwriting kinematics. Using this system, she characterized the neural dynamics associated with naturalistic handwriting and examined the associations between handwriting, visuomotor integration, and mathematical abilities at both behavioural and neural levels. The study found that Chinese handwriting shows a unique association with visuomotor integration at the neural level, which is not observed in handwriting English scripts and Arabic numbers. These findings suggest a theoretical pathway that Chinese handwriting enhances mathematics learning by strengthening visuomotor integration ability.

Since graduation, Dr Pei has been continuing her academic career as a Post-doctoral Fellow at HKU, where she is focusing on utilizing neuroscience and information technologies to better understand and enhance learning in real-life contexts.



Dr Si QIAO

PhD, Department of Urban Planning and Design

Supervisors:

Professor A.G.O. Yeh, Department of Urban Planning and Design Professor X. Zhang, Department of Urban Planning and Design

Thesis Title:

Understanding Ride-Hailing and Inventing Future Transit: Pathways to Spatial Justice

Dr QIAO's PhD thesis systematically investigated the development of ride-hailing services (e.g., Uber/Lyft/DiDi) and how these new services will revolutionize human mobility and future transit. The thesis work deepens the understanding of the complex ways in which smart mobility provision is related to gender, income, and residence, and, hence, discovers a new way for integrating smart mobility and public transit for a just future.

During her PhD studies, Dr Qiao published over 20 SCI/SSCI papers as the core author in peer-reviewed journals. Her thesis was honoured with dissertation awards from the Peking University-Lincoln Institute and the American Geographical Society. She also received research and paper awards from the International Transport Forum, Asian Geographical Association, and Hong Kong Society for Transportation Studies.

Dr Qiao has continued to pursue her research interests in the field of transport geography and spatial justice, serving as a Post-doctoral Fellow in HKU's Department of Urban Planning and Design.

Mr Martin Man Him TSE

MPhil, Hong Kong Institute for the Humanities and Social Sciences

Supervisors:

Professor D.A. Pamler, Hong Kong Institute for the Humanities and Social Sciences

Dr K.W. Fung, School of Chinese

Thesis Title:

Civil Buddhism and Martial Daoism: An Ethnographic and Textual Study on a Chinese Local Ritual Tradition in Northern Guangdong



Mr TSE is a student of Daoist rituals and Chinese society. Rituals appear to be exotic and esoteric, but they are the essential structuring elements that give shape to society. In his MPhil research, he studied a local ritual tradition in the region of Huanghua, northern Guangdong, whose ritual manuscripts and performances combine both Chinese Buddhist liturgy and Daoist Lüshan tradition. Such tradition exhibits an intriguing civil-martial duality that weaves the social fabric of the local community — the civil Buddhist articulates a supernatural bureaucracy that keeps the spiritual world in order, whereas the martial Daoist performs exorcist rites to drive away evil spirits.

In collaboration with his supervisor Professor D.A. Palmer, the above research output will be published as part of *The Book Series of Daoist Rituals* under Xinwenfeng. Mr Tse has also published in *American Anthropologist* and *Studies in Chinese Religions*. For his current PhD research, he is applying the "civil-and-martial duality" framework to the Lanten Yao in Laos, an ethnic minority that still preserves its own Daoist ritual tradition and manuscripts.



Dr Xiangsong WANGPhD, Department of Earth Sciences

Supervisor

Professor M. Sun, Department of Earth Sciences

Thesis Title:

Magmatism in the Southwestern Central Asian Orogenic Belt: Implications for Tectonic, Metallogenic and Environmental Evolution

Dr WANG's PhD thesis work systematically investigated the magmatism in the southwestern Central Asian Orogenic Belt, a topic with great significance to the mechanism of oroclinal bending, the origin of arc magmas, the petrogenesis of adakite and intraplate magmatism, and the relationship between anoxic ocean and ore deposits.

Throughout his research postgraduate studies, Dr Wang has exhibited exceptional research performance and outstanding ability, which led to him being awarded the HKU Dissertation Year Fellowship. Dr Wang also boasts an excellent research track record, having published 15 articles, including six first-author papers in prestigious journals, such as *Earth and Planetary Science Letters, Tectonics*, and *GSA Bulletin*.

Dr Wang possesses a distinct vision for delving deeper into early Earth's evolution and planetary geology. He has formulated a comprehensive research plan to realize this vision and has been awarded the position of Post-doctoral Fellow in the Department of Earth Sciences, HKU.

Dr Chao YANG

PhD, Department of Civil Engineering

Supervisor:

Professor X.Y. Li, Department of Civil Engineering

Thesis Title:

Electrochemical Oxidation Using Novel Anodes for Advanced Wastewater Treatment: Emerging Organic Pollutant Removal and Virus Disinfection



Dr YANG's PhD thesis addresses a crucial issue in the field of water and environmental engineering and presents an innovative solution of advanced electrochemical oxidation technologies for water pollution control and reuse. The thesis demonstrates an exceptional level of originality and presents a fresh perspective on high-performance anodes for advanced wastewater treatment, with a particular focus on emerging organic pollutant removal and virus disinfection. The research findings hold both significant academic value and practical importance, and the technological innovations will fundamentally advance the field of water engineering and wastewater treatment for urban environmental sustainability in Hong Kong, China, and beyond.

After completing his PhD, Dr Yang became a Post-doctoral Fellow and later a Research Assistant Professor in the Department of Civil Engineering at HKU. His future focus will be on advancing low-carbon electrocatalytic oxidation technology for wastewater treatment and resource recovery.



Dr Qunsong ZENG

PhD, Department of Electrical and Electronic Engineering

Supervisor:

Professor K. Huang, Department of Electrical and Electronic Engineering

Thesis Title:

Communication-and-Computation Integrated Designs of Next-Generation Intelligent Edge: Resource Management, Wirelessly Powered Learning, and In-Memory Baseband Processing

Dr ZENG's research interests span a wide range of topics, including wireless communications, edge intelligence, baseband processing, in-memory computing, quantum sensing, and semantic communications. In particular, his dissertation primarily focused on addressing two key issues through integrated computation-and-communication designs: the energy bottleneck in federated edge learning systems and the need for ultra-fast, energy-efficient baseband processing in 6G communications.

Throughout his PhD studies, Dr Zeng demonstrated exceptional research performance and comprehensive abilities. He was awarded the Y.S. and Christabel Lung Postgraduate Scholarship and the P.K. Yu Memorial Scholarship, reflecting his passion for and excellence in research. Dr Zeng has an outstanding research track record, with 18 publications (11 journal articles and seven conference papers) and over 600 citations.

After receiving his PhD, Dr Zeng joined HKU's Department of Electrical and Electronic Engineering as a Research Assistant Professor.

Li Ka Shing Prizes 2021-22

In 1990, Dr Li Ka Shing made a generous donation to the University. Part of the investment income earned on the donation has been used to establish the Li Ka Shing Prizes. The Prizes are awarded on the basis of academic excellence to four PhD theses and two MPhil theses annually in and after 2005-06. This Prize is highly competitive and the recipients are the best of our elite students.

SELECTION COMMITTEE FOR THE FACULTIES OF ARCHITECTURE, ARTS, BUSINESS AND ECONOMICS, EDUCATION, LAW, AND SOCIAL SCIENCES

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School of Clinical Medicine

Professor J. Lu

Department of Mathematics

Professor R.M. Watt

Faculty of Dentistry



Mr Man Sing CHEUNG

MPhil, School of Humanities

Supervisors:

Professor J.M. Carroll, School of Humanities
Professor O. Sanchez-Sibony, School of Humanities

Thesis Title:

Rebuilding Hong Kong's Entrepôt Economy, 1945–1950

Mr CHEUNG's research examines how parallel markets helped peripheral economies survive the foreign exchange crises and imbalance in global trade after World War II. In his project, he investigates the costs and benefits of Hong Kong's reconstruction strategy, which centred on attracting illegal goods and capital with carefully designed parallel markets informally sponsored by the government, as well as cultivating informal monetary links with North America, outside of the Sterling Area framework. In analysing the interaction between these informal arrangements and contemporary systems of rationing and trade controls, his thesis reveals the systemic fragility and political risks of such liminal arrangements. This approach draws on the evolving theories on marketcraft and international currency hierarchies, and contributes towards the growing body of literature on Hong Kong's shift towards Trans-Pacific exchanges by demonstrating the government as a key agent initiating this shift. He is now working on publishing his thesis as an article.

Mr Cheung is now a DPhil student at Mansfield College, University of Oxford, where he is working on the history of China's attempted economic stabilization during the Chinese Civil War. Focusing on the role of trade imbalance and other external shocks in the crisis, this project offers a case study of the strategies and cost of failure of economic readjustment for one of the major turning points in modern Chinese history. In the future, the post-war world and its myriad regime of controls will continue to be the focus of Mr Cheung's research, as he is "attracted by its otherworldliness, just like the Covid era".

Mr Longhui YUAN

MPhil, Department of Earth Sciences

Supervisor:

Professor M.H. Lee, Department of Earth Sciences

Thesis Title:

Origin and Evolution of the Orbits and Spins of the Giant Planets in the GJ 1148 System

Mr YUAN's dissertation thoroughly studied the origin and evolution of the GJ 1148 extrasolar planetary system, which is a rare system of a low-mass star with a pair of gas giant planets.

In the first part of his thesis, Mr Yuan performed N-body simulations with a hypothetical third planet and found that the architecture of the GJ 1148 system can be produced by planet–planet scattering and the ejection of a planet.

In the second part of his thesis, Mr Yuan studied the spin evolution of the inner planet of the GJ 1148 system under the outer planet's gravitational perturbation. He found that the spin rate of the planet is not significantly altered by the eccentricity variations. However, by systematically studying the influence of the ratio of the secular timescale and the spin-down timescale, he found the inner planet's rotation rate can vary significantly when the two timescales are comparable.

Finally, Mr Yuan repeated the planet–planet scattering simulations presented in an earlier paper. He carefully checked his results using different N-body codes and found consistent results that disagree with previous research. The findings have important implications for the evolution of the so-called warm Jupiters under the scenario of in-situ scattering.

Mr Yuan is now a PhD student at ETH Zurich in Switzerland, where he is studying the origin of magnetic fields on Earth and other planets.





Dr Ziyi CAI

PhD, Department of Social Work and Social Administration

Supervisors:

Professor P.S.F. Yip, Department of Social Work and Social Administration Professor Y.W. Law, Department of Social Work and Social Administration

Thesis Title:

The Institutional, Socio-economic and Proximal Factors of Women's Suicide Mortality

Dr CAI's thesis contributed significantly to a less explored area in suicidology by studying women's suicide mortality with an emphasis on multidimensional social-contextual factors. Her findings provide valuable insights into women's suicide not simply being a symptom caused by psychological or mental health problems, as the social contextual factors — including legal discrimination against women, socio-economic development, and the use of suicide methods — also play a key role.

The ground-breaking work provides strong evidence that preventing women's suicide requires a paradigm shift from the dominant psychocentric framework to a broader framework that attends to social contexts. Legal framework changes at the institutional level, such as closing the legal loopholes that allow negative practices of discriminating against women, should be the starting point for women's suicide prevention. In addition to removing the upstream risk factors, restricting lethal suicide methods that are commonly used in women's suicide acts based on the local context is also an important component of suicide prevention.

Four papers generated from Dr Cai's thesis have been published in widely respected journals, including *Lancet Regional Health-Western Pacific, Social Science & Medicine*, and *Journal of Affective Disorders*. The external examiner, a pioneer in the social factors and suicide field, highly praised her work. "The thesis is very complete, innovative, and evidence based," he commented. "Over the last 15 years, I have served as the external international reviewer on many PhD dissertations on the subject of the link between social factors and suicidality. If I include all the dissertation committees that I have served on, her thesis would be near the top."

After receiving her PhD, Dr Cai joined the Population Health Sciences Institute at Newcastle University, UK, as a Research Associate.

Dr Wing Sum CHEU

PhD, School of Clinical Medicine

Supervisors:

Professor C.C.L. Wong, School of Clinical Medicine Professor I.O.L. Ng, School of Clinical Medicine

Thesis Title:

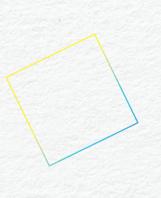
Combination Therapies to Enhance Efficacy of Immune Checkpoint Inhibitors in Hepatocellular Carcinoma

Dr CHEU's research focuses on identifying potential combination treatment approaches to enhance the efficacy of immune checkpoint inhibitors (ICIs) in liver cancer. T cells are the key players in our immune system for killing cancer cells. Immune checkpoints are molecules expressing on T cells that serve as a brake to limit their activities. ICIs inhibit these immune checkpoints and re-activate T cell functions. ICIs have become a major therapy for multiple cancer types including liver cancer, which is a lethal disease with limited treatment options. However, ICIs only work in a subset of liver cancer patients. This is because apart from immune checkpoints on T cells, other factors influence anti-tumour immune responses, including the form of cancer cell death and the tumour microenvironment.

In her PhD study, Dr Cheu demonstrated that the induction of a particular form of cell death, ferroptosis, promoted anti-tumour immune responses and worked synergistically with ICIs. She also identified the mechanism of the accumulation of an immunosuppressive metabolite, adenosine, in the tumour microenvironment in liver cancer and showed that targeting adenosine signalling also improved the efficacy of ICIs. These findings provide mechanistic bases to identify potential combination treatment approaches with ICIs and improve the clinical outcomes of patients. Her PhD work has been published in *Cellular and Molecular Gastroenterology and Hepatology* and *Science Advances*.

Dr Cheu is currently a Post-doctoral Fellow in Professor Carmen Wong's team and continuing her research on cancer immunotherapies in liver cancer. Her goal is to identify novel therapeutic approaches with strong scientific rationales to support the choices of combination treatment for cancer patients, thereby improving their clinical outcomes.







Dr Yu FENG

PhD, Department of Civil Engineering

Supervisors:

Professor J. Chen, Department of Civil Engineering
Professor C. Zheng, Southern University of Science and Technology

Thesis Title:

Tropical Forest Loss in the Early Twenty-First Century: Patterns, Drivers, and Implications for the Carbon Cycle

Dr FENG's doctoral thesis comprehensively explores the spatial and temporal dynamics of carbon loss in tropical forests and its driving forces, offering valuable insights into land use management and climate mitigation strategies.

The thesis reveals a twofold increase in forest carbon loss across tropical regions from 2001 to 2019, attributing this increase predominantly to agricultural expansion. Furthermore, it uncovers extensive forest disturbance in tropical mountainous areas — a novel revelation absent from previous climate change assessments and current model configurations. This discovery underscores the urgent need for immediate and sustained action to fulfil commitments that aim to curb forest loss. Crucially, such efforts must encompass efficient and legal strategies for commodity and food production that do not compromise tropical forests.

Dr Feng provides great insights into important scientific questions and captures data and modelling to address them. His interdisciplinary approach spans ecology, hydrology, agriculture, and remote sensing, covering scales from field plots to global perspectives. He has published 41 peer-reviewed articles, with three as the corresponding author and 19 as the first author.

Post-PhD, Dr Feng contributed to research at the Laboratoire des Sciences du Climat et de l'Environnement (LSCE), France. Currently, he holds a tenure-track position as Associate Professor at the Eastern Institute of Technology, Ningbo.

Note: Dr Yu FENG is under the joint educational programme for PhD between The University of Hong Kong and the Southern University of Science and Technology.

Dr Hong XIANG

PhD, Faculty of Business and Economics

Supervisors:

Professor S. Huang, Faculty of Business and Economics Professor T.C. Lin, Faculty of Business and Economics

Thesis Title:

Essays on Empirical Asset Pricing

Dr XIANG works in the field of empirical asset pricing, with a focus on the implications of asset management and investor behaviour on asset prices. Given the importance of the financial market and the tremendous growth of the asset management industry, Dr Xiang's research has significant value as it could help regulators and investors better understand (1) the economic causes of prominent asset pricing regularities in the financial market, and (2) the capital market outcomes of institutional frictions and investors' behavioural biases. He is driven by the desire to understand the real-world financial market to pursue a PhD in finance.

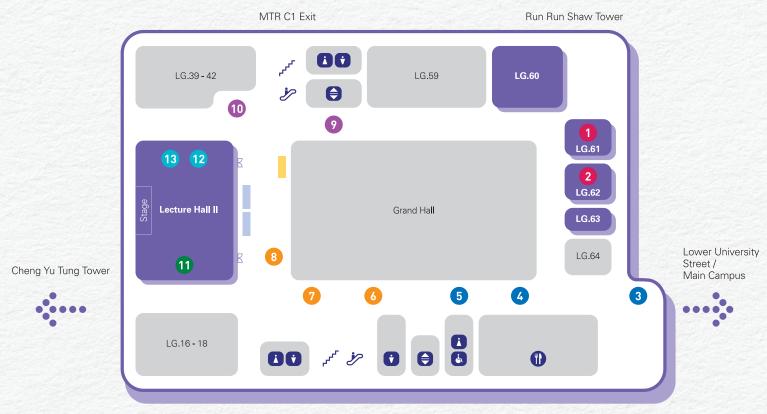
During his PhD study at the Faculty of Business and Economics, Dr Xiang published two papers in well-recognized academic journals, including the *Journal of Financial Economics*, and he has presented his works at prestigious international conferences. Moreover, his research has received attention from industry practitioners and has been covered by well-known media outlets such as Bloomberg.

After completing his PhD study, Dr Xiang joined the School of Accounting and Finance of The Hong Kong Polytechnic University as a tenure-tracked Assistant Professor of Finance, where he continues to work in the area of empirical asset pricing. He has been awarded Early Career Scheme funding from the Hong Kong Research Grants Council, and his research has recently been published in the *Journal of Financial and Quantitative Analysis*.



Poster Presentation Floor Plan

LG Level, Centennial Campus, HKU



The Jockey Club Tower



Faculty of Social Sciences (HKU-PS)

Group 5
Faculty of Architecture /
Faculty of Business and Economics /
Faculty of Social Sciences (HKU-PS)

Faculty of Business and Economics /

Group 4
Faculty of Arts /

Group 12
HKU Foundation Publication Award for RPg Students

RPg Student Innovation Award

Group 13
HKU Foundation Publication Award for RPg Students





HKU Research Postgraduate Symposium cum Award Presentation Ceremony

Programme Rundown

Monday, March 4, 2024 | 9:00am to 5:45pm Lecture Hall II, Centennial Campus, The University of Hong Kong

9:00 – 9:30am	Registration
9:30 – 9:35am	Opening Address Professor Dong-Yan Jin Senior Associate Dean, Graduate School
9:35 – 10:15am	Keynote Speech #1 Religion: A Source for Conflict or A Tool for Peacebuilding? Professor Dr Iselin Frydenlund Professor, Religious Studies MF Norwegian School of Theology, Religion and Society
10:15am – 12:30pm	Poster Presentation: Session A
12:30 – 1:40pm	Lunch
12:45 – 1:40pm	Meet and Greet the Keynote Speakers Professor Dr Iselin Frydenlund (CPD-LG.60) Professor Andras Nagy (CPD-LG.63)
1:40 – 3:55pm	Poster Presentation: Session B
3:55 – 4:35pm	Keynote Speech #2 Safe and Universal Stem Cell Source for Off-the-Shelf Therapeutic Cell Products Professor Andras Nagy Shawn Kimel Senior Scientist Lunenfeld-Tanenbaum Research Institute, Sinai Health System, Toronto, Canada
4:35 – 4:40pm	Remarks by the President Professor Xiang Zhang President and Vice-Chancellor
4:40 – 5:45pm	Award Presentation Research Postgraduate Student Innovation Award 2023-24 Awards presented by Professor Xiang Zhang, President and Vice-Chancellor
	HKU Foundation Publication Award for Research Postgraduate Students 2023 Awards presented by Dr Patrick Poon, Deputy Chairman of the HKU Foundation
	Dissertation Year Fellowship Awards presented by Professor Billy Chow, Associate Dean, Graduate School
	HKU Presidential PhD Scholar Programme 2023-24 Awards presented by Professor Dong-Yan Jin, Senior Associate Dean, Graduate School
	Best Poster Presenter Awards Awards presented by Panel Heads of Judging Panel
	HKU Foundation Award for Outstanding Research Postgraduate Students 2021-22 Awards presented by Dr Patrick Poon, Deputy Chairman of the HKU Foundation
	Li Ka Shing Prizes 2021-22 Awards presented by Professor Anderson Shum, Associate Vice-President (Research and Innovation)

Keynote Speech #1

Religion: A Source for Conflict or A Tool for Peacebuilding?

Professor Dr Iselin Frydenlund

Professor, Religious Studies,
MF Norwegian School of Theology, Religion and Society

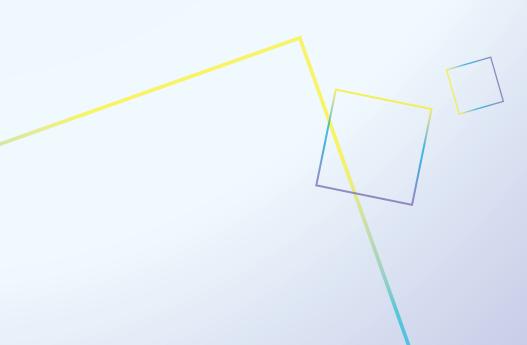


Biography

Professor Iselin Frydenlund is Professor of the Study of Religion at MF Norwegian School of Theology, Religion and Society and a Fellow of the MF Centre for the Advanced Study of Religion. She specialises in questions relating to Buddhism and its societal impact, focusing on Buddhism, politics, nationalism and violence in Sri Lanka and Myanmar. She also works on Buddhist-Muslim relations in Buddhist majority states in Asia and is the PI of the Research Council of Norway-funded research project INTERSECT ("Intersecting Flows of Islamophobia"). Since 2016, she has also been heading an academic exchange programme between MF and Myanmar Institute of Theology. Professor Frydenlund regularly appears in national and international media on questions related to Buddhism and politics, and she frequently provides analysis for policy-makers at home and abroad. Her latest book is *Buddhist-Muslim Relations in a Theravada World* (Palgrave Macmillan, 2020), co-edited with Michael Jerryson. She is currently working on a monograph on Buddhism as a social and political force in Asia.

Abstract

The world appears as unstable as ever, with new military conflicts creating chaos, fear and immense civilian suffering. In several of the ongoing conflicts, religion appears to play an important – if not crucial – role. In this talk, Professor Frydenlund will ask key questions: Does religion really matter in war and peace? What is the potential for religious actors in peacebuilding? What is the outcome of religious dialogue? This talk will analyse the multidimensional – and often ambiguous – roles of religion in conflict situations. It analyses the religion—war nexus from multiple perspectives, moving beyond the common-sense perception that religion matters, to indicate *in what ways* religion matters for war and peace. Finally, while providing some answers to the question 'What's the deal with religion', this talk also asks 'How to deal with it', a question that points to dilemmas connected to religion and peacebuilding, from both a policy-making and an academic perspective.



Keynote Speech #2

Safe and Universal Stem Cell Source for Off-the-Shelf Therapeutic Cell Products

Professor Andras Nagy

Shawn Kimel Senior Scientist, Lunenfeld-Tanenbaum Research Institute, Sinai Health System, Toronto, Canada



Biography

Dr. Andras Nagy is currently a Shawn Kimel Senior Scientist at the Lunenfeld-Tanenbaum Research Institute, Sinai Health System, Professor in the Department of Obstetrics & Gynaecology and Institute of Medical Science at the University of Toronto and Professor at the Australian Regenerative Medicine Institute in Monash University, Melbourne. He holds a Tier I Canada Research Chair in Stem Cells and Regeneration. He is a Fellow of the Royal Society of Canada in the Life Sciences Division of the Academy of Science. Dr. Nagy is also a Foreign Member of the Hungarian Academy of Science, an Honorary Professor at the Helsinki University, and a Distinguished Professor at the Hong Kong University.

Dr. Nagy has made significant breakthroughs in developmental genetics, mouse and human pluripotent stem cell biology (both embryonic and reprogramming-induced), disease modelling and cell therapy approaches. His team created the first Canadian human embryonic stem cell lines in early 2000. In 2009, they developed the first method allowing the generation of iPS cell lines without any genetic change. Their approach allowed studying the reprogramming process at multiple OMICS levels, almost at daily resolution from differentiated cells to pluripotency. His current research has become even more translational by addressing and coming up with solutions for two significant hurdles of cell therapies: safety and allogeneic cell acceptance without the need for suppression of the immune system. Dr. Nagy's research in cell-based therapy aims to advance medicine with a focus on treating incurable degenerative diseases, such as blindness, diabetes mellitus, arthritis, spinal cord injury, ageing, haemophilia, hypothyroidism, chronic pain, and multiple neurological disorders, including multiple sclerosis, depression, and bipolar disease.

Abstract

The use of ex-vivo cultured allogeneic cells is currently being considered for treating degenerative conditions. However, one of the biggest challenges is achieving allograft tolerance without the need for immune suppression. To address this issue, we transgenically expressed eight local-acting, immune-modulatory transgenes in cells. We hypothesized that this would protect them against rejection and achieve induced Allogeneic Cell Tolerance (iACT) in fully immune-competent mice. Our results showed that allogeneic allografts survived long-term, without the use of immunosuppressive drugs.

Since the immune-modulatory genes have highly conserved functions, this strategy could also work in the human system. By using iACT stem cells, we could potentially provide off-the-shelf available cells to treat/cure medical conditions without the need for immune suppression of the patient.

It is crucial to ensure safety in immune evasive cell-based therapies to eliminate the risk of developing cancer, as these cells are not subjected to immune surveillance. A highly reliable kill-switch called "FailSafeTM" was developed to eliminate cells with cancerous potential or uncontrolled growth. This system also provides safety data for informed decisions by doctors, regulators, and patients for more effective and safe cell therapies that can transform modern medicine.

The FailSafe™ cell, when combined with iACT genome editing, allows for the creation of a single pluripotent cell line that can be used as a source of readily available therapeutic cell products. These cells can then be further modified to express biologics, enabling them to target the underlying mechanism of a disease by providing biologics, including anti-inflammatory or analgesic factors, as well as antibodies against infections. Some models will be presented for such a combination of gene and allogeneic cell therapy.

