



# Science Faculty e-Newsletter

*New Year, New Ventures,  
New People*



*Staff and incoming students at the Science Faculty Inauguration Ceremony 2015-16*

The Inauguration Ceremony for Undergraduates was successfully held on 7 September 2015. This year, the Faculty is proud to have admitted around 600 bright students from various backgrounds to join our family. Many incoming students attended the inauguration ceremony and took the opportunity to get to know more about the programmes within the Faculty of Science.

On the day, the incoming young members were greeted by Professor XIE Zuowei, Associate Dean (Research), whom introduced them to the different units and people of the Faculty. Professor WONG Hoi Ying, Associate Dean (Student Affairs), then engaged the students through a series of games and Q&A sessions.

Incoming students were warmly received by teachers and staff of the 6 units within the Faculty to welcome them and to share with them insights of their respective fields.

Our teachers' enthusiasm has helped our new-comers to familiarise themselves with the university's environment, and aided their settling in to CUHK Science.



*Students enjoying an interactive game introducing the Faculty*

## ..... **ALSO IN THIS ISSUE** .....

Science Faculty Basketball  
Competition 2015  
SEE page 2

Re-opening of C.N. Yang  
Reading Room  
SEE page 3

Special Lecture: How Nobel  
Prizes are won  
SEE page 4

Student Achievements  
SEE page 5-6

Life Science Student named  
2016 Rhodes Scholar  
SEE page 6

Call for Applications  
SEE page 7

Upcoming Dates and Events  
SEE page 8



## Faculty of Science Basketball Competition 2015

The Science Faculty Basketball Competition was fiercely held on 21 November 2015 at the Yeung Ming Biu Sports Centre (formerly known as University Gym). Twelve teams, consisted of a mix of current students, alumni and staff gathered on the day for a series of intense matches, aiming to be crowned the Basketball Champion of the Faculty of Science.

The event provided an invaluable social gathering opportunity for our alumni, while it was also a chance for current students to network with their peers as well as their elders, thus fostering a good relationship, and benefiting their career plans. The day also facilitated reunions between fellow classmates and professors.



*Series of friendlies played against students, alumni and professors from different departments*

The level of the competition was very high and all the teams played exceptionally well. In the end, team FNESC, formed by members from Food and Nutritional Sciences, was crowned Champion, with Biology, Chemistry and Natural Sciences coming close as runners up.



*Students, alumni and professors from different departments played-off!*

The competition was fun-filled, and, ultimately, it has helped to strengthen the already strong bond between members of the Science Faculty.



## Undergraduate Information Day 2015

The University's Undergraduate Information Day was successfully held on 24 October 2015. Over 65,000 students visited the university campus on the day and a vast range of activities was held to promote the Faculty of Science.

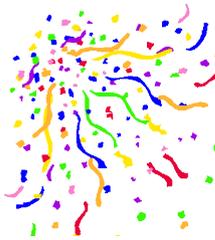
The day saw the excitement of eager future students, friends and parents. Over 660 visitors attended the admission talks for Broad-based Science programme on the day, and different programmes within the Faculty of Science held individual activities (such as lab tours, experimental demonstrations, presentations and roadshows) in order to help prospective students understand more about the programmes and its admission requirements.



*Current students explaining the CUHK Science model and the curriculum to interested parties*



*Top: Science experiment demonstration  
Bottom: SCIENCE admission talk*



## C.N. Yang Reading Room is now re-opened

After weeks of renovation, the C.N. Yang Reading Room has re-opened. To celebrate this occasion, a housewarming party was held on 30 October 2015.

On the day, our guest of honour, 1957 Nobel Laureate in Physics, Professor YANG Chen-ning, shared with us his visions and his initiative for setting up the reading room for our staff. The establishment of the C.N. Yang Reading Room is intended to prompt the sharing and communication between staff from various disciplines. This encourages scientific advancement through a common ground, and allows for collaborative inspiration across the science field.



Right to Left: Dean of Science-Professor WONG Nai-ching, Nobel Laureate-Professor YANG Chen-ning and his wife Ms. WENG Fan, Pro-Vice Chancellor-Professor POON Wai Yin



A roasted suckling-pig was cut in celebration of the re-opening of the communal area



The housewarming party attracted eager members wishing to meet the famous Nobel Laureate, as well as feasting in on the delicacies. In his opening speech, Professor Yang also reminded us to actively engage in knowledge transfer, in hopes of cultivating new ideas through leisure and casual conversations with our colleagues. Colleagues and friends joined the party and celebrated the reinstatement of this common area.

## Congratulations to our Class of 2015!



Professor WONG Nai-ching congratulating graduates at the ceremony

The Undergraduate and Postgraduate Graduation Ceremonies of 2014/15 were successfully held in this last quarter of the year. On 19 November 2015, nearly 900 Bachelor's and Master's degrees were conferred and the Master's Graduation Ceremony on 20 November saw the excitement from students and parents of our Master graduates from 17 programmes. Doctoral Degrees were conferred on 3 December 2015, where over 250 PhD students officially completed their terminal degree.

Out goes the old, in comes the new. We wish all our graduates a bright and fruitful path ahead of them.



# Now we know how Nobel Prizes are won!



We may never crack the code of what technology or discoveries will ensure you landing your hands on a Nobel Prize, but some 300 secondary-school students and members of the public are a now little bit closer to the answer.

The Popular Science Special Lecture Series: How Nobel Prizes are won was held on the 4 December 2015 at Cheng Yu Tung Building, CUHK. This lecture serves to be coherent with the announcement of the winners of the 2015 Nobel Prize. On the day, over 300 staff and students from secondary schools and the public joined the lecture series delivered by three professors from the Faculty.

Professor SHAW Pang Chui from the School of Life Sciences talked about the discovery of artemisinin from Chinese Medicine and its uses to cure malaria. Professor XIA Jiang from the Department of Chemistry presented the mechanisms of DNA repair and its potential applications within the body. To end the day of stimulating lectures, Professor CHU Ming Chung from the Department of Physics delivered another captivating talk on ghost particles.

The audience walked away having gained knowledge on specific scientific topics, as well as having a better idea of how to be resilient in the world of science.



Left to Right: Professor XIA Jiang, Professor CHU Ming Chung, Professor WONG Nai Ching and Professor SHAW Pang Chui



## 2015 Alumni Homecoming Day



Alumni reminiscing at the Faculty's history

Many CUHK Alumni returned to our beautiful campus on 28 November 2015, for this year's CUHK Alumni Homecoming Day. As usual, the homecoming day encourages alumni to revisit the campus, reflect on their past and appreciate the new additions to the university. Accompanied with substantial sunshine, the event served as the perfect opportunity to bring graduates' family and friends to the university campus and enjoy a memorable day.

The Faculty of Science also organised a booth showcasing some precious photos of Science teachers and students from the olden days. Two games were designed to increase the scientific knowledge of the participants. Overall, it was a lovely day for alumni to get back in touch with the Faculty!



Alumni and their children actively participating the fun games we had in line for them



## Continued Success from 2015 CUHK iGEM Team

For the fourth year, the CUHK team, formed by 13 undergraduate students from the Faculty of Science and Faculty of Engineering, has taken home a Gold Medal at the International Genetic Engineered Machine (iGEM) 2015 Giant World Jamboree held in Boston, USA. This year, over 280 student teams from around the world competed and showed off their finesse at this internationally-recognised, annual competition for leading synthetic biology. The team has designed a synthetic biology system which generates biological magnetic particles, called magnetosomes, inside soil bacterium *Azotobacter vinelandii* under intracellular anaerobic conditions.

The system is extremely versatile, absorbing metals from contaminated water and soil, and may even prove to be particularly useful to tackle environmental problems such as marine pollution, or to alleviate the lead-in-water problem hovering over the city in recent months.

“The judging panel is especially delighted to see the CUHK team’s effort in making standard biobricks for magnetosome biosynthesis which has huge application potential, and their ingenious choice of using *Azotobacter* as the bacteria of choice, as the biogenesis of magnetosome requires an anaerobic condition, of which the bacterial cells can readily provide.”, said Professor CHAN Ting Fung, one of the instructors of the team. This project has also been supported by the UGC Teaching Development Grant, which enhances collaboration between students and teachers.

iGEM is an international annual premier synthetic biology competition for high school, undergraduate and postgraduate students, aiming to foster students’ learning in synthetic biology, promote collaboration among students and nurture biology talents.

For more information, please visit:

<http://www.igem.org>



CUHK iGEM Team sweeps Gold Medal again in Boston



## Statistics student wins international paper award



Proud Awardee: PUN Chi Seng

Statistics PhD student, PUN Chi Seng, has recently been awarded the 2015 Best Student Research Paper Award for his presentation of his paper “Combined Estimation-Optimization (CEO) Approach for High Dimensional Portfolio Selection” at the 2015 Institute for Operations Research and the Management Sciences (INFORMS) Annual Meeting in Philadelphia, USA. This marks the first time that a PhD student from the Asia Pacific region to have won this international competition.

INFORMS has been sponsoring this student research contest since 2004. Each year, postgraduate students from all over the world to compete against one another, and are judged on the quality and presentation of their research paper. The top four finalists are then invited to present their work at the INFORMS Annual Meeting.

INFORMS is the largest society in the world for professionals in the field of operations research, management science, and analytics. For details, please visit: <http://meetings2.informs.org/wordpress/philadelphia/>



## CUHK team excels at Contemporary Undergraduate Mathematical Contest in Modeling

Congratulations to Year-3 students XI Yiru (QFRM), WANG Xianbo (MATH), and OUYANG Hao (CS), whom participated in the 2015 Contemporary Undergraduate Mathematical Contest in Modeling (CUMCM). The team, led by Professor DUAN Renjun, was awarded first prize for their outstanding performance. Commencing in 1992, the CUMCM is an annual national competition, and is one of the largest mathematical competitions in modeling.

## Life Science students seized First-Prize award in the National Challenge Cup 2015



The National Challenge Cup Competition, also known as the Olympiad for University Students, was held from 16 to 20 November at the Guangdong University of Technology and at the Hong Kong University of Science and Technology. Eight CUHK teams have won prizes at the competition, and a team from the School of Life Sciences has successfully taken home the First Prize from this final stage of the competition.

The team formed by LEUNG King Pong, LO Fong Chuen and SEAK Chi U was awarded for their development of an innovative system “Solution for One-step Sewage Treatment” which processes wastewater using a genome of genetically modified, nitrogen-fixing bacterium, enabling it to function aerobically. This system reduces nitrogen in the water environment, and therefore prevents the occurrence of harmful algal blooms. At the same time, the innovation helps to reduce the time and space taken to process wastewater, hence increasing the lifespan and efficiency of water treatment facilities.



*CUHK contestants and winners at the 14th National Challenge Cup competition bringing home the “Winner’s Cup” for the first time in the history of participating the competition.*

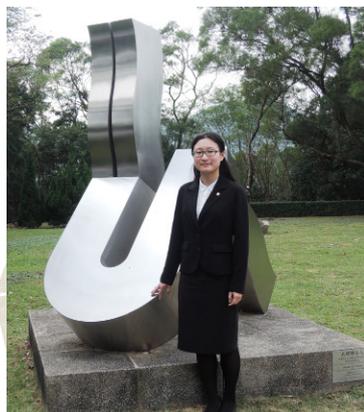
The National Challenge Cup is a bi-annual competition which aims at promoting science and innovations across China. The competition also fosters cross-trait collaborative relationship between students from various tertiary institutes, which is one of the key features of the Challenge Cup.



## Rhodes Scholar from Molecular Biotechnology Programme

Year 4 Molecular Biotechnology student, DAI Yichen (Serena), has been named the 2016 Rhodes Scholar for Hong Kong. Serena aspires to become a biologist researching in genes and genetic inheritance. Upon graduation, Serena shall pursue her PhD in Zoology at the University of Oxford in the UK, and she plans to explore the evolutionary perspective of diabetic metabolic pathways, relating back to her interests in human health. She hopes to become a biologist and devote herself to research in genes and genetic inheritance.

Serena expressed gratitude to her parents, her teachers and schoolmates from the University and United College. In particular, she would like to thank professors of the School of Life Sciences, whom not only taught her solid knowledge, gave her opportunities, but also inspired her to think innovatively.



*2016 Rhodes Scholar, Serena Dai*

The Rhodes Scholarship was established after the death of Sir Cecil Rhodes in 1902. Each year, the Rhodes Scholarship selection committee, selects one student with excellent academic achievements, outstanding personality, good physical vigour, active participation in community service and strong leadership to be the scholarship recipient. The selection process is very stringent, requiring applicants to go through several rounds of individual interview and group discussion, and to dine and interact with the committee members. Starting from 2007, the scholarship has been sponsored by the Lee Hysan Foundation. The Foundation provides full sponsorship of traveling expenses, school fees, accommodation and living expenses.



## CALL FOR APPLICATIONS



### The Croucher Innovation Awards 2017

Internal Deadline: **21 March 2016 (5pm)**  
External Deadline: **03 May 2016**

Programme Information:  
[CIA Webpage](#)



### Sustainable Development Fund

Internal Deadline: **12 January 2016**  
External Deadline: **29 February 2016 (5pm)**

Programme Information:  
[SDF Webpage](#)



### European Commission (EC)/Research Grants Council (RGC) Collaborative Scheme 2016/17

Internal Deadline: **20 June 2016**  
External Deadline: **04 July 2016**

Programme Information:  
[EC/RGC Webpage](#)



### Central Policy Unit Public Policy Research (PPR) Funding Scheme

Year-round Application

Programme Information:  
[CPU-PPR Webpage](#)



### Croucher Senior Research Fellowships (CSRF) 2017-18

Internal Deadline: **08 April 2016 (5:30pm HKT)**  
External Deadline: **31 May 2016**

Programme Information:  
[CSRF Webpage](#)



### CUHK UoM Research Fund

Deadline: **15 January 2016**

Programme Information:  
[CUHK-UoM Webpage](#)



### National Natural Science Foundation of China (NSFC)/Research Grants Council (RGC) Joint Research Scheme 2015/16

Internal Deadline: **21 January 2016**  
External Deadline: **04 February 2016**

Programme Information:  
[NSFC/RGC Webpage](#)



### Micro-Module Courseware Development Grant (Scheme 3)

Deadline: **15 January 2016**

The Scheme 3 of MMCDG aims to promote and build capacity for pedagogy research on eLearning. Completed application forms should be sent through email to [mmcd@cuhk.edu.hk](mailto:mmcd@cuhk.edu.hk).



### McDonnell International Scholars Academy Scholarship Program 2016/17

Deadline: **15 January 2016**

The Washington University in St Louis is inviting applications to the McDonnell International Scholars Academy (McDonnell Academy) for 2016/17.

## UPCOMING DATES AND EVENTS

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### Monthly Meetings with Dean of Science

All faculties are cordially invited to join the informal staff meetings with the Dean of Science, Professor WONG Nai Ching Henry. Details of the meetings are as follows:

Date	Time	Venue
29 January 2016 (Fri)	15:30 - 16:30	CN Yang Reading Room (Rm. 126), Science Centre North Block
25 February 2016 (Thu)		
24 March 2016 (Thu)		
29 April 2016 (Fri)		
20 May 2016 (Fri)		
24 Jun 2016 (Fri)		



### Faculty Exemplary Teaching Award cum Student Awards Presentation Ceremony 2015

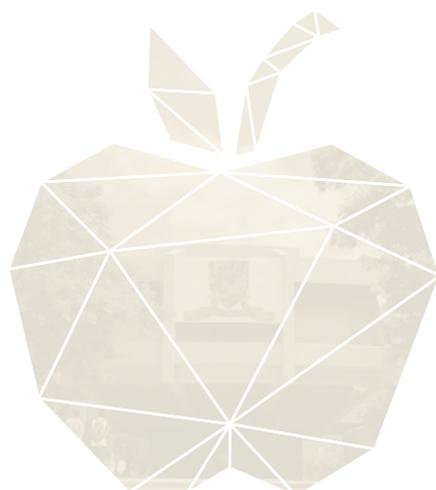
Faculty Exemplary Teaching Award cum Student Awards Presentation Ceremony 2015 will be held at **LT1, Yasumoto Academic Park** on **Saturday 16 January 2016 at 10:30am to 12:15pm** in recognition for the faculties' teaching excellence and students' efforts for the past year.



### 12th Lau Oi Wah Memorial Science Lecture Series

The 12th Lau Oi Wah Memorial Science Lecture Series will be held on **27 February 2016** at **LT1, Cheng Yu Tung Building** at **9:30am to 12:30pm**. All are welcome!

*Mark your  
calendar*



### Science Faculty e-Newsletter

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