Science Faculty e-Newsletter



Teachers and students convened on 29 May 2014 for the annual Science Faculty Research Day. This year, the Faculty had the pleasure of inviting Professor Gabriel N.C. LAU, alumnus (74/UC/ PHY), world-renowned meteorologist and AXA Professor of Geography and Resource Management, to be the keynote speaker. The themes for this year's event were the engagement of the sciences with the emerging area of Earth System Science at the Science Faculty, as well as insights into preparing for and winning major research grants. Besides Professor Lau, the event featured talks by several notable faculty members, including (in order of presentation): Professor JIANG Liwen (School of Life Sciences), Professor CHU Ming-chung (Department of Physics), Professor CHAN Ngai-hang (Department of Statistics), and Professor XIE Zuowei (Department of Chemistry). The starstudded line-up and programme were very well-received, and attracted close to 100 teachers and students to attend.

In his keynote lecture entitled "The Science behind Climate Change", Professor Gabriel N.C. LAU detailed the endeavours of countless scientists over the past few decades on the three-prone approach to studying climate science, namely Observations, Theory, and Modeling, to arrive at a consistent and convincing story about the trends in the global climate. Towards this grand effort, Professor Lau stressed, essentially all branches of science could, and should, contribute.

Following Professor Lau's talk, two multi-grant-winning members of the Science Faculty shared their insights and experiences in building strong research collaborations, which in turn enabled them to secure large grants for their projects. First off, Professor JIANG

"Since the 1970s, many of the major advancements in climate science have come about as improved **observations**, refinements to **theory**, and the results of **computer modeling** have revealed a consistent story."

- Professor Gabriel N.C. Lau

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Liwen introduced the audience to the team of researchers behind the RGC Area of Excellence's Centre for Organelle Biogenesis & Function, comprised of members of four local tertiary institutions, each with their own field of expertise to contribute to the Centre. With a long and arduous yet fruitful series of meetings and preparations for grant-bidding, the team of researchers succeeded in obtaining a total of HK\$47.25M funding from the RGC for the period of 2014-2021, and staunch support from the University in terms of match funding and laboratory space.

Another successful project bid was then shared with the audience, this time by Professor CHU Ming-chung of the Department of Physics. A veteran researcher with collaborators across the globe in high-impact projects, Professor Chu is a multi-grant winning physicist with a wealth of experience and insight. With the strong collaboration between institutions in Hong Kong and between Hong Kong and leading institutes overseas and in China, Professor Chu and his team have formed a Hong Kong experimental particle physics group to join the ATLAS experiment, one of two major experiments of the Large Hadron Collider at CERN. Besides outlining the tremendous impact of the experiments on the discovery of new fundamental physics, Professor Chu highlighted the future directions for the local and international efforts, such as



Faculty Dean Professor Henry N.C. WONG (fourth left) gathered with speakers of Science Faculty Research Day 2014 for a photo, including (from left): Professor XIE Zuowei, Professor CHU Ming-chung, Professor Gabriel N.C. LAU, Professor CHAN Ngaihang, and Professor JIANG Liwen.



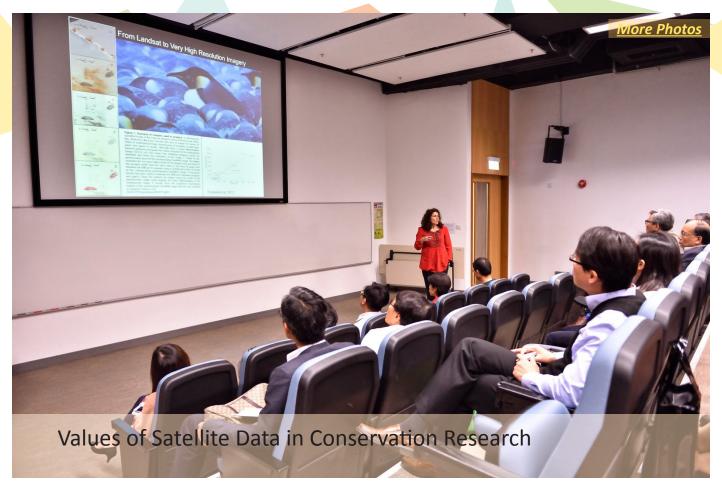
Thanks to the generous sharing of Professor CHAN Ngai-hang, audience members got a rare glimpse into the life as a member of the Research Grants Council Panel.

collaborations with engineering, as well as potential for interdisciplinary collaboration. The findings of the Hong Kong team have thus far yielded fruitful results and given fundamental physics in Hong Kong a strong boost both in terms of research and teaching.

The fourth talk of the programme was an insightful sharing by Professor CHAN Ngai-hang of the Department of Statistics. Having been a member of an RGC Subject Panel for years, Professor Chan explained the workflow for Panel Members when considering grant applications, and also provided many

> helpful tips on the dos and don'ts when writing an application. This presentation was particularly well-received by budding scientists who aspire to become Principal Investigators of their own projects in the future.

> Last but certainly not least, a presentation on the recent research activities at CUHK Science Faculty was given by Associate Dean (Research), Professor XIE Zuowei. Having noted that the Faculty had witnessed an upward trend in the amount of research funding secured, Professor Xie then outlined the challenges and opportunities for the Faculty's strategic development and research advancements in the near future. With this vivid picture of the things to come for the Science Faculty, the 2014 event came to a close, leaving audience members with new insight and inspiration.



Global environmental change facing us today will have significant impacts on biodiversity and ecosystem health, but how shall we understand and anticipate such impacts? In particular, can satellite data provide us with valuable information to devise strategies biodiversity monitoring conservation? On 20 March 2014, the Earth System Science Programme was honored to host renowned scientist, Dr. Nathalie Pettorelli, to deliver an engaging public lecture titled "How Satellite Data Tell Us Tales of Changing Biodiversity" addressing these pressing issues at the Yasumoto International Academic Park.

Dr. Pettorelli is a research fellow at the Institute of Zoology in the Zoological Society of London, UK. She has extensive experience assessing and predicting the impacts of global environmental change on biodiversity and ecosystems, with a particular focus on climate change. In the lecture, Dr. Pettorelli provided an overview of the possible applications of satellite data in biodiversity monitoring and conservation, and demonstrated how ecological knowledge and satellite-based information can be effectively combined

to address a wide array of current natural resource management needs. The lecture was attended by more than 50 participants from CUHK and the public, including faculty members and students from various Schools and Departments as well as local government officials. An engaging discussion with the participants on an integrated approach for biodiversity protection in Hong Kong and the Pearl River Delta region followed Dr. Pettorelli's informative and insightful talk.

The public lecture was jointly organized by the Earth System Science Programme in the Faculty of Science and the British Council as part of the Science Alive 2014 program. Science Alive is a collaborative effort by the British Council, the Education Bureau, the Hong Kong Education City Limited and the Hong Kong Science Museum, sponsored by The Croucher Foundation. For the past 21 years Science Alive has been inviting leading academics and communicators from the UK in various fields of science to engage Hong Kong's students, teachers and the public in activities that promote a wider understanding of science.



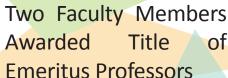


On 26 April 2014, an award ceremony was held to honour outstanding runners from the CUHK Marathon Team, for their participation in the Standard Chartered Hong Kong Marathon 2014, held on 16 February. The University had over 1,800 runners in the team for the 2014 event, and won the "Most Supportive Group Award" for the second year in a row.

At the award ceremony, more than 40 runners from different race categories and their families and friends were onhand to receive the trophies and share the joy of this great achievement. Members of the Science Faculty did not miss out on this great annual sporting and fundraising event, and the Faculty was among three Faculties to receive the

"Most Supportive Faculty Award", an honour also shared with the Faculties of Medicine and Engineering.

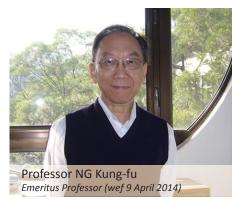
Special thanks were given to the Department of Sports Science and Physical Education, and the Department of Orthopaedics & Traumatology, in recognition and appreciation of the pre-race training sessions and on-site medical assistance provided respectively by these two units. Also recognized were the support and cheering by the many supporters who came out by the droves at the event to cheer on and encourage our runners. It was another great year for the CUHK Marathon Team, and now all eyes are set on the 2015 event, scheduled to be held on 25 January 2015.



The Science Faculty is excited that two of our long-time faculty members have been awarded the title of Emeritus Professor. The following teachers have been recognized for their outstanding contributions to the University:



Professor Lau graduated from CUHK in 1968 with a B.Sc. in Mathematics. He obtained his Ph.D. from the University of Washington in 1972, and after a long period of teaching and researching at University of Pittsburg, returned to serve his *alma mater* in 1996. Between 1996 - 2012, Professor Lau served also as Chairman of the Department of Mathematics. Over the course of his prolific academic career, Professor Lau has published more than 100 publications in refereed journals.



Professor Ng has been teaching at the Department of Mathematics since 1968, before the University's current Shatin campus was built. Over the years, Professor Ng has earned much respect and reverence from his students, and he firmly believes that "Education in Mathematics and Science is a many splendoured thing."



The Science Faculty received the "Most Supportive Faculty Award". Thank you to all our runners for your participation.



On 13 June 2014, the Faculty hosted a farewell lunch in honour of a number of retiring staff. The list of retiring staff is as follows:

<u>Unit</u>	Staff Name
Department of Chemistry	Dr. HUI Ka-chung
Department of Chemistry	Mr. LO Kwok-ying
Department of Mathematics	Prof. LAU Ka-sing
Department of Physics	Mrs. Stella KAM
Department of Statistics	Prof. LI Kim-hung
School of Life Sciences	Mr. CHAN Wing-cheung
School of Life Sciences	Prof. FUNG Ming-chiu
School of Life Sciences	Mrs. SO YIP Ching Ching
Science Faculty Office	Mrs. Angela YANG

The retiring staff and their Department Chairmen/School Director gathered at the lunch to celebrate their years of hard work and fruitful collaborations. The invaluable efforts and contributions of the staff were much appreciated by all. The Faculty wishes our retiring staff all the very best as they embark on a new, exciting chapter in their lives.



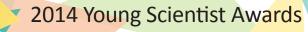
Donation to the Faculty

Special thanks goes to alumnus and former Dean of Science Professor NG Cheuk-yiu (71/CC/CHM) for his generous donation of US\$1,000 to the Faculty via The Chinese University of Hong Kong Foundation, Inc.

Every bit of support the Faculty receives is much appreciated, and we will strive to continue to bolster our research, as well as our teaching and learning activities.



UPCOMING DATES AND EVENTS



The Hong Kong Institution of Science is currently inviting applications to the captioned Awards as a means "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." All research postgraduate students and recent graduates (within two years of graduation) are eligible to compete for this award.

Application Deadline: 31 July 2014 (Thursday)

Details: http://www.science.org.hk



WUN Research Development Fund 2014

The Office of Academic Links (OAL) is now inviting applications for the Worldwide Universities Network (WUN) Research Development Fund (RDF) for 2014. The WUN RDF provides one year of seed funds to kick-start research projects under four key areas of research identified as the Global Challenges, and they are as follows:

- Responding to Climate Change
- Public Health (Non-Communicable Diseases)
- Global Higher Education and Research
- Understanding Cultures

Application Deadline: 19 September 2014 (Friday) at 5:00p.m.

For further details, please refer to the website.



Inauguration Ceremony 2014

The Inauguration Ceremony for Undergraduates 2014 will be held on 1 September 2014 (Monday). Full-time undergraduate classes will be suspended in the morning until 1:30p.m. All teachers are welcome to join the Ceremony to meet with our students and usher in a new academic year together.

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Address: Room G43, Charles Kao Building,

Science Centre, CUHK, Shatin, N.T.

Telephone: 3943 6327 **Fax:** 2603 5156

Email: sfo@cuhk.edu.hk

Website: http://www.cuhk.edu.hk/sci

Facebook: CUHKScience

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