

# Graduate School Award Presentation Ceremony 2021

Wednesday, December 15, 2021 4:30 p.m. to 5:30 p.m. Rayson Huang Theatre, The University of Hong Kong

#### PROGRAMME RUNDOWN

Programme	Presented by
Opening Address	Professor Max Z. Shen Vice-President and Pro-Vice-Chancellor (Research) and Dean, Graduate School
Award Presentation	
<ol> <li>University Postgraduate Fellowships Scheme 2021 22</li> <li>a) HKU Foundation Postgraduate Fellowships</li> <li>b) Hui Pun Hing Memorial Postgraduate Fellowships</li> <li>c) Hui Pun Hing Memorial Postgraduate Fellowships (Mainland Collaborations)</li> </ol>	Ms Bernadette Tsui Associate Vice-President (Development & Alumni Affairs) and Executive Director, HKU Foundation
2. Award for Outstanding Research Postgraduate Student 2019 20	Professor Alice S.T. Wong Associate Vice-President (Research)
3. HKU Presidential PhD Scholar Programme 2021 22	Professor Max Z. Shen Vice-President and Pro-Vice-Chancellor (Research) and Dean, Graduate School
4. Li Ka Shing Prizes 2019-20	Professor Xiang Zhang President and Vice-Chancellor
Group Photographs	

## University Postgraduate Fellowships Scheme 2021-22

- HKU Foundation Postgraduate Fellowships
- Hui Pun Hing Memorial Postgraduate Fellowships
- Hui Pun Hing Memorial Postgraduate Fellowships (Mainland Collaborations)

University Postgraduate Fellowships are awarded to new full time PhD students with excellent academic records on a competitive basis. This postgraduate fellowships scheme serves the purpose of attracting high-calibre applicants from around the world for admission to our various PhD programmes. Since the Scheme's inception in 2007, 664 outstanding students have been awarded the fellowships

The University Postgraduate Fellowships Scheme is generously supported by The University of Hong Kong Foundation for Educational Development and Research (HKU Foundation) and the Hui Pun Hing Endowment Fund.

#### **HKU Foundation Postgraduate Fellowships**



Ms Jiali LI
Department of Architecture
Research Field: Building Science,
Technology and Sustainability



Mr Guangyu CHENG
Department of Real Estate and Construction
Research Field: Real Estate Development
and Management



Mr Dong LIANG
Department of Real Estate and Construction
Research Field: Civil Engineering-Computer aided
Design Optimization



Mr Jianxiao LIU
Department of Real Estate and Construction
Research Field: Real Estate Prices Volatility
and Migration



Miss Mushu ZHAO
Department of Urban Planning and Design
Research Field: Urban Planning and Design



**Mr Jinhua HE** School of Humanities (Philosophy) Research Field: Philosophy



Miss Sijia LUO Faculty of Business and Economics Research Field: Accounting



**Ms Hanzhang YANG**Faculty of Business and Economics
Research Field: Innovation and Information Management



**Miss Chuyi ZHANG**Faculty of Business and Economics
Research Field: Finance



**Dr Jun KANG** Faculty of Dentistry Research Field: Regenerative Endodontics



**Dr Vijetha VISHWANATH** Faculty of Dentistry Research Field: Regenerative Endodontics



**Miss Boyin CHEN** Faculty of Education Research Field: Science Identities, Reflection, Computer supported Inquiry Learning Environment, K 12 Science Education, Mixed method Research

Miss Fangzhou JIN Faculty of Education



Research Field: Computer-assisted Language Learning; Chinese Language Education; Vocabulary Learning Process



Miss Jiaqi LIAO# Faculty of Education Research Field: Information Behavior



Miss Yongjia YU Faculty of Education Research Field: Child Development; English as a Second Language



Mr Ying ZHANG
Faculty of Education
Research Field: Education Measurement and
Assessment; Large scale International Assessments



Miss Xinzhuo ZOU
Faculty of Education
Research Field: The Effect of
Father Child Numeracy Activities on
Young Children's Mathematics
Learning



Miss Wenyu LIU
Department of Civil Engineering
Research Field: Water and Environmental Engineering



Mr Weichao YING
Department of Civil Engineering
Research Field: Structural
Engineering



**Mr Haotian GUAN**Department of Electrical and Electronic Engineering Research Field: Biomedical Engineering



Mr Qihao WU
Department of Industrial and
Manufacturing Systems Engineering
Research Field: Data Analytics and Data
Intensive Modeling



Mr Chung Hin DUNG
Department of Mechanical Engineering
Research Field: Drainage System



Miss Wanchun XU

Department of Family Medicine and Primary Care
Research Field: Biostatistics, Epidemiology and
Primary Care



Mr Zhixian CHEN
Department of Pathology
Research Field: Hepatocellular
Carcinoma Derived Extracellular Vesicles



Miss Ka Ching CHAN School of Biomedical Sciences Research Field: Combinatorial Genetics and Synthetic Biology



Miss Tin Yan KOO School of Biomedical Sciences Research Field: Developing New mTORC1 Inhibitors to Treat mTOR Hyperactivated Cancers



Ms Isidora SAVOVIC
School of Biomedical Sciences
Research Field: Medicine Biomedicine Science



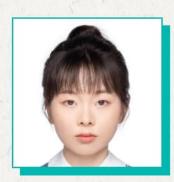
Miss Bingqing GUO School of Public Health Research Field: Health Economics and Policy



Ms Songwei SHAN
School of Public Health
Research Field: Infectious Disease
Epidemiology



Miss Yi SONG
School of Public Health
Research Field: Infectious Disease Epidemiology



Miss Kexin YIN
Department of Chemistry
Research Field: Catalysis and
Flow Chemistry



Mr Ho Ming CHAN
Department of Psychology
Research Field: Cognitive Psychology



Miss Weiyan LIAO
Department of Psychology
Research Field: Psycholinguistics and
Cognitive Psychology



**Miss Mengyuan LIU**Department of Psychology
Research Field: Cognitive Psychology/Neuroscience

#### Hui Pun Hing Memorial Postgraduate Fellowships



Mr Lin ZHENG
Department of Computer Science
Research Field: Machine Learning
and Natural Language Processing



Mr Ka Chun YAN
Department of Pharmacology and
Pharmacy
Research Field: Pharmacy



Miss Xin HUANG School of Public Health Research Field: Epidemiology of Chronic Diseases



Mr Boyu YIN
Department of Chemistry
Research Field: Chemical Biology



**Mr Jintao SU**Department of Earth Sciences
Research Field: Environmental Sciences



Mr Zhenghan YUAN#
Department of Physics
Research Field: Quantum Information and Cryptography



Mr Xiang LI
Department of Statistics and Actuarial
Science
Research Field: Biostatistics



Mr Minhao YAO
Department of Statistics and
Actuarial Science
Research Field: Biostatistics



**Mr Haoming HE#**School of Biological Sciences
Research Field: Neurobiology

## Hui Pun Hing Memorial Postgraduate Fellowships (Mainland Collaborations)



Ms Ling YANG
Department of Mechanical
Engineering
Research Field: Microfluidics and
Soft Materials



Mr Yang XIANG
School of Biomedical Sciences
Research Field: Cancer and
Immunology

## Award for Outstanding Research Postgraduate Student 2019-20

Award for Outstanding Research Postgraduate Student was established by the Graduate School in 2002 to give due recognition to research postgraduate students who have submitted a thesis of exceptional quality and demonstrated outstanding performance in other academic aspects. Each year, not more than 10 students will receive this award among hundreds of students who have submitted their thesis during the specific academic year.

Nominations for the Award for Outstanding Research Postgraduate Student 2019-20 were considered by a Selection Committee.

Faculties of Architecture, Arts, Business and Economics, Education, Law, and Social Sciences

Professor C. Cheng, Associate Dean, Graduate School (Chairperson)

Professor C.M.K. Chan, Faculty of Business and Economics

Professor H.Y. Chan, School of Humanities (Music), Faculty of Arts

Emeritus Professor G.A. Postiglione, Faculty of Education

Faculties of Dentistry, Engineering, Medicine, and Science

Professor B.P. Chan, Associate Dean, Graduate School (Chairperson)

Professor M.G. Botelho, Faculty of Dentistry

Professor U.S. Khoo, Department of Pathology, Li Ka Shing Faculty of Medicine

Professor Z. Wang, Department of Physics, Faculty of Science

#### **Dr Mohammed Nadeem BIJLE**

PhD, Faculty of Dentistry

Thesis Title:

Arginine-based Prebiotic Measures for Caries Prevention

Supervisors:

Professor C.K.Y. Yiu, Faculty of Dentistry Dr M. Ekambaram, Faculty of Dentistry Professor E C M Lo, Faculty of Dentistry



His thesis reveals Dr Bijle as a highly-motivated, creative and hard working researcher in preventive cariology and paediatric oral health. In managing his research projects, he showed excellent ability in experimental design and independent thinking, conference presentations and publications. He has published 15 papers as first author in high impact peer revealed journals. His honours include prestigious research and travel awards. He was selected from the pool of worldwide young scientists/researchers to attend the 2019 Global Young Scientists Summit and interact with Nobel Laureates in Singapore.

Dental caries forms a significant public health problem worldwide. Prevention of oral biofilm-related microbial dysbiosis would probably reduce this disease and its associated global burden. Dr Bijle's PhD work demonstrated that the addition of prebiotics, arginine, to fluoridated vehicles and probiotics (to develop as synbiotics) has a synergistic effect for caries prevention and provides a promising ecological based caries preventive measure for clinical applications

Dr Bijle's thesis documents a comprehensive literature review and a series of laboratory studies represents a significant scholarly work, with high quality methodological approaches, much of which is original

Following completion of his PhD, Dr Bijle has been working as an Honorary Research Associate in the Faculty of Dentistry at HKU, where he is actively involved in Professor C.K.Y. Yiu's on going GRF projects and supervision of research projects of Taught Postgraduate students in Paediatric Dentistry Dr Bijle is also establishing collaborations with other research groups, developing his profile in the research community and pursuing a career in academia.

#### Mr Chok Meng CHAN

MPhil, School of Chinese

Thesis Title:

Writing for the Empire: A Study of Ban Gu's (32 92 CE) "Dian Yin" (Elicitation of the Canon)

Supervisors:

Dr N.M. Williams, School of Chinese Professor C. Wu, School of Chinese



Mr Chan's thesis is an ambitious and detailed study of a challenging Han dynasty text which he places in its historical context through an erudite examination of Eastern Han politics, while also completing an extraordinarily precise translation of the text into English. The result is an important work of scholarship that successfully reconstructs and brings to life the production of texts in the Han dynasty, examining them at the nexus of ritual, court politics, literati culture, poetry, and performance. He takes a text that might be misunderstood as conventional or dismissed as propaganda, and explores how Ban Gu uses this surprising genre ("portents for the Mandate of Heaven") to convey his own political proposals. Ultimately, he shows how the text conveys support for the legitimacy of the Eastern Han rule while subtly expressing Ban Gu's more personal vision of how the empire ought to evolve

At over 100,000 English words, the thesis merits publication with a Western scholarly press, and Mr Chan is already preparing it for submission. It promises to be an influential contribution to the historical and literary studies of early China.

After completion of his MPhil, Mr Chan has continued to pursue his PhD study at HKU. His chosen topic is "Eulogistic Tradition Rediscovered: A Study of the Sòng (Eulogy) in Imperial Chinese Literature "This develops some themes of his Master's thesis but approaches the subject from a much broader perspective in terms of time range and cultural context.

#### Dr You CHE

PhD, Department of Civil Engineering

Thesis Title:

Mobile Antibiotic Resistome in WWTPs and the Mechanisms for Horizontal Transfer of Resistance Genes

Supervisor:

Professor T. Zhang, Department of Civil Engineering



Antibiotic resistance poses a major global threat. For his PhD dissertation Dr Che employed an interdisciplinary approach of next-generation sequencing, bioinformatics and molecular techniques to understand the interactions between different mobile genetic elements (MEGs) and the major contributors in facilitating the transfer of antibiotic resistance genes (ARGs). These findings substantially expand our current knowledge of resistome and offer novel perspectives on ways to tackle this critical public health threat During his PhD, Dr Che published in two high impact journals and presented his work at seven conferences.

Dr Che developed a workflow based on Nanopore metagenomic sequencing to rapidly profile and monitor the mobile resistome and track the hosts of ARGs in WWTPs, which solved an important problem in determining the genetic location of AMR genes and established a baseline analysis framework to study ARGs in different settings. He also developed an automatic bioinformatic tool for plasmid classification, AMR gene annotation and visualization, and revealed a general evolutionary mechanism for the horizontal transfer of AMR genes mediated by the interaction of different MGEs. This tool will facilitate the study of AMR globally.

Dr Che investigated the transfer of multidrug resistance between WWTPs and humans/animals by the combination of Nanopore sequencing and population genomics and established the epidemiological links of resistance transfer across ecological boundaries, which provided important reference to combat antibiotic resistance from One Health and Global Health perspectives

Dr Che is currently a Post doctoral Fellow at US National Institutes of Health (NIH), working on skin microbiome and AMR at NIH.

#### Dr Rui CHENG

PhD, Department of Mechanical Engineering

Thesis Title:

Crystallization and Composition Control of Perovskite Material for Efficient Solar/Indoor Light Harvesting and Photocatalyst

Supervisors:

Dr S.P.T. Feng, Department of Mechanical Engineering

Dr W Li, Department of Mechanical Engineering



Dr Cheng's thesis is of outstanding quality and has led to prolific publication including first-author papers in 6 top-tier journals. His research achieved fundamental and experimental breakthroughs for perovskite materials in multiple interdisciplinary fields including solar cells, indoor light harvesting, and photocatalysis. Each work is at the frontier of the field, and has pushed the limits of energy conversion efficiency.

Indoor photovoltaic (IPV) cells have the potential to power the Internet of Things (IOT) ecosystem, of which the self powered characteristic can reduce the use of batteries and avoid battery replacement. Dr Cheng developed a triple-anion CH<sub>3</sub>NH<sub>3</sub>Pbl<sub>2</sub>xBrCl<sub>x</sub> perovskite film with a bandgap that has been specially designed to fit the indoor light spectrum and achieve a record high IPV efficiency of 36.2%, with excellent long term performance.

In addition to indoor/solar light harvesting, Dr Cheng extended the application of perovskite materials to solar-driven CO<sub>2</sub> reduction and developed an efficient photocatalyst/polymer platform for the worldwide concern of carbon emission control.

Dr Cheng has done seminal and outstanding work in the field of perovskite by developing novel processing techniques and pushing the limits of energy conversion efficiency.

Following completion of his thesis, Dr Cheng worked as a Post-doctoral Fellow in the Department of Mechanical Engineering, HKU In July 2021 he took up a post as Post-doctoral Research Associate at Carnegie Mellon University.

#### Dr Yiran HUANG

PhD, Department of Chemistry

Thesis Title:

Target-specific Labeling of Membrane Proteins for Ligand Discovery and Other Applications

Supervisors:

Professor X. Li, Department of Chemistry Professor X.C. Li, Department of Chemistry



Dr Huang's project used an innovative chemical genetic approach to tackle membrane proteins, among the most important but also most challenging proteins in biology. Membrane proteins play important roles in biology, and many of them are high-value targets that are being intensively pursued in the pharmaceutical industry. The thesis developed a novel drug discovery approach for membrane proteins. The method ingeniously solved two major long-lasting hurdles in this field and enabled direct selection of large-scale DNA-encoded chemical libraries against membrane protein drug targets on live cells.

The thesis deals with three very important problems in Chemical Biology, namely: (i) The development of methods for the specific chemical labeling of target proteins of interest on the surface of cells; (ii) The development of methods for the discovery of small organic ligands to membrane proteins of interest on the surface of cells; (iii) The development of methods for the imaging, manipulation, killing, clustering and/or sorting of cells of interest. The unusually high number of ligands and target proteins demonstrates the versatility of the newly discovered approaches.

Dr Huang's work has produced several high impact publications and made major contributions to the field of chemical biology and drug discovery as well as academic research to explore challenging biological systems.

Since completion of her PhD, Dr Huang has continued to conduct Chemical Biology research as a Post doctoral Fellow at the Department of Chemistry at HKU

#### Dr Anna Maria ISKRA

PhD, Hong Kong Institute for the Humanities and Social Sciences

Thesis Title:

Healing the Nation through Self-Discovery: The Chinese New Age Milieu and the Politics of Emotion

Supervisors:

Professor D A Palmer, Department of Sociology Dr G D Santos, Hong Kong Institute for the Humanities and Social Sciences Dr J. Li, School of Modern Languages and Cultures



Dr Iskra breaks new ground in her anthropological study of the rising popularity of *shen xin ling* ("Body Mind-Spirit") practices of self-improvement in China led by entrepreneurial gurus, motivational speakers and life coaches, for whom Shenzhen is a major centre This is a highly original study of an important phenomenon in contemporary China, which is linked to several critical dimensions of social, cultural and political change, including processes of individualization, new forms of self-cultivation, gender constructions, spiritual civilization-building, and hybridizations of traditional therapeutic modalities and modern medicalizing discourses.

Following her discovery of circulation of spiritual teachers and adepts between India and China as an important strand of the *shen xin ling* movement, Dr Iskra has developed a project to pursue further research into these Sino-Indian transnational connections for her postdoctoral research, a project that will provide a fascinating comparative study on the interface between spiritual cultivation, global circulations and nationalism in China and India She has created a crucial methodological tool for understanding contemporary China.

She makes sense of a huge diversity of practices, competing practitioners, and varied teachings by her innovative approach of focusing on what she identifies as the common element running through these disparate elements: the focus on emotions (both the authentic release and the subsequent management). Building on the seminal work of her doctoral supervisor Dr David Palmer, Dr Iskra situates the shen xin ling milieu as part of a succession of post-Maoist self-cultivation "fevers" in which popular desire intersects with state-endorsed discourses and neosocialist techniques of governmentality.

Following completion of her PhD, Dr Iskra was jointly appointed as a Post-doctoral Fellow by the Hong Kong Institute for the Humanities and Social Sciences and the Centre for the Humanities and Medicine at HKU.

#### Dr Xinran Ll

PhD, School of Biomedical Sciences

#### Thesis Title:

Functional Characterization of PIK3R1 Aberrations in Gynecological Cancers

#### Supervisors:

Dr W.T.L. Cheung, School of Biomedical Sciences Professor G.S.W. Tsao, School of Biomedical Sciences



In her ground-breaking research, Dr Li investigated the genomic aberrations of the PIK3R1 gene (which encodes  $p85\alpha$ ) in gynecological cancers. She identified potential molecular biomarkers for cancer therapies. Publication of her research in leading journals testifies to the outstanding standard of her work. She has also received a number of competitive awards during her studies and collaborated in research projects for publication.

As the most lethal gynecological cancers worldwide, ovarian cancer annually takes the lives of countless women. However, the genomic aberrations and molecular events that lead to the development of ovarian cancer remain largely unknown. Dr Li's research findings have revealed that genomic aberrations of PIK3R1, which occur in >50% of ovarian cancer patients, can be explored as potential biomarkers for targeted therapies. Her work has discovered novel pathways adopted by the mutant cancer cells, an important foundation for the future development of therapeutic strategies that can be delivered to cancer patients carrying these mutations helping to personalize treatments based on patients' unique mutational aberrations.

Dr Li is currently a Clinical Laboratory Scientist at the Zhongnan Hospital of Wuhan University, winning her place in competition with some 60 candidates. Her outstanding qualifications are recognized with the highest salary package in her rank. She aims to bridge the gap between bedside clinical observations and bench-side laboratory research. By deciphering and dissecting the personalized clinical questions derived from cancer patients admitted to the Zhongnan Hospital, she provides professional advice on the genetic and molecular diagnosis for clinical application.

#### **Dr Andrew Thomas PARK**

PhD, School of Modern Languages and Cultures (European Studies)

#### Thesis Title:

Crises of Self-Determination and the Origins of International Governance, 1919-1956

#### Supervisors:

Dr C.R. Vogt, School of Modern Languages and Cultures (European Studies) Dr S Auer, School of Modern Languages and Cultures (European Studies)



Dr Park's thesis is an exceptional achievement by a highly accomplished, original and erudite scholar who has demonstrated his ability to make a major contribution to our understanding of an important part of European history Investigating how the ideal of self determination shaped the turbulent historical period between 1919 1956, Dr Park paves the way for a novel interpretation of the international order, the understanding of which continues to be of utmost importance to contemporary politics. This achievement is reflected in remarkably positive assessments by leading scholars who examined the thesis, as well as a number of publications that Dr Park has produced already during his dissertation and shortly thereafter.

Dr Park's thesis is a truly outstanding piece of scholarship on international and diplomatic history in the early 20th century. His thesis tracks the evolution of the work of international commissions and the role of plebiscites to which they gave rise. The thesis is meticulously researched and makes a major contribution to understanding the emergence of an international order based on norms, multilateral institutions, and technocratic governance. Dr Park's thesis is more than just a doctoral dissertation — it promises to make an important impact on how we think about our international order

Dr Park's approach is overwhelmingly evidence-driven, much of it based on archival and documentary evidence. He is currently Honorary Lecturer in the Department of Politics and Public Administration, and is reworking his thesis as a book manuscript to be entitled "Let the people decide: the rise and fall of the plebiscite in international relations".

#### Dr Zuochen WANG

PhD, Department of Chemistry

Thesis Title:

Active Patchy Colloids and Shape-tunable Dynamics under AC Electric Fields

Supervisors:

Dr Y. Wang, Department of Chemistry Dr J. Tang, Department of Chemistry



Lying at the interface of chemistry, physics, materials science, and biology, Dr Wang's research work significantly extends the boundary of colloids and active matter and makes a major contribution to the global scientific community. He devoted most of his time to designing and conducting the experiments and acquiring knowledge and skillsets from these multiple disciplines while he applied what he learned to his project, digging into the insight mechanisms behind the experimental results and exploiting the potential applications based on his findings. He actively communicated with scientists from various backgrounds, in the process practicing his interpersonal and presentation skills and effectively coordinating his projects, which facilitated his fruitful academic achievements.

In addition to focusing on his specific discipline, Dr Wang tried his best to broaden his horizons making it possible for him to undertake projects related to active matter and soft materials. The development of colloidal science has witnessed two major excitements in the last decade. One is the introduction of patchy colloids with directional interaction which enables complex open structures. The other is the realization of active, self-propelled particles with enhanced motions and controlled trajectories, forming collective organizations that mimic those of living organisms. Dr Wang's thesis work presents a merger of both aspects by demonstrating shape-tunable locomotive properties and dynamic assemblies featuring selective and directional bonds. Such research required knowledge and techniques from multiple disciplines, including chemistry, physics, material science, chemical engineering and biomedical engineering.

Dr Wang is currently working as a Post-doctoral Fellow at the Advanced Biomedical Instrumentation Centre at InnoHK / Department of Mechanical Engineering at HKU.

#### Miss Yu Yan YAU

MPhil, Department of Earth Sciences

Thesis Title:

Tracing Atmospheric Nitrogen Deposition and its Impact on Hong Kong and Chinese Coastal Ecosystem

Supervisors:

Dr B. Thibodeau, Department of Earth Sciences Dr D M Baker, School of Biological Sciences



Miss Yau's thesis comprises original and interdisciplinary research looking into air and water pollution in Hong Kong. She provides key elements that should be considered when designing future policy on atmospheric pollution in Hong Kong and China Her thesis is the first to track sources of atmospheric pollution in Hong Kong using cutting edge techniques of stable isotopes of nitrogen and sulfur. This enabled her to provide unparalleled precision regarding estimates of different sources of pollution. She also used modelling to estimate the area of hypoxia in Chinese coastal waters under the changes atmospheric pollution in the future.

Miss Yau's study has had a direct impact on the community: the published chapter of her thesis was the subject of a press release by HKU and was covered in the HKU bulletin. It attracted press attention, notably from the Hong Kong Economic Journal, who gave the study full coverage.

Following completion of her MPhil, Miss Yau worked as a Research Assistant at HKU on a project using nitrogen isotopes to reconstruct the deoxygenation of the western Pacific. This highlights her scientific adaptability. She also finalized for publication the paper based on her second chapter.

Starting from January 2021, Miss Yau has started her PhD study in a world-leading lab in the field of blue carbon at Gothenburg University. Her project will help unravel methane cycling in mangrove and seagrass.

### HKU Presidential PhD Scholar Programme 2021-22

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: Ms Xinhui CHEN

Department of Real Estate and Construction: Mr Benjamin Kwaku ABABIO\*

Department of Urban Planning and Design: Mr Mingze BAI\* Mr Dongsheng HE\* Mr Dong LI\* Mr Mutu Tantrige Osada Vishvajith PEIRIS\* Miss Siwei ZHANG

#### **Faculty of Arts**

Centre of Buddhist Studies: Mr Pemananda Thero REV UNAPANE\*#

School of Humanities: Miss Jing PENG\* Ms Xindi YE\*

School of Modern Languages and Cultures: Miss Anqi LI\*

#### **Faculty of Business and Economics**

Miss Lulu CHEN\*
Mr Yang LEI\*
Miss Zhen LIANG\*
Mr Xuanpu LIN\*
Mr Yucheng QUAN
Miss Miao YU
Miss Jiahang ZHANG\*
Ms Zhongyu ZHAO
Miss Xinbei ZHOU\*

#### **Faculty of Dentistry**

Ms Elaine Kar Man CHOONG\*

#### **Faculty of Education**

Mr Benjamin Kyle CHIESA\*# Ms Angel Yinlin GUO\* Miss Zhixing GUO\* Ms Nora Patricia HERNANDEZ LOPEZ\* Miss Mei LAI Mr Hao LI Miss Ya XIAO Miss Jiahuan ZHANG\*

#### **Faculty of Engineering**

Department of Civil Engineering: Mr Jiajun CHEN Mr Pak Hei FOK\* Miss Ruoying II Miss Archchana SHANDRASEHARAN Mr Qiqi ZHANG\*

Department of Computer Science:
Mr Runjian CHEN\*
Mr Shoufa CHEN\*
Mr Shengyi JIANG
Mr Yao LAI\*
Miss Chui Shan LEE\*
Mr Jinyang LI#
Mr Yao MU\*
Mr Jun Wei SU\*
Mr Yinqiang ZHANG\*

Department of Electrical and Electronic Engineering: Mr Ruifei HE\* Miss Chenxi HU Mr Zhiyan LIU\* Mrs Shobana Venkat STASSEN# Mr Dingchen WANG Mr You ZHOU\*

Department of Mechanical Engineering: Mr Chun Hin Chris CHAN\* Miss Kee Wah LEONG\* Mr Jianxiao MA Ms Tianjiao MAO Miss Libaihe TIAN Mr Hengjia ZHU\*

#### Faculty of Law

Department of Law: Mr Guillermo CORONADO Ms Puspa POKHAREL Mr Erik John SHADDOCK\* Miss Hoi Kwan Carmen YAM\* Miss Yuyao YI

#### Li Ka Shing Faculty of Medicine

Department of Anaesthesiology: Mr Zhiming SHAN

Department of Diagnostic Radiology: Miss Jie LIAN

Department of Medicine: Miss Inyoung OH\* Ms Runging YANG

Department of Orthopaedics and Traumatology: Mr Augustine Suurinobah BRAH\* Mr Zhuoqi Ll

Department of Pathology: Mr Yu CHENG Miss Jingyi LU\* Ms Zher Yee OOI\*

Department of Pharmacology and Pharmacy: Mr Ho Wan CHAN\* Mr Wing Ming CHEUNG\*# Mr Jinzhao LIU\* Mr Cheng MA

Department of Psychiatry: Mr Sai Ting CHU\*

School of Biomedical Sciences:
Mr Michael King Yung CHUNG
Mr Hoi Chun FONG\*
Mr Yik Chai Charles LAU\*
Mr Ho Ping SIU\*
Mr Md Sahab UDDIN
Miss Peiyi XIAO
Miss Xinyu YE^
Miss Xiaotian ZHANG\*
Ms Yu ZHENG

School of Nursing: Miss Man Lee CHAN\* Miss Wai Ying WONG Mr Yongyang YAN

School of Public Health: Miss Ziru DENG Miss Zhuliduzi JIESISIBIEKE

Mr Chit Kay LEUNG Miss Qiaoxin SHI

#### **Faculty of Science**

Department of Chemistry: Ms Yihui CAO\* Mr Jamie Guan-tai LOK\* Mr Liren ZHANG Mr Yingchuan ZHANG\* Miss Weixiang ZHOU Department of Earth Sciences: Mr O LAI\* Mr Ruining YAO\*

Department of Mathematics: Mr Junren CHEN\* Mr Aneesh JATAR Miss Fengcheng LU Miss Yueqi WANG\* Miss Jiefei YANG

Department of Physics: Ms Weiyuan TANG Ms Xinyu WANG Mr Qingdong YANG Mr Zijian ZHANG

Department of Statistics and Actuarial Science: Miss Yuxi CAI\* Mr Lingting ZHU

School of Biological Sciences:
Ms Victoria Elizabeth AMARAL\*
Mr Joseph Bradley BRENNAN
Ms Zhe CHEN
Mr Felipe Pereira DA ROCHA
Miss Felicianna\*
Miss Chit Yu Elsie IU
Dr Daniele ROMEO\*

#### **Faculty of Social Sciences**

Department of Geography: Miss Zhuangyuan FAN\* Mr Liam Nicholas Seth REEVE Mr Zijing SHEN\*

Department of Politics and Public Administration: Mr Jiasheng XIAO

Department of Psychology: Miss Nadia ADELINA Mr Shu Yi Sean GUO Miss Letian LEI Miss Yi Ping LI Mr Sai Ho YIP

Department of Social Work and Social Administration: Miss Sin Kwan Janelle LAI Mr Jun Wei LIOW Mr Yong Hao NG Ms Shiqi PENG

Department of Sociology: Ms Yun-Tzu CHANG Miss Kylie Chiu Yee LUI

Hong Kong Institute for the Humanities and Social Sciences: Mr Man Him Martin TSE#

<sup>\*</sup> Also awardee of the Hong Kong PhD Fellowship Scheme funded by the Research Grants Council.

<sup>#</sup> Expected registration date is on January 1, 2022

<sup>^</sup> Expected registration date is on April 1, 2022.

### Li Ka Shing Prizes 2019-20

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.

Nominations for the Li Ka Shing Prizes 2019 20 were considered by a Selection Committee in two broad groups

Faculties of Architecture, Arts, Business and Economics, Education, Law, and Social Sciences

Professor C. Cheng, Associate Dean, Graduate School (Chairperson)

Professor C.M.K. Chan, Faculty of Business and Economics

Professor H.Y. Chan, School of Humanities (Music), Faculty of Arts

Emeritus Professor G.A. Postiglione, Faculty of Education

#### Faculties of Dentistry, Engineering, Medicine, and Science

Professor B.P. Chan, Associate Dean, Graduate School (Chairperson)

Professor M.G. Botelho, Faculty of Dentistry

Professor U.S. Khoo, Department of Pathology, Li Ka Shing Faculty of Medicine

Professor Z. Wang, Department of Physics, Faculty of Science

## Best MPhil Thesis in the Faculties of Dentistry, Engineering, Medicine, and Science

#### Miss Pit Shan CHONG

MPhil, School of Biomedical Sciences

Thesis Title:

Elucidation of Neuroprotective Role of Hericium Erinaceus in Animal Models of Depression and Cerebellar Ataxia

Supervisors:

Dr L.W. Lim, School of Biomedical Sciences Dr M L Fung, School of Biomedical Sciences

Miss Chong's study investigated the therapeutic potential of *Hericium erinaceus*, a medicinal-culinary mushroom, commonly known as Lion's Mane or Monkey's Head mushroom, for depressive disorder and cerebellar ataxia. Depression affects more than 300 million people worldwide and it is one of the major contributors to the global burden of diseases. Two thirds of patients with depression fail to respond to antidepressant treatment due to treatment resistant depression and intolerable side effects. Hence, the continuing search for novel antidepressants with higher efficacy and fewer side effects.

Her study has demonstrated that Hericium erinaceus could potentially ameliorate depressive like symptoms. She further revealed that the underlying mechanism contributing to the antidepressant like effect is possibly due to the growth of neurons induced by Hericium erinaceus treatment in a brain region strongly associated with depression. Her finding paves the way for developing a cost-effective complementary and alternative medicine for depressive disorders, with less adverse effect.

She further investigated the neuroprotective role of Hericium erinaceus against cerebellar ataxia, a progressive neurodegenerative disorder that affects balance and voluntary movement. The results raise hopes for the effective treatment of cerebellar ataxia. These finding make a significant contribution to knowledge and understanding of the therapeutic effects of Hericium erinaceus, building a base for future translational research and development of Hericium erinaceus as a neuroprotective medicine

Miss Chong has achieved an impressive record of publication in professional journals and she has received a number of major academic awards. Following completion of her MPhil, Miss Chong was awarded the Hong Kong Postgraduate Fellowship and HKU Presidential PhD Scholarship to pursue her PhD in HKU.



Dr L.W. Lim (fourth from left) and Miss Pit Shan Chong (second from right)



## Best MPhil Thesis in the Faculties of Architecture, Arts, Business and Economics, Education, Law, and Social Sciences

#### Mr Hui Fei CHAN

MPhil, Department of Psychology

Thesis Title:

Attentional and Interpretation Biases in the Context of Pain

Supervisors:

Dr T.J. Barry, Faculty of Social Sciences Dr J.H.W. Hsiao, Department of Psychology

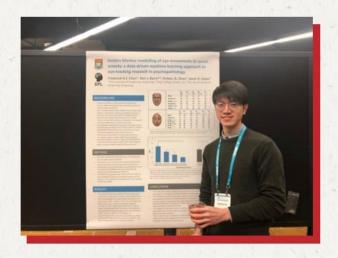
During his MPhil, Mr Chan was more productive than many PhD candidates. He conducted five investigations from which he was able to publish five chapters of his MPhil thesis. This is in addition to time spent on final preparation of his undergraduate thesis for publication.

In addition to publication in leading professional publications, Mr Chan presented his work at two major international conferences. His international impact has been remarkable. His interdisciplinary approach integrating complex machine learning techniques with basic clinical science resulted in publication and presentation among diverse academic groups and disciplines.

Given that pain perception has both physical and psychological components, this study has the potential to offer hints for better pain management. Mr Chan used novel techniques including eye movement data; investigating the interplay between different types of information processing biases; including cross-sectional, longitudinal and experimental techniques across the various studies; attempting to measure developmental differences in the presentation of pain and its relationship with information processing

After completion of the MPhil, Mr Chan embarked on a PhD in the field of Health Psychology and Behavioural Medicine at the Centre for Population Health Sciences, Lee Kong Chian School of Medicine, Nanyang Technological University & Imperial College London. His current research focuses on neuropsychological functioning and cognitive complaints in patients with end stage renal disease who are receiving dialysis treatment.





Dr TJ Barry (left) and Mr Hui Fei Chan (right)

## Best PhD Theses in the Faculties of Architecture, Arts, Business and Economics, Education, Law, and Social Sciences

#### Dr Vesa Petri PURSIAINEN

PhD, Faculty of Business and Economics

Thesis Title:

Essays on Behavioral Finance

Supervisor:

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

In his thesis Dr Pursiainen weaves together three interesting, original research papers on behavioral finance. The first two essays examine how cultural trust affects analysts' stock recommendations for European firms and the outcomes of crowdfunding campaigns. The third essay shows a negative externality of the stock market, as it can affect stress levels within families and lead to domestic violence. The thesis helps us understand the interaction of financial markets and human behavior by documenting new and important findings

The first paper addresses the economic impact of cultural biases and also adds to the literature on the determinants of the quality and biases in equity research.

The major innovation of the paper is to quantify bilateral trust that allows for the identification of cultural biases based on the Eurobarometer based measure of bilateral trust between European nations. The evidence of the negative North South bias during the European debt crisis and a Franco British bias during the Iraq war are also interesting and consistent with his hypothesis. Compared with existing studies, the bilateral nature of the trust measure can capture the influence of cultural biases in a more direct fashion.

Dr Pursiainen has developed an impressive professional network thanks to his widespread publication in academic and high end consumer media including The Economist. He has presented all chapters of his thesis at prestigious international conferences. Following completion of his PhD, Dr Pursiainen joined the University of St. Gallen as Assistant Professor of Finance. In addition, he is an Affiliated Researcher at Hanken School of Economics in Finland





Prof TC Lin (left) and Dr Vesa Petri Pursiainen (second from right)

## Best PhD Theses in the Faculties of Architecture, Arts, Business and Economics, Education, Law, and Social Sciences

#### **Dr Tat Yeung James KUAN**

PhD, Faculty of Education

Thesis Title:

The Impact of a Time Perspective Educational Course on Students' Intellectual Styles, Locus of Control, and Subjective Well being

Supervisors:

Professor L.F. Zhang, Faculty of Education Dr PS Yeung, Faculty of Education

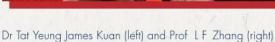
Dr Kuan's thesis represents a significant piece of work in the field of educational psychology. He is the first to investigate the relationship between time perspectives and intellectual styles.

Malleable time perspective and intellectual styles are crucial for student development. Dr Kuan's theory-based and self-designed intervention of the Time Perspective Educational Course (TPEC) exerted a significant impact on the development of students' adaptive time perspectives and creative intellectual styles. At the same time, the intervention markedly enhanced students' preference for collaboration and their sense of psychological well being. In addition to contributing to the literature on human psychology and education, his research findings provide practical implications for students, educators, and other stakeholders.

Dr Kuan's thesis gave rise to his first-authored paper on thinking styles and time perspectives in *Educational Psychology*. His publication was widely read and well-received. A second manuscript concerning the TPEC is currently under review for publication in the same journal

Throughout his PhD study period, Dr Kuan worked as a Vice Principal in a private independent school in Hong Kong. Today, he serves in the same capacity at the same school.







## Best PhD Theses in the Faculties of Dentistry, Engineering, Medicine, and Science

#### Dr Li LIU

PhD, Department of Mechanical Engineering

Thesis Title:

Deformation and Fracture Mechanisms of High Strength Medium Mn Steel

Supervisor:

Professor M. Huang, Department of Mechanical Engineering

Dr Liu's ground breaking thesis examines the fracture mechanisms of structural materials and promotes the industrialization of super strong steel for lightweight applications and environmental protection. Their excellent performance-cost synergy makes metallic materials essential. Modern technologies and industries depend on current metallic materials, but raise ever increasing demands for stronger and tougher metals to withstand more arduous operating conditions and aggressive environments

Dr Liu offers a different pathway to develop engineering materials with ultrahigh strength and superior toughness at economical cost. She also proposes lightweight applications of advanced high strength steels and shows how existing industrial techniques can develop medium Mn steels with excellent mechanical properties, improved safety, energy-saving and environment protection. She recommends a new toughening mechanism which changes the traditional view that improved strength adversely affects toughness.

While working on her doctoral thesis, Dr Liu prepared an impressive number of papers for publication in leading journals. Her excellent presentation skills and logical thinking ability make her an outstanding team member Among other honours she received the M Braun Postgraduate Prize for outstanding postgraduate research student from the Department of Mechanical Engineering, HKU in July 2020. She was awarded the only "Best paper award" for her presentation during the 4th International Conference on Medium and High Manganese Steels held in Germany, in 2019.

After receiving her PhD degree, Dr Liu worked as an Associate Professor at the Harbin Institute of Technology, Shenzhen.



Dr Li Liu (left) and Prof. M. Huang (right)



## Best PhD theses in the Faculties of Dentistry, Engineering, Medicine, and Science

#### Dr Derek LEE

PhD, Department of Pathology

Thesis Title:

Adaptive and Constitutive Activations of Antioxidant producing Metabolic Pathways in Hepatocellular Carcinoma

Supervisors:

Dr C.C.L. Wong, Department of Pathology Professor I O L Ng, Department of Pathology

Dr Lee's thesis represents his original ideas and is strongly hypothesis-driven. His work is supported by many state-of-the-art experimental platforms and compelling data. He comprehensively reveals the major metabolic pathways that liver cancer cells use to counteract oxidative stress, survive, and propagate. He also identified more than 10 therapeutic strategies to target these metabolic pathways to suppress HCC development. The findings from his PhD could be leveraged for effective therapeutic strategies to target liver cancer cells.

His thesis has generated a great number of publications. Apart from being productive himself, Dr Lee shows great leadership and mentorship in guiding and assisting new students in their projects. He is an excellent scientist and a great team player. His PhD work has had great scientific and clinical impact and led us to a comprehensive understanding of the metabolism of liver cancer, an uncharted and challenging area.

Dr Lee is single-minded in his determination to develop his career in academia and cancer research. He has been preparing for submission of a highly original and clinically important proposal in his capacity as principal investigator for the Health and Medical Research Fund (HMRF) on lipid-derived oxidative stress and hepatosteatosis associated HCC, a project that he initiated independently during his PhD study.

Dr Lee is currently a Post-doctoral Fellow in the Department of Pathology, preparing some work derived from his PhD study for publication next year. Due to his great research output and original new research proposal on ferroptosis and lipid-derived oxidative stress, Dr Lee has recently been awarded the highly competitive RGC postdoctoral fellowship.





Dr Derek Lee (back row, third from right) and Dr C.C.L. Wong (back row, second from right)