# **Connecting Science and Society**

Yvonne Yu Yan Yau, an MPhil student in the Department of Earth Sciences, has recently shared her research on meat consumption and carbon emissions in a district-funded workshop 'Vegan City Project' and radio interview with RTHK programme 'Climate Watcher'. Reducing meat consumption at the citizen level could significantly reduce the amount of carbon emissions in the world, which is one of the main messages of Yvonne's research. She therefore used these opportunities to spread the message and hopefully raise public awareness.



Yvonne Yu Yan Yan (second from right) with hosts of Climate Watcher

As science students, we are trained to present our data and results in a scientific way, such as addressing a gap in the field and detailing the methodology of the experiments. But non-science audiences have no such interest in our research. The hardest thing for me is to connect the dots between scientific research and the public. Therefore, I try to let the audience know why the research matters and what actions they need to take.

My first step is to explain my research to parents and friends. I need to talk about the scientific terms such as greenhouse gas emissions in a way that is easy to grasp. So, for example, I describe them as "gases trapping heat just like a blanket". Using an analogy is a great way to avoid the jargon that only the scientists or experts in your field will understand.

Explaining a 10-page summary of your research to someone who does not know much about the field is very challenging. Therefore, I don't talk about my actual research and the data in a great detail. Instead, I zoom out and focus on the big picture of my research, which can be easily related to the public. Moreover, I pinpoint just one or two main messages. In a recent radio interview on *Climate Watcher* during which I shared my research, I was asked for any fun or interesting fact that I could discuss, as some listeners might already know that animal agriculture is bad for the environment. Therefore, I started with cows' farts and burps to explain the reasons behind why cows contribute a massive amount to greenhouse gas emissions. Sharing some fun facts or telling a story can resonate with the lay audience.

Although the environmental impact of food production is widely studied in the scientific community, it is seldom discussed in Hong Kong. Hence, for science to have a greater impact on society, we need to take an extra step to build the bridge of conveying the knowledge to the citizens.

#### Yvonne Yu Yan Yau

MPhil Candidate
Department of Earth Sciences

# PhD Student Wins Award for Designing Digital Gadget for Speech Therapy

Kammy Hiu Fung Chan – a PhD student in the Division of Speech and Hearing Sciences of the Faculty of Education – was awarded 1st runner-up in the tertiary institution sector in the Samsung Solve for Tomorrow 2018 competition at the award ceremony in January 2019. The competition encourages students to use technology creatively to address the needs of children with special education needs (SEN), as well as to support their families, caregivers, teachers, classmates and other people surrounding them. Over 1,000 designs were received from primary, secondary and tertiary students.

Kammy designed an innovative application called 'Kammy's board' for those who have stuttering and dyslexia. Kammy's board is an enhanced version of the traditional pacing board, which is a treatment tool used in speech therapy. Pacing boards are commonly used for individuals who need a visual cue to separate words or syllables in order to modulate speech rate. Inspired by her patients with Parkinson's disease, Kammy modified the traditional pacing board and improved it with several digital functions, such as recording and saving. Kammy is deeply grateful to her supervisor Dr Lawrence Ng, who always motivates her to strive for excellence.



## PhD Candidate Awarded Runner-Up Prize in the U21/ PwC Innovation Challenge

Michelle Cheng Wing Tung, an HKU PhD candidate in the Centre for the Enhancement of Teaching and Learning, was the runner-up in the second round (B) of the U21/PwC Innovation Challenge competition. Michelle will receive a cash prize from HKU and exclusive coaching sessions with the PwC Academy tailored to her career needs.

Universitas 21 (U21) and PricewaterhouseCoopers (PwC), two globally focused organisations, have come together to offer the Innovation Challenge to enable Master's and PhD students at U21 institutions access to global work opportunities in a mutually beneficial relationship. Professor W. John Kao, former HKU Vice-President/Pro-Vice-Chancellor (Global), brought this competition to HKU and initiated an 'HKU round', in collaboration with the Graduate School and CEDARS, before submitting nominations to U21 and/or PwC. Professor Kao regarded the competition as meaningful

and challenging and was proud of our students' work.



The challenge asks students to respond to the idea of working in a world where innovation rules and automation and 'thinking machines' are replacing human tasks. However, in this competition round students were asked to respond to and prepare for working in a world where companies care and humans come first.

This competition round included U21 institutions from Hong Kong, Singapore, South Korea, North and South America, and Canada.

"The future of work is a topic that links with all of us, and I am very glad to have this opportunity to think through it. The competition also required us to reflect on our personal strengths and weaknesses, so it is a good opportunity for me to evaluate and further improve myself," Michelle said.

(This article is adapted from https://www.hku.hk/press/press-releases/detail/18998.html.)

#### **Graduate School Award Presentation Ceremony 2018**



The annual Graduate School Award Presentation Ceremony was held on December 12, 2018 in Rayson Huang Theatre, HKU to showcase the important contributions and achievements made by our research postgraduate students. Dr Alan Yu (Member of the Court), Professor Xiang Zhang (President and Vice-Chancellor), Professor Andy Hor (Vice-President and Pro-Vice-Chancellor (Research)), Professor Mee Len Chye (Dean of the Graduate School) and many research student supervisors attended the ceremony to share the joy and honour with our awardees.

Following the opening address delivered by Professor Zhang, Dr Yu presented the University Postgraduate Fellowships (UPFs) to 50 incoming elite PhD students. 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.

In addition to the UPF presentations, 10 students who have submitted a thesis of exceptional quality and demonstrated outstanding performance in other academic aspects received the Awards for Outstanding Research Postgraduate Student from Professor Hor.

The highly competitive Li Ka Shing Prizes were presented by Professor Zhang to two MPhil and four PhD graduates who were considered to have submitted the best MPhil and PhD theses in the Humanities and the Science Faculty Groups.

Awardees who have received external prizes, such as the Hong Kong PhD Fellowships, Croucher Foundation Fellowships/Scholarships and Three Minute Thesis Competition Awards, also attended the Ceremony and received a certificate of recognition from Professor Chye.

Our heartfelt congratulations again to all of the award winners!



List of Prize Winners:

#### LI KA SHING PRIZES (2016-17)

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

MEGGITT Gary (Department of Law)

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

CHONG Chun Kong (Department of Medicine)

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

Dr POUPARD Duncan James (School of Chinese)

Dr REPOUSIS Odysseas (Department of Law)

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

Dr LI Bowen (Department of Electrical and Electronic Engineering)

Dr CHIU Kung Chun (Department of Pathology)





#### AWARDS FOR OUTSTANDING RESEARCH POSTGRADUATE STUDENT (2016-17)

Dr CHEUNG Ka Shing

(PhD, Department of Real Estate and Construction)

Dr GHOSH Shrestha

(PhD, School of Biomedical Sciences)

Dr KHAN Arshad

(PhD, Department of Mechanical Engineering)

Dr LIU Qian

(PhD, Department of Earth Sciences)

Dr LUO Na

(PhD, Centre for Applied English Studies)

PENG Qiaoyang

(MPhil, Department of Sociology)

Dr SHAO Xiang

(PhD, Faculty of Business and Economics)

Dr WONG Yun Sum

(PhD, Department of Pharmacology and Pharmacy)

Dr YEUNG Wai Kan Andy

(PhD, Faculty of Dentistry)

YU Kexin

(MPhil, Department of Statistics and Actuarial Science)



#### **HKU-SUSTech Joint Research Symposium 2018**

To enhance academic exchanges between HKU and the Southern University of Science and Technology (SUSTech), both universities have agreed to co-organise a joint research symposium annually starting from 2017, to be held alternately at HKU and SUSTech. The second such joint research symposium was held at SUSTech, Shenzhen, on November 21, 2018, with the themes of 'Environment, Chemistry & Biology' and 'Advancing Emerging Research and Innovations'.

Professor Andy Hor, Vice-President and Pro-Vice-Chancellor (Research) of HKU, and Professor Jinguang Teng, Vice-President and Dean of the Graduate School of SUSTech, gave the opening addresses. Professor Yiming Rong, Chair Professor and Head of the Department of Mechanical and Energy Engineering of SUSTech, then presented a keynote lecture on 'Global Arena for the Development of Engineering Leadership'. An overview of research areas of HKU and SUSTech,

and the HKU-SUSTech Joint Education Programme for PhD was then given by Professor Dong-Yan Jin, Associate Dean (Internationalisation and Partnership) of the Graduate School of HKU, and Professor Shuanghua Yang, Associate Dean of the Graduate School of SUSTech. A group photo session was also arranged.

At the concurrent platform sessions, a total of 34 students and supervisors/potential supervisors of the Joint Education Programme shared their research, with a view to further fostering research collaboration and joint PhD supervision between the two universities. A total of 26 students also participated in the poster session.

The symposium was a memorable and fruitful event and HKU will continue its role to engage in innovative research and fruitful collaboration for the benefit of society.



### PhD Graduate Wins Young Scientist Award in Life Science

Dr Angel Yun Sum Wong – a PhD graduate of the Department of Pharmacology and Pharmacy – won the Hong Kong Institution of Science (HKIS)-Towngas 2018 Young Scientist Award in the field of Life Science at the HKIS Annual Conference held on December 1, 2018. Dr Wong was awarded for her research on 'Post-marketing evaluation of effectiveness and safety of medications using big-data'.

Post-marketing evaluation using big-data from healthcare databases is necessary to complement existing drug profiles. Observational studies benefit from being less resource intensive, having greater generalisability and fewer ethical concerns owing



to the availability of clinical data in population-based databases. The focus of Dr Wong's research work is to use clinical data to inform the effectiveness and safety profiles of commonly used medications including antibiotics, antiosteoporosis medications, proton pump inhibitors, aspirin and metformin. The highlight of her work is to demonstrate the short-term cardiovascular risk associated with clarithromycin using multiple study designs to address potential biases. Her studies led to a current update on international clinical guidelines.

Dr Wong is now a Research Fellow at the London School of Hygiene & Tropical Medicine.

# To Be or Not to Be? How to Survive Your Academic or Non-Academic Job Hunt

The Career Talk for RPg Students, a new initiative launched by the Graduate School in the 2018-19 academic year, was held on November 16, 2018 at the Wang Gungwu Lecture Hall.

This fist talk comprised two sessions. In the first session, Ms Alison Chang, Managing Director of the COREsearch Group Ltd, explored from a macro point of view the essentials for successful job seeking. She urged students to look beyond the educational qualifications they possess and reflect on who they are and what they aspire to. She further encouraged students to connect their research expertise with their personal hobbies or interests in career planning. Her key message was summed up by the saying of Ralph Waldo Emerson: "What lies behind us and what lies before us are small matters compared to what lies within us. And when we bring what is within us out into the world, miracles happen."

After the first session on effective job seeking techniques, two prominent HKU scholars – Professor Christopher Hutton (School of English) and Professor



Victor Li (Department of Electrical and Electronic Engineering) – talked about practical ways to hunt for academic jobs, which included establishing a research statement, attending conferences, publishing articles, and developing a teaching portfolio/philosophy. Their ultimate advice for RPgs, echoing that of Ms Chang, was to be true to yourself and know what you really want. After all, being an academic is not an easy job. They advised not being afraid of challenging established beliefs and always being passionate about advancing knowledge for a better world and educating the next generation.

The Graduate School would like to express its gratitude to the three speakers for their genuine sharing and constructive advice to help students overcome their job search challenges.



#### On the Front Line

## An Alumni Story of Dr Cheryl Hiu Kwan Chui

Once upon a time, in the sophisticated, fast-moving city of Hong Kong, a young teenager chose a rare moment of quiet, family time to engage her parents in a conversation that maybe ran along the lines of, "Mum, Dad, if possible I'd like to go overseas to study at a boarding school."

For many parents this might be an emotional scenario, making them question where they went wrong. But in actual fact, Cheryl Chui's parents were very open to the idea and offered her their full support. And so our young heroine set off on her adventures: destination Canada.

Cheryl fully embraced Shawnigan Lake School's 'development of the whole child' approach. Alongside study time, students were expected to partake in intensive sports training, and Cheryl found herself rising at 5 am every morning to do two hours of rigorous rowing practice before lessons started.

And there were dramas too. Dr Chui smiles as she recalls the time when a heavy snowstorm brought down the power lines, and with no electricity lessons came to a halt. What could the children do for an afternoon? A solution was found.

"We flipped over our desks and used them [as toboggans] to slide down the snowy slopes...and we had snowball fights."

But it wasn't all playful fun. "Being away from home and experiencing normal adolescent struggles shaped who I am," she reflects. "I built resilience and made lifelong friends of classmates from around the world. It broadened my perspective in many ways."

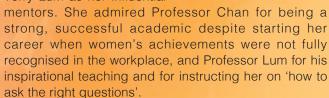
After graduating from high school, Cheryl studied at McGill University in Montreal, Canada, majoring in International Development Studies. This involved looking, on a global level, at vulnerable population groups. She joined societies such as AIDS Concern and China Care Concern, which raised her awareness of the humanitarian needs in developing countries.

With a First Class BA(Hons) from McGill University, Cheryl chose to return to Hong Kong to further her work both because her family was there and because she continued to be "fascinated by China's emerging economy and the huge inequalities of groups left behind"

At HKU, Cheryl was fast-tracked to work on her PhD, which was then followed by her Master's degree in Social Work. It was here, in this highly competitive, academic environment, that she became aware of the importance of having not just a 'research mind' but also 'hands-on experience'. At HKU she was in the

right location to be able to satisfy this burning desire to blend the academic life with 'getting your hands dirty'.

She highlights Professor Cecilia Chan and Professor Terry Lum as her influential



Regularly travelling to remote areas of China to meet face-to-face with vulnerable groups, both the young and the ageing population, was and still is the lifeblood of her work. A key project that she has been engaged in together with her colleague Dr Angel Lai from Hong Kong Baptist University is entitled, 'Ethnic identity development for psychological resilience in Yi orphaned infants: Peer socialisation in rural China school settings'. This and other China ventures have prompted several publications on the subject.

On the spot communication with real people in the field – whether they be the elderly at the Centre on Ageing in HK, abandoned orphans in Sichuan, NGO reps or social workers in rural China, or stakeholders in HK – is the necessary complement to Dr Chui's academic research. "It's the personal touch that has kept me going all these years... to hear the words, 'it's great to see you again,' is more important than papers and accolades," she passionately claims.

"We are not philosophers who sit in an ivory tower thinking of grand theories. We actually have to find solutions that are feasible and implementable... it is difficult to effect policy change without frontline experience."

Dr Chui describes her current role at HKU as "heavily research driven in the areas of social entrepreneurship and social enterprise development, and social policies for vulnerable population groups including ethnic minority children and youths, as well as the elderly". She also has duties in teaching and project implementation.

Somehow she manages to find time for her family, friends, as well as music. So, if you hear the strains of a guitar playing a Beatles' oldie like 'Eleanor Rigby' or 'Lady Madonna', it may be Dr Chui in her office having some down time and being inspired by lyrics such as 'all the lonely people' to plan her next trip to the 'front line'.



#### **New Graduate School Member**

The Graduate School is pleased to announce that Professor Barbara P. Chan has been appointed as the Associate Dean (Innovation and Internship) of the Graduate School to succeed Professor Ben Young with effect from December 21, 2018.

Professor Chan completed her BSc in Biochemistry and PhD in Surgical Science at the Chinese University of Hong Kong. She received postdoctoral training in



Laser Medicine and Tissue Regeneration at Massachusetts General Hospital, Harvard Medical School. She joined the Biomedical Engineering programme at HKU in 2003 and was promoted to Professor in 2016. Her research interests include tissue engineering and regenerative medicine,

natural biomaterials, stem cells, mechanoregulation, multiphoton biofabrication and laser medicine.

She was awarded the Outstanding Young Researcher Award (Faculty of Engineering) in 2010 and the Research Output Prize (Faculty of Engineering) in 2009 and 2014. She served as the Associate Dean (Research) and the Chairperson of the Faculty Higher Degrees Committee of the Faculty of Engineering (2016/17).

Our warmest welcome is extended to Professor Chan. We would also like to take this opportunity to thank Professor Young, formerly of the Department of Civil Engineering, for his valuable contributions to the Graduate School from November 2010 to December 2018, especially his support in innovation, internship and outreach matters.

## **Communal Writing Experience: Writing Boot Camp**

Starting from July 2018, the Graduate School has been strengthening the communal writing experience of RPgs from different faculties by running a three-day Writing Boot Camp twice per year. Alongside the important role of providing several hours daily of undistracted writing time for the participants, the Writing Boot Camp offers strategy-based support in revising and editing a thesis, producing a metatext, publishing in academic journals and managing time. Examples from the written evaluative comments by the participants of the last two Boot Camps show how enthusiastic and devoted they were during this intensive writing experience, as well as their appreciation of the opportunity to participate:

- "The facilitators are very helpful and caring. There are also many private occasions when we can focus on doing our own work/writing with few distractions. The presence of peers with a similar background or doing similar tasks is very encouraging."
- "All of the facilitators are congenial, helpful and experienced; they all provide us with good and useful suggestions during their lectures and in private; the timing for this camp is optimal as well."
- "The class size, duration, and relevancy are very good. I really like the opportunities provided to talk to peers and the facilitators."
- "I like the three-day schedule, which is not too long and is easy to follow. I like the lectures as well as the lunchtime sharing with others."



