

HKU Research Postgraduate Symposium cum Award Presentation Ceremony

11 March 2025



The Symposium has been supported by the Postgraduate Students Conference/Seminar Grants of the Research Grants Council, Hong Kong.

Sponsoring organisation



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

Research is at the heart of our academic community, driving innovation, discovery and academic excellence. We prioritise talent development. The HKU Research Postgraduate Symposium provides a valuable platform to enrich the educational experience for research postgraduate students, and at the same time promotes a culture of collaboration and intellectual exchange. Hong Kong Presidential PhD Scholarship holders and award recipients across diverse disciplines will present their excellent research, showcasing their passion for discovery and desire to advance knowledge. The Symposium acts as a hub for the cross-pollination of ideas and exploration of new frontiers in academia and beyond, enhancing a dynamic research environment at HKU.

The exceptional accomplishments celebrated today demonstrate our research students' dedication in their pursuit of knowledge. I am proud of the high calibre of research conducted by our students. Young researchers are driven by their eagerness for exploration and innovation. Their intellectual curiosity and research commitment will empower them to continually progress and make significant contributions in their respective fields.

I would like to offer my gratitude to The University of Hong Kong Foundation for Educational Development and Research and the Mrs Li Ka Shing Fund for their continued support in research education. My congratulations go to all awardees for your achievements in your research endeavours, and my deepest appreciation to all supervisors for your invaluable guidance and support to students. I extend a special acknowledgement to the Student Organising Committee for your enthusiasm and devotion, which have greatly contributed to the success of the event. Let us together nurture a culture of research excellence, pushing the boundaries of knowledge and cultivating a spirit of academic inquiry.



A handwritten signature in black ink, appearing to read 'Max Shen'.

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

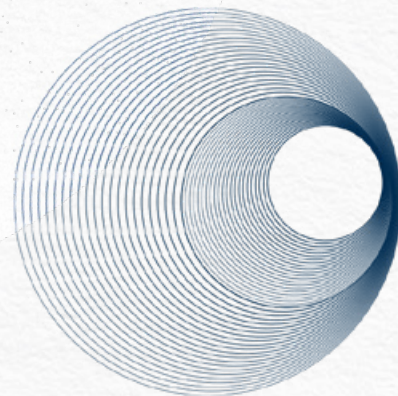
Message from the Student Organising Committee

I am delighted to extend a warm welcome to you on behalf of the Student Organising Committee to the HKU Research Postgraduate Symposium cum Award Presentation Ceremony 2025. The Symposium serves as a flagship annual event to highlight the academic journey of our research postgraduate students and promote the sharing of knowledge and ideas.

The Symposium was established in 2023 to provide a unique and memorable opportunity for our fellow students from all ten faculties to come together and explore beyond their research areas. As the current organisers and also former participants, we see the Symposium as a platform both for self-validation and intellectual exchange. We are delighted to have Professor Andrew Ellul to share with us, as well as poster presentations from our HKU Presidential Scholars and awardees of the Publication and Innovation Awards. We anticipate that the keynote speech and poster presentations will inspire a passion for interdisciplinary research, motivating students to venture beyond their familiar areas and gain a deeper understanding of diverse research fields.

We would like to express our sincere gratitude for the support provided by the Postgraduate Students Conference/Seminar Grants of the Research Grants Council, Hong Kong. We also thank our advisor, Professor Dong-Yan Jin, and the dedicated administrative staff from the Graduate School for their invaluable assistance and guidance. A special thanks goes to Epigeum for their generous support towards the Symposium. Finally, congratulations to all the awardees recognised at the Award Presentation Ceremony!

We trust that you will have an enjoyable and memorable experience at the Symposium.



Y. Wu

Mr Yuxiao WU
PhD Candidate, Faculty of Business and Economics
Chairperson, Student Organising Committee for the
HKU Research Postgraduate Symposium 2025

Student Organising Committee



Top row (from left to right) Mr Ryan HO, Mr Yuxiao WU
Middle row (from left to right) Mr Chi Wui NG, Mr Hogan Kok-Fung WAI
Bottom row (from left to right) Ms Siqi SONG, Miss Hui Yuan LIM, Miss Scarlet Nga Chin TONG, Miss Najia SHARMIN, Mr Yefeng WU

Chairperson

Mr Yuxiao WU, PhD, Faculty of Business and Economics

Vice Chairperson

Miss Najia SHARMIN, PhD, Department of Electrical and Electronic Engineering

Secretary

Mr Yefeng WU, PhD, Faculty of Dentistry

Committee Members

Mr Ryan HO, PhD, School of Humanities

Mr Zhitao HUANG, PhD, Faculty of Law

Miss Hui Yuan LIM, PhD, School of Biological Sciences

Mr Chi Wui NG, PhD, Faculty of Education

Mr Soumil ROYCHOWDHURY, PhD, Department of Physics

Ms Siqi SONG, PhD, Centre for Applied English Studies

Miss Scarlet Nga Chin TONG, PhD, Department of Urban Planning and Design

Mr Hogan Kok-Fung WAI, PhD, School of Public Health

Miss Zhiwei ZHENG, PhD, Department of Psychology

Advisor

Professor Dong-Yan JIN, Senior Associate Dean, Graduate School

HKU Research Postgraduate Symposium cum Award Presentation Ceremony

Programme Rundown

Tuesday, March 11, 2025
12:00 noon to 6:00 p.m.

Lecture Hall II, LG/F, Centennial Campus, The University of Hong Kong

12:00 noon – 12:45 p.m. **Meet and Greet the Keynote Speaker** (CPD-LG.60)

12:30 – 1:00 p.m. **Registration**

1:00 – 1:05 p.m. **Opening Address**

Professor Dong-Yan Jin
Senior Associate Dean, Graduate School

1:05 – 2:45 p.m. **Poster Presentation: Session A** (CPD-LG.61-62, Lecture Hall II and Foyer Area)

2:45 – 4:25 p.m. **Poster Presentation: Session B** (CPD-LG.61-62, Lecture Hall II and Foyer Area)

4:25 – 5:00 p.m. **Keynote Speech**

The Historical Roots of Lending Discrimination: The Long-Term Effects of “Redlining” Maps

Professor Andrew Ellul
Professor of Finance and Fred T. Greene Chair in Finance
Kelley School of Business, Indiana University

5:00 – 5:05 p.m. **Remarks by the President**

Professor Xiang Zhang
President and Vice-Chancellor

5:05 – 5:55 p.m. **Award Presentation**

Research Postgraduate Student Innovation Award 2024-25

Award presented by Professor Xiang Zhang, President and Vice-Chancellor

HKU Foundation First Year Excellent PhD Award 2023-24

Award presented by Professor Lap-Chee Tsui, Chairman of the HKU Foundation

HKU Foundation Publication Award for Research Postgraduate Students 2024

Award presented by Professor Lap-Chee Tsui, Chairman of the HKU Foundation

Dissertation Year Fellowship

Award presented by Professor Dong-Yan Jin, Senior Associate Dean, Graduate School

5:05 – 5:55 p.m.

HKU Presidential PhD Scholar Programme 2024-25

Award presented by

Engineering Panel

Professor Edmund Lam, Associate Dean, Graduate School

Humanities and Social Sciences Panel

Professor Cecilia Cheng, Associate Dean, Graduate School

Medicine and Dentistry Panel

Professor Dong-Yan Jin, Senior Associate Dean, Graduate School

Science Panel

Professor Billy Chow, Associate Dean, Graduate School

Best Poster Presentation Awards and Poster Presentation Merit Awards

Award presented by

Groups 1 – 4

Professor Cecilia Cheng, Associate Dean, Graduate School

Groups 5 – 9

Professor Edmund Lam, Associate Dean, Graduate School

Groups 10 – 11

Professor Billy Chow, Associate Dean, Graduate School

Groups 12 – 14

Professor Zhiwei Chen, Suen Chi-Sun Professor in Clinical Science and
Chair Professor of Immunology and Immunotherapy, School of Clinical Medicine

***HKU Foundation Award for Outstanding Research Postgraduate Students
2022-23***

Award presented by Professor Lap-Chee Tsui, Chairman of the HKU Foundation

Li Ka Shing Prizes 2022-23

Award presented by Professor Max Shen

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

5:55 – 6:00 p.m.

Closing Address

Professor Max Shen

Vice-President and Pro-Vice-Chancellor (Research) and 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 2023-24 and recipients of the HKU Foundation Publication Award for Research Postgraduate Students 2024 and the Research Postgraduate Student Innovation Award 2024-25 will share their research projects and interim findings through two poster presentation sessions. Students are divided into 14 groups, with 7 groups presenting in Session A and another 7 groups in Session B.

Session A (1:05 – 2:45 p.m.)

Group 1	Faculty of Architecture / Faculty of Education
Group 3	Faculty of Arts / Faculty of Social Sciences
Group 5	Faculty of Engineering / Institute of Data Science
Group 7	Faculty of Engineering
Group 9	Faculty of Engineering
Group 11	Faculty of Science
Group 13	Li Ka Shing Faculty of Medicine

Session B (2:45 – 4:25 p.m.)

Group 2	Faculty of Architecture / Faculty of Law
Group 4	Faculty of Business and Economics / Faculty of Social Sciences
Group 6	Faculty of Engineering
Group 8	Faculty of Engineering
Group 10	Faculty of Science
Group 12	Faculty of Dentistry / Li Ka Shing Faculty of Medicine
Group 14	Li Ka Shing Faculty of Medicine

Please scan for the student lists



Best Poster Presentation Awards and Poster Presentation Merit Awards

In each group, the top two presenters will receive the poster presentation awards. The awards include a certificate and a cash prize of HK\$1,000 for the Best Poster Presentation Awards, and HK\$300 for the Poster Presentation Merit Awards. The results will be announced during the award presentation session.

Note: Recipients of the HKU Foundation Publication Award for Research Postgraduate Students and Research Postgraduate Student Innovation Award will not be eligible to compete for the poster presentation awards.

Keynote Speech

The Historical Roots of Lending Discrimination: The Long-Term Effects of “Redlining” Maps



Professor Andrew Ellul

Professor of Finance and Fred T. Greene Chair in Finance
Kelley School of Business, Indiana University

Biography

Professor Andrew Ellul is Professor of Finance and Fred T. Greene Chair of Finance at Indiana University’s Kelley School of Business. He joined the Kelley School of Business at Indiana University after completing his PhD at the London School of Economics and Political Science. His research interests focus on financial intermediaries, institutional investors’ trading and risk management, empirical corporate finance, labor and finance, and market microstructure. He was the Executive Editor of the *Review of Corporate Finance Studies* between 2018 and 2024, Editor of the *Review of Finance* between 2014 and 2017, and a visiting academic at the Office of Financial Research, a federal agency. Professor Ellul is a Research Associate of the Centre for Economic Policy Research, Center for Studies of Economics and Finance, Financial Markets Group, and European Corporate Governance Institute and serves on the organization committees of the leading finance conferences. His research has been published by the leading finance and economics journals, including the *Journal of Finance*, *Journal of Financial Economics*, *Review of Financial Studies*, and the *American Economic Review*. He teaches courses in corporate finance and investment analysis at the undergraduate, graduate and PhD levels and has won several teaching and research awards.

Abstract

Does geographical discrimination persist over time, even across several decades, and despite legislative efforts aimed at removing it? There has been a long-standing interest in economics in the link between geography and socioeconomic outcomes. In this talk, Professor Ellul poses the question whether there is historical persistence of past urban “redlining” policies, that led to restricted credit access in specific urban communities, on present-day mortgage lending. The talk will cover the urban “redlining” maps of the 1930s-era Home Owners Loan Corporation (HOLC) in the US, repealed more than 60 years ago. Professor Ellul will show how contemporary borrowers located in neighborhoods that were “redlined” almost a century ago continue to pay higher interest rates and fees, and are more likely to be denied mortgage credit. These results indicate the persistence of geographical discrimination that operates over time scales of decades and continue despite fair-lending laws. Such discrimination is even higher for minority borrowers. The evidence points to limitations of simply introducing legislation, an important first step, to address disparities and discrimination in mortgage markets.

Selection Committee for Research Postgraduate Student Awards

The Selection Committee for Research Postgraduate Student Awards considers applications/nominations of research postgraduate (RPg) student awards, including the HKU Foundation First Year Excellent PhD Award, HKU Foundation Publication Award for Research Postgraduate Students, Research Postgraduate Student Innovation Award, Li Ka Shing Prizes, and HKU Foundation Award for Outstanding Research Postgraduate Students, and recommends awards for approval by the Graduate School.

Non-STEM Panel

Professor C. Cheng, Department of Psychology (Chairperson)
Professor D.W. Arner, Faculty of Law (until January 31, 2025)
Professor D.R. Carless, Faculty of Education
Professor K.W. Chau, Department of Real Estate and Construction
Professor M.C.L. Chau, Faculty of Business and Economics
Professor R.T.H. Ho, Department of Social Work and Social Administration
Professor C.M. Hutton, School of English
Professor T.S. Veitch, Faculty of Law
Professor L.F. Zhang, Faculty of Education (until January 31, 2025)

STEM Panel

Professor E.Y.M. Lam, Department of Electrical and Electronic Engineering (Chairperson)
Professor W.K. Ching, Department of Mathematics
Professor C.H. Chu, Faculty of Dentistry
Professor B.J. Cowling, School of Public Health
Professor X.D. Li, Department of Chemistry
Professor Y. Li, Department of Mechanical Engineering
Professor E.S.W. Ngan, School of Clinical Medicine

Innovation Award Panel

Professor E.Y.M. Lam, Department of Electrical and Electronic Engineering (Chairperson)
Professor M.C.L. Chau, Faculty of Business and Economics
Professor W.K. Ching, Department of Mathematics
Professor R.T.H. Ho, Department of Social Work and Social Administration
Professor E.S.W. Ngan, School of Clinical Medicine
Dr M. Tang, Deputy Director, Technology Transfer Office

Research Postgraduate Student Innovation Award 2024-25

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.

Mr Hayk AZIZBEKYAN, School of Humanities

Project title: Bringing the Digital 3D Data to the Excavation: Experiments with Mixed and Augmented Reality (MR/AR) during Archaeological Fieldwork

Mr Wang CHEN, Department of Civil Engineering

Project title: A Multiagent-Based Simulation Platform for Urban Mobility in the Autonomous Driving Era

Miss Yixin HUANG, School of Biomedical Sciences

Project title: Structure and Function of Coronavirus Double-Membrane Vesicle Pore Complex

Miss Jialin LAI, Department of Chemistry

Project title: Photoredox DNA Molecular Swimmers for Studying Cellular Behavior

Miss Yingzhe LI, Faculty of Education

Project title: AI-Augmented Real-Time Speech Skill Training for Enhancing Information Processing Capacity and Efficiency

Mr Shuai YUAN, Department of Geography

Project title: Revealing the Energy Transition Process in the Greater Bay Area from 2000 to 2020 by Satellite Images and Deep Learning

Mr Heng ZHANG, Department of Electrical and Electronic Engineering

Project title: Wearable Wireless Charging System for Next-Generation Capsule Endoscopy

Miss Jiahang ZHANG, Faculty of Business and Economics

Project title: Building Trust in the Green Finance Market: Unveiling Assurance Dynamics

Miss Siwei ZHANG, Department of Urban Planning and Design

Project title: MultiSense DumpSpotter: A Multi-Modal Language-Based Framework for Urban Improper Dumpsite Identification, Classification, and Analysis

Miss Yaping ZHAO, Department of Electrical and Electronic Engineering

Project title: Bridging Computational Imaging and Computer Vision with Infinite-Depth Networks and Constant Memory for Smart Cities

HKU Foundation First Year Excellent PhD Award 2023-24

The HKU Foundation First Year Excellent PhD Award was established from the academic year 2023-24. Up to fifteen awards may be made each year to PhD students who have excellent performance during the probationary period. The awards are funded by The University of Hong Kong Foundation for Educational Development and Research.

Mr Guodong CHEN

Department of Earth Sciences

Mr Zhiyang DOU

School of Computing and Data Science

Mr Dongsheng HE

Department of Urban Planning and Design

Miss Zhihan JIANG

Department of Electrical and Electronic Engineering

Mr Hanzhe LI

Faculty of Business and Economics

Miss Ziyang LIANG

Faculty of Law

Mr Tingcong LIN

School of English

Miss Dan LIU

Department of Sociology

Mr Jianxiao LIU

Department of Real Estate and Construction

Dr Xinyu PAN

Department of Psychology

Dr Jian WEI

School of Biological Sciences

Mr Junyu WU

School of Chinese Medicine

Miss Ya XIAO

Faculty of Education

HKU Foundation Publication Award for Research Postgraduate Students 2024

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.

Dr Alfred AMRUTH, Department of Physics

Einstein rings modulated by wavelike dark matter from anomalies in gravitationally lensed images. [Alfred Amruth](#), Tom Broadhurst, Jeremy Lim, Masamune Oguri, George F. Smoot, Jose M. Diego, Enoch Leung, Razieh Emami, Juno Li, Tzihong Chiueh, Hsi-Yu Schive, Michael C. H. Yeung & Sung Kei Li, *Nature Astronomy*, 7(2023), pp736-747.

Mr Nan CHEN, Department of Mechanical Engineering

A self-rotating, single-actuated UAV with extended sensor field of view for autonomous navigation. [Nan Chen](#), Fanze Kong, Wei Xu, Yixi Cai, Haotian Li, Dongjiao He, Youming Qin, Fu Zhang, *Science Robotics*, 2023, 8(76).

Mr Shuang CHEN, Department of Geography

ROBOT: A spatiotemporal fusion model toward seamless data cube for global remote sensing applications. [Shuang Chen](#), Jie Wang, Peng Gong, *Remote Sensing of Environment*, 294(2023), 113616.

Mr Xi CHEN, Department of Electrical and Electronic Engineering

An organic electrochemical transistor for multi-modal sensing, memory and processing. Shijie Wang, [Xi Chen](#), Chao Zhao, Yuxin Kong, Baojun Lin, Yongyi Wu, Zhaozhao Bi, Ziyi Xuan, Tao Li, Yuxiang Li, Wei Zhang, En Ma, Zhongrui Wang & Wei Ma, *Nature Electronics*, 2023, 6(4), pp281-291.

Mr Quang Cuong DOAN, Department of Urban Planning and Design

How urban air quality affects land values: Exploring non-linear and threshold mechanism using explainable artificial intelligence. [Quang Cuong Doan](#), Chen Chen, Shenjing He, Xiaohu Zhang, *Journal of Cleaner Production*, 434(2024), 140340. Published online on December 27, 2023.

Ms Zhuangyuan FAN, Department of Geography

Urban visual intelligence: Uncovering hidden city profiles with street view images. [Zhuangyuan Fan](#), Fan Zhang, Becky P.Y. Loo, and Carlo Ratti, *Proceedings of the National Academy of Sciences*, 2023, 120(27), e2220417120.

Mr Kai GUO, Faculty of Education

Effects of chatbot-assisted in-class debates on students' argumentation skills and task motivation. [Kai Guo](#), Yuchun Zhong, Danling Li, Samuel Kai Wah Chu, *Computers & Education*, 203(2023), 104862.

Miss Ruiyan HOU, School of Biomedical Sciences

CamoTSS: analysis of alternative transcription start sites for cellular phenotypes and regulatory patterns from 5' scRNA-seq data. [Ruiyan Hou](#), Chung-Chau Hon & Yuanhua Huang, *Nature Communications*, 14, 7240(2023).

Dr Jin HU, Faculty of Business and Economics

The impacts of lockdown on open source software contributions during the COVID-19 pandemic. [Jin Hu](#), Daning Hu, Xuan Yang, Michael Chau, *Research Policy*, 52(2023), 104885.

Mr Jian LI, School of Biological Sciences

The human pre-replication complex is an open complex. Jian Li, Jiangqing Dong, Weitao Wang, Daqi Yu, Xinyu Fan, Yan Chit Hui, Clare S.K. Lee, Wai Hei Lam, Nathan Alary, Yang Yang, Yingyi Zhang, Qian Zhao, Chun-Long Chen, Bik-Kwoon Tye, Shangyu Dang and Yuanliang Zhai, *Cell*, 2023, 186(1), pp98-111.

Mr Yunhao LI, School of Clinical Medicine

Global prevalence of *Helicobacter pylori* infection between 1980 and 2022: a systematic review and meta-analysis. Yunhao Li, Horace Choi, Kathy Leung, Fang Jiang, David Y Graham, Wai K Leung, *The Lancet Gastroenterology & Hepatology*, 2023, 8(6), pp553-564.

Miss Yun LIN, School of Public Health

Viral kinetics of SARS-CoV-2 following onset of COVID-19 in symptomatic patients infected with the ancestral strain and omicron BA.2 in Hong Kong: a retrospective observational study. Yun Lin, Peng Wu, Tim K Tsang, Jessica Y Wong, Eric H Y Lau, Bingyi Yang, Gabriel M Leung, Benjamin J Cowling, *The Lancet Microbe*, 2023, 4(9), e722-e731.

Mrs Lijuan LIU, Department of Chemistry

Atomically precise gold nanoclusters at the molecular-to-metallic transition with intrinsic chirality from surface layers. Li-Juan Liu, Fahri Alkan, Shengli Zhuang, Dongyi Liu, Tehseen Nawaz, Jun Guo, Xiaozhou Luo & Jian He, *Nature Communications*, 14, 2397(2023).

Dr Jingya PU, Faculty of Dentistry

A quantitative comparison of bone resection margin distances in virtual surgical planning versus histopathology: a prospective study. Jane J. Pu, Anthony W.I. Lo, May C.M. Wong, Wing-Shan Choi, Grace Ho, Wei-Fa Yang, Yu-Xiong Su, *International Journal of Surgery*, 2024, 110(1), pp111-118. Published online on September 21, 2023.

Miss Chenyuan WANG, Department of Chemistry

Metallo-sideromycin as a dual functional complex for combating antimicrobial resistance. Chenyuan Wang, Yushan Xia, Runming Wang, Jingru Li, Chun-Lung Chan, Richard Yi-Tsun Kao, Patrick H. Toy, Pak-Leung Ho, Hongyan Li & Hongzhe Sun, *Nature Communications*, 14, 5311(2023).

Dr Shaocong WANG, Department of Electrical and Electronic Engineering

Echo state graph neural networks with analogue random resistive memory arrays. Shaocong Wang, Yi Li, Dingchen Wang, Woyu Zhang, Xi Chen, Danian Dong, Songqi Wang, Xumeng Zhang, Peng Lin, Claudio Gallicchio, Xiaoxin Xu, Qi Liu, Kwang-Ting Cheng, Zhongrui Wang, Dashan Shang, Ming Liu, *Nature Machine Intelligence*, 2023, 5(2), pp104-113.

Mr Wan Ki WONG, School of Clinical Medicine

Small Extracellular Vesicle-Derived vWF Induces a Positive Feedback Loop between Tumor and Endothelial Cells to Promote Angiogenesis and Metastasis in Hepatocellular Carcinoma. Samuel Wan Ki Wong, Sze Keong Tey, Xiaowen Mao, Hiu Ling Fung, Zhi-Jie Xiao, Danny Ka Ho Wong, Lung-Yi Mak, Man-Fung Yuen, Irene Oi-Lin Ng, Jing Ping Yun, Yi Gao, Judy Wai Ping Yam, *Advanced Science*, 2023, 10(26), e2302677.

Dr Hai WU, Department of Electrical and Electronic Engineering

Vertical Layering of Quantized Neural Networks for Heterogeneous Inference. Hai Wu, Ruifei He, Haoru Tan, Xiaojuan Qi, Kaibin Huang, *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 2023, 45(12), pp15964-15978.

Dr Ruopeng XIE, School of Public Health

The episodic resurgence of highly pathogenic avian influenza H5 virus. Ruopeng Xie, Kimberly M. Edwards, Michelle Wille, Xiaoman Wei, Sook-San Wong, Mark Zanin, Rabeh El-Shesheny, Mariette Ducatez, Leo L.M. Poon, Ghazi Kayali, Richard J. Webby & Vijaykrishna Dhanasekaran, *Nature*, 622(2023), pp810-817.

Miss Luyun ZHAO, Department of Urban Planning and Design

Planning decentralized battery-swapping recharging facilities for e-bike sharing systems. Luyun Zhao, Shiyu Shen, Zhan Zhao, *Sustainable Cities and Society*, 101(2024),105118. Published online on December 13, 2023.

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.

Ms Danni CHEN

Department of Psychology

Miss Lok Lee CHO

Department of Sociology

Mr Sai Ting CHU

School of Clinical Medicine

Mr Yulin DENG

Department of Chemistry

Mr Kai GUO

Faculty of Education

Mr Nicholas Stewart HOBHOUSE

Centre of Buddhist Studies

Mr Xing HU

Faculty of Business and Economics

Mr Ho Ming Terence LEE

School of Biological Sciences

Miss Wan Ning LEE

School of Biomedical Sciences

Mr Peijie LI

Department of Mathematics

Miss Ting LIAN

Department of Geography

Miss Zeyuan LIU

School of Biological Sciences

Miss Yaoyue QI

School of Biomedical Sciences

Mr Ruben Antonio SANCHEZ HERNANDEZ

Faculty of Education

Mr Jincheng TANG

Department of Mathematics

Miss Ling WANG

Faculty of Education

Miss Zeyi WANG

Faculty of Education

Miss Xiaomin WEN

School of Humanities

Mr Mengjie WU

School of Clinical Medicine

Miss Siyuan WU

Department of Civil Engineering

Miss Yu XIA

Faculty of Business and Economics

Miss Ning XU

School of Chinese

Mr Yimo YAN

Department of Data and Systems Engineering

Mr Lipeng YIN

Department of Psychology

Miss Heng YING

School of Humanities

Miss Yunping ZHANG

Department of Electrical and Electronic Engineering

Ms Yuchun ZHONG

Faculty of Education

Mr Hang ZHOU

Department of Chemistry

Miss Yaxian ZHOU

Faculty of Business and Economics

HKU Presidential PhD Scholar Programme

2024-25

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

Mr Wellage Chandima SILVA*

Department of Real Estate and Construction

Miss Yuchen GAO*

Mr Jiaqi WANG*

Miss Zhuoran ZHANG*

Department of Urban Planning and Design

Miss Yuting CHENG

Miss Xintong LYU

Miss Yuan GAO*

Miss Lai TIAN*

Miss Yunsong LIU*

Mr Jinfeng XIE*

FACULTY OF ARTS

School of Chinese

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Mr Hong ZOU*

School of Humanities

Mr Jialiang REN

Ms Xiangqun WANG*

Miss Zhiyin ZHU

School of Modern Languages and Cultures

Miss Yuqing LIU*

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Mr Mingfei JIANG*

Miss Xiaoming XIE

Miss Jiaqi TENG

Ms Yimin YIN

Miss Fanfan WANG*

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Miss Siyuan WANG

FACULTY OF EDUCATION

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Miss Weiyue LIN*

Miss Wanying ZHONG*

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Department of Civil Engineering

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Mr Kefan LAI

Mr Jingxian LIN*

Mr Haowen SUN*

Mr Kai WANG*

Mr Xingrui ZHANG*

Miss Xun ZHANG*

School of Computing and Data Science[#]

Mr Kwong Yu CHONG*

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Mr Tianyu FAN*

Mr Jingyuan WANG*

Ms Sihui JI

Mr Tianyou WANG*

Mr Keyi JIANG

Miss Xuan WANG

Mr Yuxuan JIANG*

Mr Yiyang WANG

Mr Jiuru LI*

Miss Ziyang XIAO*

Mr Luping LIU

Mr Zhihui XIE

Mr Yicong LUO*

Mr Qiaochu XU

Mr Haoqi LYU

Mr Tianshuo YANG

Mr Zisheng MENG

Mr Shibo YU*

Mr Theodosios

Mr Yichi ZHANG

PAPAZOGLU*

Miss Yujia ZHANG*

Mr Huajin PI

Mr Jiahao ZHAO*

Mr Yihang QIU*

Department of Data and Systems Engineering

Mr Dinghan LIU

Miss Siyu SHAO

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Department of Electrical and Electronic Engineering

Mr Zimu CHEN*

Miss Lu QIU

Mr Renxiang GUAN

Miss Rui QIU

Miss Jia LI

Miss Jie WANG*

Mr Li LIAO

Mr Tianwei XIONG*

Mr Shu LIU*

Mr Shengchao ZHOU

Mr Zeyang LONG

Miss Zihan MENG*

Department of Mechanical Engineering

Ms Zhaowan FU* Mr Hui ZHOU
Mr Haoyuan SUN*

FACULTY OF LAW

Mr Seung Mann BAE
Mr Joseph John GODFREY*

LI KA SHING FACULTY OF MEDICINE

School of Biomedical Sciences

Mr Man Kit CHUNG
Miss Yin Yee HO*
Mr Cheng Han HSIEH*
Ms Yuxin HU*
Mr Yunlong HUO
Miss Chi Kio IP*
Miss Lingjun JIN
Ms Yanshu KONG*
Miss Man Ping LEE
Mr Qian Xin Andreas LI
Mr Yuteng LIANG
Miss Jianghan LU*
Mr Changmo PARK*
Mr Zheng Yi TAY
Mr Xiaolin XU
Mr Muhua YANG
Ms Tangweina YANG

School of Clinical Medicine

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Miss Siu Wa CHUI
Miss Zhuoma CIREN*
Miss Yixiao GAN*
Ms Wing LAM
Mr Wing Lun LEE*
Miss Ka Yan LEUNG
Miss Rachel NATALIE*

School of Nursing

Miss Wai Ping CHAN

Department of Pharmacology and Pharmacy

Ms Kehui DENG
Mr Osama Waheed Mohammed HASSUNEH*
Mr Vignesh Gopalakrishnan UNNITHAN*

School of Public Health

Miss Haoling CHEN
Miss Celeste Erica CONWAY*
Mr Chenxi LI
Ms Shiyi WU*
Ms Jialin XU*
Miss Jennifer ZHONG*

FACULTY OF SCIENCE

School of Biological Sciences

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Miss Yating GUO
Miss Ruotong HUANG*
Miss Man Yui LEE
Miss Jimena PAREDES DE LA VEGA*
Miss Yihan YU*

Department of Chemistry

Mr Wangzhirui CHENG
Mr Boqin YANG
Mr Zhuo YIN
Mr Zhuoliang YING*

Department of Earth Sciences

Mr Jinshu CAI

Department of Mathematics

Mr Shengbo MA
Mr Ruijie SHAO
Mr Longtian TANG
Mr Luhao XUE*
Mr Chen YANG*
Mr Su ZHANG*

Department of Physics

Miss Cheuk Kwan KAN*

FACULTY OF SOCIAL SCIENCES

Department of Geography

Miss Zounachuan SUN

Department of Politics and Public Administration

Ms Cecilia Maria BORELLA*

Department of Psychology

Ms Zihan CHEN*
Miss Yuqi HUANG*
Miss Lok Ching LI*
Miss Zhiqi ZHANG

Department of Sociology

Miss Yan Yue SHUM*
Miss Jie SU*

HKU MUSKETEERS FOUNDATION INSTITUTE OF DATA SCIENCE

Mr Chengqi DUAN*
Mr Ruizhe LIU*
Miss Jiayu WENG*

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

The School of Computing and Data Science, established in July 2024, encompassing the Department of Computer Science and the Department of Statistics and Actuarial Science, is under both the Faculty of Engineering and the Faculty of Science.



HKU Foundation Award for Outstanding Research Postgraduate Students 2022-23

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 2022-23 awards are funded by The University of Hong Kong Foundation for Educational Development and Research.



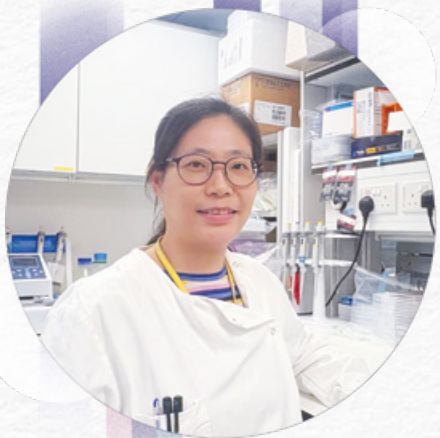
Dr Alfred AMRUTH
PhD, Department of Physics

Supervisor
Professor J.J.L. Lim, Department of Physics

Thesis Title
Resolving Lensing Anomalies with Wavelike Dark Matter

Dr AMRUTH, originally from the island of Sri Lanka, focuses on uncovering the nature of dark matter, a mysterious substance that comprises a staggering 85% of the mass in our universe. He utilizes the technique of gravitational lensing, which involves the bending of light as predicted by Einstein's theory of relativity. By providing the first credible explanation for resolving a two-decade-long lensing anomaly problem that has plagued the community, Dr Amruth's research has provided a new avenue to reveal the nature of dark matter. His work has been featured on the front cover of *Nature Astronomy*. He has also received the 2023 Hong Kong Young Scientist Award, which is given annually to the best PhD research in Hong Kong within physics, chemistry and mathematics.

Currently a URC Postdoctoral Fellow at HKU, Dr Amruth believes that the most important quality in a great scientist is humility – without it, one cannot continue to learn.



Dr Linlei CHEN
PhD, School of Clinical Medicine

Supervisors
Professor K.K.W. To, School of Clinical Medicine
Professor K.Y. Yuen, School of Clinical Medicine

Thesis Title
Antibody Response in Influenza and COVID-19

Dr CHEN's research systematically analysed the neutralization antibodies against emerging viral pathogens such as influenza, SARS-CoV-2, and its variants in Hong Kong patients and the general population. The thesis demonstrated the importance of continuous seroprevalence studies in assessing the population immunity, which can reveal the hidden burden of infection in the community, trace the high-risk population, and investigate the key mutation for immune escape.

The strong research performance and abilities Dr Chen displayed through her research postgraduate studies have been recognised by the 2022 Young Scientist Award in Life Science and the Dr K.P. Stephen Chang Gold Medal in 2022-2023. She has published over 30 articles including more than 10 first-author papers in prestigious journals, such as *Nature Communications*, *The Lancet Microbe*, and *EBioMedicine*.

Dr Chen is now pursuing her academic career as a Post-doctoral Fellow in the Centre for Virology, Vaccinology and Therapeutics at HKU. Her future focus is on seroprevalence studies of influenza viruses, SARS-CoV-2, and other respiratory viruses.



Ms Chung Yan CHOW
MPhil, School of Chinese

Supervisor
Professor G. Song, School of Chinese

Thesis Title
Dangerous Pleasures: Queering “Women” in Chinese Nisu Fan Culture

Ms CHOW investigates how Chinese Nisu fan communities engage with male effeminacy in transnational media contexts. Her MPhil research reveals the sophisticated ways fans navigate between creative pleasure and cultural transgression, challenging traditional approaches to both fan studies and gender theory. This work provides crucial insights into how digital communities are reshaping our understanding of gender expression and cultural production in contemporary Asia.

The most intriguing discovery in Ms Chow’s research is how fan practices often transcend conventional theoretical frameworks. She observes that fans create spaces where identity politics give way to more fluid and ambivalent forms of engagement, suggesting new ways of thinking about gender and sexuality in digital spaces.

Now pursuing doctoral studies at the University of Kentucky’s Department of Gender and Women’s Studies, Ms Chow is expanding her research to examine how transnational queer Chinese media fandoms navigate between local specificities and global influences.



Mr Kai Ching LAM
MPhil, School of Biomedical Sciences

Supervisor
Professor S.C. Kwon, School of Biomedical Sciences

Thesis Title
Single-Nucleotide-Resolution Mapping of RNA-targeting Cas System Cleavage Sites

Mr LAM’s research focuses on the ever-growing CRISPR-Cas systems. These systems in bacteria have been repurposed to edit our own genome (DNA) and transcriptome (RNA). RNA-targeting CRISPR-Cas systems are valuable tools to make temporary changes in our transcriptome but not permanent alterations in our genome. Mr Lam’s thesis centres around RfxCas13d, an RNA-targeting CRISPR-Cas system. Combining in vitro biochemical experiments and next-generation sequencing, he studied where RfxCas13d cuts in vitro and in vivo. His findings could help researchers worldwide to develop safer Cas13-based tools.

Since completing his MPhil, Mr Lam has been continuing his research on RNA-targeting Cas13 systems as a PhD candidate in the same laboratory. He aims to explore other Cas13 systems and harness them as tools to study other biology questions. “The hours are long, and the glorious ‘aha’ days come only very infrequently,” he says. “But you have to keep believing that if you put in the hours, those days will indeed come!”



Dr Yuanjun LU
PhD, School of Chinese Medicine

Supervisors

Professor N. Wang, School of Chinese Medicine
Professor Y. Feng, School of Chinese Medicine

Thesis Title

MiR-23a-3p Mediates Sorafenib Resistance in Human Hepatocellular Carcinoma: Study on the Regulatory Mechanisms and Potential Natural Suppressor from Chinese Herbal Medicine

Dr LU's research focuses on investigating epigenetic mechanisms underlying sorafenib resistance in hepatocellular carcinoma (HCC) and exploring epigenetic-targeting drugs derived from Chinese herbal medicine. Her PhD thesis includes two major studies: (i) unravelling the mechanism of miR-23a-3p in driving sorafenib resistance in HCC and (ii) identifying the miR-23a-3p-targeting compound HL23, which exhibits a synergistic anti-HCC effect when combined with sorafenib. Her PhD work has led to four first-authored publications and earned her the YS and Christabel Lung Postgraduate Scholarship in 2021/22 and 2022/23. Her achievements reflect not only her relentless effort and perseverance but also the invaluable guidance and trust from her supervisors, along with the support and encouragement from her peers.

Dr Lu is now an Associate Research Fellow in the Sichuan Cancer Hospital & Institute, affiliated with the Cancer Hospital of the University of Electronic Science and Technology of China, where she continues her research on the epigenetic mechanisms of human cancer.



Dr Shengzi ZENG
PhD, Department of Psychology

Supervisors

Professor X. Hu, Department of Psychology
Professor J.H.W. Hsiao, Department of Psychology

Thesis Title

Examining the Sleep's Role in Emotional Memory Processing

Dr ZENG's research focuses on understanding how healthy and disrupted sleep affect emotional memory processing, including the development of intrusive memories following traumatic events. Utilizing high-density electroencephalogram (EEG), her PhD thesis consists of three laboratory studies exploring the effects of sleep on emotional experiences, ranging from emotional memory to traumatic memory, and spanning healthy participants to those with insomnia disorders. These studies illustrated the crucial role of healthy sleep in safeguarding cognitive health and highlighted the potential of sleep-targeted interventions to enhance mental well-being. Her doctoral work has led to three first-author publications in *Nature Human Behavior*, *SLEEP*, and the *Journal of Sleep Research*.

Dr Zeng is currently a Post-doctoral Fellow at the Beth Israel Deaconess Medical Center and Harvard Medical School, where she continues her research on the interplay between human sleep, emotion, and memory. She is committed to a research career working to improve sleep and mental health.



Dr Tongtong ZHANG

PhD, Department of Electrical and Electronic Engineering

Supervisors

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

Thesis Title

Purification, Fabrication and Shape Engineering of Diamond Materials for Applications Ranging from Anti-counterfeiting to Biofilm Inhibition

Dr ZHANG's thesis presents a comprehensive study on the engineering of diamond materials for practical applications. It introduces an innovative method for purifying nanodiamonds using salt-assisted air oxidation, achieving high purity and quality suitable for various applications. This lays the groundwork for the fabrication of high-quality diamonds, particularly those with silicon-vacancy centres via chemical vapour deposition. Additionally, the thesis demonstrates an anti-counterfeiting strategy employing high-quality diamonds on silicon substrates, offering robust security solutions across multiple industries. The research also delves into diamond shape engineering through a straightforward oxidation method aimed at precise morphology control, facilitating advancements in diamond-based technologies.

After completing his PhD, Dr Zhang became a Post-doctoral Fellow at the Advanced Biomedical Instrumentation Centre, dedicated to advancing quantum diamond materials and their innovative applications, aiming to unlock new possibilities in electronics, photonics, catalysis, and quantum technologies.



Dr Yuchen ZHANG

PhD, Faculty of Dentistry

Supervisors

Professor C. Zhang, Faculty of Dentistry
Professor W.L. Dissanayaka, Faculty of Dentistry

Thesis Title

Endothelial Cells Regulate the Functions of Dental Pulp Stem Cells in Stabilizing the Newly Formed Blood Vessels

Dr ZHANG's research focuses on dental pulp stem cells (DPSCs) and angiogenesis in dental pulp regeneration. His PhD thesis provides two approaches to induce DPSC differentiation into smooth muscle cells (SMCs). The derived SMCs from DPSCs possess the functions and properties of the primary SMCs in vitro and in vivo. They may replace the primary SMCs in vascular tissue engineering for dental pulp regeneration, which may help to address the shortage of primary SMCs and accelerate the application of DPSCs in vascular tissue engineering and dental pulp regeneration.

After his PhD, Dr Zhang returned to mainland China to work as an Assistant Professor at Zhengzhou University. To date, he has published 26 journal articles, with an H-index of 16 and over 2,500 citations. He received the Pulp Biology and Regeneration Group Septodont Award for Innovation at the 101st General Session & Exhibition of the International Association of Dental Research, which was held in June 2023 in Bogota, Colombia. He also received the L.P. Samaranayake Award for Research Excellence 2022-2023 from the Faculty of Dentistry. In the coming years, Dr Zhang will continue to devote himself to the study of stem cells in tissue regeneration and the treatment of ischemic diseases.



Dr Ya ZHAO

PhD, Department of Real Estate and Construction

Supervisors

Professor H.T. Choy, Department of Real Estate and Construction

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

Thesis Title

Decentralization of Land Leasing under a Politically Centralized Regime: Interplays between Political Promotion, Rent-Seeking and Local Government Behaviors in China

Dr ZHAO's PhD thesis provides a new perspective on understanding the strategic behaviours of local governments in China when selling land. It makes several significant contributions to the fields of institutions and land supply in China. First, it extends research on economic decentralization by examining the effects of land governance decentralization on land supply within a politically centralized regime. Second, it investigates how exogenous institutional changes, such as the amendment of the cadre assessment system and the anti-corruption campaign, impact local governments' land supply strategies. Third, it explores the central government's role in addressing problems associated with decentralization by examining its interventions in solving these issues. During her PhD studies, Dr Zhao was awarded the Hong Kong PhD Fellowship and the Ronald Coase Institute Fellowship.

Upon completing her PhD, Dr Zhao was appointed as a Post-doctoral Fellow in the Department of Urban Planning at HKU and as an honorary lecturer in the Department of Geography at HKU.

Dr Hongyu ZHOU

PhD, Department of Computer Science

Supervisor

Professor Y. Yu, Department of Computer Science

Thesis Title

Exploring Pathways to Medical Foundation Models

Dr ZHOU is a postdoctoral fellow at Harvard University / Harvard Medical School, where he advances pioneering research at the nexus of artificial intelligence, medicine, and healthcare. He completed his PhD in computer science at HKU, supervised by Professor Y. Yu. Dr Zhou's work focuses on developing AI systems capable of interpreting health data across multiple scales, from molecular insights to patient histories, aiming to support precision health.

Recognized among the World's Top 2% Scientists by Stanford University, Dr Zhou has published his research in leading journals such as *Nature Medicine*, *Nature Biomedical Engineering*, *Nature Machine Intelligence*, and *Nature Communications*, alongside prominent computer science conferences. His work has received over 2,800 citations on Google Scholar, achieving an h-index of 27. Dr Zhou is also a committed mentor, guiding students and contributing to the next generation of AI-driven healthcare innovations.



Li Ka Shing Prizes 2022-23

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.

Miss Ka Hei CHEUNG
MPhil, Department of Earth Sciences

Supervisor
Dr C.A. Not, Department of Earth Sciences

Thesis Title
Plastic Degradation in Hong Kong Natural Open-Air and Coastal Marine Environments



Miss CHEUNG's research tackles the pressing environmental issue of plastic pollution, focusing on the degradability of various plastic polymers in natural environments. Her work investigates the degradation potential and fragmentation risk of both conventional plastics and bioplastics under environmental factors such as sunlight irradiation, temperature, microbial activity, and wave abrasion.

The findings in Miss Cheung's thesis highlight that Styrofoam and polyolefins are particularly prone to fragmenting into harmful microplastics in the environment, underscoring the need to reduce the usage of these plastics and prioritize their cleanup as marine debris. Additionally, the thesis reveals that bioplastics, often regarded as a novel solution to plastic pollution, may turn into a form of nano pollution by producing plastic fragments. These findings provide critical guidance for sustainable polymer selection and inform strategies to mitigate plastic pollution through improved consumption practices.

Since completing her MPhil, Miss Cheung has continued her impactful work as a Research Assistant at HKU, contributing to diverse environmental projects, including plastic recycling, additive leakage, and mudflat conservation. Beyond academia, she is passionate about making scientific research accessible and impactful for society. She co-founded "iResearch", a platform that bridges the gap between researchers and the public, fostering a culture of scientific inquiry and collaboration. Through her work, Miss Cheung aspires to bridge the divide between science and society, empowering communities to engage with and contribute to research while addressing pressing environmental challenges.

Ms Jiaqian NI

MPhil, Department of Politics and Public Administration

Supervisor

Professor K. Quek, Department of Politics and Public Administration

Thesis Title

Behavior, Identity, and Incongruency: When and How Are Political Attitudes Moved?



Ms NI's research focuses on foreign policy-related political attitudes. Under what conditions and through what mechanisms would political attitudes move or persist? To answer these questions against the backdrop of increasing attitudinal intransigence and polarization, her thesis reverses the conventional 'attitude → behaviour' arrow and focuses on how attitudes can be influenced by behaviour.

Ms Ni designed an innovative survey experiment to test the causal effects of behaviour-induced incongruency on Chinese public attitudes towards Japan. She found that when reminded of attitude-incongruent past behaviour, individuals' attitudes tend to become more moderated. However, for those whose initial attitudes are close to neutral, while a relatively high level of incongruency nudges them further towards moderation, a relatively low level of incongruency backfires, pushing them towards the extremes. Exploring the microfoundational mechanisms, Ms Ni conducted digital ethnography and interviews with a sample of individuals who regularly consume Japanese anime yet hold anti-Japanese sentiments, and she identified strategies in response to attitude-behaviour dissonance.

The research contributes to the study of political attitudes and political communication, informs the debate on political polarization, offers new insights on strategies of spontaneous dissonance coping, and has significant implications for China-Japan relations.

More broadly, Ms Ni is devoted to a research programme on understanding and potentially overcoming obstacles to international reconciliation and cooperation, with an interdisciplinary approach spanning political psychology, public opinion, and international relations.

Ms Ni is now a PhD student at the University of California, Berkeley, where she is researching the role of uncertainty in international rapprochement and reconciliation.

Dr Carolyn Amanda COHEN
PhD, School of Public Health

Supervisors

Professor R. Bruzzone, School of Public Health
Professor B.J. Cowling, School of Public Health
Professor S.A. Valkenburg, School of Public Health

Thesis Title

Age Effects on Humoral and Cellular Adaptive Immune Responses to SARS-CoV-2 Infection and Vaccination



Dr COHEN's PhD thesis studied the immune response to SARS-CoV-2 infection and vaccination in children compared with adults during the first years of the COVID-19 pandemic. Resulting in 14 publications, her research helped to define the immune response in children with SARS-CoV-2, showed the functional immune responses to COVID-19 vaccines in Hong Kong, and helped to inform vaccine policy around the world.

Antibodies that neutralise SARS-CoV-2 emerged as a marker of infection and correlate of protection. However, the immune response comprises many additional important and protective functions. Dr Cohen's research explored the T cellular and other antibody functional responses in children and adults that can react across variants and prevent severe disease. She found that infected children generated lower T cell and antibody responses to structural proteins of SARS-CoV-2, but directed their responses to non-structural parts of the virus. With the roll-out of vaccines, she found that BioNTech and CoronaVac vaccines generated T cells and functional antibodies in children and adults, with higher antibodies from BioNTech, but equivalent T cells after two or three doses.

Dr Cohen is grateful for the many fruitful collaborations that have resulted in the success of this thesis. Alongside her research skills, she has learnt that interdisciplinary teamwork is vital and one of the most rewarding parts of research to answer important public health questions.

Dr Cohen is now a Post-doctoral Fellow under Professor Sophie Valkenburg and Professor Leo Poon at the HKU-Pasteur Research Pole. She is developing projects and learning new methodologies to study the immune response to SARS-CoV-2 and other viruses with pandemic potential.

Dr Wenzhi DING

PhD, Faculty of Business and Economics

Supervisors

Professor C. Lin, Faculty of Business and Economics

Professor M. Tai, Faculty of Business and Economics

Thesis Title

Essays on Corporate Governance



Dr DING's research focuses on improving governance to enhance corporate social responsibility and firms' resilience. Corporate governance is the system by which companies are directed and controlled. It involves the decision-making process of the board of directors and executive managers. Good governance is key to not only running firms efficiently but also ensuring fairness by considering every stakeholder's interest. By attaching stakeholders, firms could be more resilient to significant shocks such as frauds, disasters, pandemics, economic crises, or wars. Ultimately, a society consists of resilient firms that are robust and stable.

In his PhD, Dr Ding studied what types of firms were more resilient to the COVID-19 pandemic using data from more than 60 economies and 6,000 firms. He found firms with diverse supply chains, good social responsibility records, and properly incentivized managers were more resilient to the pandemic. His research provided a timely reference to comprehensively understand the impact of the COVID-19 pandemic on firms and has been widely cited more than 1,500 times within three years. In another study, Dr Ding found that laws encouraging competition induce firms to become more socially responsible to differentiate themselves from their rivals. His PhD work has been published in top journals and cited by the United Nations, *The Economist*, and many renowned media outlets.

Dr Ding is currently a Research Assistant Professor at the Hong Kong Polytechnic University's School of Accounting and Finance, where he is continuing his research on governance. He has been awarded a competitive General Research Fund grant from the Hong Kong Research Grants Council for his project on studying decentralized governance mechanisms innovatively using blockchain scenarios. He is dedicated to exploring how modern technology can enhance the governance of firms, governments, and society.



Dr Liupengfei WU

PhD, Department of Real Estate and Construction

Supervisors

Professor W.W. Lu, Department of Real Estate and Construction

Professor F. Xue, Department of Real Estate and Construction

Thesis Title

A Blockchain Smart Contract and Oracle-Enabled System for Cross-border Modular Integrated Construction Supply Chain Management

Dr WU's doctoral thesis comprehensively explores blockchain smart contracts and oracles for cross-border modular integrated construction (MiC) supply chain management. The proposed solution revolutionizes the production and use of MiC in Hong Kong and Mainland China by digitally assuring the quality of MiC in the manufacturing, transport, and installation processes. It reduces resources for supervision and paperwork, and ensures tamper-proof data. It contributes significantly to solving housing problems in Hong Kong.

In his PhD, Dr Wu developed a remote supply chain quality assurance system focusing on cross-border MiC production, transport, and installation. The system comprises i-Core, e-InStar, e-TranStar, and e-InstalStar mobile apps and a blockchain-based backend. The innovations include

- blockchain security of quality monitoring, assurance, and tracing of the whole production, transport, and installation process;
- a transparent digital secure endorsement mechanism; and
- remote quality control.

Dr Wu is currently a Research Assistant Professor in iLab, HKU and is continuing his research on construction information technology. Honours received for his research include a Bronze medal at the 48th International Exhibition of Inventions of Geneva in 2023, the American Society of Civil Engineers Best Peer Reviewed Paper Award for 2022, a Gold Award in the Hong Kong ICT Awards 2022, an Innovation Award in the 12th Guangdong-Hong Kong IoT Awards in 2022, Sole Winner in the 'Professional Research' category of the buildingSMART International Awards 2021, and a Merit Paper Award at the 25th International Symposium on Advancement of Construction Management and Real Estate in 2020.

Dr Xiaoqing XU
PhD, Department of Civil Engineering

Supervisor
Professor T. Zhang, Department of Civil Engineering

Thesis Title
Rapid and Effective Detection of SARS-CoV-2 Virus and New Mutants to Enhance Wastewater Surveillance



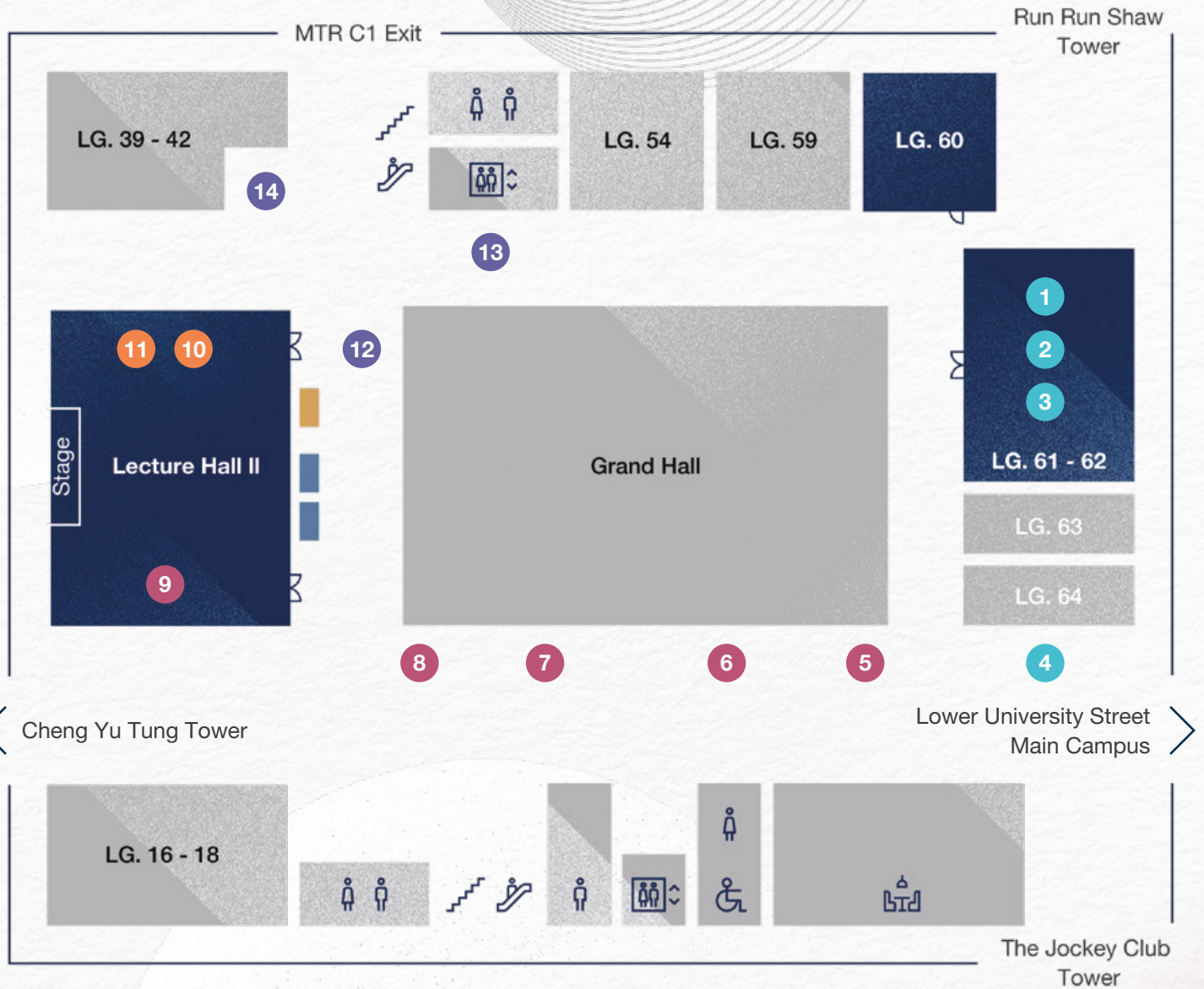
Dr XU's PhD research focused on developing advanced wastewater-based epidemiology methods to monitor SARS-CoV-2 and support public health initiatives. She created high-resolution techniques for the accurate detection, differentiation, and quantification of SARS-CoV-2 and its variants in wastewater, utilizing PCR-based and targeted sequencing technologies. Her work ensures a high level of confidence in identifying viral variants, providing critical insights for rapid, effective, and cost-efficient public health responses.

During her PhD studies, Dr Xu published over 20 articles in high-impact journals, taking the first author role in six papers and co-first author role in three papers. In addition, she has registered six patents, with three listing her as the principal inventor, including one that has generated over HK\$20 million in income for HKU. Her innovative contributions have been recognized with the award of a Gold Medal at the 2021 Inventions Geneva Evaluation Days, and she was honoured with the Chief Executive's Commendation for Community Service in 2021. These publications and awards underscore her significant contributions to scientific research and society.

Currently a Post-doctoral Fellow in Professor T. Zhang's research group, Dr Xu continues to explore pathogen interactions across diverse environments, aiming to illuminate environmental health risks and enhance public health strategies. Looking ahead, she aspires to drive significant advancements in wastewater-based epidemiology and microbiome engineering, developing innovative solutions that bolster global health monitoring and resilience.

Poster Presentation Floor Plan

LG Level, Centennial Campus, HKU



Registration Counter

Catering Point

- 1 Group 1**
Faculty of Architecture/
Faculty of Education
- 2 Group 2**
Faculty of Architecture/
Faculty of Law
- 3 Group 3**
Faculty of Arts/
Faculty of Social Sciences
- 4 Group 4**
Faculty of Business and
Economics/
Faculty of Social Sciences

- 5 Group 5**
Faculty of Engineering/
Institute of Data Science
- 6 Group 6**
Faculty of Engineering
- 7 Group 7**
Faculty of Engineering
- 8 Group 8**
Faculty of Engineering
- 9 Group 9**
Faculty of Engineering

- 10 Group 10**
Faculty of Science
- 11 Group 11**
Faculty of Science
- 12 Group 12**
Faculty of Dentistry/
Li Ka Shing Faculty of Medicine
- 13 Group 13**
Li Ka Shing Faculty of Medicine
- 14 Group 14**
Li Ka Shing Faculty of Medicine

- Escalator
- Staircase
- Lift
- Toilet
- Restaurant



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