

Fostering a Culture of Trans-disciplinary Research among RPg Students

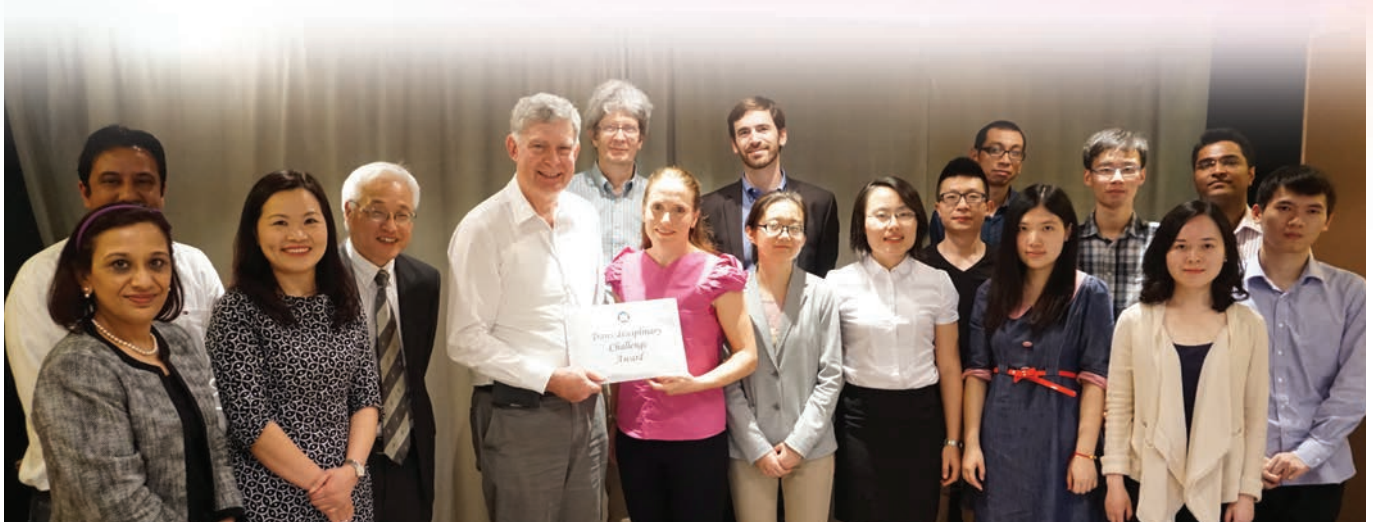
Earlier this year, the Graduate School organised its first workshop on studying complex social networks (CSN) using a trans-disciplinary approach. The workshop comprised two half-day sessions held on March 4 and 18, 2015, which attracted over 20 research postgraduate students, and was rounded off by a Trans-disciplinary Challenge Award Competition on April 24, 2015.

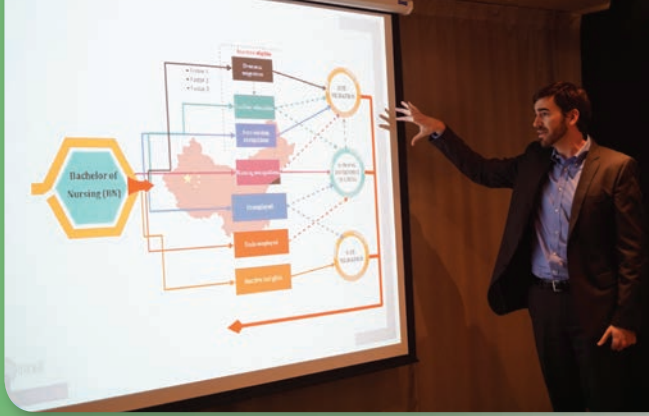
Complex systems can be seen as a new approach to science that investigates how relationships among parts give rise to collective behaviour in a system and how a system interacts and forms relationships with its environment. Observations of interaction networks in social, life, physical and biological sciences suggest that the key functional properties of these networks are the flow of information they can support, the robustness of the flow to node failure and the efficiency of the network. Complex systems can therefore be used to explore how certain network designs perform better than others within the context of social, behavioural, organisational and other systems. This workshop, presented by Professor Liaquat Hossain from the Faculty of Education, aims to provide a comprehensive overview of the trans-disciplinary science approach to studying complex social networks (CSN). "We want to engage the students and create awareness of the fundamentals of investigating CSN, highlight the overall approach to the design of the instrument or procedure for observing/collecting data from existing sources, and discuss the process involved in the analysis of a



CSN dataset," Professor Hossain said. "We then hope to orient students with some existing research, which provides a good coverage of the broader context of CSN in life, engineering, information, physical as well as organisational sciences so that students are able to appreciate the applications of CSN theory and methods using the basis of trans-disciplinary science."

Students were given the opportunity to demonstrate how the issues addressed in the workshop could be applied to research and to present their research in posters in groups and compete for the Graduate School Trans-disciplinary Challenge Award. Each group was given 5 minutes to present their research project, followed by a question and answer session with the judging panel. The panel members were Professor Paul Tam, Vice-President and Pro-Vice-Chancellor (Research), Professor John Bacon-Shone, Associate Dean (Knowledge Exchange) of the Faculty of Social Sciences and Director of the Social Sciences Research Centre and Professor Becky P.Y. Loo, Associate Dean of the Graduate School.





Professor Loo explained the rationale behind the establishment of the Graduate School Trans-disciplinary Challenge Award: “The Award was set up to encourage RPg students at HKU to think beyond their disciplines both in terms of scope and methodology to focus on major problems facing humankind. The focus is really on contributions to addressing significant problems with bearings on the lives of many people rather than contributions to the advancement of a specific discipline. I hope that postgraduate education nowadays will train the next generation of researchers not only to excel in their disciplines but also to care about the world and to have a firm commitment to the betterment of the human race.” She added that “trans-disciplinary research is therefore different in nature from multidisciplinary research, whereby researchers from more than one discipline work together but independently most of the time after a ‘division of labour’ and each team basically works within a framework of discipline-specific research questions, methodology and approaches, and interdisciplinary research, which emphasises the transfer of knowledge and skills from one discipline to another. Given the

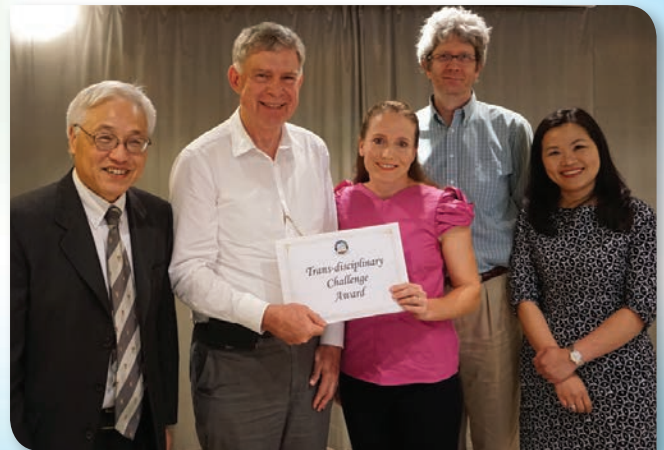
Some Comments from Participating Students:

The [Trans-disciplinary Challenge Award] competition was great because it helped us build connections with others at HKU who use complex network methodology. The competition also helped move my own research ideas forward and was a good experience for me in timed competitive public speaking. I would like to see a PhD level social networks methodology course to help students get the in-depth training needed to apply this methodology in our research.

Michelle Lowry
PhD Candidate, School of Business

above, classroom teaching is not really ideal and, hence, the Graduate School is organising a series of workshops. This year, we are very glad to have invited Professor Liaquat Hossain to launch the series and we are planning more in the future. There will be two innovative workshops on big data next year. The aim is to foster a culture of trans-disciplinary research on campus.”

The Trans-disciplinary Challenge Award 2015 went to the team of Michelle Lowry and Ross Smith, PhD candidates from the School of Business and Department of Law respectively.



From left: Professor Paul Tam, Mr Ross Smith, Mrs Michelle Lowry, Professor John Bacon-Shone and Professor Becky Loo

The trans-disciplinary workshop was an opportunity to join colleagues from across HKU to address grand challenges from diverse perspectives. From mechanical engineers to medical doctors, we explored complex problems and developed interdisciplinary research plans. Rather than narrowing in on our research questions based on our individual disciplines, we were able to step back and see new dimensions of social problems and their context. It was an honour to take part and experience the scope and potential of research at HKU.

Thank you to Professor Hossain and the Graduate School.

Wesley Teter
PhD Candidate, Faculty of Education

Fulbright-RGC Hong Kong Research Scholar Awards 2015-16

Three HKU PhD candidates have been awarded 2014-2015 Fulbright-RGC Hong Kong Research Scholar Awards, recently announced by the U.S. Consulate Hong Kong & Macau. The Fulbright Program is the U.S. Government's flagship international educational exchange initiative. In partnership with the Research Grants Council, and with the support of the Lee Hysan Foundation, the Fulbright-RGC Hong Kong Research Scholar Award Program will enable PhD candidates to conduct research in elite institutions in the United States. Congratulations go to the following awardees from HKU:



Ms DAI Yuanyuan (*PhD candidate, Faculty of Education*) will be based at Indiana University at Purdue for ten months to conduct research on education localisation and internationalisation.

to work with Professor Steven C. Tracy for ten months to research China's reception of African American literature after 1949 and to explore how ideology has shaped Communist China's interpretation of race and class.



Ms DONG Xiaoxi (*PhD candidate, School of Modern Languages and Cultures (American studies)*) will be hosted by the University of Massachusetts at Amherst



Ms TSOI Emily Wing See (*PhD candidate, Department of Social Work and Social Administration*) will conduct research at Kansas University for six months on the use of Strengths Case Management as an intervention for Chinese people with severe and persistent mental illnesses.

Skills Development Workshops for Research Postgraduate Students



The Graduate School offered two skills development workshops in May 2015, with the objective to better prepare research postgraduate students for their future careers.

The first workshop, on "Developing Leadership Skills", was held on May 6, 2015 and attracted 32 participants. This workshop discussed the desired attributes of leaders, and explored different styles of leadership and their relative advantages. Participants also looked at a popular model of leadership based on the required behaviours of a successful leader, and took part in practical leadership exercises. The workshop aimed to enhance participants' awareness of their own leadership potential and how to develop it further.



Another workshop on "Maximising Your Skills for Success in Your Non-academic Career" was held on May 7, 2015. During the workshop, the 22 participants had discussions on the skills and attributes developed during their postgraduate studies and on how to 'translate' their value to maximise success in non-academic careers.

The workshops were presented by Ms Elaine Walsh, who for more than ten years led the team responsible for postgraduate professional development at Imperial College London, supporting more than 6,000 graduate students.

HKU Three Minute Thesis (3MT®) Competition 2015



"We want our next-generation researchers to not only excel in cutting-edge research, but also influence the world with their research discoveries and innovations."

Professor Peter Mathieson
President and Vice-Chancellor

Jointly organised by the Graduate School and the Knowledge Exchange Office, the Three Minute Thesis (3MT®) Competition 2015 of HKU was successfully held on March 10, 2015. During the competition, 41 research postgraduate (RPG) students each gave a dynamic and engaging talk about the significance of their research in just three minutes.

The 3MT Competition was developed by The University of Queensland, Australia in 2008. It is an academic competition that challenges RPG students to explain their research project to a non-specialist audience within three minutes. 3MT celebrates the discoveries made by RPG students and encourages them to develop the skills to communicate the importance of their research to the broader community.

We were honoured to have Professor Peter Mathieson, President and Vice-Chancellor of HKU, officiating at the final competition. We were also delighted to have Mr Oscar Chow, Executive Director of Chevalier International Holdings Limited and HKU Court member, and Ms Wendy Gan, Executive Director of Pacific Century Premium Developments and HKU Court member, serving on the adjudicating panel as external members. Internal members of the adjudicating panel included Professor John Bacon-Shone, Associate Director of the Knowledge Exchange Office (KEO), who served as the Chairman of the panel, Professor Ying Chan, Director of the Journalism and Media Studies Centre (JMASC), Professor Hongzhe Sun of the Department of Chemistry, Professor Paul Yip of the Department of Social Work and Social Administration, and Professor Ben Young, Associate Dean of the Graduate School.

Congratulations go to all of the following winners:

Champion

(awarded research travel support or book prize of HK\$7,000)

Name: Ms LIU Tianyin
(PhD candidate, Faculty of Social Sciences)
Presentation Title: A Tale of Two Chinese Languages
Primary Supervisor: Dr Janet H.W. HSIAO

1st Runner-up

(awarded research travel support or book prize of HK\$5,000) and

People's Choice Award

(awarded research travel support or book prize of HK\$3,000)

Name: Ms KONG Wai Yan
(MPhil candidate, Faculty of Arts)
Presentation Title: Britons Only: The 1940 Hong Kong Evacuation
Primary Supervisor: Professor John CARROLL

2nd Runner-up

(awarded research travel support or book prize of HK\$3,000)

Name: Mr LAU Andy Kam Seng
(PhD candidate, Faculty of Engineering)
Title of Presentation: World's Fastest Microscope —
Creating Big-Data for Deciphering Big
Unknowns in Biomedicine
Primary Supervisor: Dr Kevin K.M. TSIA

Online People's Choice Award

(awarded book prize of HK\$800)

Name: Ms YUNG Mana Man Na
(PhD candidate, Faculty of Science)
Title of Presentation: Ecotoxicity of Zinc Oxide Nanoparticles
in the Aquatic Environment
Primary Supervisor: Professor Kenneth M.Y. LEUNG

Videos of the presentations of the awardees and finalists are available at <http://www.ke.hku.hk/hku3mt/index.php/competition/2015/2015-videos-of-finalists-and-awardees>.



Work Hard and Play Hard -

Alumni interview with Dr Li Guodong

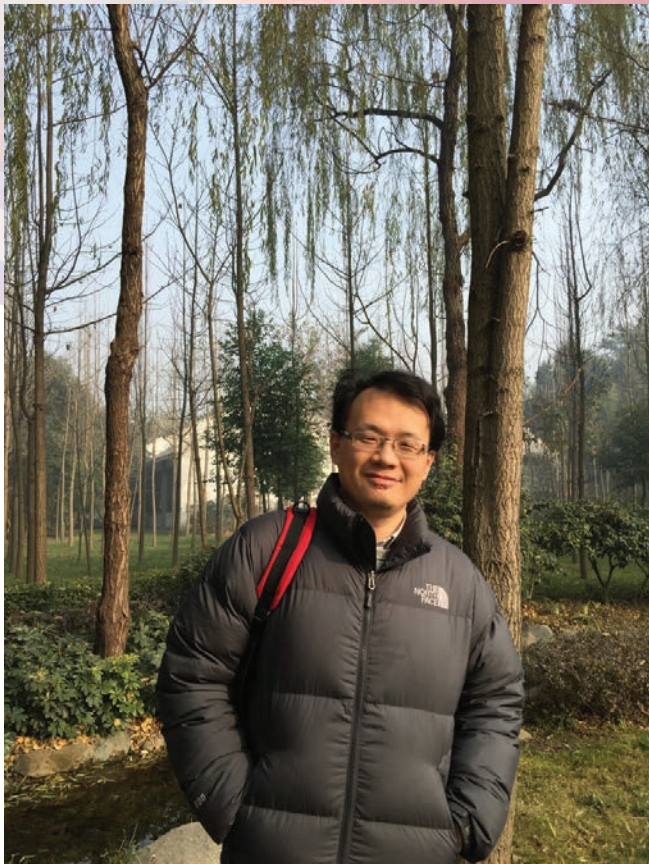
Introduction

Dr Li Guodong arrived at HKU in 2003 as a PhD student. He is currently an Associate Professor in the Department of Statistics and Actuarial Science. A native of Shandong, he holds a bachelor's and a master's degree from China's prestigious Peking University.

The story begins...

"Universities in Mainland China have big and beautiful campuses, but the academic environment is very different from what I found at HKU," says Dr Li. "The Mainland approach is to push students to read a lot but not to focus on how to apply what they have learned. At HKU students are encouraged to think of how to apply a theory to a project."

"After I completed my studies in Beijing I found a good job as a data analyst at the Department of Statistics at the China Customs Bureau, a department of the Central Government. My job was to maintain the database of China's import and export trade and to write reports based on the database. I enjoyed the opportunity to make friends with many people with very high IQ levels. I learned a lot from them in such areas as time management and communication skills."



"I soon realised that I was better suited to a life in academia, but what I learned from that job has had a lasting influence on the direction of my research. Statistics is the science of data analysis. It has two sides: one is the methodology, which is more mathematical, while the other side is the application, in which the data-sense is very important. In the past, I focused more on the methodology. Working at China Customs, I encountered a huge volume of data. Until now, I am still thinking about the best way to handle such data. 'Big data' to use the current fancy name, is a hot topic these days. Accompanying the development of technology, more and more numbers are recorded and accumulated. My department recently launched a new major, Decision Analytics, aimed at teaching students how to handle big data. Specifically many big companies such as Google and Alibaba have huge volumes of data in hand, and they want to make use of them."

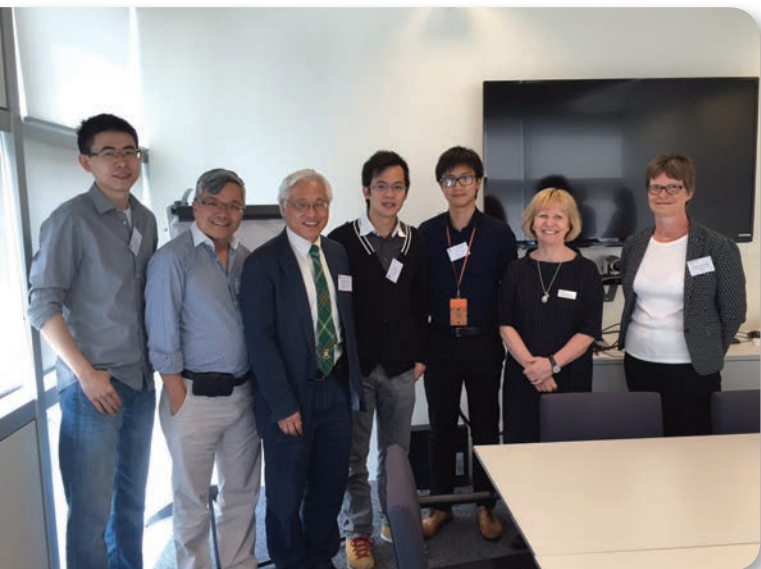
Dr Li says his application to HKU for his RPg studies was almost a matter of chance. "I had a girlfriend in the same school and she wanted to go abroad for PhD studies. So we both applied to universities in the U.S. and also in Hong Kong. In the end she changed her mind when she found a good job in Beijing and I came to HKU on my own. But when I went to Nanyang University in Singapore as an assistant professor after I received my PhD degree in 2007 she also moved to Singapore and after about two years when I was appointed an assistant professor in the Department of Statistics at HKU she came back to Hong Kong with me. But by that time she was no longer my girlfriend, she was my wife."

They now have two sons, aged six and three. Dr Li says he tries to combine his favourite leisure activities with his role as a hands-on as a father. "I swim with my older son and take him hiking and exploring Hong Kong's beautiful country parks. Before I was married I played squash a lot, but currently I rarely play because my sons are too young to learn."

"In the course of my career, I have received a lot of valuable advice from my former supervisor, Professor W.K. Li. I really enjoyed my four years of PhD study. I could feel myself growing up in the course of my research, and it seemed that every day brought its own achievement!"

"The most valuable advice comes from my wife, urging me always to work hard and play hard!"

Visit to Imperial College and King's College, London



(From left) LI Xiang (Joint PhD student, Department of Medicine); Professor Peter Cheung, Vice Dean of the Faculty of Engineering and Head of the Department of Electrical and Electronic Engineering, ICL; Professor Paul Tam; CHAU Man Ho (Joint PhD student, Department of Statistics and Actuarial Science); LIANG Shaolin (Joint PhD student, School of Biomedical Sciences); Professor Maggie Dallman, Associate Provost, Academic Partnerships, ICL; Professor Sue Gibson, Director of the Graduate School, ICL

The University of Hong Kong (HKU) has collaborated with Imperial College London (ICL) and King's College London (KCL) to offer Joint PhD programmes since 2010. As an annual event, Professor Paul K.H. Tam, Provost & Deputy Vice Chancellor and Vice-President & Pro-Vice-Chancellor (Research), visited KCL and ICL on July 15 and 16, 2015, respectively. During the visits, the university leaders reviewed the programmes and discussed ways for enhancement. Professor Tam also took this opportunity to meet with joint PhD students at ICL.

Joint PhD programmes aim to provide PhD students with opportunities to benefit from shared research excellence in a wide range of disciplines between HKU and its prestigious partners. Students are supervised by academic staff at both HKU and one of its partner universities, and spend their time in both universities. Upon successful completion of the programme, students will be awarded a PhD degree jointly by HKU and the partner university. Joint PhDs are elite programmes, admitting only a very small number of high calibre students. So far, 19 and 11 students have enrolled in the joint PhD programmes with ICL and KCL, respectively, of which 4 graduated in 2014.

Since 2012, HKU also offers Joint Education Placement for PhD with the University of Toronto. Under this arrangement, students will be conferred a single PhD degree from the lead institution upon satisfactory completion of their studies.

Lunch gathering with joint PhD students.



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