PhD Students Win Awards for Young Scientists

Two HKU PhD candidates won awards at the Hong Kong Institution of Science (HKIS) Annual Conference held on December 2, 2017. Daniel Ebler (Department of Computer Science) won the HKIS-Towngas 2017 Young Scientist Award in the field of Physical/Mathematical Science for his research titled ‘Optimal Quantum Networks’, while Wallis Cheuk Yin Lau (Department of Pharmacology and Pharmacy) received an Honourable Mention in the field of Life Science.

Quantum technologies have become a global focus of interdisciplinary research. Like conventional computers, quantum technologies often consist of several interconnected components. Daniel studies collections of components, called quantum networks. Specifically, he analyses the underlying structure of the networks, which is based on the laws of quantum physics. The networks have a promising range of applications, including improvements in studies about causality, over-enhanced capabilities of communicating information, and higher security in data transmission. Daniel’s work has shown that quantum networks offer a large variety of advantages.

Wallis was awarded for her research titled ‘Effectiveness and Safety of New Oral Anticoagulants in Patients with Atrial Fibrillation’. Oral anticoagulant (OAC) is recommended by Western guidelines for stroke prevention, but it is not well studied among Asians. Wallis’s work utilised an electronic clinical database of Hong Kong and found that the new OAC was associated with a lower risk of bleeding and fractures compared with traditional OAC. This was the largest study of OAC among Southern Chinese people and the results helped inform the prescribing of OAC in clinical practice.

The Young Scientist Awards are a territory-wide competition hosted by the HKIS. The awards aim to reward young scientists and engineers in Hong Kong who show great promise in their field of study, with the hope that this will nurture the growth of science and technology in the region.

PhD Students Receive Jurassic Foundation Funding for Dinosaur Research

Congratulations to Raymond Kwai Man Fong and Arindam Roy – first year PhD students of Dr Michael Pittman in the Department of Earth Sciences – for receiving competitive research grants from the Jurassic Foundation. The Jurassic Foundation awards grants to early-career researchers to conduct impactful research on dinosaurs. Raymond will be using his award to evaluate the potential for laser light to improve the study of bone microstructure, which palaeontologists use to reconstruct dinosaur growth patterns. Arindam will be investigating the flight anatomy and colour patterning of the strange ‘bat-like’ bird relative Yi qi. Well done Raymond and Arindam!
Bridging the Gap
An Alumni Story of Dr Jason Ka-Hang Ho

Dr Jason Ho’s journey starts here against the dynamic cityscape of Hong Kong, with its intricate pattern of streets, roads, pathways and bridges: a fitting opening scene for any road movie or ‘bildungsroman’.

A clip of our hero, Jason Ho, as a young boy at school would show him reading his favourite books on animals: not of him losing himself in adventure stories, fantasy novels, or Marvel Comics.

But all that was to change.

Fast forward to Jason as a young man and it was the ‘rebellious’ film *Thelma & Louise* directed by Ridley Scott that captured his imagination. “It [Thelma & Louise] enlightened me back then as a twenty-year-old,” he now reflects. “There are always alternative possibilities to think and act otherwise, which is the key message of not only the film, but also the Comparative Literature discipline, and my motto as a professor as well as an activist.”

And so Jason Ho was motivated to embark upon an academic career using the Comparative Literature route for his direction of study and research. His interests developed in cultural studies, gender and sexuality.

In this new and challenging environment of HKU he was supported and encouraged by the late Dr Esther Cheung whom he fondly recalls as having been “a friend, mentor and mother figure”.

As his supervisor, this inspirational professor guided him through his early thesis study of the film director Stanley Kwan and later his PhD thesis entitled ‘Remapping East Asian Cinemas: Dynamics of Regional Circulations and Aesthetics’.

Two other key figures of his HKU undergraduate years were Professor Maureen Sabine and Professor Mette Hjort. The former opened up his interest in gender studies, sexuality and queer theory, and Professor Hjort’s knowledge of film and philosophy and commitment to teaching influenced him a great deal.

Dr Ho’s own passion for teaching at HKU is beyond doubt. He enjoys having big classes of students: “I never complain about my workload – I love my students.”

As a one hundred percent Hong Konger, he feels that he fulfils a much needed role as a local voice in academia. He comments that in a high ranking university such as HKU, this local voice is important and is a complimentary balance to those of global scholars.

His advice to students would be to make sure that they are well-prepared for academic life. He goes so far as to say that first steps at HKU would be a good start, but then ‘reach out’ and have other international experiences – then return to HKU as other alumni have done.

Dr Ho himself prefers not to venture far regularly. He confesses that he gets homesick. “I miss my family and my dog Hebe.” He attends annual overseas conferences and seminars, but loves to take the road back home.

He praises the HKU School of Humanities (Comparative Literature) for being a “safe, secure environment, where everyone is open and broad”.

It is from this platform that he runs the department’s internship programme; co-ordinator since its launch in 2012, Dr Ho is proud of this project. “The internship programme lines up with various cultural sectors in the community (film companies, festivals newspapers, NGOs to name a few)...to provide diverse experience for our students and to get them prepared for ‘reality’ before entering the workplace.”

“I manage to bridge the gap between theories and texts in CompLit and the real world outside, and to deliver the message to students that the knowledge they’ve been learning in our very unique discipline can see relevance in a future career.”

All the signs are clear. With his current research involving work on gay activism, minority rights and disability studies, combined with a packed HKU teaching schedule, the road ahead for Dr Jason Ho is a busy one. The journey does not stop here!
Revitalising Pearl Cultivation in Hong Kong — the Pearl of the Orient

Pearl hunting in Hong Kong has a long history, with stories dating back to the Kai Yuan era (AD 713-741) of the Tang Dynasty. During Nam Han or Southern Han (AD 917-971), of the Five Dynasties and Ten Kingdoms, Mei Chuan County was established at Tai Po for pearl hunting in Tolo Harbour. More than 2,000 soldiers were stationed in Tolo Harbour to collect pearls for the emperors.

In the 1950s, the rich and famous in Hong Kong tried to start pearl cultivation locally. The Pearl Culture (Control) Ordinance was introduced in 1958 to manage the pearl farming activities in Hong Kong. Permits were issued to six different parties, including Sir Kenneth Fung, Sir Ruttonjee and Sir Kadoorie. The government was very supportive of the activities. A pearl research centre was also set up at Kat O Island headed by a biologist from HKU, Dr Derek Bromhall. However, their attempts to cultivate pearls failed due to various reasons.

Under the supervision of Professor Kenneth Leung (School of Biological Science) and Professor Paul Lau (Faculty of Business and Economics), my PhD research seeks to discover the reasons for their failure and try to overcome the difficulties to re-establish the industry in Hong Kong. Modern technologies, such as RFID (radio-frequency identification) nucleus, will be used to develop locally produced pearls and establish a brand name. I just had the first harvest from my research in January 2018, and the quality of the pearls is encouraging. More research will be carried out to investigate how to promote the growth of pearl oysters as well as the pearls.

Today, Hong Kong is a major pearl trading hub – we are one of the largest importers and exporters of pearls in the world. Pearl powder, which is generated from the inner shell surface of pearl oysters, is an expensive Chinese medicine and is also commonly used in cosmetics around the world. Additionally, the oyster flesh can be dried and used in making soup. Hong Kong has more than 1,000 idle fish rafts in 26 fish culture zones, which could be utilized to cultivate pearl oysters that will potentially bring economic benefit to local fishers and Hong Kong.

Furthermore, pearl oysters such as *Pinctada fucata* feed by filtering suspended organic matter such as microalgae in seawater. Hence, they can help to improve the seawater quality and control harmful algal blooms.

The research has gained local media attention including from RTHK, Apple Daily, Post Magazine of the South China Morning Post and Hong Kong Economic Journal Monthly, and has also drawn interest from the aquaculture sector. I was invited to serve as an advisor for the pearl oyster cultivation project operated by the Aberdeen Fisherwomen Association, which is funded by the Fisheries Enhancement Fund. The ultimate goal of the research is to transfer the know-how from my scientific study to the fishers.

Yan Wa Tat
PhD candidate, School of Biological Sciences
The achievements of HKU’s research postgraduate students were celebrated at the annual Award Presentation Ceremony, organised by the Graduate School on December 13, 2017.

Joining our awardees at the ceremony to help celebrate the achievements were Ms Elley Mao (Honorary Director of the HKU Foundation), Professor Paul K.H. Tam (Acting President and Vice-Chancellor & Provost and Deputy Vice-Chancellor), Professor Mee Len Chye (Dean of the Graduate School), Professor Dong-Yan Jin (Associate Dean of the Graduate School) and research student supervisors.

In his opening address, Professor Tam accentuated the high value the University places on research postgraduate education and gave recognition to the collaborative efforts of staff and students, together with the generosity of donors. The University Postgraduate Fellowships (UPFs) were then presented by Ms Mao to 50 incoming PhD students with excellent academic records. The UPFs, generously supported by the HKU Foundation, the Jessie & George Ho Charitable Foundation, Dr Lee Shau Kee, and the Philip K H Wong Foundation, give due recognition to PhD students with excellent academic records.

Professor Chye then presented the Awards for Outstanding Research Postgraduate Student to ten students who had submitted a thesis of exceptional quality and demonstrated outstanding performance in other academic aspects. This was followed by the presentation of Li Ka Shing Prizes to two MPhil and four PhD graduates. The Li Ka Shing Prizes are highly competitive, and the winners are considered to have submitted the best MPhil and PhD theses in the Humanities and the Science Faculty Groups respectively.

Winners of external prizes – including the Hong Kong PhD Fellowships, Fulbright-RGC Research Scholar Award Programme and Three Minute Thesis Competition Awards – also received certificates of recognition from Professor Jin at the Ceremony.

Let us congratulate our awardees once again!
List of prize winners:

UNIVERSITY POSTGRADUATE FELLOWSHIPS (2017-18)

HKU Foundation Postgraduate Fellowships

Faculty of Business and Economics
Miss YUAN Zhaoneng

Faculty of Education
Miss LIU Wan Yi Eva
Miss LIU Yingxin
Mr SHI Hejia
Miss XIE Weiyi
Miss YE Wei

Faculty of Engineering
Mr ZHUANG Yansheng
(Department of Civil Engineering)
Mr CAI Huaxiang
(Department of Electrical and Electronic Engineering)
Mr MA Xin
(Department of Electrical and Electronic Engineering)
Mr SONG Shiguang
(Department of Electrical and Electronic Engineering)
Mr LI Wenye
(Department of Mechanical Engineering)
Mr PAN Wending
(Department of Mechanical Engineering)

Li Ka Shing Faculty of Medicine
Miss ZHANG Yu
(Department of Clinical Oncology)
Miss WANG Lingling
(Department of Medicine)

Faculty of Science
Mr FONG Pak Ming
(Department of Chemistry)
Mr MAN Jason Yin Hei
(Department of Chemistry)
Mr MU Yijiang
(Department of Chemistry)
Mr ZHENG Bin
(Department of Chemistry)
Mr YUAN Wangjun
(Department of Mathematics)
Mr YANG Fengwei
(Department of Physics)

Faculty of Social Sciences
Miss GUO Danyuan
(Department of Social Work and Social Administration)
Miss SONG Xinmiao
(Department of Sociology)

Jessie Ho Memorial Postgraduate Fellowships

Faculty of Architecture
Miss ZHANG Mengzhu
(Department of Urban Planning and Design)

Faculty of Business and Economics
Miss WU Qiong

Faculty of Education
Mr LUI Chi To

Faculty of Engineering
Mr WU Tien Hsuan
(Department of Computer Science)
Mr WEN Dingzhu
(Department of Electrical and Electronic Engineering)
Miss GAO Yue
(Department of Industrial and Manufacturing Systems Engineering)

Faculty of Law
Mr XUE Renwei
(Department of Law)

Li Ka Shing Faculty of Medicine
Miss CHUA Hui Ying
(School of Public Health)
Mr LIAO Yunshi
(School of Public Health)

Faculty of Science
Mr FUNG Ho Ching
(Department of Chemistry)
Miss LI Yanran
(School of Biological Sciences)

Faculty of Social Sciences
Miss LENG Lingli
(Department of Social Work and Social Administration)
Lee Shau Kee Postgraduate Fellowships

Faculty of Architecture
Ms LI Yadi (Department of Real Estate and Construction)
Miss LU Siru (Department of Real Estate and Construction)

Faculty of Arts
Miss WU Shuang (School of Humanities (History))

Faculty of Engineering
Miss DU Jia (Department of Civil Engineering)
Mr YE Yun (Department of Civil Engineering)
Mr ZHANG Qiankun (Department of Computer Science)

Li Ka Shing Faculty of Medicine
Mr DU Richard (Department of Diagnostic Radiology)
Mr KONG Mingpeng (School of Biomedical Sciences)
Miss LIN Xiaochen (School of Biomedical Sciences)

Faculty of Science
Mr WONG Ka Ho (Department of Chemistry)
Miss HUANG Qi (School of Biological Sciences)

Faulty of Social Sciences
Miss GAO Hang (Department of Sociology)

Philip K H Wong Foundation Postgraduate Fellowships

Faculty of Dentistry
Dr ALI Islam Abdelhalim Abdelaziz

Faculty of Education
Miss WANG Ruohan

Li Ka Shing Faculty of Medicine
Miss RONG Li (School of Biomedical Sciences)

Faculty of Social Sciences
Miss LEE Lok Chun Janet (Department of Social Work and Social Administration)

LI KA SHING PRIZES (2015-16)

Best MPhil thesis in the Faculties of Architecture, Arts, Business & Economics, Education, Law and Social Sciences
Mr PAPAVASILIOU Georges (MPhil, Centre for the Humanities and Medicine)

Best MPhil thesis in the Faculties of Dentistry, Engineering, Medicine and Science
Miss CHENG Yik Ling Bowie (MPhil, Department of Pathology)

Best PhD theses in the Faculties of Architecture, Arts, Business & Economics, Education, Law and Social Sciences
Dr WANG Jiejing (PhD, Department of Urban Planning and Design)
Dr CHEN Chih-Ting (PhD, School of Humanities (Music))

Best PhD theses in the Faculties of Dentistry, Engineering, Medicine and Science
Dr LEE Ho Tin (PhD, Department of Electrical and Electronic Engineering)
Dr HE Bailiang (PhD, Department of Medicine)

AWARDS FOR OUTSTANDING RESEARCH POSTGRADUATE STUDENT (2015-16)

Dr BAO Xiucong (PhD, Department of Chemistry)
Dr CARRAI Maria Adele (PhD, Department of Law)
Dr LAM Sze Yuen (PhD, Department of Medicine)
Dr LI Changxian (PhD, Department of Surgery)
Dr LIANG Zhiyuan (PhD, Department of Mechanical Engineering)
Mrs NARAYAN Niketa Gupte (MPhil, School of English)
Dr WANG Shuai (PhD, Faculty of Dentistry)
Mr WONG Cheong Wai Martin (MPhil, School of Biological Sciences)
Dr YAO Liaoyuan (PhD, Department of Chemistry)
Dr ZHU Han (PhD, Department of Law)
How to Pursue an Alternative Academic Path in Humanities and Sciences – Insights from AsiaGlobal Fellows

A panel discussion with five AsiaGlobal Fellows titled ‘How to Pursue an Alternative Academic Path in Humanities and Sciences’ – organised by the Graduate School on November 23, 2017 – gave me a valuable chance to meet professionals from various backgrounds, namely business, political science, law, global relations and public health. Drawing from their wide experience in different companies and international organisations, the fellows shared perceptive insights with participants into building expertise and excellence, professionalism, and career prospects.

“Be excellent” is the shared advice from all the fellows for a successful career. This includes continuous development of knowledge, expertise and skill sets. We can expand our knowledge by reading more from different authors, genres, and sources so as to get world news and updates in various fields. Skill sets – such as in reading, writing, research, language, management, communication, and statistical/technical skills – are all transferable, and can be developed through interacting with others in the workplace. Publications are practical proof of our skill sets and the ability to apply our skills and produce outcomes. Also, we need to develop interdisciplinary perspectives and capabilities to progress in different fields in different places. To achieve career promotions, we need to demonstrate our expertise and skills, and maximise all the opportunities that bring about excellence.

Professionalism is another expected competence, comprising professional behaviours and abilities. Working in a diverse and international context requires a global outlook and the ability to interact in a diplomatic and professional manner with colleagues and stakeholders from different backgrounds and levels. Acting professionally in any job should include not gossiping, being very organised and patient, and having a thorough understanding of daily operations.

Self-efficacy in our career prospects is a decisive factor in professional development. We should always be prepared to seize opportunities, and move beyond our comfort zone for further development. This includes the ability to work out strategies to secure job offers and to improve our expertise, i.e. by studying the criteria and working on matching them, selecting the areas of work in which we excel, and choosing a community of professionals in our targeted field. That is, “be strategic about what you want to learn and what you want to get”, as suggested by one of the fellows. To land the ‘right job’, an effective strategy is knowing who we are, which could be achieved by either trusting our inner voice or listening to someone we respect. We can also define our mission – for example, contributing to the development of the world – and find an organisation with the same mission. Last but not least, learning from our weaknesses, building skills and strengths, and considering different opportunities would offer us several alternative academic paths.

Quach Hoang Thien Hy
PhD candidate, Faculty of Education

The AsiaGlobal Fellows Program at HKU is a global initiative designed to nurture future leaders. AsiaGlobal Fellows are promising mid-career professionals from around the world and across a spectrum of occupations. They share a common policy interest in Asia, have demonstrated strong leadership potential, and are committed to making a positive impact on society. A central goal of the program is to further develop the leadership skills of tomorrow’s leaders and broaden their global knowledge, exposure and experience.
Dialogues with Entrepreneurs

The Graduate School has launched a series of Dialogues with Entrepreneurs to promote innovation and entrepreneurship among research postgraduate (RPg) students. Mr. Florian Simmendinger, the Chief Executive Officer and Founder of Soundbrenner, was invited to meet a group of RPg students and staff at iDendron, the HKU Innovation and Entrepreneurship Hub, on January 19, 2018. He shared his personal experience on creating the world’s first wearable device for musicians, the Soundbrenner Pulse, where and how he started his business, and some key ingredients for success, such as being a fast learner with strong determination. The session also gave audience members the opportunity to interact with Mr. Simmendinger.

Fruitful International Experience through Cambridge Training Course

In October 2017, I attended a structural bioinformatics course organised by the European Bioinformatics Institute (EMBL-EBI) at the Wellcome Genome Campus in Cambridge, UK. The EMBL-EBI provides freely available data from life sciences research and maintains the world’s most comprehensive range of open access molecular databases. During the one-week programme, renowned academics in the field from different universities introduced various methods to explore bioinformatics data resources and tools for the interpretation and exploitation of biomacromolecular structures. The valuable experience aided my understanding on the binding affinity of a pharmaceutical compound, which can be applied in my future research studies. On the last day of my stay, I joined a tour to explore and appreciate the beautiful city of Cambridge.

My trip was sponsored by the Pilot Scheme on International Experience for Research Postgraduate (RPg) Students at HKU. I would like to express my sincerest gratitude for this support, as otherwise my application to the training course would not have been possible. The Pilot Scheme helps HKU RPg students broaden their horizons and stimulate communication with students worldwide across different cultural backgrounds. This experience is one that I will never forget.

Wang Xueyu
MPhil candidate, School of Chinese Medicine