同創 - 科大通訊

HKUST

NEWSLETTER - GENESIS

issue 59

Environmental Sustainability a Priority
持續科大的美

Gearing up for Change
鼓足拼勁 迎接變革

President Chu Awarded "Science for Peace Prize"
朱經武校長獲頒科學和平獎

HKUST Leaps in World University Rankings
科大世界排名躍升

HKUST Makes a Big Splash in Shenzhen
播種深圳 育出青苗

From Good to Great

靈感之泉 學術之韻

目錄 ● CONTENTS

From Good to Great

IAS Enters a Brand New Phase of Development

by May Cheung

The Institute for Advanced Study at HKUST (IAS at HKUST) began the new year with a bang, by launching a series of activities in January 2009 to usher in a new stage of development.

On 5 January 2009 HKSAR's Chief Executive Donald Tsang and some of the world's top scientists descended on HKUST to launch its inaugural symposium "Mapping Frontiers of Science" and a tree-planting ceremony at its future site.

At the tree planting ceremony Mr Tsang was accompanied by Prof C N Yang, winner of the Nobel Prize in Physics in 1957 and currently Chair of the IAS International Advisory Board, and HKUST President Paul Chu.

The Inaugural Symposium ran for two full days on 5 and 6 January 2009, with over 21 distinguished lectures under five categories, followed by a roundtable discussion on future directions.

A major inaugural activity was the signing of a Memorandum of Understanding (MOU) by HKUST President Paul Chu representing HKUST and Prof Peter Goddard representing the Institute for Advanced Study in Princeton. HKUST is one of only three universities in China with which the Institute for Advanced Study in Princeton has entered into a partnership — the other two being Peking University and Tsinghua University.

The future IAS Academic Building will stand on a knoll commanding magnificent sea view

As one of the world's leading centers for theoretical research, the Institute for Advanced Study in Princeton serves as a model for its younger cousin at HKUST.

The Institute for Advanced Study at HKUST now has a sterling International Advisory Board whose membership includes 18 of the world's most eminent scientists. To date, the Institute has run more than 64 talks and seminars by Nobel laureates and top scholars. A joint R & D laboratory of the Institute, a collaborative project of United States' Scripps Research Institute and HKUST, is up and running.

Up to now, it has attracted 9 visiting faculty, all of whom pioneers in their own fields, including Aaron Ciechanover, Nobel laureate in Chemistry; Shuji Nakamura, the inventor of blue laser; Michael Atiyah, Fields Medalist and Abel Prizewinner, and Patrick Lee, winner of Dirac Prize in Physics.

The IAS is working to realize its goal of building, by 2016, a team of 130 members, including 10 permanent faculty, 20 visiting members, 40 affiliate members and 60 postdoctoral fellows.

With the Institute for Advanced Study in Princeton and the Kavli Institute for Theoretical Physics, University of California, Santa Barbara (KITP) as models, the IAS of HKUST will keep a core faculty with eminent academics who will serve as a magnet attracting scholars of the highest caliber to the Institute while running thematic programs.

The unique environment in Hong Kong warrants some adaptations to the Princeton or KITP model. Unlike the IAS in Princeton which embraces only theoretical research, the IAS at HKUST in President Paul Chu's view would support both theoretical and applied research.

"We believe applied research will benefit the Hong Kong community. Also, putting theorists and experimentalists in one setting might create the chemical reactions or exchanges conducive to innovation or discoveries. On the other hand, instead of having set fields of studies and looking to fill up faculty positions with the right

Prof Douglas Osheroff
[Stanford University]

Prof Andrew Yao
[Tsinghua University]

Prof Tord Claeson
[Chalmers University of Technology]

Prof Patrick A Lee
[Massachusetts Institute of Technology]

Prof Marvin Cohen
[UC Berkeley]

Prof Lap-Chee Tsui
[University of Hong Kong]

Prof Robert Austin
[Princeton University]

靈感之泉
學術之韻
科大高研院創新里程

(From left) President Paul Chu; Council's Vice-Chairman Dr Michael Mak; The Hon Donald Tsang; Chair of the IAS International Advisory Board Prof C N Yang and Court Chairman Dr John Chan

candidates, President Chu's strategy is to build a small temple around scholars of star quality who find here the right soil and climate for scholastic work," said Executive Director of IAS at HKUST Prof Angelina Yee.

"Reflecting our own strengths in Physics, Mathematics and Life Sciences we have attracted some scholars in these areas and we shall start off in that direction," she added.

While the economic tsunami has dealt a great blow to most universities in the States, it may have a silver lining for the IAS at HKUST. Due to the hiring freeze in the West, a lot of top scholars in the States are looking to the East for opportunities. Prof Yee anticipated that Hong Kong's flexible and open academic environment and its proximity to Mainland China provide ideal conditions for ambitious scholars to contribute to the continued development of this fast-growing area.

Prof Yee confirmed that a number of up-and-coming scholars will soon join IAS at HKUST as visiting members. A world-wide search for a world-class scholar as the Director of the Institute is underway. The Director is expected to assume office by September 2009 when the construction work of IAS' Academic Building is scheduled to start.

At a developmental cost of $195.3 million, IAS' Academic Building will consist of a built area of 4,600 square meters, providing office accommodation, meeting rooms, conference facilities, teaching space, staff amenities and support space for its faculty and staff members.

Determined to create an academic utopia in the fashion of IAS in Princeton, HKUST IAS will be built on top of a knoll adjacent to the southern side of the HKUST campus overlooking the secluded bay.

"At IAS there will be ample individual space to ensure the pursuit of undisturbed intellectual inquiry as well as plenty of common space for vibrant interaction. There will be lounging areas on each floor for members, visitors and students to relax, have fun, and share with each other the most ludicrous or outrageous jokes or ideas — so much an integral part of the dream life of an academic community," said a proud Prof Yee.

對香港科技大學高等研究院（科大高研院）來說，2009年是極具意義的一年。科大高研究於今年1月5日在興建院址舉行了一項植樹典禮，及緊隨其後、一連兩天的創院研討會，標誌著科大高研院的發展，邁進了全新階段。

當日，行政長官曾蔭權先生、楊振寧教授（科大高研院國際顧問委員會主席、1957年諾貝爾物理獎得主）、科大校長兼高研院創院院長朱經武教授及其他嘉賓，一起為高研院種下八棵風鈴木，並將之命名為「靈韻」，意即「靈感之泉、學術之韻」。「靈韻」這名字，是高研院行政總裁余珍珠教授的創作。

其後舉行的科大高研院創院研討會共有21場專題講座，涵蓋五個範疇，並以一個探討未來科學發展方向的圓桌會議作結。

科大校長朱經武教授及普林斯頓高等研究院院長彼得．戈達德教授亦於1月5日簽署合作協議。普林斯頓高等研究院一共與三所中國大學簽訂了合作協議，除科大外，其餘兩家是北京大學及清華大學。普林斯頓高等研究院為現今世界上首屈一指的高等研究院，以理論研究著稱於世，足以為世界各地高研院的典範。

Prof Dahe Qin
[Chinese Academy of Sciences & China Meteorological Administration]

Prof Paul Schimmel
[The Scripps Research Institute]

Prof Y T Lee
[Academia Sinica]

Prof Aaron Ciechanover
[Technion - Israel Institute of Technology]

Prof Fanghua Lin
[Courant Institute of Mathematical Sciences]

Sir John Pendry
[Imperial College London]

Prof Yuen-Ron Shen
[UC Berkeley]

(From left) The Institute for Advanced Study in Princeton Prof Peter Goddard; Prof C N Yang and President Paul Chu at a ceremony to formalize the ties between the two institutes

科大高研院的國際顧問委員會共有 18 名成員，全部都是國際上赫赫有名、獨當一面的科學家。時至今日，科大高等研究院已舉辦了 64 場由諾貝爾得獎人及國際知名學者主持的研討會或講座。而由科大高研院及美國史拔思科研院合作成立的科研發展實驗室，亦已啟用。

高研院現時已獲 9 名國際學者加盟為訪問教授，他們都是極有分量，在其研究領域上各領風騷的頂尖人物，包括藍激光的發明者中村修二、諾貝爾化學獎得獎人阿龍．西查諾瓦、菲爾茲獎得主邁克．阿蒂亞及狄拉克物理學獎得主李雅達等。

高研院期望可以在 2016 年把整個團隊建成。團隊共有 130 位成員，包括 10 位長駐教授、20 名訪問教授、 40 位客座教授及 60 位博士後研究員。

以普林斯頓高等研究院及美國加州大學聖芭芭拉分校 Kavli 理論物理研究所為典範的科大高研院，其核心教研團隊將會盡量精簡，並希望藉著這個星級的教研團隊吸引各方有志之士加盟。

不過，香港的獨特環境，並不適宜將其他地方的經驗全盤套用。以研究重點為例，普林斯頓高等研究院及 Kavli 理論物理研究所都是以理論研究為先，但科大高研院則會依循創院院長朱經武教授的建議，實行兩條腿走路，理論研究與應用研究並重。

科大高研院行政總裁余珍珠教授表示，「我們相信應用研究對香港的發展有利，而把理論科學家與實驗主義者放在一起，將可能產生奇妙的化學作用，引發各種創新和突破。此外，與其把研究領域預早圈定，再物色適當人才填補空缺，不如反其道而行，讓有心在此地發展的星級學者在科大建立科研基地，藉他們的學術魅力聚攏人才。」

「有鑑於科大在物理、數學及生命科學已有的優勢，我們吸納了一批有關領域的頂級學者加盟，高研院亦會朝著這個方向發展。」

金融海嘯雖然把全球大學沖擊得「頭昏轉向」，卻為科大帶來意想不到的好處。由於各大學必須勒緊褲頭，暫緩招聘，不少學者開始到東方尋找發展機會。香港靈活開放的學術環境，加上位置鄰近中國，使希望協助中國發展的學者願意報效。

余教授表示，目前高研院已羅致了數位頭角嶄露的學者加盟成為訪問教授。科大亦正在全球物色高研院下一任院長的適當人選，並期望可以在今年 9 月履新，正好配合高研院學術大樓正式動土。

高研院的發展和興建費用為一億九千五百三十萬元，其土地面積為 4,600 平方米，內設有辦公室、研討及會議設施、課室及演講廳，教職員的休閒設施等。

科大高研院的院址位於科大校園南面的山頭、一片清幽、臨海景緻、盡收眼底。科大在此選址，是希望能夠像普林斯頓高等研究院一樣，為研究院團隊建立一個獨立而不遺世的學術桃花源。

「科大高研院的建築格局，非常獨特。我們一方面要為科研團隊提供清幽雅致的空間，讓他們專心致志地從事嚴肅的學問工夫；另一方面我們亦要提供適當的場地，讓這批智慧過人的學者有機會休息鬆弛、聊天暢聚、在思想上互相『激』盪，在學術上相互薰陶，」余珍珠教授說。

(From left) Prof Henry Tye [Cornell University], Prof Eli Yablonovitch [UC Berkeley], Prof H S Kwok [HKUST]

The audience is enraptured by the humor and wisdom of the speaker at one of IAS Inaugural Conferences

(From left) Prof George Papanicolaou [Stanford University], Prof Angelina Yee [HKUST], Prof Roland Glowinski [University of Houston], Mrs Angela Glowinski, Prof Mounir Hamdi [HKUST]

President Chu Awarded "Science for Peace Prize"

朱經武校長獲頒**科學和平獎**

Receiving accolades, national or international, may not be novel to President Paul Chu. But for the first time, he is reaping a prestigious international award with a slight twist— the "Ettore Majorana - Erice - Science for Peace Prize".

Few scientists are ever honored for contributions to peace, but this time President Chu is being honored for his significant achievements in using scientific research to contribute to world peace.

President Chu now joins the ranks of global leaders who have been awarded the Science for Peace Prize. This illustrious company includes Prof Tsung-Dao Lee, the first Chinese co-winner of the Nobel Prize in Physics back in 1957, Prof Chien-Shiung Wu, distinguished physicist, better known as the "First Lady of Physics", and the late Pope John Paul II.

The Science for Peace Prize was created by the Sicilian Government, under the auspices of the Ettore Majorana Centre for Scientific Culture, which was founded in Erice in Italy in 1962. The town of Erice is a hub of scientific research, with as many as 114 university schools in all fields of research related to modern science.

Each year, members of the World Federation of Scientists select a handful of candidates, whose scientific contributions play a part in promoting world peace. This year the list happily includes our President.

朱經武校長再獲殊榮 — 他榮獲 Ettore Majorana - Erice 科學和平獎，以表揚他憑科技促進世界和平的傑出貢獻。

其他獲這獎項的名人包括李政道教授（1990 年）（他於 1957 年成為首兩位獲諾貝爾物理學獎的華人之一）、吳健雄教授（1992 年）（她有「物理學第一夫人之稱」），以及已故教宗若望保祿二世（2004 年）。

科學和平獎由意大利西西里政府成立，並由 Ettore Majorana 科學文化中心主理。這中心於 1962 年在意大利 Erice 市成立。Erice 是個科學研究中樞城市，擁有多達 114 家大學學院，涵蓋現代科學各個範疇。

這重要獎項每年由世界科學家聯盟的成員選出得主。評選標準是候選人在使用科技促進世界和平方面的貢獻。

Ten Questions for Vice-President Prof Y S Wong

1. What are the major administrative and financial issues arising from 3-3-4? (A staff member)

A: This is a big issue. We are talking about a one-third increase in student population, a consequential increase in faculty members, a new system for student admission, course registration, and placement, a new 3-3-4 curriculum, the further complications due to the "double cohort" of having two intake classes in 2012 - the last intake to a 3-year program and the first intake to the 4-year program, and the consequential co-existence of two curricula for at least three years. All this would have profound resource and administrative implications.

2. How is the University going to deal with such a range of administrative challenges? (A staff member)

A: One of our key strategic responses to these challenges is the new Enterprise Resource Planning Project, which is a new and fully web-enabled information system to improve services for students, alumni, faculty and staff. The project is much more than a software upgrade exercise. Rather, the project would enable all functional units of the University to critically rethink the current way of doing things and to take advantage of the best-practice workflow capabilities to streamline interactions and improve the services to our students, faculty, and staff. On the hardware side, we need to expand the space and facilities on campus to make sure that we have the physical capacity to accommodate the additional students and to provide a suitable teaching and learning environment in support of the new academic structure.

3. Why don't we organize associate degree courses which can provide education opportunities to more youngsters and at the same time generate revenue for the University? (Student K K Cheung)

A: HKUST was established with a clear mission to be a research-intensive university. Our University's philosophy is academic excellence. The University Grants Committee (UGC) emphasizes role differentiation among institutions, and that is also the role that differentiates us from other local institutions, some of which are doing very well in associate degree and sub-degree courses.

4. Our University suffers a major handicap for not having a proper auditorium / formal hall for holding major events such as congregation or concert. Should this not be part of our campus development plan? (Andrew Lau, Physics Year 3)

A: Unfortunately UGC does not provide funding for an auditorium. Even if we do have an auditorium — an average auditorium normally accommodates about 1,000-plus people - we still would have to run seven or eight separate sessions for our Congregation which is attended by 9,000 students, parents, and guests each year. I am aware that an auditorium on campus is on the wish list of many, but I have also heard from many others who like our Congregation conducted at the Atrium which provides a grand and open-air ambience that is cherished by students and colleagues as something unique to UST.

Of course it would be nice if we could raise donations in future to build an auditorium for cultural and academic activities.

5. Some sports facilities will be impacted by campus development project without re-provisioning. Will new facilities be built? (From a student)

A: By UGC standard, our existing sports facilities are adequate even with the increase in student population post-334. This means that it would be extremely difficult to obtain Government funding to build more sports facilities. However, we think that additional sports facilities would benefit our students immensely, and therefore have kicked off a consultancy study to see whether the roof top of the sea water pump house adjacent to the swimming pool can be developed into facilities for sports and student activities. This would have to be done by private funding as well.

6. Can the University find ways to save students from having to empty their hall rooms in summer, or provide storage space for them? (Student Yan Qin)

A: During the summer break, most students check out of the halls and remove their belongings. This arrangement allows the University to schedule renovation and maintenance of the halls with minimal inconvenience caused to students, and it also makes rooms available for other education-related and academic exchange activities such as summer programs, conferences, and other activities requiring on-campus accommodation. That is why students cannot leave their belongings in their rooms. Instead, we have been helping students to arrange commercial storage in nearby areas. Some provide very convenient services including pick up and return services, and the cost is quite reasonable.

7. Would the University consider providing campus apartments for student couples when both husband and wife are current postgraduate students? (From a student couple)

A: The University is not able to provide special on-campus accommodation for married student couples for the time being due to shortage of student housing. We will review the situation when our three new on-campus student residence blocks and the two off-campus joint student dormitories are completed in a few years' time.

8. Many fast food stores have their staff wearing face masks to ensure hygiene. Will our canteen do the same? (From a student)

A: This is a good suggestion and we would talk to the caterers although the wearing of masks by food handlers is not a licensing requirement. To some students and colleagues, mask wearing may look unfriendly, but certainly there are circumstances when the wearing of mask is necessary, such as during a flu outbreak.

9. Given your broad portfolio, do you still have any time left for scientific research? (From a faculty member)

A: VP-AB is a very demanding full time job and it leaves me with little time for research. As a professor, I take this with some "regret". Having said that, I still conduct ongoing joint-research projects on environmental biotechnology with my collaborators, and have been co-authoring a few scientific papers in journals on my research work every year up till now.

10. What do you do during your leisure time? (From a staff member)

A: I usually go hiking in the countryside on Sunday mornings during autumn and winter. I enjoy reading and listening to music during leisure time, but this has become a luxury now.

黃玉山副校長答師生十問

1 四年制大學引發出什麼行政和財政挑戰？（一職員）

這是個重大問題。由於學生人數增加三分一，教研人員亦須相應增加。此外，我們亦須準備一個處理收生、課程登記及分配的系統、以及一套配合三三四制的全新課程。另外，在2012年我們須要同時應付兩批新生——最後一批大學三年制的學生、以及首批大學四年制的學生。而其後至少三年內，我們也要同時提供兩套大學課程。這一切都大大影響我們的資源和行政負擔。

2 科大如何處理這些挑戰？（一職員）

我們迎接這些挑戰的具體策略之一是推行新的企業資源策劃（ERP）。企業資源策劃（ERP）是一個可以全面在網上運作的新資訊系統，旨在全盤改善我們對學生、舊生及教職員的服務。這計劃不僅是個軟件提昇行動，而且它使科大所有功能單位可以重新思考我們目前的辦事方式，並有效利用全球最佳工作程序，去簡化互動流程，並改善對學生及教職員的服務。在硬件方面，我們須要擴展校園空間和設施，以確保可以容納新增的學生，並提供一個合適的教育環境，以支持新的學術架構。

3 我們為什麼不推出副學士課程，為更多青年人提供教育機會，同時亦為大學帶來收入？（學生 KK Cheung）

科大的宗旨很清晰，就是成為一所研究型大學。我們的目標是達到卓越的科研及學術水平。大學教育資助委員會強調大專學府各有不同的角色，按照科大角色定位，我們不會開辦副學位課程。事實上，有些其他大學正在提供副學位或非學位課程。它們都辦得很成功。

4 科大缺少一個正規的會堂以舉行畢業禮及音樂會等大型活動。我們的校園發展計劃會不會在這方面作出改善？（物理學系三年級學生 Andrew Lau）

大學教育資助委員會並無資助科大興建會堂。就算我們真有一個會堂（會堂平均可容納一千多人），我們仍須要舉行七至八次畢業禮，因為每年參加我們畢業禮的學生、家長和嘉賓多達九千人。我知道不少師生均希望科大校園內有個會堂，但也有很多同學和同事喜歡在我們現有的大堂舉行畢業禮，因為它不單宏偉，亦有戶外氣氛，是科大的獨有特色。

當然，如果我們將來能夠籌得經費，就可以興建一個會堂，以供文化和藝術用途。

HKUST's artificial turf soccer pitch plus a 400-meter track with 8 lanes

A view of HKUST's student residential halls

5 校園發展計劃刪減了一些體育設施。這計劃會不會包括興建新的體育設施？（一學生）

以大學教育資助委員會的標準來看，我們現有的體育設施已足夠迎合三三四制下學生增長的需要。換言之，我們很難獲得政府額外資助興建更多體育設施。不過，我們亦覺得更多的體育設施會為學生帶來很多裨益，因此我們開始進行一個顧問研究，看看可否在游泳池旁的海水泵房頂部發展更多體育和學生設施。不過，這也需要籌集資金。

6 科大可否研究如何使學生不用在暑假期間騰出宿位，或為他們提供儲物空間？（學生 Yan Qin）

在暑假期間，大部分學生都要遷出宿舍並移走房內物品，以進行宿舍的翻新和維修。同時，騰出來的房間可作其他教學及學術交流用途，例如暑期活動、會議及其他需要校內住宿的活動。因此，於暑假期間，學生不可將私人物品留在房內。不過，我們一直都盡量協助學生在附近安排商業儲物間。有些公司提供很方便的服務，包括運送服務，而價錢也很相宜。

Our catering staff without masks — do they look more approachable?

7 科大會否考慮為夫婦研究生提供家庭居住單位？（一對學生夫婦）

由於學生宿位有限，我們未能在校園內特別為夫婦學生提供家庭單位。不過，未來幾年內我們校內的三座宿舍大樓以及兩座校外聯合學生宿舍會陸續落成；屆時我們會有空間檢討情況。

8 很多快餐店的員工都配戴口罩以確保衛生。科大的飯堂會不會對員工有同樣要求？（一學生）

這是一個好建議。雖然戴口罩並非發牌條件之一，但我們仍會與膳食供應商討論。對某些同事來說，配戴口罩的員工在外貌上不夠親善，但在有需要時（例如在流感爆發期間），我們會要求處理食物的員工配戴口罩。

9 副校長的工作範圍這麼繁重，有沒有時間進行科研？（一位教授）

副校長（行政）是一份要求很高的工作，因此我實在沒有時間進行研究。對一個教授來說，這可說是一個遺憾。雖然如此，我仍在環境生物技術方面與其他科研人員進行合作研究，並且每年都在我的研究範圍內與其他學者合作，在學術期刊中發表科研文章。

10 你有什麼公餘活動？

在秋冬時節我通常在星期日早上到郊外遠足。閒時我喜歡閱讀和聽音樂，但現在這些都已成為「奢侈活動」了！

HKUST Leaps in World University

In one of the world's most influential university rankings, *The Times Higher Education - Quacquarelli Symonds (THE - QS)* World University Rankings, the Hong Kong University of Science and Technology ranks 39, a great leap from 2007's 53 and 2006's 58.

Other Asian universities making the top 50 in this year's rankings include:

University of Tokyo	(19th)
Kyoto University	(25th)
University of Hong Kong	(26th)
National University of Singapore	(30th)
The Chinese University of Hong Kong	(42th)
Peking University	(50th)
Seoul National University	(50th)

THE - QS World University Rankings were conceived to present a multi-faceted view of the relative strengths of the world's leading universities. The overall rankings are compiled based on six distinct indicators:

Indicator	Weighting
Academic Peer Review	40%
Employer Review	10%
Faculty Student Ratio	20%
Citations per Faculty	20%
International Faculty	5%
International Students	5%

Commenting on this achievement in world rankings, President Paul Chu said, "We are very proud with what we have achieved in world rankings. Years ago when people talked about the best universities in Hong Kong, they only mentioned the University of Hong Kong and the Chinese University of Hong Kong, now they would also include the Hong Kong University of Science and Technology into their list. This ranking achievement is an extra impetus for us to move ahead and strive for excellence."

EMBA Program Ranks Second in *Financial Times'* EMBA Global Rankings

The University's Executive MBA Program, jointly offered with the Kellogg School of Management, Northwestern University, maintains its leading position in the world in this year's *Financial Times* EMBA global rankings. It ranks No 2 overall. This follows its historic ranking as the world's No 1 last year.

The program has been in the world's top 10 since it first took part in the ranking in 2003. For four consecutive years since 2005, it has been in the world's top 3.

The program is listed No 1 for "salary today" of its participants and No 1 in "international students", No 2 in "work experience" and No 3 in "international faculty". The Kellogg-HKUST EMBA program also comes first in "top salary in finance", "top salaries in industry" and "top salaries in consulting".

By nationality, 88% of the current class of the Kellogg-HKUST EMBA program is international. Some 40% of the students are based outside of Hong Kong. On average they have 14 years of full-time working experience.

MBA Program Ranks 11 in *EIU* World Ranking and 16 in *Financial Times* Ranking

HKUST's MBA program has again been ranked by the *Economist Intelligence Unit (EIU)*, for the third year in a row, as No 1 in Asia and Australia. Overall, it ranks No 11 in the world.

Of the 100 MBA programs that made the EIU annual list this year, 50 are from North America, 39 from Europe and 11 from Asia and Australia. The *EIU* ranking places HKUST MBA program ahead of Harvard Business School (12), Wharton (17) and MIT (18).

Describing HKUST as a top-ranked Asian school, the *EIU* said the School's full-time faculty teaching on the MBA program are all PhD qualified. It also described the School as having excellent facilities, with easy access to markets such as China and turns out graduates who are much coveted by employers across the world.

EIU's ranking criteria include four main areas, namely, "open new career opportunities", "personal development and educational experience", "increase salary" and "potential to network". The HKUST MBA program ranks No 3 in the world in "open new career opportunities" which is measured by diversity of recruiters, assessment of career services, jobs found through the career service and student assessment, and No 6 in "personal development and educational experience" measured by faculty quality, student quality, student diversity and education experience.

In the *Financial Times* Ranking, HKUST's MBA program advanced one place to achieve 16th ranking. It ranks No 2 in the world for "international faculty" and "international board", No 3 for "international experience" provided to students, No 9 in "international students" and No 17 in "international mobility", which is measured by the employment movements of alumni between graduation and three years on.

Students at "Individual & Group Behavior in the Organization" class.

Rankings 科大**世界排名**躍升

世界權威大學排行榜之一——*The Times Higher Education - Quacquarelli Symonds (THE - QS)* 的世界大學排行榜公布，科大在 2008 年的排名由 2006 年的 58 位、及 2007 年的 53 位，大幅躍升至 39 位。

其他位列 50 大的亞洲區大學包括：

東京大學	**(19 位)**
京都大學	**(25 位)**
香港大學	**(26 位)**
新加坡國立大學	**(30 位)**
香港中文大學	**(42 位)**
北京大學	**(50 位)**
首爾國立大學	**(50 位)**

世界大學排行榜根據六個指標來評估世界頂尖學府的實力，包括：

指標	**比重**
教學人員評分	40%
僱主評分	10%
師生比例	20%
各學院的成就	20%
國際教學人員	5%
國際學生人數	5%

對於科大世界排名躍升，朱經武校長表示：「我們很自豪能符合世界排名的要求。多年前，人們談論香港的優秀大學時，只會提及香港大學及香港中文大學，現在，他們也會提起科大。這個排名推動我們繼續向前邁進，追求卓越。」

EMBA 課程在《金融時報》的 EMBA 全球排行榜名列第二

科大和西北大學凱洛格管理學院合辦的行政人員工商管理碩士課程，今年仍高踞《金融時報》的 EMBA 全球排行榜第二位，僅比去年下跌一位。2003 年，課程首次榮登十甲，2005 年起，更連續四年位列三甲。

課程在多項評分排列高位：修讀者的「現有薪酬」位列第一；「國際學生數目」排行第一；「工作經驗」排行第二；「國際學院」排行第三。凱洛格–科大行政人員工商管理課程在「金融界頂級薪酬」、「企業界頂級薪酬」及「諮詢界頂級薪酬」位列第一。

這一屆凱洛格–科大行政人員工商管理課程的學生 88% 是國際化的，40% 的工作基地在香港以外的地區，平均有 14 年全職工作經驗。

工商管理碩士課程在《經濟學人信息部》及《金融時報》全球排行榜上分別名列 11 和 16

科大工商管理碩士課程連續第三年獲得《經濟學人信息部》亞洲及澳洲地區的首位，而在全球排名則是 11。

《經濟學人信息部》今年的 100 大排行榜裡，50 間大學屬於北美洲，39 間屬歐洲，11 間屬亞洲和澳洲。科大的排名比許多著名學府還要高，如：哈佛商學院（12 位）、華頓商學院（17 位）和麻省理工學院（18 位）。

能被冠以亞洲第一學府的榮譽，因工商管理碩士課程的全職教學人員均持有博士學位。《經濟學人信息部》也認為科大有一流的設施，較容易進入中國市場，使世界各地的商家僱主都垂涎聘用能貫通兩地的畢業生。

《經濟學人信息部》排行榜評分準則分四大範疇：「發展事業的機遇」、「個人發展及教育經驗」、「薪酬加幅」及「建立人際網絡潛力」。科大工商管理碩士課程在「發展事業的機遇」一項排行第三；評估準則包括招聘者多元性、專業服務評估、職業轉介和學生評估。在「個人發展及教育經驗」則排行第六，由教學人員素質、學生素質、學生的多樣性和教育經驗綜合評分。

在《金融時報》全球排行榜上，科大的工商管理碩士課程於「教授國際化背景」及「顧問國際化背景」兩個分項上均排名全球第二位，在「為學生提供國際經驗」方面位列全球第三，「學員國際化背景」排名第九，「學生國際就業流動性」（衡量學生畢業後三年內的就業流動性）則位列 17。

MBA offers a balance between theory and practice, individual and team approaches.

MBA students cheer the success of the program with Prof Leonard Cheng, Dean of HKUST Business School and Prof Steve DeKrey, Senior Associate Dean and MBA Program Director.

Dean Emeritus Donald Jacobs flies to Hong Kong every year to teach Kellogg-HKUST EMBA class.

HKUST's Director of the Center for Marine Bioactive Substance Prof Qian Peiyuan will oversee this massive research project

Red Sea & Clear Water Bay in Joint Marine Research

科大於紅海開展海洋生物研究計劃

The Red Sea is not only famous for the biblical story of Moses, who parted its waters to save the Israelites from the Egyptian army, then drowned the soldiers who were on their tail. It is also well known for the wealth of marine microbes inhabiting the Sea's coral reefs.

In fact, the year-round warm climate of Saudi Arabia and the Red Sea's geographic isolation are two factors that might have caused a host of unique marine microbial species to breed there. These marine life forms could not be found elsewhere in the world. This has prompted King Abdullah University of Science and Technology (KAUST) to fund a massive collaborative marine research program and to commission HKUST to build a microbial culture collection and to database the local marine environment for KAUST.

With a funding of US $ 4.5 million (about HK$35 million) from KAUST, former Director of the Coastal Marine Laboratory at HKUST and the Director of the Center for Marine Bioactive Substance, Prof Qian Peiyuan, will take charge of this exciting research as the Project Director.

He would set up and supervise the operation of two laboratories in Hong Kong and Saudi Arabia— the KAUST-HKUST Marine Microbial Genomics Lab at HKUST and the KAUST Marine Microbial Genomics Lab and marine bioactive substances laboratory at Saudi Arabia. The collection and study of the microbial genomics and bioactive compounds of the Red Sea will take place at these two laboratories.

"By applying the most advanced sequencing technology and molecular techniques to study microbial community structures in extreme marine environments, we wish to unlock some of the greatest mysteries of marine ecology: what kind of marine microbes and microbial genetic materials are there? What function do these organisms play in the ecosystem? How do they adapt to such a hostile environment?

"Addressing these questions may help us understand how life has evolved in such an extreme environment," Prof Qian said.

"We are also interested in exploring the kind of sustainable biological resources that can be developed from the Red Sea's marine microbes for human application, such as antibiotics and antifoulants. We will isolate and identify bioactive compounds produced by microbes in culture collection and examine how the bioactive compounds affect gene expression (comparative genomics) and protein expression (marine proteomics) in target model organisms," Prof Qian added.

HKUST will work with the Woods Hole Oceanographic Institution (the world's largest nonprofit ocean research, engineering and education organization, which is based in Massachusetts, USA), KAUST and the America University in Cairo, and take advantage of their field cruises to collect seawater, sediments, and marine organisms in the Red Sea.

The project is expected to complete in 2012.

紅海是膾炙人口聖經故事的所在地，摩西為了逃避埃及兵馬的追捕，帶領以色列人出埃及，把紅海一分為二，紅海最後再次合攏，把埃及大軍統統淹沒。另一方面，紅海也因其珊瑚礁所蘊含的豐富海洋微生物而聞名於世。

沙地阿拉伯終年溫暖的氣候、紅海偏處一隅的地理環境，使紅海的海洋環境別樹一幟，並孕育出不少奇特的微生物。

為見及此，阿卜杜拉國王科技大學特別贊助一項大型的海洋生物研究計劃，並委託香港科技大學成立微生物培養收藏及資料庫，以研究和分析從紅海及附近海域收集到海洋生物樣本及資料數據。

科大海洋生物活性物質實驗室主任、科大海岸海洋實驗室前主任錢培元教授最近得到阿卜杜拉國王科技大學贊助港幣約 3,500 萬元，分別在香港及沙地阿拉伯成立兩所實驗室，用以分析和研究在紅海收集到的微生物基因組及生物活性物質。

「我們希望以最先進的測序技術及分子生物學技術，研究在極端海洋環境下的微生物群族結構，並藉此破解海洋生態最大的謎團：海洋中存在著甚麼微生物及微生物遺傳物質？這些有機體在整個生態系統中發揮甚麼作用？他們究竟如何適應這個極端的生態環境……凡此種種，均可以讓我們瞭解生命如何在極端環境中進化錢教授表示。

香港科技大學將會與位於美國麻省的世界最大私人非牟利海洋研究、工程和教育組織－Woods Hole 海洋研究所、阿卜杜拉國王科技大學，以及位於埃及開羅的美國大學攜手合作，一起到紅海進行海洋勘察活動以收集在紅海的海洋生物、海水及沉積物。

預計整個計劃將於 2012 年完成。

KAUST is being built in Saudi Arabia as an international, graduate-level research university. The University is set to open in September 2009

HKUST a Winner at **MIT's Synthetic Biology Competition**
科大於麻省理工**合成生物學大賽獲銅獎**

In its maiden attempt, an 11-member team from HKUST snatched a bronze medal from among 84 teams worldwide at the International Genetically Engineered Machine Competition 2008 (iGEM), a premiere Synthetic Biology Competition held at the Massachusetts Institute of Technology (MIT).

Made up of seven undergraduates, three high school students from HKUST's Talented Youth Summer Program and Prof King Chow as faculty advisor, the team produced and presented a project about a biological circuit which can generate randomized signals and memorize them exactly like an actual biological cell.

Team members rated their participation at iGEM highly. "iGEM is a unique learning experience for me. It's the perfect blend of team-building, self-initiated learning, research and fun," remarked one participant.

"The jamboree at MIT was really eye-opening. We met so many undergraduate students from all over the world channeling their ingenuity and passion into biological sciences," another participant echoed.

"I was amazed at the creative yet analytical minds of people from teams around the world, and dazzled by the wonderful applications of science and synthetic biology," a high school student from HKUST's Talented Youth Summer Program said.

iGEM is an undergraduate Synthetic Biology Competition. Originally a month-long course in 2003 during MIT's independent activities period, it soon grew into a summer competition. This year the competition attracted over 1,000 participants from all over the world.

HKUST's participation at iGEM 2008 was made possible by a generous donation from the Lee Hysan Foundation.

Some of HKUSTers at MIT's Synthetic Biology Competition

由11名科大師生組成的參賽隊伍「科大人」於2008年11月到美國波士頓麻省理工學院參加一項備受矚目的合成生物學大賽iGEM，並在84隊來自全球的參賽隊伍中奪得銅獎。

「科大人」由七名科大本科生、三名曾參加科大優才生暑期課程並表現傑出的中學生及科大生物學系周敬流教授組成。他們的參賽項目是可以隨機發信號而其記憶系統與真正生物細胞相若的生物電路。獲獎歸來的「科大人」均認為能夠參與這項賽事，令他們獲益良多。

「iGEM給我一個集研究、自發學習、趣味與群體協作精神於一爐的學習經驗，」一位參加者說。

另一位參加者對此深表贊同。他說：「參加iGEM大賽令我眼界大開。我們與來自五湖四海的大學生，一起把心血傾注於生物學研究，那種熱誠和齊心，實在令人感動。」

「來自世界各地的年青精英，濟濟一堂；他們把精密的思考與靈活的創意巧妙地應用於生物及合成生物科技中，創造出精彩的作品，令我們瞠目結舌，嘆為觀止，」一位參賽的高中生表示。

iGEM原本僅是麻省理工學院於2003年舉辦的一項為期一個月的合成生物學課程，由於反應熱烈，主辦當局決定把它變為一項全球性、為本科生而設的合成生物學大賽。2008年的賽事吸引了超過1,000名參賽者參加。

「科大人」參與是項賽事的經費，由利希慎基金贊助。

HKUST Makes a **Big Splash in Shenzhen**

As 2008 drew to a close, HKUST made further inroads in Shenzhen.

The PKU-HKUST Shenzhen-Hong Kong Institution became the only institution of its kind in Guangdong this year to gain recognition by the Ministry of Science and Technology as a National High-tech Innovation Service Center. At the same time, construction of our own building for "industry, education and research" (IER) has commenced.

Rare Distinction - Shenzhen IER Base

The PKU-HKUST Shenzhen-Hong Kong Institution, otherwise called "Shenzhen IER Base", was jointly formed by HKUST, Peking University and the Shenzhen Municipal Government in August 1999.

In late December 2008, the Ministry of Science and Technology announced the latest selection results for National High-tech Innovation Service Centers. Of the 31 institutions chosen nationwide, the Shenzhen IER Base was the only from all of Guangdong Province to be recognized as a technology incubator.

After nearly a decade, the Shenzhen IER Base has gone a long way towards becoming a high-level, integrated and open-style entity embracing government regulation, industrial production, education, research and financial activities. It is a base for the incubation of scientific inventions, management of financial risks, as well as for the development of technological talent.

Breaking Ground - HKUST Shenzhen IER Building

HKUST is constructing a new building to accommodate the growing demand for office space by a number of companies awaiting incubation.

Named HKUST Shenzhen IER Building and situated just a stone's throw from the Shenzhen IER Base, the 7-storey edifice is scheduled for completion by the end of this year. A ground breaking ceremony was held on 17 December 2008 to mark this milestone in our enhanced presence in Shenzhen.

播種深圳 育出青苗

2008年底，科大在深圳繼續造出令人鼓舞的成績。深港產學研基地成為國家科學技術部年中選出的31家國家高新技術創業服務中心之中唯一來自廣東的機構。同時，科大在深圳亦開始興建自己的產學研大樓。

深港產學研基地喜獲殊榮

深港產學研基地由科大、北京大學和深圳市政府於1999年8月共同成立。2008年底，國家科技部公布了新一輪遴選結果，選出31家國家高新技術創新中心。深港產學研基地成為廣東省唯一的入選機構。

經過近十年的發展，深港產學研基地已成為一個高層次、綜合性和開放式的政府、生產、教學、研究和資金管理相結合的實體，同時是科技成果孵化基地、風險基金聚散基地，以及高新技術人才培養基地。

香港科大深圳產學研大樓動工

隨著等待「孵化」的公司數量不斷增加，科大正興建一座自己的產學研大樓。

香港科大深圳產學研大樓距離深港產學研基地只是一箭之遙。它樓高七層，預計於今年年底落成啟用。科大於2008年12月17日舉行了動土儀式，標誌著科大在深圳的發展樹立了又一里程碑。

New Partner in the Search for New Neural Drugs

科大與暨南大學攜手研究神經科學及創新藥物

An agreement joining Jinan University in Guangzhou in partnership has been reached for collaboration in neuroscience and innovative drug research.

Under the Memorandum of Understanding signed in December 2008, the two universities will conduct regular academic exchanges as well as share facilities. It will also see the exchange of postgraduate students for joint research.

The agreement allows the two universities to join forces in the search for and research of neural drugs, by tapping into the wealth of Chinese herbal and natural drug resources.

The signing ceremony was jointly presided over by the heads of the two collaborating universities, Prof Paul Chu for HKUST and Prof Hu Jun for Jinan University. The project will be jointly managed by HKUST's Head and Chair Professor of the Biochemistry Department Nancy Ip and Jinan University's College of Pharmacy Associate Dean Prof Ye Wencai.

Prof Hu Jun from Jinan University and President Paul Chu at the signing ceremony

科大及暨南大學（暨大）於2008年12月簽署協議，成立「香港科技大學與暨南大學神經科學和創新藥物研究聯合實驗室」，共同開展治療和延緩神經系統疾病藥物的研究。

簽約單位為科大的「分子神經科學中心」及暨大的「中藥藥效物質基礎與創新藥物研究廣東省高校重點實驗室」。

在協議下，雙方的教研人員會定期交流講學，並分享有關設施。雙方也可以交換研究生，在適當的領域進行學習和研究。科大和暨大亦會結合各自的科研優勢，共同尋求發現神經系統藥物，特別著眼於我國豐富的中藥及天然藥物資源。

協議由科大校長朱經武教授及暨大校長胡軍教授簽署。雙方的聯絡主任分別為科大生物化學系系主任及講座教授葉玉如院士及暨大藥學院副院長葉文才教授。

Science and Technology Minister
Wan Gang Visits HKUST
科技部部長萬鋼蒞臨科大

12 December 2008 marks the date of an important visit by the Minister of Science and Technology Mr Wan Gang who came to our campus to preside over the signing of a collaborative agreement and to visit the University's research facilities.

The collaborative agreement was signed at HKUST between the Department for International Cooperation of the Ministry of Science and Technology and the Nansha IT Park, to step up collaborative research in Chinese medicine and other areas.

The agreement was signed by Mr Gan Xiaoming, Head of the Department for International Cooperation of the Ministry of Science and Technology, and Mr Ian Fok, Managing Director of Nansha IT Park Limited which is situated in Nansha, Guangzhou. The signing of the agreement was witnessed by Minister Wan Gang, Fok Ying Tung Foundation Chairman Mr Timothy Fok, and HKUST President Paul Chu.

Under the agreement, Nansha IT Park and the Department of International Cooperation of the Ministry of Science and Technology will enter into a partnership to support international scientific collaboration, with a special focus on the research and commercialization of Chinese Medicine, and other areas.

國家科技部部長萬鋼於12月12日到訪科大，簽訂合作協議，並參觀科大的研究設施。

合作意向書由國家科技部國際合作司與南沙資訊科技園於科大簽訂，以加強雙方在中醫藥及其他領域的研發合作。

合作意向書由國家科技部國際合作司靳曉明司長，及廣州南沙資訊科技園有限公司董事長霍震寰先生簽訂，並由全國政協副主席、國家科技部萬鋼部長、霍英東基金會主席霍震霆先生及香港科技大學校長朱經武教授作見證。

根據合作意向書，南沙資訊科技園與國家科技部國際合作司建立夥伴關係，共同支援國際科技合作，並以科技部牽頭實施的《中醫藥國際科技合作計畫》等為重點，扶持中醫藥及其他領域的創新科技的研發和產業化。

Direct Descendent of Qing Emperor Qianlong
Demonstrates His Artistry at HKUST
乾隆後人在科大即席揮毫

Aisin Gioro Hengshao, the seventh generation grandson of Qing dynasty emperor Qianlong, visited Hong Kong University of Science and Technology in December 2008 to give a lecture on Pu Yi, the last emperor.

He also presented to HKUST a Chinese ink painting of his own creation. Measuring seven meters, the painting features the beauty of Qiangbeishan Mountain. He also demonstrated to the audience his own unique style of Chinese calligraphy. The calligraphy was awarded to a first year engineering student, winner of a simple quiz.

Aisin Gioro is now a mainland University professor, a calligrapher and art commentator.

Aisin Gioro presents his calligraphy to a lucky engineering student.

清代乾隆皇帝七世嫡孫愛新覺羅恆紹教授於 2008 年 12 月蒞臨香港科技大學，主持普及講座「清代末代家史」，特別詳述溥儀大婚的禮節。

愛新覺羅教授還特別畫了一幅闊達七米題為「長白山神韻」的國畫，送給科大，並由科大署理校長錢大康教授代表科大接收。愛新覺羅教授亦即席揮毫，示範他風格獨特的書法。最後，他寫了「澹豔」兩個大字，以「答中有獎」方式送給一位來聽講的科大工學院一年級學生。

愛新覺羅恆紹現任吉林醫藥學院教授及吉林師範大學名譽教授，也是名書畫家及藝術評論家。

Showcasing Our Technology Achievements in China Hi-Tech Fair 2008

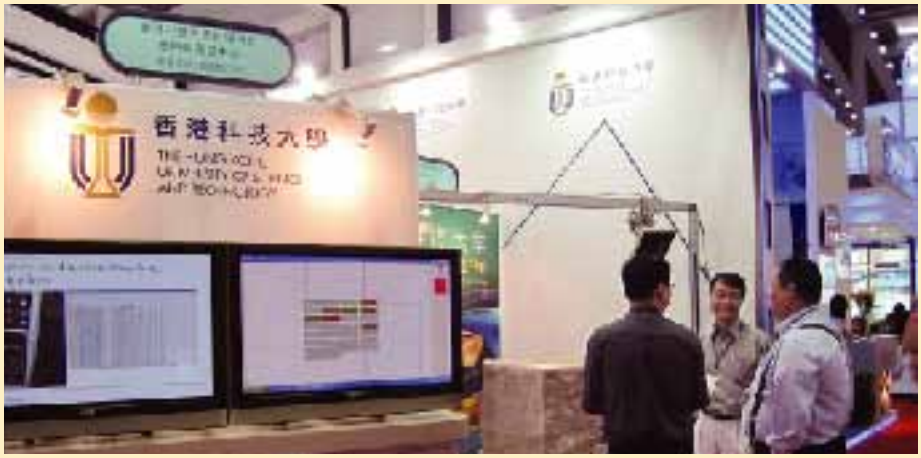
科大於高交會展示獲獎科技

by HKUST Technology Transfer Center

HKUST displayed its recent technological achievements at the 10th Annual China Hi-Tech Fair (CHTF) in Shenzhen, the most important exhibition on science and technology in China, from 11 to 17 October 2008.

Now in its 10th year, CHTF 2008 adopted the theme of "Technology for Better Livelihood and Innovation for a Better World" and highlighted the important scientific and technological innovations achieved in China in the past 30 years.

As the University's coordinator of the event, Technology Transfer Center (TTC) took the occasion to showcase some of our latest inventions.



α Gate dynamic RFID Portal

The first of its kind, it is a device to measure, test and calibrate different tags and readers for specific RFID applications. Invented by CSE Department's Prof Lionel Ni and Prof Shing-Chi Cheung, the device has won the Certificate of Merit of Hong Kong RFID Awards 2008.

MotiVision

An award winning device by two CSE and ECE students, the technology is a gestures recognition technology that controls computer interactivity.

Three hi-tech start-ups under the University's Entrepreneurship Center also displayed their latest products including nanocatalytic filters, skincare products with hEGF as active ingredient, and DSP-based industrial electromechanical motion controllers.

HKUST was given multiple recognitions for its commitment to and support of the event, with the university winning "the Excellent Organizer" award, together with the Honor Certificate for TTC Director Dr Claudia Xu's 10-year Contribution and Certificate of Outstanding Coordinator for TTC's Ms Alice Yuen.

科大於 10 月 11 日至 17 日參與在深圳舉行的中國最大型的國際科技交易會——深圳中國國際高新技術成果交易會。

是屆高交會已踏入第 10 個年頭，以「科技改善民生，創新改變世界」為主題，集中展現中國改革開放 30 年來科技自主創新取得的成就。

今年科大重點展覽已榮獲 2008 無線射頻識別大獎的智能龍門架。這項技術由科大的電腦科學及工程學系的倪明選教授及張成志教授研發，為不同的 RFID 工業應用而設計，在同類型的設計中，首次能自動量度、測試及校準不同的讀取器。

MotiVision 是科大展示的另一項獲獎科技，是一項應用於電腦介面的手勢識別技術，由科大電腦科學及工程學系及電子及電腦工程學系的學生研發。

科大創業中心屬下其中三家創業公司，亦在高交會上向訪客及投資商展示所研製的創新產品，包括納米催化濾網、添加了人類表皮生長因子 (hEGF) 的護膚品及在高速數位信號處理器 DSP 的基礎上發展出來的運動控制器等。

今年科大更榮獲主辦機構頒發的優秀組織獎，以表揚科大在過去 10 年對高交會的支持。此外，技術轉移中心主任徐建博士及袁淑娟女士也分別獲 10 年特別貢獻獎及優秀工作者獎。

A Golden Visit 奧運金光照校園

by Philip Yeung

HKUST basked in the afterglow of the Beijing Olympics when 11 of China's gold medalists and two national coaches came calling at our campus—the only local university so honored.

Our students and staff plus invited representatives from sister institutions got a special treat— to see some of their favorite sports heroes up close, and most memorably, chatting with them.

The high point of their visit came when each of the 11 national heroes tossed an autographed golden ball at random to the audience, and the lucky ones who caught a golden ball would keep it as a memento and put a question to the ball-tossing medalist.

Record-breaking weight-lifter Ms Chen Xiexia was asked about what she thought would be an ideal boy friend. Ms Du Li, the record-breaking 10-meter air rifle winner, was ever mindful of the less fortunate, sharing with the audience how she set up a foundation to drive her philanthropic dreams.

Ms Zhang Yangyang, one of the fearsome foursome who powered China to its first ever victory over the much-favored British team in rowing, told the audience the secret of her success: sheer will power and sense of honor.

And who can forget Ms Liu Zige's heart-stopping, record-shattering win in the 200-meter butterfly? She was here too, in her hallmark golden girl elegance, and so was Mr Long Qingquan, the teddy bear who stole the hearts of all the girls in the Atrium with his boyish charm.

The Olympians left something behind that will grow with the years: they planted trees in the specially created Olympic Garden, the garden of heroes.

在北京2008年奧運燦爛的餘暉下，11位金牌健兒和兩位國家級教練蒞臨科大，與科大師生及由各大院校應邀而來的師生進行近距離接觸。

當天最令現場觀眾情緒高漲的環節是答問時間。接到運動員從台上拋下的金繡球的幸運兒，可向運動員提問，帶出運動員風趣幽默的一面。

打破世界紀錄的舉重選手陳燮霞被問及其愛情生活。刷新十米氣步槍紀錄的杜麗，則常記掛著窮苦的一群，甚至成立了個人慈善基金去實踐關懷社會的夢想。首次打破了英國壟斷划艇項目的局面而為中國奪金的四人划艇組組員之一張揚揚表示，堅定不移的意志力和國家民族的尊嚴，是她們致勝的關鍵。

誰能忘記劉子歌在200米蝶泳衝線時令人怦然心跳的一刻？她以破紀錄的時間奪金。她當天在場展示了游泳選手優雅的氣質。龍清泉也不遑多讓，其率真的大男孩個性，當場奪得不少少女的芳心。

奧運金牌選手在科大雖然只是逗留了短短一個上午，但他們給科大留下的美好回憶卻會隨時日成長，因為科大特別開闢了「京奧園」，讓選手們種下樹苗，讓這歷史一刻歷久常青。

People's Liberation Army
Meet with HKUST Staff and Students
解放軍駐港部隊與科大師生全方位交流

Over 80 members of the People's Liberation Army (PLA) Hong Kong Garrison spent a full day at the University in October 2008 meeting and interacting with the staff and students in a diversified range of activities.

Led by Major General Dong Wenjiu, the PLA Hong Kong Garrison first attended a tree-planting and plaque-unveiling ceremony to mark this historical occasion, followed by visits to some of the research facilities on the campus, including the Biotechnology Research Institute, the Materials Characterization and Preparation Facilities, the Biological NMR Center, and the Coastal Marine Laboratory.

Lunch was hosted by HKUST Council Chairman Dr Marvin Cheung and President Paul Chu. About 100 staff and students took this golden opportunity to talk and make friends with the visiting PLA officers. The officers also toured the student hostel facilities.

Two lectures were arranged for the visitors and the HKUST community. Prof David Zweig, Director of HKUST's Center for China's Transnational Relations, outlined China's resource diplomacy, while Prof Jin Canrong, Associate Dean of the School of International Relations of the Renmin University of China, discussed the current international political scene and China's diplomatic strategies.

Before leaving the campus, the PLA officers enjoyed a light moment of sport activities with the HKUST staff and students. Major General Dong Wenjiu played a game of table tennis against Prof Edmond Ko of HKUST, while HKUST's students battled against the PLA officers in the basketball court.

HKUST President Paul Chu said, "This visit by the PLA Hong Kong Garrison is a good starting point for a long-term relationship with us which, I am sure, will grow and prosper with time."

八十多位中國人民解放軍駐港部隊於2008年10月首次到訪科大，與師生作全方位交流。當日的活動包括「同遊一校園」、「同上一節課」、「同聽一講座」、「同吃一桌飯」，以及「同賽一局球」。

PLA members visiting HKUST's Coastal Marine Laboratory

由駐港部隊副司令員董文久少將率領到訪的解放軍駐港部隊，除了與一眾嘉賓到科大草坪進行植樹紀念及牌匾揭幕儀式外，還參觀了科大一些具代表性的實驗室，包括生物技術研究所、材料測製實驗所、生物核磁共振中心，以及海岸海洋實驗室。

午餐由科大校董會主席張建東博士及校長朱經武教授主持；約100位科大師生與各官兵共晉午膳，互作交流，建立友誼。

午後，駐港部隊參觀了學生宿舍設施，並與科大師生共同參加講座。科大中國跨國關係研究中心主任崔大偉教授主講「中國的資源外交」，中國人民大學國際關係學院副院長金燦榮教授則主講「當前國際形勢與中國外交」。

駐港部隊離開前，還與科大師生進行友誼球賽。首先，駐港部隊副司令員董文久少將與科大的高彥鳴教授切磋乒乓球技，而駐港部隊的官兵則與科大運動員較量籃球技術。

科大校長朱經武教授說：「駐港部隊這次訪問，為科大師生帶來很有意義的衝擊和啟示，希望科大與駐港部隊繼續保持溝通，使雙方的了解和友誼可以發展下去。」

President Chu in Popular Science TV Series
朱經武校長為科技粉墨登場

The popular science TV series features President Paul Chu as the commander of a team of science and technology protectors

President Chu's diary is always full but when it comes to promoting science to the younger generation he would always find time to do it— by skipping lunch and dinner and forgoing his meager leisure time on Sundays and public holidays.

This is exactly what he did for Radio Television's popular science series on prime time TV to promote knowledge of science and technology in a way designed to interest and excite our youngsters.

In the Techno Frontier TV series jointly produced by Radio Television Hong Kong and the Government's Innovation and Technology Commission, President Chu played the role of the commander of a team of protectors of science and technology in the fight against a monster who has the super-natural ability to turn back the clock of scientific advances.

Through this science-fiction drama, audience are reminded of how unimaginable modern day living would be without all the convenience brought about by advances in science and technology. They are also given a taste of how scientific achievements are made.

"I'm all for science," President Chu said while filming in Science Park. The filming is done on Sundays and holidays during which he has also to skip lunch and dinner in order to fit his busy schedule.

"In addition to promoting science, the added bonus is that my wife almost re-discovers her teenage heart-throb in me when she saw me on TV wearing the Phantom-of-the-Opera-look-alike face mask and the long silver-color wig and clad in the Keanu Reeves-in-Matrix type of long gown," President Chu said jokingly.

朱經武校長日理萬機，但為了向年輕一代宣揚科學精神，即使廢寢忘食、犧牲僅有的餘暇亦在所不辭。

因此，他參與了香港電台特別為時下青年拍攝的一輯科普電視節目，推廣科技知識。

「創新戰隊」由香港電台及創新科技署聯合製作，朱經武校長飾演的武博士聯同五色戰士，對抗令科技倒退的退步獸。

透過這科幻小説式的戲劇演出，觀眾赫然發現，科技早已不知不覺滲入在日常生活中，也會體會到科技帶來的方便。

「一切都是為了科學。」朱經武校長在科學園進行拍攝時曾説。為了配合他繁忙的日程，拍攝時間總是安排在星期日及公眾假期。為使拍攝順利進行，校長也甘願放棄用餐時間。

朱經武校長又開玩笑説：「除了能弘揚科學精神外，意外的收穫是，太太看到我在電視節目裡戴上『歌聲魅影』的臉具，頭頂銀白色的假髮，穿上『廿二世紀殺人網絡』奇洛李維斯的長袍時，重新了發現我的『魅力』。」

With the help of make-up artists, President Chu 's charismatic image comes into being.

She Leads by Listening: Our First Legislative Council Member 科大舊生晉身立法會

by Philip Yeung

"You never know what volunteering can do for you." That is alumnus and Legislative Council Member Starry Lee Wai-king's advice to HKUST students.

「你永遠不知道義務工作會為你帶來甚麼。」這是科大校友立法會議員李慧琼對科大學生的忠告。

Volunteering took her into politics and into her career as a full-time politician. After winning a geographical constituency seat in Kowloon West in the Legislative Council elections in September 2008, she became the first HKUST alumna to win a seat in the legislature.

Soft-spoken and unfailingly polite, Starry has patience in surplus. She also has one attribute that distinguishes great politicians from the rest: her capacity to listen. By training she is an auditor, but by temperament she is a natural grassroots politician driven by a genuine care and concern for the lot of the people.

A graduate of the class of '96 in Accounting, Starry stumbled into politics as a volunteer in a local constituency office and shortly afterwards became the youngest female District Councillor for Kowloon City.

Passionate about serving the community and unrelenting in door-knocking, she entered the Legislative Council elections in 2008 not exactly a hot favorite. But again her dogged efforts and willingness to listen to the rumblings of the people paid off handsomely, topping the polls in a heated contest with 13 hard-charging candidates.

The word most often used about women in politics is "juggling". For Starry, she has to juggle with the competing demands of motherhood with a 6-year old daughter, a busy constituency office, and the work of the Legislative Council. She was emphatic about one thing: she did not enter politics for fame or fortune. Compared to her lucrative career as a senior accountant, being a politician is an underpaid career in monetary terms.

But she is determined to make a difference to her community. She now sits on two Legislative Council Panels: one on education, the other on economic affairs, both are dear to her heart and vital to the interests of her constituents. Count on her to be an eloquent spokesperson on these and other hot-button issues.

義務工作引領她踏上政治之路，並於2008年9月的立法會選舉之中，在西九龍地區順利勝出，成為全職政壇人物，也是科大校友中首位立法會議員。

語調溫文、禮貌周周，李慧琼饒富耐性，樂於靜心聆聽，這是許多香港政客欠缺的優點。她後天被培訓為核數師，但先天個性屬於基層的政客。她從經驗老到的良師——曾鈺成身上學習到許多技法。

李慧琼1996年畢業於會計系，政治之途始於參與工聯會義務工作。不久，憑藉其堅持不懈，她輕易叩門成功，成為九龍西選區最年輕的區議員。2008年9月，她首次參選立法會。她並非大熱人選，但又一次，以其頑強的努力和樂意聆聽選民意見的態度，在13名候選人中高票當選，粉碎多位知名度甚高的候選者的希望。這次，她又再度締造歷史，成為最年輕的女性立法會議員。

女政治家常被描繪成「變戲法」，李慧琼既是六歲女兒之母，要顧及家庭生活，亦要應付繁忙的區議會工作。她周旋於兩者之間，不斷表演分身大法。她強調一點——從政不是為了金錢。作為資深會計師的可觀收入，政客的薪酬相對較低，但她決心改革社會。她現在參與立法會內教育和經濟兩個委員會的事務，兩者她同樣重視，並以選民的利益為依歸。她的雄辯詞令和對時事的熱衷，令她的選民衷心折服。

訪問當日，她因另一個超時訪問延誤了約定時間而深感抱歉。說話時，臉上一直掛著笑容，似是準備接受記者的任何發問。面對香港傳媒日益「八卦」的風氣，這作法似乎有點冒險。然而，李慧琼不畏挑戰。她希望永遠站在開放、透明的一面，持續發揮她的個人和政治魅力。

A Hat Trick for the Leader of the Year
葉玉如教授獎項豐收

For Chair Professor in Biochemistry, Prof Nancy Ip, 2008 was a year to remember. She was showered with two high honors — The Asian Knowledge Leaders Award 2008, by the Asian Knowledge Management Association, and Ho Leung Ho Lee Foundation's (HLHL) Prize for Scientific and Technological Progress 2008.

Prof Ip was one of only two scholars from Hong Kong selected for the prestigious HLHL awards.

The HLHL Foundation is set up by four local bankers and philanthropists — the late Mr Ho Sin Heng, the late Dr Liang Qiu Ju, Dr He Tian and Sir Q W Li to honor scientists and academics who have made significant breakthroughs in scientific and technological developments. Each year, the Foundation gives out three awards, of which the Prize for Scientific and Technological Progress awarded to Prof Ip is one.

In 2008, Professor Ip was awarded the Medal of Honour by the HKSAR Government for her valuable contribution to the promotion of industrial and technological development in Hong Kong, particularly in the biotechnology field.

2008年是科大生物化學系系主任及講座教授葉玉如的豐收年——特別是在獎項方面。她不單獲得亞洲知識管理協會的亞洲十大知識領袖獎，還獲頒2008年何梁何利基金的「科學與技術進步獎」。

何梁何利基金今年為57來自中國內地及香港的傑出人士頒發了獎項，其中兩位來自香港；葉教授是其中一位。

何梁何利基金是香港四位金融界善長——何善衡、梁球琚、何添、利國偉於1994年創立的科技獎勵基金。基金分設「科學與技術成就獎」、「科學與技術創新獎」及頒予葉教授的「科學與技術進步獎」。

2008年葉玉如教授獲香港特區政府頒授榮譽勳章，以表彰她積極推動香港工業和科技發展，以及在生物科技領域的傑出貢獻。

A Young Scientist Award for a Young University

The achievements of scientists are often the work of a lifetime. But outstanding awards don't always go to the venerable. HKUST is full of the young, bold-thinking and prolific scientists. One of them, Associate Professor in Biochemistry Xia Jun, has won a prestigious Young Scientist Award.

This award is presented by Elsevier, the world's leading research publisher of scientific and medical literature and the Association of Southeast Asian Institutions of Higher Learning's (ASAIHL).

Prof Xia is the first runner-up in the Life Science category of the first annual ASAIHL - Scopus Young Scientist Awards 2008. The other three categories of awards are in Engineering and Technology, Medicine and Agricultural Sciences.

To receive this award, scientists and academics have to be under 40. Winners are evaluated on three key criteria: number of citations and h-index, number of publications and patents based on Scopus, as well as documented social impact. The h-index is a measure of both the actual scientific productivity and the apparent scientific impact of a scientist.

Prof Xia's research focuses on the molecular mechanism of protein trafficking and its implication in learning and memory, diabetes and infertility. Over a period of 10 years Prof Xia has published 16 papers which were cited an average of 76 times each, giving Prof Xia an h-index of 11.

Prof Xia graduated from the Johns Hopkins University's School of Medicine with a doctorate degree in Neuroscience in 2001. He joined the Hong Kong University of Science and Technology the following year.

HKUST Professor Appointed First Asian Chief of **50-year-old Air Pollution Journal**

科大教授任**權威環保學刊**主編

Picture shows Prof Chak Chan (left), Atmospheric Environment's Editor-in-chief and Dr Ngai-ting Lau, Senior Editorial Assistant of the Journal's China Office at work.

KUST Professor and Associate Head of Chemical and Biomolecular Engineering Chak Keung Chan has become the first candidate outside Europe and US to be appointed Editor-in-Chief of Atmospheric Environment, an academic journal on air pollution celebrating its 50th anniversary this year.

In his new capacity as Editor-in-Chief of the journal, he will be in charge of the Journal's China Office in HKUST and join hands with two other editors in managing the manuscripts for the Journal.

Prof Chan joined HKUST in 1992 shortly after he earned his doctorate degree in Chemical Engineering from USA's California Institute of Technology, Pasadena. He received in 2005 the Asian Young Aerosol Scientist Award in recognition of the field and laboratory investigations of the thermodynamics and hygroscopic properties of atmospheric aerosols. He was also the winner of HKUST's Top Ten Lecturers Award in 1999.

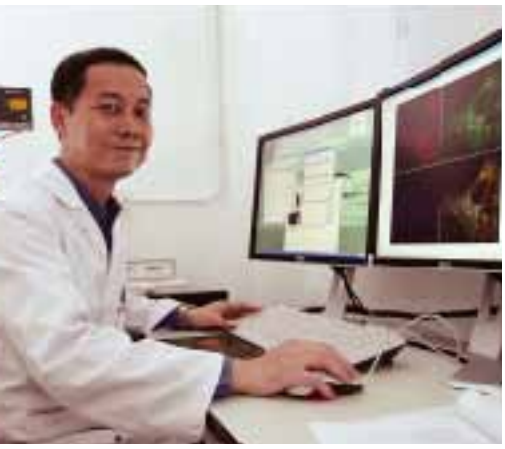
Hailed as "an international academic journal that places air pollution in a regional context", Atmospheric Environment was established in 1959 as an Elsevier journal focusing on air pollution and its applications.

Some of the most respectable air-pollution experts have served the Journal as its Editor-in-chief, including "the father of air-pollution control", US National Medal of Science recipient and Prof Arie Jan Haagen-Smit. With three offices respectively in the States, UK and China, it publishes 40 issues per year. In 2008 it has published over 700 papers of more than 9,000 pages.

科大化學及生物分子工程學系教授及副主任陳澤強，最近獲委任為著名學術期刊《大氣環境》的主編，成為首位獲此重任的非歐美學者。《大氣環境》為一本探討空氣污染的期刊，已有 50 年的歷史。作為該期刊主編，陳教授將會聯同另外兩位主編處理及審核所有來稿。他亦會管理該期刊位於科大的中國辦事處。陳教授於 1991 年於美國加州理工大學取得化學工程學博士學位後，於翌年加入科大。由於陳教授在研究大氣顆粒物的熱力及吸濕性能方面，表現傑出，獲頒 2005 年氣膠科學家獎。他亦是 1999 年科大十大傑出講師得獎人。

被譽為「以國際視野審視地區議題」的《大氣環境》，於 1959 年開始發行，發表的論文以空氣污染及有關技術的應用為主。不少國際知名學者都曾擔任該刊主編，包括有「排污減染之父」美譽、美國國家科學獎得獎人 Arie JanHaagen-Smit 教授 (1900-1977)。

夏軍教授研究質量傑出**獲亞太區獎項**



香港科技大學生物化學系副教授夏軍最近獲頒首屆「東南亞高等教育協會——史高柏年輕科學家」獎。獎項由全球最大的科技及醫藥學術期刊出版集團 Elsevier 及東南亞高等教育協會頒贈。

獎項共分生命科學、科技及工程、醫藥及農業科學四大類。夏教授獲生命科學類別中的銀獎。

這個獎項是為 40 歲以下的亞太區學者及研究員而設，並以下列三項標準作出選拔：根據文摘引文數據庫史高柏 (Scopus) 的數據，來衡量參加者論文被引用的次數及參加者的 h- 指數、論文的多寡及所獲專利權的數量，及其研究所帶來的社會影響和效益等。h- 指數是學術界用於衡量學者的研究產量及其文章所產生社會影響的指數。

夏教授的研究範疇集中於蛋白質運輸的分子機理及其對學習、記憶、糖尿病及不育的影響。根據史高柏的數據，夏教授於短短 10 年間所發表的 16 篇論文，每篇平均被引用 76 次，其 h- 指數為 11 。

夏教授於 2001 年畢業於美國約翰斯霍普金斯大學 (The Johns Hopkins University)，獲神經科學博士學位。他於翌年加入科大。

吳宏偉教授助南水北調工程

HKUST Professor Contributes to South-to-North Water Transfer Project

The result of an HKUST geotechnical research project has been applied to China's South-to-North Water Transfer Project (middle route) from the Yangtze River to Beijing, a mega infrastructure project comparable in scale to the Three Gorges Dam Project. This research paper has also won for the team an Honorable Mention in the R M Quigley Award.

由科大工學院副院長吳宏偉教授領導的岩土研究項目，其成果將獲應用於興建中國內地的南水北調由棉陽至北京中線工程，而該研究小組發表於岩土工程權威刊物——《加拿大岩土工程學刊》的研究報告，則獲該刊物的年度大獎 R M Quigley Honorable Mention 。

《加拿大岩土工程學刊》每年均會從年內刊登於學刊的論文中選出最優秀的作品，並授予論文作者 R M Quigley 獎。

The project was carried out by HKUST's Associate Dean of Engineering and Director of the Geotechnical Centrifuge Facility Prof Charles W W Ng, his former doctorate student Mr Tong L T Zhan, and former Civil Engineering Department's Adjunct Professor Dr Delwyn G Fredlund.

Hosted by *the Canadian Geotechnical Journal*, one of the world's most authoritative geotechnical research publications, the R M Quigley Award is presented annually to an individual or individuals whose paper was judged to be the best paper published during the preceding year in the *Canadian Geotechnical Journal*.

Entitled "Field study of rainfall infiltration into a grassed unsaturated expansive soil slope", the paper provides a pioneer study and insight into the behavior of expansive soil slopes in China. Funded by the Research Grants Council of the HKSAR, research results of the study have been used for the preliminary design of the middle-route of the 1,200 km long South-to-North Water Transfer Project in China. In collaboration with the Yangtze River Scientific Research Institute, Prof Ng is also actively involved at present in the detailed design of the slope stability for the water transfer canal using the state-of-the-art Geotechnical Centrifuge Facility at HKUST.

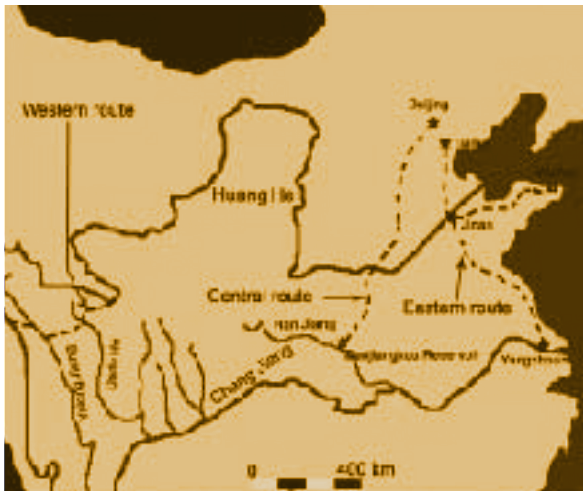
Very recently Professor Ng has been elected Fellow of the Institution of Civil Engineers, U.K. (FICE); Fellow of the American Society of Civil Engineers (FASCE) and Fellow of Hong Kong Academy of Engineering Sciences (HKAES).

這個由科大岩土工程離心機實驗所主任吳宏偉教授，和他的前博士生詹良通及前土木工程系兼任教授 Delwyn G Fredlund 組成的研究小組，早前經已到加拿大參加該獎項的頒獎典禮並領取獎項。

吳教授等學者在其得獎論文中對中國內地膨脹土邊坡的表現提出了創新而又具突破性的見解。三位學者的研究由香港研究資助局資助，其研究結果並得到主要設計單位長江科學院採納作為設計南水北調中線之用。中國的南水北調工程，就會是繼三峽工程後內地最浩大的工程。

除此之外，吳教授還繼續與長江科學院合作，運用科大岩土工程離心機實驗所內的先進設施，設計南水北調工程輸水道的邊坡鞏固工程。

吳教授又於 2008 年獲選為英國土木工程師學會資深會員，美國土木工程師學會資深會員和香港工程科學院院士。



The Science of Eating & the Art of Teaching Science

by May Cheung

Two experimental psychologists, Massimiliano Zampini, from Italy, and Charles Spence of Oxford University, walked away with the Ig Nobel Prize (a parody of the Nobel Prize for achievements that "first make people laugh, and then make them think") this year, for showing how a food's taste can be affected by the sound it makes when eaten.

They found that potato chips that sound crunchier taste better.

This astonishing discovery is exactly what HKUST Associate Professor of Biology Dr King Lau Chow and Adjunct Associate Professor of Chemistry Dr Yeung Lam Lung are demonstrating at a credit-bearing course "Gastronomy". The course is the School of Science's General Education Program for non-science students.

In one of their lessons, students were subject to different audio signals— the sound of people eating crispy potato chips or vegetables and horses chewing grass— while they tasted potato chips blind-folded. Unmistakenly, students found their chips most delicious when they heard the crunchy sound of crispy potato chips.

As a general education elective, the course adopts a multi-disciplinary approach and tries to help students understand the different scientific concepts at work when foods are consumed.

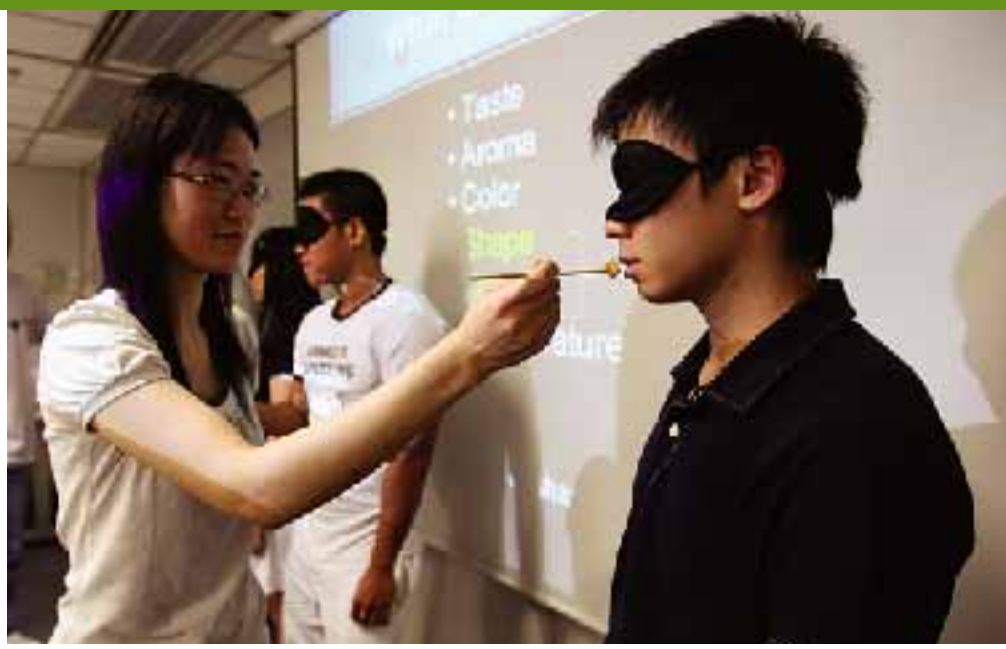
Today, eating has already evolved into a highly sophisticated art form in countries like China and Italy. Now comes the science of eating. While culinary cultures vary from country to country, there is always something in common in terms of how people evaluate a dish. "The better a dish can satisfy our multiple sensations, the more likely it will be termed 'delicious'," said Prof King Lau Chow who co-runs the course with Prof Yeung.

HKUST Biology Prof King Lau Chow explaining the science of eating to his students

Prof Chow cited Peking duck as an example. In terms of color, the reddish duck skin contrasts beautifully with the white bun, green cucumber and leek. In terms of taste and texture, the supple bun, crispy duck skin and fleshy duck meat are perfect complements to the crunchy cucumber and leek, with the latter giving out a strong, "provocative" flavor. The final dab of sweet sauce is the crowning touch, providing an additional layer of sensation to the diner's experience.

The art of food tasting is a highly sensual experience while food sciences encompass biology, chemistry, physics, psychology and even neuroscience.

First and foremost, food science is chemistry-biased. A good example is tea sampling. "Tea contains a chemical called tannin which is bitter and can only be dissipated by protein. As human beings cannot secrete enough saliva (which is protein-based) to drive away tannin's bitterness, we use milk to serve the purpose. The milk being added into tea takes away the bitterness while giving tea a smooth and soothing texture," said Prof Yeung.



Students are being given food to sample blindfolded.

Saliva actually serves a very important function in the eating process. The sensations derived from eating are elicited by our taste molecules, which dissolve in water - our saliva. "That's why when we are sick, we will find food tasteless. When we are subject to viral attack, our body cannot secrete enough water or saliva to support its proper functioning. As a result, we find most food bland and tasteless," said Prof Yeung.

Food is also heavily related to neuroscience. One of our most sought-after dream food—chocolate—contains a compound called Phenylethylamine (PEA). It releases feel-good chemicals called endorphins in the consumer's brain. Miraculously, PEA is also released by the brain when people fall in love. "Chocolate contains more than 500 natural chemical compounds, some of which are mood-elevating and pleasure-inducing. That's why chocolates and being in love make us feel good", said Prof Chow.

Yet food tasting is as deeply embroiled in psychology as it is in neuroscience, biology or chemistry. Observe a child's eating habit and you can more or less figure out his temperament or background. "If a child savors the dishes before rice, he would have come from a big and less affluent family where ample food supply is an issue," said Prof Yeung.

Prof Chow expanded: "There's a story of an American soldier who was held captive in China for years. During his stay, Chinese food became his regular cuisine. After he was released to his own country he felt nauseous whenever he caught sight of Chinese food. Chinese food invariably brought him back to his painful past when he was in captivity," said Prof Chow.

As this liberal discourse on food went on, it was easy for one to mistake Professors Chow and Yeung for another Jamie Oliver or Anthony Bourdain—but no. Both of them confess they are not picky at all when it comes to food. To spare himself the vexation of having to choose, Prof Chow had stuck loyally to spaghetti with chicken drumsticks for more than a year during his post-doctoral years. As for Prof Yeung, even his daughter knows that his only choice at the University Canteen is No 4—rice with barbecued pork.

This General Education Course from the School of Science, started with a grant proposal from Physics Department's Prof Michael Wong, has been very popular since its launch last spring. With the program's enrolment capped at 60, it was always fully booked. Students were fascinated by its cross-disciplinary, interactive and experimental approach, not to mention the adventurous journeys of sensations that the course walks them through during classes.

飲食科學與教授科學的藝術

來自意大利的 Massimiliano Zampini 和牛津大學的 Charles Spencer，兩位實驗心理學家，以食物被咀嚼時發出的聲音如何影響食物味道的理論，輕易取得今屆的搞笑諾貝爾獎（一個模仿諾貝爾獎，以讚揚一些「先讓人發笑，後讓人深思」的理論）。

他們發現，聽起來愈脆的薯片愈美味。

這個發現，正是科大生物學系副教授周敬流博士和化學系兼任副教授楊霖龍博士在學分課程「美食法」所示範的概念。課程隸屬由理學院開辦的通識教育課程，為非理科生而設。

在其中一堂課，學生要蒙上眼睛，聆聽不同的音效，包括：人吃薯片、蔬菜和馬兒嚼草。同一時間，他們會試吃薯片。不約而同地，所有學生在聽到吃薯片時發出的脆卜卜聲響時，都會認為正試吃的那種薯片最美味。

作為通識選修科，課程採納了多元教學法，以協助同學明白在美食背後所蘊藏的各種科學概念。

時至今日，某些國家如中國和意大利，已經把飲食發展成一門高度精緻的藝術。烹調文化因「國」而異，但在鑑賞菜餚時，我們始終有一些共通的看法。「愈能滿足人們感官的，愈有可能被稱讚『美味』，」周敬流教授說。

周教授援引北京填鴨為例。論顏色，亮紅的鴨皮、雪白的麵餅皮、翠綠的青瓜和嫩黃的韭蔥，形成強烈的對比。論味道和食材配搭，軟綿綿的麵餅皮、酥脆的鴨皮、肉質鮮美的鴨肉，與爽脆的青瓜和韭蔥配合得天衣無縫。最後沾上的甜醬料有畫龍點睛的作用，為食客提供另一層次的味覺體驗。

品嘗食物是高度複雜的感官經驗，並且是一項概括了生物、化學、物理、心理學和神經科學的學問。

首先，食物科學是偏向化學的。品茶就是一個例子。「茶含有一種成份名丹寧酸，味苦澀，只有蛋白質能中和它。人類不能分泌足夠的唾液（含蛋白質）去除掉丹寧酸的苦澀味，所以只好用牛奶。茶加了奶，除帶走了苦澀味之外，還會變得更香滑，」楊教授說。

在進食的過程中，唾液起了十分重要的作用。口感藉味蕾而來，而味蕾必須要在水（唾液）中，才能發生作用。「因此，我們生病時，會覺得食而無味。我們被病毒入侵時，身體水份不足，不能製造足夠的唾液。於是，我們覺得所有食物都淡而無味，」楊教授說。

Prof Yeung Lam Lung, another teacher of the course

食物和神經科學有千絲萬縷的關係。其中一種我們夢寐以求的食物——巧克力，含有一種名苯乙胺的複合物。它在人們的腦中釋放出化學物質胺多芬，令人覺得感覺良好。神奇地，人們在熱戀期，腦部也會釋出苯乙胺。「巧克力含有超過 500 種化學複合物，部分可提升情緒和令人感覺愉快。這正是吃巧克力和談戀愛都同樣使人快樂的原因，」周教授說。

美食學不但與神經科學、生物學及化學層層相扣，它與心理學也有非常密切的關係。觀察一個兒童的飲食習慣，你或多或少可推敲出他的性格或成長背景。「若小孩先吃菜餚後吃飯，代表他來自物質條件不佳的家庭，家人得不到充裕的食物，」楊教授說。

周教授補充：「曾經有一個故事，說有一個美軍被俘虜，留在中國多年。在這段期間，中式食品成為了他的日常飲食。後來他被釋放回美國，每次見到中國菜，他便會感到噁心，因為中國菜勾起他被俘的痛苦回憶。」

談到欣賞美食，我們不其然會以為周教授和楊教授是歐美名廚 Jamie Oliver 或 Anthony Bourdain 的中國版。但他們二人均坦承自己絕不挑食。周教授在博士後研究期間，有一整年的時間，為免除選擇食物的困惱，他都鍾情於雞腿意粉。至於楊教授，連他的女兒都知道，他最愛 LG7 第四號櫃位的叉燒飯。

這理學院通識課程，由物理學系的王國彝教授取得資助而得以設立，去年春季推出後，深受歡迎。60 個名額經常額滿。同學們為這跨越訓練、互動和實驗性的上課模式深深著迷，更不必說課堂上經歷的感官冒險旅程了。

Members of HKUST's Sustainability Committee

HKUST Makes Environmental

The site for the HKUST campus is an amazingly natural setting looking out over Port Shelter and the local islands. From the time of construction in the early 1990s, HKUST has valued this spectacular 'feng shui' setting and has considered environmental sustainability in its planning and development. Here are a few examples of HKUST's historical roots and on-going projects in the development of environmental sustainability, especially in the Facilities Management Office and the Health, Safety and Environment Office at HKUST:

- Using seawater for air conditioning cooling systems to save energy
- Minimizing paper waste by reducing, reusing, and recycling
- Recycling aluminum cans, batteries, styrofoam, printer cartridges, etc.
- Chemical exchange program for unwanted reagents
- Organic farming to utilize recycled food waste as fertilizer
- Garage sales and used book fairs to encourage reuse

During the last decade urgent environmental issues of global importance have emerged. Universities around the world are responding and providing some solutions to these problems of climate change, and the deterioration of our water and air. Several years ago, HKUST selected the environment as one of its five strategic areas for future development. HKUST has an opportunity to take a local leadership role in education and projects on our campus that involves both faculty and students.

In 2007, an Ad Hoc Environmental Sustainability Committee began to plan for the next phase of environmental sustainability at HKUST by completing a 'white paper' called "HKUST's Green Campus Initiative: A Sustainability Strategy". In this paper, they reviewed what we are presently doing and outlined some of the practices that some other campuses in North America and Europe have incorporated into the operation of their universities.

We launched the next phase of environmental sustainability by holding "Environment Week" last June. During the week, we had speakers from HKUST, sister institutions, the Government, the Mainland and overseas. These experts review their projects, actions and plans for the future. The week ended with talks from two Sustainability Directors from Harvard and Colorado Universities telling us of their successes in working with students and staff and introducing sustainability practices on their campuses.

To sustain this momentum at HKUST, we have set up a UAC Environmental Sustainability Steering Committee that will work with students, faculty, staff and alumni at HKUST to make a positive contribution to environmental sustainability and review options for action to reduce HKUST's own environmental impact. An inter-university sustainability committee has been set up to foster collaboration and exchange of ideas with our sister universities.

We are delighted to announce that HKUST has hired a Sustainability Officer, Calvin Kwan. He has just finished his PhD at UCLA and joined HKUST in January 2009. Calvin will work with faculty to facilitate the incorporation of sustainability issues into teaching and learning at HKUST. He will work with students to encourage them to apply their sustainability education to new innovations that help to green our campus and with staff to develop projects that improve our environmental performance on campus.

There are many exciting student led activities planned for 2008/09.

Launch of a new Student Sustainability Society – the HKUST Students' Union strongly supports the formation of this Society which will work with faculty and staff on new projects, teaching, student activities and community outreach.

Student hall life – it can provide a unique learning environment through weekly sharing sessions, hall or floor environmental competitions, raising the awareness of energy consumption and demonstrating renewable energy alternatives such as solar energy and wind energy.

Hang Seng Bank Green Ambassador Program – This is designed to foster the personal growth and leadership skills of 20 students to help enhance sustainability awareness on campus and in the community. To earn the Green Ambassador Award, students need to attend training sessions/lectures, develop and lead a community-based Green Project, help organize environmental events on campus, enhance their knowledge in environmental sustainability issues, and share this knowledge with other students on campus and in the community.

Hang Seng Bank Green Challenge Student Project Competition – there will be another student environmental sustainability poster competition similar to last year, with three categories: 1) final year projects, 2) HKUST campus innovative sustainability projects/improvements, and 3) interdisciplinary team projects involving 2 or more schools. The posters will be displayed and judged in early May 2009.

持續科大的美

Sustainability a Priority

by HKUST Sustainability Committee

Workshop on Facilitating and Promoting Sustainability in Student Learning – the workshop will cover what faculty are doing about sustainability issues in their courses and programs, their successes, challenges, and HKUST's future plans.

These activities, ranging from teaching and student-led projects to community out-reach, demonstrate that HKUST is taking up the challenge of playing a leadership role in Hong Kong in promoting environmental sustainability. By working together we can make it happen!

科大校園之美，來自天然。我們有青山、有綠水；有秋風 ，有春霧。故此我們出俊彥，產優秀 。

從九十年代初校園施工展開時，科大已十分重視科大的校園美，並考慮如何將持續環保概念注入計劃及發展的藍圖裡。以下是科大少數具有歷史根基並仍持續進行的環保概念發展計劃，由校園設施管理處和健康、安全及環境處兩個部門負責：空調冷卻系統使用海水來節能

- 通過減少使用、重用和回收，將用紙量降至最低
- 回收鋁罐、電池、聚苯乙烯泡沫塑料、打印機碳粉匣等
- 進行化學品交換計劃，處理不需要的測試劑
- 推動有機耕作，並使用廢棄食物作肥料
- 舉辦校園賣物會及二手書展，鼓勵循環再用

過去 10 年來，全球對環境保護的意識急速飆升；世界各地的大學紛紛對氣候變化、水質和空氣的惡化等問題作出回應和提供對策。數年前，科大選擇了環境作為未來發展的五大策略範疇之一。在教職員和學生的共同參與下，科大有機會在教育及校園研究項目擔當本地的領導角色。

2007 年，臨時持續環保委員會通過名為「科大綠色校園行動—— 持續策略」的「白皮書」，開始計劃下一階段的科大持續環保活動。白皮書檢討了目前進行的工作，並略述部分已在某些北美和歐洲的大學校園進行的措施。

去年 6 月，我們舉行「環保周」以展開持續環保的下一階段。在這星期，來自科大、相關團體、政府、國內及海外的專家，回顧他們的項目和活動，並為未來作出計劃。「環保周」以哈佛和科羅拉多大學兩位持續環保主管的講座作結束。在講座裡，他們分享了與教職員、學生如何合作取得成果，並介紹如何在校園持續實踐。

為保持這動力，科大成立了一個由學生、教學人員、職員及校友合力工作的 UAC 環保持續發展指導委員會，對環保持續發展作出貢獻，以及檢討哪些行動可降低科大對本身環境的傷害。同時，亦聯同多間姊妹大學聯合成立跨大學互動持續委員會，促進環保工作及進行交流。

科大聘用了關凱臨博士擔任持續發展計劃統籌。關博士於加州大學洛杉磯分校取得博士學位， 2009 年 1 月起履新。他會與教學人員合作，促使環保持續發展的議題融入教學。他將會與學生合作，鼓勵他們將持續發展教育應用在改革上，綠化校園；與職員合作發展新項目，提升校園的環保成效。

在 2008/09 年，有許多令人振奮的活動是由學生帶領策劃的。

學生持續發展學會成立——科大學生會全力支持這學會的成立，因學會將參與教學人員及職員的新項目、教學、學生活動和社區服務。

學生宿舍生活——透過每周分享環節、宿舍或樓層之間的環保比賽、提高能源消耗的意識和展示其他再造能源選擇，例如風力和太陽能，並提供一個獨特的學習環境，

恒生銀行環保大使計劃——培養 20 位學生的個人成長和領導技能，協助提高校園及社區的環保意識。要取得環保大使獎，學生須出席訓練或講座，發展及主導一個以社區為基礎的環保項目，協助校園策劃環保活動，提升關於環保持續發展項目的知識，並將知識傳播給同學及社區。

恒生銀行環保挑戰學生計劃比賽——和去年相似，會有一個以學生環保持續發展為主題的海報設計比賽，分三個類別：1) 年終計劃， 2) 科大校園創新持續計劃或改善；和 3) 超過兩間或以上學校參與的小組計劃。海報將於 2009 年 5 月初展出及評審。

促進及宣揚環保持續發展學生工作坊——工作坊如何將涵蓋環保持續發展事宜應用於教學上，包括：課程和計劃，其成果及遇到的挑戰，以及科大的未來計劃。

以上活動由教育開始；學生主導的項目跨入社區，顯示出科大在香港推動環保持續發展扮演領導的角色，並勇於迎接挑戰。只須同心協力，成功一定在望。

Some of HKUST's initiatives in environmental protection

❶ *Recycle bins on the Campus*

❷ *University members are encouraged to run their own organic farms to utilize recycled food waste as fertilizer*

❸ *A team of HKUST divers help collect garbage from the sea.*

Demystifying Islamic Finance

by Prof Rod Monger

By Prof Rod Monger, Adjunct Associate Professor in the Department of Accounting, and a Certified Islamic Professional Accountant. He had lived and worked in Dubai for two years before joining HKUST last year.

Hong Kong recently announced its intention to become a regional center for Islamic finance. Already, a handful of major transactions have been completed locally and another by the Hong Kong Airport Authority is being contemplated pending revisions to the local tax code.

Islamic finance is governed by the Shari'a, a component of religious law which binds Muslims. One tenet in Islamic finance is that risk and reward in commercial transactions must be shared, which means that a profit cannot be earned on lending money. So, for example, the Shari'a forbids the payment or earning of interest and financial instruments that depend on derivatives. This suggests that Islamic finance would not be able to participate in major components of conventional financial markets like fixed-income securities, or hedges and structured products.

However, Islamic finance has proved surprisingly adaptable, and in recent years many Shari'a- compliant transactions have been structured with the same or similar characteristics as those found in conventional products. Indeed, Islamic finance has found ways to participate in almost every nook and cranny of financial services.

Much of this innovation has been unleashed by sukuk which is often characterized as 'Islamic bonds' outside Islam. Sukuk is not debt but rather equal share ownership of assets with shared risk and reward, and is always paired with another Islamic transaction — typically, financing an asset purchase, leasing and certain investment partnerships (Murabaha, Ijarah, and Musharaka, respectively).

Sukuk brings two important advantages. First, it permits broader participation by investors since a major transaction can be divided into smaller shares. Second, sukuk can often be used, when combined with other Islamic transactions, to help create flexible financial structures that are acceptable under the Shari'a.

For example, Deutsche Bank created a Shari'a- compliant investment fund that allows investors to swap the total return on equities for a fixed return. A fixed return, especially if guaranteed as with interest on a conventional bond, would not ordinarily be Shari'a- compliant. Yet the Deutsche Bank transaction was structured so that the swap could occur, and the credit risk hedged.

Compliance is decided by Shari'a jurists who are qualified to give legal interpretations of Islamic law (fatwas). Not all Shari'a jurists agree on all issues, and in fact, some disagreement exists on certain points within the Deutsche Bank transaction.

In another case, Islamic finance was used by a Texas-based operator to finance production from leased oil reserves. The asset financed was production royalties, which under Islamic law would normally be inappropriate since they are a financial asset. But under Texas law royalties are regarded as real estate.

Estimates suggest that between HK$2.5 billion and $3 billion are currently invested in Islamic finance and are expanding at 15% per annum. Though this is only a small slice of global financial assets, many observers believe that the market could eventually be quite substantial especially considering that Muslims comprise one-fifth of the world's population.

Only 20 million Muslims reside in Hong Kong and China (about 1.5% of those populations). So the logical questions are why Hong Kong is interested in being a regional centre for Islamic finance and what role Islamic finance could play in China.

Part of the answer is that the Islamic Arabian Gulf (Bahrain, Kuwait, Oman, Saudi Arabia and the United Arab Emirates) have amassed an estimated $1 trillion in petro-dollars. Depending on the future price of oil, this amount could grow rapidly.

Not surprisingly, Arabs are interested in Mainland China because of the unparalleled opportunities to invest these funds. Many financial services professionals in these Arab nations believe that Asia — and China in particula — will account for the largest proportion.

Even with excess liquidity of its own, China is likely to be interested in investment opportunities in Islamic finance for reasons of diversification especially considering losses recently sustained on its US holdings. Islamic finance offers a powerful channel for foreign direct investment both ways — Islam to China, and China to Islam.

Hong Kong therefore has an impressive opportunity to position itself as the financial services platform for Islamic finance in Asia, basically brokering relationships between Muslim and Chinese investors. In the bargain, Hong Kong offers something that Islamic finance sorely needs — a deepening of markets and liquidity for Islamic products.

揭開伊斯蘭金融的神秘面紗

作者孟德教授(Prof Rod Monger)是科大會計學系兼任副教授，也是特許伊斯蘭專業會計師。在去年加入科大前，他在杜拜工作兩年。

最近香港政府宣布有意將香港發展為區內的伊斯蘭金融中心。迄今為止，香港已完成了多宗有關的大交易，而香港機場管理局亦正等待本港修訂稅法，屆時可望促成另一宗大交易。

稱為沙裡阿（Shari'a）的伊斯蘭教教法是伊斯蘭法律的一部分，也是規管伊斯蘭金融的法典；其中一項信條是商業交易各方須分擔風險、共享回報，即不得放貸牟利。舉例說，沙裡阿禁止支付或賺取利息，亦不接受以衍生產品構建的金融工具。換言之，伊斯蘭金融不可買賣傳統金融市場上的大多數投資工具，包括固定收益證券、對沖基金及結構性產品。

然而，伊斯蘭金融其實適應力很強，出人意料。近年來，遵照沙裡阿締結的交易為數不少，其特徵與傳統產品頗為相似甚至相同。事實上，伊斯蘭金融現已能夠參與金融服務的許多環節。

種種創意主要是拜蘇庫克（sukuk）所賜，意即伊斯蘭以外的「伊斯蘭債券」。蘇庫克並非債務，而是根據分擔風險、共享回報的原則攤分資產的業權，通常伴隨另一項伊斯蘭交易進行——這些伴隨的交易通常指提供融資進行資產收購、租賃及若干投資合夥活動（分別稱為穆拉巴哈（Murabaha）、依加拉（Ijarah）及穆沙拉卡（Musharaka））。

蘇庫克具有兩大優點：一是可讓投資者參與更廣泛的交易，因為一宗大交易可分割成多宗小交易；二是可與其他伊斯蘭交易結合使用，有助創建沙裡阿允許的靈活金融結構。

例如，德意志銀行創立了一項符合沙裡阿規定的投資基金，可讓投資者把股票投資回報總額掉換成固定回報。沙裡阿通常不允許有固定回報，特別是一如傳統債券利息的保證固定回報，更在被禁之列。然而德意志銀行的交易結構，卻既可進行前述掉換，又可對沖信貸風險。交易是否合規，要由合資格的沙裡阿法學家根據伊斯蘭法律作出法律詮釋（稱之為 fatwas，意指「教令」）。沙裡阿法學家不會事事看法一致；事實上，他們對德意志銀行交易內的某些要點就存在分歧。

再看另一個案，美國德克薩斯州一家營運公司借助伊斯蘭資金開採其租賃回來的石油儲藏。獲融資的資產屬生產使用費；根據伊斯蘭法律，這種使用費一般並不恰當，原因是其性質為金融資產。然而，根據德克薩斯州法律，使用費被視為不動產。

根據估計，目前投資於伊斯蘭金融的資金約 25 億至 30 億港元，並以每年 15% 的速度增長。對比全球金融資產，儘管這個金額僅屬一小部分，但觀察家卻認為由於伊斯蘭信徒佔全球人口五分之一，伊斯蘭金融日後的市場規模不可小覷。

香港和中國內地合計只有 2,000 萬名穆斯林（約佔全球穆斯林 1.5%）。試問香港為何一心想成為伊斯蘭金融的地區中心？伊斯蘭金融在中國能扮演甚麼角色？

其中一個答案是：信奉伊斯蘭教的阿拉伯國家（巴林、科威特、阿曼、沙特阿拉伯及阿聯酋）估計已累積了 10,000 億石油美元；若未來油價上升，上述金額可能會迅速增長。

毫無疑問，阿拉伯國家有興趣投資中國，因為內地蘊藏無比商機，是這些資金的絕佳出路。這些阿拉伯國家不少金融服務專家認為，亞洲特別是中國勢將成為他們最主要的投資對象。

而中國本身即使已流動資金過剩，也很可能因為要實現投資多元化而對伊斯蘭金融的投資機遇產生興趣。特別是近年中國所持美元資產蒙受虧損，伊斯蘭金融可說是一個強而有力的管道，方便伊斯蘭與中國彼此進行雙向的對外直接投資。

因此，香港實在可以把握良機，定位為伊斯蘭金融在亞洲區的金融服務平台，擔任伊斯蘭國家與中國投資者之間的中介角色。再者，香港還擁有伊斯蘭金融最渴望得到的條件：一個運作成熟而且資金充裕的市場，供伊斯蘭產品大展拳腳。

HKUST's Gift for the Gifted

Full many a gem of purest ray serene
The dark, unfathomed caves of ocean bear,
Full many a flower is born to blush unseen
And waste its sweetness on the desert air

'Elegy Written on a Country Churchyard' by Thomas Gray

What is Giftedness?

The applicants for HKUST's Enrichment Program for Science Talents have to sit for a personality test with the following question:

"If you can change ONE thing about the world, what would you like to see being changed?"

One of the applicants answered: "I would like to demolish the entire world and have it started all over again."

According to the brain behind School of Science's offering of gifted programs and Head of Physics Department Prof Tai Kai Ng, outrageous as it may seem, such "outrageousness is exactly a personality feature that defines giftedness. Gifted youngsters always display unconventional, out-of-the-box thinking," said Prof Ng.

Personality test aside, HKUST School of Science also uses a myriad of many other tools to assess applicants' suitability for its gifted programs — including subject-specific written tests, IQ test results, evidence of students' academic performance at school, and recommendations and references from principals, teachers and parents.

According to the existing British and American standard, children achieving an IQ test score of 130 or above are considered gifted. Based on this criterion, about 2-3 percent of all student population in Hong Kong is estimated to have achieved that score.

HKUST's Gifted Programs

HKUST started its educational initiatives to help the gifted and talented in Hong Kong in 2001 when the Government's Education and Manpower Bureau formalized its efforts in gifted education by launching "Support Measures for the Exceptionally Gifted Students Scheme". In support of the Scheme, HKUST has been running a full array of gifted programs in collaboration with the Education and Manpower Bureau (currently known as Educaton Bureau), including:

Mathematics
Saturday School for Gifted Students in Mathematics (a credit-bearing course); Basic Mathematics Enrichment Course and Saturday School for Gifted Students in Mathematics - Student Tutors Training Workshops

In addition, the School will produce a one-and-a-half year online mathematics course for gifted students identified by the Education Bureau. Currently more than a thousand gifted students have enrolled for the course.

Physics
Hong Kong Physics Olympiad — Pre-Olympiad Workshops and Physics Enhancement Program and Hong Kong Physics Olympiad - Physics Enhancement Program.

Other subjects
General Education Course - Exploration of life (a credit-bearing course); a Credit-bearing Course on Marine Sciences ; University-based Multi-disciplinary Study Projects and Cyber Learning and Mentoring Platform.

In 2005, HKUST School of Science's Education Development Program Unit began to launch its own enrichment programs for gifted primary and secondary students:

Primary	**Kids@ust**
Secondary	**Just Science**
	Walk into the Pearl River Delta
	Enrichment Program for Science Talents
	General Knowledge Lectures

One of the programs, the Enrichment Program for Science Talents, is aimed at providing comprehensive pre-university level Science and Mathematics training for gifted secondary school students aged 11 or above. Participants are arranged to take a series of basic core courses before being "promoted" to more advanced courses. They are also encouraged to take electives for stimulating their interests and broadening their knowledge base.

Outstanding students will be guided to work on investigative projects that last up to 6 months.

World Class Arena

Launched in 2001, World Class Arena is run under the aegis of the British Government's Department for Education and Skills for nurturing and assessing gifted

Programs for Precocious Students

by May Cheung

talents. At its core are the international World Class Tests in Mathematics and Problem Solving for students aged between 8-11 (senior primary) and 12-14 (junior secondary). Comprising both paper and computer-based tests, they are conducted twice a year in April and November in more than 20 countries or regions.

The Tests were first introduced to Hong Kong in 2004. Starting in 2008, HKUST has become the Tests' Asian Center for promoting and administering the tests in the Asian region.

In Hong Kong, the 2008 April and November tests have drawn close to 4,000 youngsters from around 400 primary and secondary schools. Most students were recommended by their schools to take the Tests on the basis of their outstanding performance in Mathematics and related subjects at school.

Out of the many achievers in the Tests, 9-year-old Yiu Chun Lok from Tai Po was named recipient of the "Youngest Outstanding Candidate Award" in the WCT in April 2008 .

As the youngest among all double distinction (in World Class Test's Mathematics and Problem Solving) scorers , Chun Lok said he enjoyed doing the Problem Solving Test better than Mathematics because "it was fun". His precocity in Mathematics was recognized very early by his father who observed that his son loved to engage in self-devised mathematical quizzes as young as 6. Now at 9, he is already challenging himself with mathematical problems at secondary school levels — including logarithm, geometry and algebra.

Mr Tony Lam, Director of the World Class Test Asia Center at HKUST, views the Tests as having an enormous potential for expansion in Asia. "Our outreach efforts in Asia are helping to build up WCT's brand name in the region. More and more gifted students from the Mainland, including Beijing, Shenzhen and Foshan have access to the Tests, and schools in Macau, Taiwan, Korea, India, Malaysia, Singapore, and Vietnam are expressing great interest in recommending their students to take the Tests.

Talented Youth Summer Program

HKUST started to launch a summer program in 2005 - Summer @ UST - to attract top students of grade 10 to 12 (F4 to F6) from around the world to attend a credit-bearing program at HKUST.

Drawing on the success of this experience, the University has decided to upscale the offer of summer program to a more selected group of gifted high school students with a re-structured 3-week Talented Youth Summer Program launched in July 2008.

With a core program called "Accelerated Societal Development Through Science and Technology" and four electives - Critical Thinking, Global Climate Change and Energy Issues, Introductory Game Theory, and Frontier Techniques in Biotechnology, the program was attended by 60 grades 10-12 youngsters from 10 countries. They were taught by a 6-member teaching team from the University and a guest instructor from Stanford University.

❶ - ❹ *Snapshots of HKUST' School of Science's programs for the gifted in progress.*

At the signing ceremony between HKUST and Johns Hopkins University Center for Talented Youth: (from left) Director of HKUST's Summer Youth Program Prof Nelson Cue; HKUST Vice-President for Academic Affairs Prof Roland Chin; Dr Charles Rowins Ms Elizabeth Albert from Johns Hopkins University Center for Talented Youth

The program combines lectures, laboratory experiments and group projects

Research shows that gifted children can do better academically when they work with other gifted children. These programs help to bring like-minded gifted students together, foster emotional and intellectual exchanges and ease their sense of isolation, as some of the participants commented at the graduation ceremony of HKUST's Talented Youth Summer Program 2008 (TYS@UST 2008).

Almost without exception the participants viewed "getting to know people from all parts of the world" as the best part about TYS@UST 2008.

"I enjoyed meeting people here — some of the friends I met here would be my friends for life," a student from Thailand declared. He valued the exchanges he had with his peers in the Program. As a devout Buddhist he had been through some rigorous discussion with his Christian peers on their religious beliefs, which in turn has prompted him to reexamine his own religious convictions.

The participants also treasured the intellectual challenges posed by the program. As one of the participants said, "Here are some of the things that will define you as a true TYS@UST 2008 student - Every time you see your cat, or your friends' cat fidget with a ball of yarn, you will be forever haunted by the theory that the world is really ten dimensional, or so says the mathematics of string theory. And that the next time you see a pair of twins, you will be so excited to ask them, 'Who do you think will be younger if one of you flew to space?'"

Joint Summer Programs with Johns Hopkins University Center for Talented Youth

Encouraged by the success of the Talented Youth Summer Program, the University will run an additional junior program for the 12 to 14 age group in this summer through teaming up with Johns Hopkins University Center for Talented Youth (JHU CTY), one of the most respectable gifted program providers in the world.

Students will be admitted based on their SAT or World Class Tests scores. SAT candidates must be able to obtain SAT scores which satisfy CTY's admission requirements for different grades of study, and World Class Tests candidates should have won at least one distinction to qualify for the 2009 summer program in Hong Kong.

SAT is now commonly used by Johns Hopkins and many gifted education centers as an effective tool in assessing giftedness. According to the late Dr Julian Stanley (1918 - 2005), a widely recognized expert on gifted education who established Johns Hopkins' Center for Talented Youth in 1979, SAT was found "to have especially strong predictive value because they (students) did well on it only with great 'brain power', not by having been taught or coached at length."

Set to kick off on July 12, 2009, this 3-week program provides opportunities for gifted youngsters to specialize in one of the subjects under three streams of studies - Mathematics and Computer Science. Science and Writing—allowing students to explore subjects they have little access to in their everyday classroom setting, including Cryptology, Mathematical Logic, Mathematical Modeling, Probability and Game Theory, Fundamentals of Computer Science, Astronomy, Faced-Paced Upper School Biology, Fast-Paced Upper School Chemistry, Electrical Engineering, Introduction to Biomedical Sciences, and Neuroscience.

As intellectual challenge and interests are the key components for quality gifted education programs - this joint undertaking between HKUST and JHU CTY guarantees an abundance of both.

Students for the writing course, for example, will explore the issues of self identity and one's ties with humanity through traversing Elizabeth Bishop's poem *In the Waiting Room* written in the eyes of a 7-year-old girl. Students who have opted for Neuroscience will be able to go into the worlds of people afflicted with Tourette's syndrome, autism, parkinsonism, phantom limb syndrome, musical hallucination, retardation and Alzheimer's disease—through Oliver Sacks' brilliant yet human recast of some of the cases he handled as a neurologist in *The Man Who Mistook His Wife for a Hat and Other Clinical Tales*, a bestseller released in 1985.

As gifted students normally thrive in an experiential and interactive learning environment, the Program is expected to hold not more than 20 students in one class. With the help of teaching and residential assistants from HKUST, instructors with extensive experience in gifted education would be flown in by JHU CTY to provide the most intellectually stimulating learning experience to some of the ablest youngsters from Asia.

與天比高
科大的資優課程

The program will also embrace a wide range of activities outside the classroom, such as sports, games, dances, movies and a talent show.

"By joining hands with Johns Hopkins University's Talented Youth Center, we hope we could identify young prodigies in Asia and help them extend their talents to the full. It's an enormous waste of human resources if our youngsters' precocity remains unshovelled," said HKUST's Deputy to the President Prof Roland Chin who has helped seal the bonding between HKUST and JHU CTY.

Spontaneous Efforts Growing into Massive Undertakings

The University's offering for the gifted is a sound testimony of how spontaneous educational initiatives can gather momentum to develop into full-blown global ventures for target audience of diverse interests and levels.

"At the beginning we only expected to engage our colleagues in some meaningful endeavors to help the school kids in Hong Kong. Programs targeted at the average students were plentiful and so didn't warrant our involvement. Running courses for the mentally challenged posed too huge a challenge to us as we knew pitiably little about this target group. What was left was the gifted and talented who could have been ignored and we feel more confident coping with this group of youngsters," said Prof Cheng Shiu Yuen, Dean of the School of Science.

甚麼是「資優」？

主辦《數理優才增益課程》的科大理學院為申請者設計了一項測試，其中包括了以下的問題:

「若果你可以令世界改變，你會改變甚麼？」

其中一名申請人這樣回答：「我要把世界毀滅，讓一切重新開始。」

科大物理學系系主任吳大琪教授，亦是理學院為中小學生安排同類課程的總設計師，認為上述答案確實是有點兒「出軌」。「不過，思想離經叛道，不按常理出牌，卻又往往是資優兒最常見的性格特點，」吳教授解釋道。

除了性格測試，理學院還使用不同方法和工具來測試申請人是否如假包換的資優生，包括學科測試、申請人的智商測試成績、學業成績証明和校長、老師及學生家長的推薦等。

根據現行美國及英國的標準，只要兒童的智商達 130 已屬資優。若根據此標準，全港約有 2% 到 3% 的學童為資優兒童。

香港科技大學於 2001 年開始參與培育資優學生的工作。香港政府在 2001 年推出「特別資優學生培育支援計劃」後，科大開始與教育統籌局緊密合作，推出一系列為資優中學生而設的課程，包括：

數學
週末數學特訓課程（科大學分課程）；
基礎數學增益課程；
週末數學特訓課程之「學生導師培訓工作坊」

除此之外，理學院亦為教育署的網上資優數學課程，設計及編撰教材，課程為期年半，已有過千學生報讀。

物理
香港物理奧林匹克：賽前培訓；
香港物理奧林匹克；
物理培訓課程

其他科目
通識教育課程：生命的探索（科大學分課程）；
海洋科學學分課程；
名師教研計劃；
網上名師啟導學習平台

自 2005 年開始，科大理學院的教育發展組更推出獨家資優課程，讓全港中小學生參加：

小學生	小朋友 @ 科大
中學生	數理互動工作坊 走進珠三角 數理優才增益課程 通識講座系列


Gifted students thrive on experiential learning, pictures show students from the "Walk into the Pearl River Delta Program" at field trips to South China



❶-❸
Snapshots of School of Science's myriad gifted programs on offer

其中為中學生而設的《數理優才增益課程》旨在為十一歲或以上的中學生提供廣泛的數理訓練。學生必須在完成核心課程後，才可以晉級就讀進階課程。此外，學員亦可以依個人意願選擇合適的選修科就讀。

表現傑出的學員將有機會參與由科大導師帶領，為期可長達六個月的研究計劃。

世界數學測試

世界數學測試由英國教育與就業部於 2001 年推出，用以評核及培育資優學童的數學及解難能力。考試每年於 4 月及 11 月於世界逾 20 個國家或地區舉行，分數學及解難兩科，對象為 8-11 歲（高小）及 12-14 歲（初中）兩個組別的學生。

世界數學測試在 2004 年在香港首次舉行。自 2008 年開始，科大成為該試的亞洲中心，負責推廣及安排考試事宜。

去年有超過 4,000 名中小學學生參加世界數學測試。他們來自全港約 400 間學校，由於在學校的數理科表現傑出，獲校長推薦參與考核。

在眾考生當中，來自大埔舊墟公立學校（寶湖道），年僅九歲的姚俊樂在 4 月份考試的數學及解難兩科均取得優等成績，成為年紀最小的雙優生。在兩科中姚俊樂表示較喜歡解難一科，因為這科考試「有趣好玩」。其實姚俊樂在數學方面的天分，在六歲甚或更早時候，經已顯露。小俊樂經常沉醉於設計各式各樣的數學題目，自問自答，樂在其中。現時就讀小五的俊樂，閒時最愛以中學程度的數學難題挑戰自己 - 包括幾何、三角及對數表等。

世界數學測試亞洲中心主任林惟良認為，世數在亞洲有極大的發展潛力。「我們早前到亞洲進行的巡迴推廣之旅，為世界數學測試打響了招牌。現時北京、深圳及佛山的學生都可以參加這個考試，而不少在台灣、韓國、印度、馬來西亞、新加坡、越南及澳門的學校，在聽過簡介後，都表示這個考試很有意思，會向學生推介。」

優才生暑期課程

科大對資優生的關注，除了考核外，還有培育——我們透過測試，考核優才；透過資優課程，培育優才。

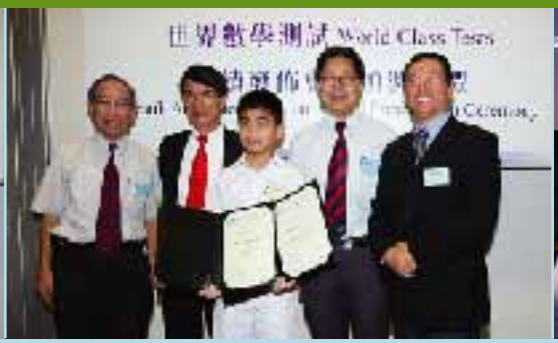
科大在 2005 年開始舉辦暑期學分課程，對象為來自世界各地，就讀第 10 至 12 年級（中四至中六）的高中學生，甚為成功。有鑑於這個課程的成功經驗，科大決定乘勝追擊，為資優高中生度身訂造一個為期三星期的資優課程，於 2008 年 7 月首度推出。

這個課程除了必修科「科技與社會發展」外，還有批判性思考、全球氣候變化和能源問題、博奕理論導讀、及生物科技的技術前沿等四個必修科，吸引了來自 10 個國家共 60 位同學參加。負責教授工作的除了科大六名教授外，還有來自美國史丹福大學的學者。

除了上課外，學員還可以透過實驗及小組習作，分析科技如何在歷史長河中推動社會發展。

研究顯示，假若把資優兒集中一起學習，其學習效果將會大大提高。他們需要與一班同聲同氣的資優同類，聚在一起，共同學習、彼此激勵，以減輕自己的孤絕感。而科大 2008 年優才生暑假課程部份學員的感受，正好反映上列觀點。

HKUST School of Science's Prof T K Ng with 9-year-old Yiu Chun Lok, a double distinction achiever at April's World Class Tests



Prof Paul Chu (2nd from left), Director of World Class Test Asia Center at HKUST Tony Lam (right) at the prize presentation ceremony

HKUST Prof Edmund Chiang is closely involved in analyzing World Class Tests' results

大部份學員認為課程最優勝的地方，是讓他們「認識來自世界各地的友人。」

「這個課程讓我交了不少可以維繫終生的摯友。」一位來自泰國的參加者非常認真的表示，他再次強調「終生」兩字，令人感動。作為虔誠佛教徒的他，曾經就信仰問題與基督教友伴多次激辯，並因此而反思自己的信仰。

學員承認這個課程略為艱深，但享受課程帶來的腦力震盪和挑戰。正說一名學員說：「假如你符合下列的描述，那你就不折不扣是個 TYS@UST 2008 人了（TYS@UST 即優才生暑期課程英文簡寫）！——每次你看到家裏或朋友的貓把玩毛線球時，就不禁浮想連篇——想起數學弦論中世界原本是一個 10 面體的論點；又或者你在碰見一對雙生兒時，你就會情不自禁上跑上前痴痴地問，『假如你們兩人中一人飛向太空，回到地球後，誰會是較年輕的那一個？』」

與約翰斯霍普金斯大學青少年優才中心合辦資優課程

在 2009 年暑假，科大除了繼續舉辦優才生暑期課程外，還首次與世界知名的資優青少年培訓學院——約翰斯霍普金斯大學青少年優才中心——合辦專為 12 至 14 歲青少年而設的資優課程。

申請入讀的學生必須要在 SAT 取得符合中心釐定的分數，又或者在世界數學測試取得最少一科優等成績。

除了約翰斯霍普金斯大學的青少年優才中心外，不少美國頂級大學的資優青少年訓練學院，均以 SAT 成績為取錄學生的標準。為甚麼？因為正如在 1979 年創辦約翰斯霍普金斯大學青少年優才中心、已故著名資優教育學家 Dr Julian Stanley（1918-2005）所說：「在 SAT 考試取得優異成績的學生，並非由於有人從旁指導，而是靠考生異於常人的『腦力』，所以 SAT 確可以為我們評核學生的潛力，對學生未來的表現，有預知和啟發作用。」

課程將於 2009 年 7 月開課。課程共分三大單元——數學及電腦科學、科學及寫作等。學員可以在三個單元中依個人喜好選科，並修讀一些大部份學校沒法提供的科目，包括密碼學、數理邏輯、數理模型、概率及遊戲理論、電腦科學基礎理論、天文學、快速高校程度生物、快速高校程度化學、電子工程、生物醫學初階、神經科學及寫作等。

為資優學生而設的課程，若要滿足學員的要求，必須具備兩個條件——具備足夠的難度而且有趣好玩——令人欣慰的是，JHU CTY 課程兩者兼備。

參加《寫作》單元的學員將會透過伊利沙白・庇素的詩作《等候間》探索個人身份認同、以及個人與人類的聯繫等問題。《等候間》是作者以一名七歲小女孩的身份寫成的詩作。而選擇《神經科學》單元的學生，將可以透過解構奧利華・索斯（Oliver Sacks）於 1985 年出版的暢銷書《把妻子誤當帽子及其他醫學個案》，探索飽受各式頑疾煎熬病人的內心世界——包括自閉症、柏金遜症、杜萊德氏綜合症、幻肢痛、音樂幻覺、老人癡呆症及發展障礙等。奧利華・索斯是一名神經病學家，書中所收錄都是他處理過的醫療案例。

資優學生在學習時最愛親自探索及體驗，亦珍惜與人討論和交流的機會。為此，課程以小班教學為主，每班僅收 20 人。課程的導師由 JHU CTY 招聘，資優教學經驗豐富。他們特別由美國飛到科大任教，並在教學助理（由科大同事擔任）協助下，帶領一班來自亞洲的尖子進行深入有趣、並極富挑戰性的學習體驗。

課程亦包括一系列課外活動，例如運動、遊戲，舞蹈、戲劇及天才表演。

玉成這次科大與 JHU CTY 合作的香港科技大學首席副校長錢大康教授，對這個課程寄以極大厚望，「我們希望藉著這次與約翰霍斯普斯金青少年優才中心的合作，在亞洲發掘出潛質優秀的頂尖人才。假如這些年青人的才具，像璞玉埋於泥土中，終其一生未被發掘，那是極大的資源浪費，令人惋惜。」

無心插柳 柳成蔭

上列有關科大資優課程的描述，足以證明——原來無心插柳的好人好事，往往會發放「正」能量，牽引其他「好人」加入，令雪球愈滾愈大，使事情成為備受矚目、具國際水平的教育項目、令來自世界各地、不同年齡、不同級別的尖子受惠。

「其實我們最初的動機至為單純——我們只想做一點有意義的教育工作，扶助本地的學生。在市面上為一般學生而設的課程多不勝數，不用我們費神。至於特殊學生，我們對這類學生的認識幾近於零，要我們因材施教，實在力有不逮。剩下來而我們尚可勝任的，就只有資優兒一族。就是這樣，我們就踏上了資優教育的不歸路，」理學院院長鄭紹遠教授笑說。

Synthetic Biology

Real Life Benefits

by May Cheung

Elliott wakes up in the morning to get ready for work. After taking a shower, he examines his clean, clear face in the mirror, deciding that he can probably wait another month before re-applying the bio-spray that keeps his skin pores clean and renders shaving unnecessary. The spray contains skin surface bacteria engineered to eat dirt, oil, and dead skin, as well as dissolve the keratin in facial hair, while keeping the skin intact. They also prevent colonization by foreign bacteria that can cause infection of pores in skin, which creates acne.

Elliott walked downstairs to the table for breakfast. He had a bowl of cereal and milk, along with a spicy southwest omelette and some sausages. Eating was always an enjoyable experience. Elliott used to be wary of many foods, as he was prone to frequent indigestion, especially from spicy foods or dairy products. But since his visit to the dietician earlier this year, those problems have become a thing of the past. After analyzing his symptoms, the doctor selected a digestive commensal from the Biobricks 3000 catalog which had been modified to suit his dietary needs. Now, lactose and the irritating chemicals in most spicy foods are broken down with ease in his stomach, before they can cause any physical distress. An added benefit was that he no longer had to worry about food poisoning. The new commensals specifically targeted and killed any pathogens from a long list of possible food contaminants, and could even neutralize the toxins these bacteria produced. Elliott relished his new state of permanent gastrointestinal bliss.

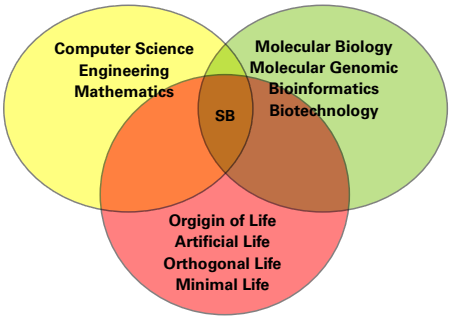
Synthetic biology - A Life-tampering oxymoron

The above excerpt from *www.syntheticbiology.org* relates how advances in synthetic biology have helped erase petty inconveniences in our lives— from face-cleaning sprays that clear facial hair and acne, to chemicals that can help ease indigestions or food poisoning. Yet, despite the promises synthetic biology seems to hold for mankind, it is still a controversial subject eyed with disbelief by skeptics.

Some are concerned about this human attempt to tamper with life. Others feel that, without proper regulatory oversight, this immense power to "create" artificial life in the laboratory will invite disaster. Such fears have prompted the late Michael Crichton to depict in his thriller *"Prey"* how a bunch of nanobots created from bacteria swarmed and eventually went out of control.

Engineering lives through biological means

Since the term "synthetic biology" was first coined by Polish geneticist Waclaw Szybalski in 1974, who foresaw that molecular biology techniques would allow scientists to manipulate genomes, synthetic biology has become a subject that is increasingly mesmerising specialists and laymen.



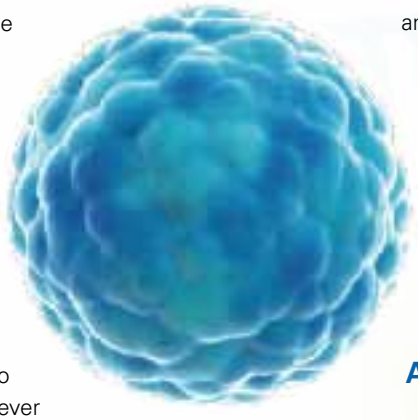
Synthetic biology is about the redesign of existing biological systems or the design and construction of new biological parts that do not exist in the natural world. At the core of synthetic biology is the belief that all the constituent parts of life can be made synthetically, engineered and assembled to produce working organisms. In these synthetic biological processes, scientists can just add, subtract or alter the tiny units that make up DNA in a gene.

With just a laptop computer, published gene sequence information and mail-order synthetic DNA, scientists can start constructing genes or entire genomes from scratch. The Massachusetts Institute of Technology's Registry of Standard Biological Parts, for example, has made free DNA sequences of many of the "parts" used to assemble their genetic circuit available to any interested parties. This registry is currently run by the MIT-led BioBricks Foundation.

Synthetic biology versus genetic engineering

We tend to mix up synthetic biology with genetic engineering. While synthetic biology as a research subject was born in the 80's, genetic engineering was started 35 years ago. According to Rob Carlson, a synthetic biologist and senior scientist in electrical engineering at the University of Washington, "Genetic engineering techniques are abysmally primitive, akin to swapping random parts between random cars to produce a better car."

Offers



Genetic engineering is about the manipulation of DNA with comparatively crude tools to construct relatively simple genetic programs. It involves introducing a gene here and there and does not result in any fundamental or massive changes to the DNA. With the technologies made possible by genetic engineering, scientists can enhance the resilience of a tomato plant to pesticides but they can never turn the plant into a fundamentally different product. Synthetic biology, on the other hand, is like having someone hack into a computer to reengineer a brand new program. It concerns the rearrangement of genes on a much wider scale, that of a genome, or an organism's entire DNA program. Such genetic programming, once inserted into bacteria or yeast, will churn out the expected product.

Synthetic Biology 4.0 International Conference in Hong Kong

To raise awareness and stir interest among local and overseas scholars and officials in synthetic biology, researchers, both local and overseas,including HKUST's Prof I-Ming Hsing from Chemical and Biomolecular Engineering Department and Prof King Lau Chow from Biology Department, joined hands with the MIT-based Biobricks Foundation in organizing Synthetic Biology 4.0 International Conference in Hong Kong. It took place on HKUST campus in October 2008.

The International Conference on Synthetic Biology is by far the most influential conference on the subject. This is the first time this reputable International Meeting was held in Asia, thanks to the support from the Croucher Foundation and Innovation and Technology Commission. The event attracted more than 500 participants from over 15 countries who converged on our campus to discuss and share their views on various aspects of synthetic biology, such as: research, education, investment, industrial applications in energy, green manufacturing, agriculture, drug production, and medicine. The event's closing ceremony was presided over by Hong Kong SAR Government's Financial Secretary Mr John Tsang.

Advances in Synthetic Biology

Synthetic biology is being touted by scientists and venture capitalists as "the next big thing", which could hold the key to solving issues vital to our existence—advances in medicine, health care, energy and green production.

Medicine

Jay Keasling, a synthetic chemist from UC Berkeley, was at the Conference in Hong Kong. His team have engineered yeast cells to produce Artemisinin to treat malaria.

Prof Jay Keasling (center) at Synthetic Biology Conference 4.0 held on HKUST campus

Artemisinin has been considered an effective cure for malaria. Extracted from a plant called sweet wormwood (Artemisia annua), laboratories have attemped to synthesize the compound chemically. But Artemisinin is costly and in short supply, and the endeavor has proved to be incredibly difficult.

Prof Kealing and his team are trying to introduce the plant enzymes of sweet wormwood into brewer's yeast, as the end product has the same properties and effects as Artemisinin, but at only a fraction of the cost for its production.

改造基因 建構生命
合成生物學初探

Anti-pollutants

Some living species are very sensitive to pollutants. Taking advantage of the natural self-defense mechanism as a sensing system, some bacteria are embedded with DNA encoding light emitting proteins. When they come across heavy metals or toxin, the cells will emit fluorescence.

Engineered organisms and biological structures can be re-engineered to serve as sensors and detection systems. These detection capabilities might be further enhanced to degrade and destroy dangerous substances, such as contaminating petroleum and sewage sludge, and turn them into less harmful or even useful products.

Looking into the future

The strides synthetic biology has made in the recent years have been such, that it would unquestionably have an enormous impact on our future. There is growing interest among the University's faculty members in conducting research on bio-engineering or synthetic biology. Like other synthetic biologists worldwide, their primary concern is to harness the beauty and versatility of life through reengineered DNA programs, including tapping into new sources of energy and fuel, discovering a cure for deadly diseases and eliminating the environmental hazards that exist in our world.

李奧圖早上醒來，準備梳洗上班。沐浴過後，他一邊檢視鏡中潔淨白皙的面孔，一邊考慮或許可以再過一個月，才使用生物噴霧保持毛孔清潔及防止鬍子生長。噴霧含有表皮細菌，可吞噬污垢、面油及死皮，溶解面部毛髮的角質蛋白，保持肌膚嫩滑。噴霧所含成分亦可防止會引致毛孔感染的外來細菌入侵，避免暗瘡形成。

李奧圖到樓下的餐桌進食早餐。他先吃了一碗牛奶麥皮，再吃了一份富有美國西南部特色的辣奄列及幾條香腸。品嚐美食是教人滿足的體驗。李奧圖以往必須戒口，因為他很容易消化不良，尤其是辛辣食品及奶製品。但自從今年初諮詢營養師的意見之後，問題便迎刃而解。醫生先分析他的徵狀，然後從「生物磚塊」的3,000個目錄中選出有助消化的共棲體，再進行特別調較，來滿足李奧圖的需要。如今，乳糖及大部分辛辣食品所含的刺激性化學物質在尚未引發任何問題之前，已經被李奧圖的胃部輕易分解。另一個好處是，他不用再擔心食物中毒了。新的共棲體會特別對準各種可能被污染食物產生的病原體，然後將病原體殺死，甚至可中和這些細菌生產的毒素。李奧圖對自己能夠保持腸胃持久健康，感到十分高興。

Hong Kong SAR Government's Financial Secretary John Tsang enjoys a casual chat with Prof Roland Chin before he officiates at the closing ceremony of the Synthetic Biology 4.0 International Conference

合成生物學 - 企圖改寫生命？

上文摘錄自 *www.syntheticbiology.org*，當中講述合成生物學的發展如何幫助我們解決日常生活中的諸多不便，無論是面部清潔噴霧，還是有助解決消化不良或食物中毒的化學品。可是，縱使合成生物學似乎對人類的未來舉足輕重，但至今仍然是頗具爭議的課題，不少人亦投以懷疑的眼光。

舉例來說，部分人對於人類企圖改寫生命表示憂慮，亦有人認為未制訂適當規管政策前，人類可以在實驗室「創造」生命的巨大力量，將會為人類帶來大災難。他們的恐懼為已故的米高・克萊頓（Michael Crichton）帶來靈感，並在驚悚小說《Prey》中講述利用細菌創造的一群納米機械人不斷繁殖，其後不受控制，最終掌控人類的意識。

利用生物方式建構生命

「合成生物學」一詞由波蘭遺傳學家 Waclaw Szybalski 於 1974 年首次提出。他預測分子生物學技術將會使科學家能夠改造基因組，而合成生物學自此成為日漸吸引研究人員及一般群眾的課題。

合成生物學是關於重新設計現有生物系統，又或設計及構造自然界中並不存在的新生物元件、設備及系統。合成生物學的核心是相信生命的所有組件都可透過合成方法製造出來，經過處理及組裝工程後製成具有功能的有機體。進行合成生物學工程時，科學家只需添加、減少或改變核甘酸，而核甘酸是基因中 DNA 的最小組成單位。

利用手提電腦、已發表的基因排列資料及郵購的合成 DNA，科學家便可從頭開始建構基因或完整的基因組。例如，麻省理工學院的標準生物組件登記冊（Registry of Standard Biological Parts）為有興趣的各方人士免費提供眾多「組件」中的 DNA 排列，以供他們用作組裝基因環路。該登記冊現時由麻省理工學院領導的 BioBricks Foundation 管理。

HKUST's Prof I-Ming Hsing (right) and Prof King Lau Chow (left) contribute to making the Conference a success

合成生物學與基因工程

我們通常會將合成生物學與基因工程混為一談。合成生物學於八十年代才成為研究課題，而基因工程則始於 35 年前。合成生物學家兼華盛頓大學電子工程高級科學家 Rob Carlson 認為，「基因工程技術非常原始，有如隨意取兩部汽車，然後隨意交換當中的零件，務求製造出性能較佳的汽車。」

基因工程是以相對原始的方法控制 DNA ，藉以建構相對簡單的基因程式，當中涉及在不同地方加添基因，但目的不在於從根本上或大規模地改動。利用基因工程發展的技術，科學家可增強番茄抵抗殺蟲藥的能力，但絕對不會將番茄變成另一種截然不同的產品。另一方面，合成生物學類似入侵一部電腦，然後為電腦重新設計全新的程式。合成生物學涉及大規模的基因重組，換言之是將基因組或有機體整個 DNA 程式重組。重組後的基因程式一旦植入細菌或酵母當中，便會得出預期產品。

香港舉辦第四屆國際合成生物科學研討會

為了提升本港及海外學者及官員對合成生物學的認識及興趣，來自本港及海外大專學府的研究人員，包括香港科技大學化學工程及生物分子工程學系邢怡銘教授及生物學系周敬流教授，與麻省理工學院的 Biobricks Foundation 攜手合辦第四屆國際合成生物科學研討會，於 2008 年 10 月在香港科技大學舉行。

國際合成生物科學研討會是當今最具影響力的合成生物科學會議，去年首次在亞洲召開。承蒙裘槎基金會及創新科技署鼎力支持，超過 15 個國家或地區的 500 多名人士聚首一堂，就合成生物學不同範疇的議題展開討論及分享意見，議題包括合成生物學的研究、教育、投資及在能源、綠色製造、農業、藥物製造及醫學等多個行業的應用。香港特區政府財政司司長曾俊華先生更蒞臨科大主持研討會的閉幕禮。

合成生物學的進展

合成生物學被眾多科學家及企業資本家視為「下一項偉大技術」，有望透過合成生物學在醫療保健、能源及綠色製造範疇的進展，解決威脅人類生存的各項問題。

醫藥

美國加州大學柏克萊分校的合成化學家 Jay Keasling 教授及他領導的研究小組已利用酵母細胞製成青蒿素（Artemisinin）治療瘧疾。教授亦是第四屆國際合成生物科學研討會講者之一。

青蒿素被視為治療瘧疾的有效藥物。它提取自一種命為香蒿的植物（黃花蒿），但價錢不菲，供應短缺，而且難以在實驗室中利用化合物進行化學合成。

Keasling 教授及他的研究小組成功將香蒿的植物酶加添入啤酒酵母當中，得出的產品功能與青蒿素相若，但價錢卻比青蒿素便宜得多。

抗污染物

某些生物品種對污染物非常敏感。借助天生的自我防衛機制作為感應系統，某些細菌附帶有 DNA 編碼能力的發光蛋白，當遇到重金屬或毒素時，細胞便會發出熒光。

有機體及生物結構經過重新工程改造後，便可發揮感應器及偵測系統的功能。偵測能力甚至可以進一步提升，藉以降解及消滅危險物質，例如會造成污染的石油及污水污泥，並將這些物質改造成危害較輕的產品，甚至是有用的產品。

展望未來

近年合成生物學取得迅速的實質進展，大多數人亦不會懷疑這門科學將會對我們的未來影響深遠。本校教學人員對生物工程或合成生物學研究的興趣亦與日俱增，正如全球其他合成生物學家一樣，大家的關注重點是透過重新設計的 DNA 程式，掌握生命的美妙多姿，包括開拓新能量及燃料資源、治癒致命疾病及消除周遭的環境災害。

Leveraging Teaching Efforts through Remote Video Capture

by Ross Lai

HKUST is constantly striving to enhance the quality and effectiveness of teaching and learning. A good example is the successful implementation of Remote Video Capture (RVC) by the Publishing Technology Center (PTC) to support and promote e-Learning at the University.

Putting it simply, Remote Video Capture enables faculty members to videotape all their lectures in a semester, and students to review their lectures at any time and place convenient to them.

With RVC, video images of the teacher, whiteboard, computer screen, and the sound tracks are captured by devices pre-installed in the classroom. The captured audio-visual files are then transmitted to the PTC and synchronized to produce lecture videos which are then uploaded online within two days after the class.

Leveraging the Teachers' Teaching Efforts

There is no visible production crew in the classroom, and no equipment setup or pre-training is required. All a teacher needs to do is book one of the 30 RVC-equipped venues at the start of a semester — and teach. Teachers who use RVC have found the service to be:

- Highly useful for large and make-up classes;
- Suitable for recording guest lectures to share with other classes;
- Effective for developing teaching skills and for self-evaluation;
- An easy way to share ideas with a co-instructor or peer.

Extending Students' Learning Options

RVC creates exciting new learning possibilities that enhance retention and comprehension by giving students the flexibility and freedom to review lectures at their own pace and discuss with other students during their review, and revise for examinations from the full lecture, not just notes.

RVC has become immensely popular as it fully resonates with today's multimedia lifestyle and is particularly useful for students less at home with English.

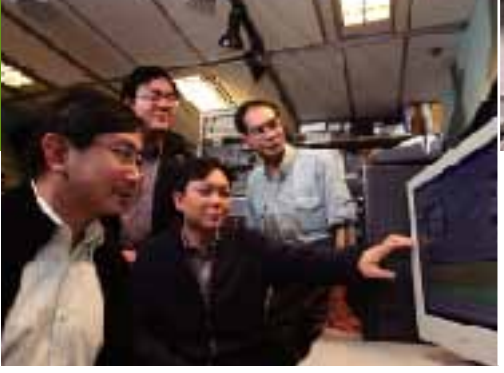
What Has Been Done So Far?

The RVC was first launched in the Fall Semester 2007 with 15 classrooms and 33 teachers using the service.

By Fall 2008, 30 teaching venues, including all 10 lecture theaters, were already RVC-equipped, with 60 faculty members teaching more than 70 courses using RVC during the semester, and some 1,400 lecture videos and approximately 2,100 hours of learning content produced.

RVC workflow

Scheduled Capture



RVC production team

Evaluations on RVC's effectiveness were conducted after each deployment. The latest surveys were conducted on 60 faculty members using RVC and 913 students who could access RVC produced videos during Fall 2008. The results were encouraging, with 87% of faculty considering RVC helpful, and 92% of students finding RVC videos useful. Complete results and details of services can be found in the RVC website *http://ptc.ust.hk/remote-capture/findings.html*

What Faculty Members Say

Opinions from the faculty were also positive. Prof Karl Tsim, Head of the Department of Biology, said, "In the past I have had to repeat things again and again. With this 'self-service' video technology, my students can access my lectures any time they need."

Prof Emily Nason of the Department of Management of Organizations echoed, "RVC is very easy to use. You don't even need to switch anything on! I originally wanted the videos for my own evaluation, but later I decided to release them to my students, who liked the idea a lot. A positive experience all round!"

"I like to podcast my lecture and after receiving the link from PTC, I put them online for my podcast subscribers. A great centralized service, especially for someone who is not comfortable with technology," added Prof Jogesh Muppala, Department of Computer Science and Engineering.

What's Next?

Dr David Mole, Associate Vice-President for Academic Affairs (Undergraduate), said, "The RVC service has already demonstrated its value to students at HKUST. For students, the opportunity to review lectures is invaluable. For teachers, there is less time lost going over the material already covered. I hope to see this service progressively rolled out to cover more courses."

According to Thomas Ng, Director of the Publishing Technology Center, RVC will further expand its applications.

"Recently, we provided free videotaping service for all seminars held in lecture theaters with our RVC devices. We will also provide training on using simple video editing tools to add value to the RVC video content," he said.

"We will collaborate with interested faculty members to integrate RVC with e-learning or mobile learning projects. We will even explore potential open learning technologies and channels to maximize the exposure and benefits of RVC content," he added.

"Who knows—in the not-so-distant future, we may see students revising their lectures through RVC videos on their mobile phones or other smart devices!" he mused.

Post Production → **Video Streaming** → **Online access** → **DVD Storage**

PTC will process the AV files to produce the lecture videos and put them on streaming server

The teachers have sole discretion in releasing the videos of their lectures. If requested, the videos will be streamed to students through the Learning Management and Evaluation System (LMES) of the Center for Enhanced Learning and Teaching (CELT), or through the teacher's own course website

Students can review the lecture videos at their own pace

All RVC videos will be put on DVD after the semester and sent to the respective lecturer

善用遙距錄像教學事半功倍

科大不斷努力提升教與學的質素和成效，出版技術中心 (PTC) 推出遙距錄像服務以支援和推廣網上教學，就是一個明証。

教學人員只需作出簡單安排，就可以用遙距錄像系統將整個學期的授課以數碼攝錄，讓學生可以隨時隨地重温各課堂。

遙距錄像系統使用預先安裝在課室的器材，收錄教師、白板、投射螢幕及電腦的視訊和音訊。這些影音檔案會透過校園網絡，傳送到出版技術中心，並進行影音同步處理。完成後的課堂錄像會於課堂後兩天之內，上載至資訊科技服務中心 (ITSC) 的串流伺服器。同學便可在網上重看課堂內容。

Prof Karl Tsim *Prof Emily Nason* *Prof Jogesh Muppala* *Dr David Mole*

教學事半功倍

遙距錄像運作特點在於課室內並無攝製人員在場，更不需任何特別安排。教授只須於學期初應邀接受 PTC 的攝錄服務，便可在設有遙距錄像的課室或演講廳授課(校內現共有30個)如常講授。使用過遙距錄像的教授有以下意見：

- 在人數眾多和補課的課堂中尤為有用
- 適用於攝錄客席演講，以便與其他課程的學生分享
- 適用於優化教學技巧及自我評估
- 可與合作教學的人員分享教學知識和心得

多「源」學習模式

遙距錄像創造不少新的學習方式，並可以提高記憶和理解，因為學生可以靈活自由地：

- 以自己的學習進度重温講課，並與其他同學討論
- 與教師互動，並於重温之後以電郵表達意見
- 重温課堂講授的內容和重點，而不單依賴筆記

遙距錄像廣為同學接受，因為它完全配合時下的跨媒體生活方式，對未能完全習慣英語授課的同學尤其有用。

兩年來的進展

遙距錄像於 2007 年春季在 5 個課室開始試用，有 7 位教授參加。由於成效理想，服務於 2007 年秋季正式推出；當時有 15 個課程使用，參與教授有 33 位。

直至 2008 年秋季，裝設有遙距錄像器材的教學地點已增至 30 個，包括現有 10 個演講廳，並有 60 位教學人員參與，教授 70 多個課程。在這學期內，出版技術中心製作超過 1,400 個課堂錄像，共長達 2,100 小時的視頻教材。

每當學期完結，出版技術中心均向各使用遙距錄像的教師和學生進行調查及訪問。參與最近一次問卷調查有 60 位教師和 913 名學生。結果令人鼓舞；在回覆的問卷中，有 87% 教學人員及 93% 學生均認為遙距錄像具有相當成效。詳盡報告和數據可見於遙距錄像的網址 *http://ptc.ust.hk/remote-capture/findings.html*

教授的意見

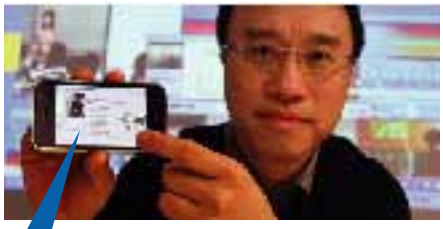
參與教授都對此服務有正面評價。生物學系系主任詹華強教授說：「以前我要多次重複我的講課，但有了這『自助』錄像系統，我的學生可以隨時隨地上我的課。」

組織管理學系助理教授劉夢琳說：「遙距錄像系統非常易用；你甚至不須按任何按鈕！最初，我使用錄像作自我評估，但後來決定與學生分享；他們都喜歡這安排。一言以蓋之，就是各方得益。」

計算機科學及工程學系的梅伯樂教授說：「我喜歡以 podcast 形式分享我的講授內容。從出版技術中心取得連結後，我就可以上載到網上，與 podcast 用戶分享。這是一個很好的一站式服務，對不習慣使用媒體技術的人來說特別有用。

放眼將來

協理副校長（本科生）毛大偉博士說：「遙距錄像服務已証實對教學有很大幫助。學生既可重温課室，教授亦可省卻重覆已講授的課堂內容。我希望這服務範圍能不斷擴大，涵蓋更多課程。」



出版技術中心主任吳宏權表示：「中心會繼續擴展遙距錄像系統的應用範圍。例如，我們為所有在演講廳舉行的講座提供免費遙距錄像服務。又安排工作坊，介紹簡單的錄像剪輯工具，為課堂錄像增值。

他說：「我們會與有興趣的教研人員合作，將遙距錄像系統與網上學習及流動學習計劃整合起來。探討更多開放教學技術和途徑，令遙距錄像的內容發揮最大效益。

「或許，不久將來，我們的學生可在手機或其他智能裝置，透過這些課堂錄像來温習功課！」

http://ptc.ust.hk/remote-capture

Four Initiatives
for a Fuller University Experience

University education is not just about lectures, libraries and laboratories. It is also about making friends, preparing for careers, as well as contributing to the community and the environment. To enable students to get the most out of their university life, the Student Affairs Office has introduced four new initiatives, each with a different set of benefits.

REDbird Award Program

The sundial that resembles a red bird has always been HKUST's visual icon. But apart from borrowing its image in naming the program, we also allude to the bird's ability to soar to great heights and explore new horizons.

The REDbird Award Program, launched in this academic year, has this noble motto: "Soar to New Horizons - Learn Endlessly. Celebrate Diversity. Serve the Community".

In a nutshell, the REDbird Award Program is a holistic student development program where selected first-year students are given opportunities to take part in personal development training, community service, internship and exchange activities, thereby gaining the REDbird Award at the Bronze, Silver and Gold levels. As this Program progresses, outstanding participants will be selected, trained and appointed as REDbird Coaches, the highest honor within the Program. This year, 107 students and 22 coaches were selected to join the Program.



Under the auspices of the Committee on Student Affairs of the HKUST Senate, this Program aims to nurture exemplary student leaders.

With the support of the Drs Richard Charles and Esther Yewpick Lee Charitable Foundation to the tune of $2.35 million, needy students are given financial support to join activities such as overseas training, learning trips, conferences and internships.

Upon joining the REDbird Award Program, participants will set their goals and achieve them within the stipulated time, through completing a range of activities with guided support and feedback on their personal development pursuits.

To articulate the desirable qualities of HKUST graduates in general and REDbird participants in particular, we have turned the name REDbird into an acronym for these attributes: Respectful, Energetic, Diverse, Bright, Innovative, Responsive and Diligent & dependable.

HKUST - Hang Seng Bank Green Ambassador Program

Another initiative introduced this academic year is the HKUST - Hang Seng Bank Green Ambassador Program, which aims to nurture HKUST students to become environmental pioneers both within the HKUST campus and in the community.

Green Ambassadors will be provided training in environmental concepts and practical skills, and will visit environmental protection facilities to understand their operations. On the other hand, these Green Ambassadors will help in promoting green activities within HKUST and take part in environmental internship programs during the summer vacation.

This Program is sponsored by Hang Seng Bank with an aim to training up around 180 Green Ambassadors within four years. All applicants have to go through a stringent selection process involving HKUST faculty and staff from various departments. To start with, we have recruited 23 Green Ambassadors for a term of two years. These ambassadors are now equipping themselves in living out their mission in enhancing the environmental and sustainability awareness of their peers and the public as well as solving critical environmental issues facing our communities.

Peer Counselor Training Program

The widespread emotional problems faced by university students in Hong Kong have aroused great public concern. Dr Grace Au, Director of the Student Affairs Office, lamented that some of the recent tragedies have been due to students not knowing where to seek support, or their reluctance to use the services available to them.

To address this issue, the Students Affairs Office is stepping up its Peer Counselor Training Program this academic year, with an aim to training up 50 mentors every year among teaching assistants, hall wardens and second and third year students.

To become a qualified peer counselor, the participant must first complete the Mental Health First Aid course and regularly attend monthly case sharing sessions. These courses are taught by professional instructors outside HKUST as well as Student Counselors of the Student Affairs Office.

Dr Au added that peer counselors mainly comprise second and third year students, because on the one hand, they belong to the same age group as the new students; and on the other, they can share their insights into university life that they have gained at HKUST. Dr Au hopes that this spirit of sharing, caring and mutual support will spread on our campus and sustain through the years.

Internship Learning Scheme

The Internship Learning Scheme (ILS) is a new program launched by the Career Center of the Student Affairs Office. It provides both pre-internship training and actual internship experience to HKUST undergraduates of all disciplines (except exchange students), with priority given to students in their last but one year.

The ILS comprises four phases:
1. Information session, application and interview
2. Pre-internship training
3. Internship
4. Consolidation

Of particular note is that as part of the pre-internship training, participants are required to form small groups to explore a chosen profession by doing data research and interviewing current practitioners. At the moment, the careers being explored by the students include airlines, advertising, catering, hotel and tourism, media, NGOs, retail, public relations and theme parks, among others.

The participants who have completed their pre-internship training will be recommended to private and public organizations in Hong Kong, Mainland China and overseas, for an internship of at least six weeks, after which they will submit a report, a self-evaluation form and the employer's appraisal form.

This year, the ILS received about 250 applications, from which 100 students were selected. Among them about half of them are from the School of Business and Management and the rest from Engineering and Science.

學生事務處 四大行動 締造美滿校園生活

大學不單是鑽研學問的場所，更為年青人提供交友、就業準備、推行環保和貢獻社會的機會。有見及此，學生事務處在這個學年，策劃了四個取向和目標各異的計劃，務求啟發同學的潛能，使他們能融入校園生活，發掘自我，繼而投身社會。

行動一 紅鳥計劃

形似紅鳥的日昏是科大的地標，計劃以紅鳥為名，取其外貌外形之外，還隱含紅鳥能展翅翱翔，探索新視野的意思。

學生事務處今年首次舉辦的紅鳥計劃，以「開拓視野，長期學習，多元發展，服務社區」為宗旨。

紅鳥計劃顧及學生全面發展，入選的一年級生會參與個人發展訓練、社區義工服務、實習及交流活動等各個範疇，按照成果以獲取金、銀、銅獎。當計劃不斷發展，優秀傑出的參加者會被甄選，訓練為朋輩輔導員，亦即計劃中的最高榮譽。今年，入選計劃的同學有 107 位，朋輩輔導員則有 22 位。

計劃由科大教務委員會轄下的學生事務委員會主辦，以培養模範領袖為目標。

利銘澤黃瑤璧慈善基金捐出 235 萬元，贊助貧困學生參加海外訓練、遊學團、交流會和實習。

加入計劃後，參加者須訂立目標，然後在指定時間內完成一系列活動。期間，導師會定期與參加者會面，了解進度和進行評估。

為明確表達科大畢業生和紅鳥計劃參加者所需的質素，計劃以紅鳥命名。每一個英文字母均有其含意：R 是恭敬、E 是精力充沛、D 是多元性、B 是光亮、I 是創新、R 是敏銳、D 是勤奮可靠。

行動二 恒生環保大使計劃

恒生環保大使計劃是這學年另一個值得推介的行動，目的是培育環保先鋒，以科大和社區為中心，向外界宣揚環保意識。

環保大使須參加訓練課程，學習基本環保概念和實用知識，也會參觀環保設施，了解其運作。此外，他們還要協助推動科大校內的綠色運動。計劃還包括暑期實習部分，讓參加者學以致用。

環保大使計劃由恒生銀行贊助，期望在四年內培訓 180 位環保大使。遴選過程尤其嚴謹，評審委員會由多個界別的人士組成。目前，已錄取了 23 名環保大使，為期兩年。他們要自我裝備，以身作則，弘揚環保精神，並關注及協助解決社會現今面對的環保問題。

行動三 陽光大使——朋輩輔導訓練計劃

近年來，香港各大學發生的學生情緒問題事件，引起了大眾和校方的關注。學生事務處處長區嘉麗博士指出，有些學生不願意或不懂得尋求協助，以致釀成悲劇。

有見及此，學生事務處今年特別加強陽光大使——朋輩輔導員的培訓，務求建立一個充滿關懷的校園網絡。此計劃的對象是教學助理、舍監和二、三年級的學生，名額 50 個。

要成為稱職的輔導員，參加者必須完成精神健康急救課程，和出席每月舉行的個案分享及討論小組。課程分別由外聘的專業導師和學生事務處的輔導員任教，教導輔導時所需要的有系統處理方法。

區博士表示，輔導員以二、三年級學生為主，因為年紀相若的朋輩，較容易和新生接觸和溝通。而部分新生必然遇到的問題，二、三年級的學生亦能以過來人身份分享心得。她期望這種朋輩互相扶持的精神，能夠一代一代傳承下去。

行動四
『實習學習』計劃

學生事務處就業輔導中心近日推出全新計劃——『實習學習』計劃，給各學系的本科生（交換生除外）提供實習前培訓和實際實習經驗，三年級生優先考慮。

計劃包括四個階段：
1. 簡介會、申請及面試
2. 實習前訓練
3. 實習
4. 強化學習成果

特別一提，參加者會分為小組，選擇一個行業範疇作深入研究，並與現職從業員進行訪問，作為實習前訓練的一部分。學生目前在研究的的行業包括：航空公司、廣告業、餐飲業、酒店及旅遊業、傳媒、非政府組織、零售業、公共關係和主題樂園等。

完成實習前訓練後，參加者會被推薦至香港、內地和海外的私人和公共機構，進行為期不少於六周的實習。實習結束後，學員須呈交報告、自我評估及僱主評估。

本年度，實習計劃收到約 250 份申請，從中選出了 100 位。接近一半是來自商學院，其餘則是來自工學院和理學院。

Prof Leonard Cheng
Appointed Dean of Business and Management
鄭國漢教授獲委任為商學院院長

Prof Leonard Cheng has been appointed Dean of Business and Management, with effect from 1 March 2009.

Prof Cheng joined HKUST in 1992 as a Founding Professor of the Business School. Currently he is Chair Professor of Economics, and prior to his appointment as Dean, he had been heading the Business School in an acting capacity.

"I feel honored and humbled to head up what is widely recognized as one of the best business schools in this part of the world. As a leading research school, we are committed to offering nothing less than the very best for our students. This we will continue to do, and we will also reach out further to the business community," said Prof Cheng.

鄭國漢教授獲委任為工商管理學院（商學院）院長，由 2009 年 3 月 1 日起生效。

鄭教授於 1992 年加入科大，為商學院創院教授之一。他現為科大經濟系講座教授，並於 2007 年 7 月起出任商學院署理院長。

鄭教授表示：「獲委任為科大商學院院長，我感到非常榮幸。科大商學院是被公認為區內最佳的商學院。作為一所領先的研究型商學院，我們致力為學生提供最優質的教育及學習經驗。我亦將進一步加強與商界的溝通，積極為社會及經濟發展作出貢獻。」

Members of ERP's Steering Committee at the Campaign's kick-off ceremony

Gearing up for

by May Cheung

I held my breath and stepped outside
And let the change begin.

I took a step and with new strength
I'd never felt before,
I kissed my Comfort Zone 'goodbye'
And closed and locked the door.

From "My Comfort Zone",
author anonymous

Look out, all HKUST members — be prepared to say goodbye to our comfort zone and get ready for some unprecedented changes. With the 3-3-4 curriculum changes just around the corner, the University will overhaul our information system and change the way we work. In the months ahead, change will be the order of the day.

To spearhead the changes, the University has recently kicked off the HKUST Enterprise Resources Planning (ERP) Implementation Project, code-named "Teamust". Chaired by VP-AB Prof Yuk-Shan Wong, Teamust is to put in place a major information infrastructure to make the university 3-3-4 ready in terms of administration and financial management.

Presided over by Vice-President for Academic Affairs Prof Roland Chin and Vice-President for Administration and Business Prof Y S Wong, the project had a ceremonial kick-off on 18 December 2008. Being out-of-town on the day, President Paul Chu showed his strong backing for the project by delivering a video message at the ceremony calling on all members of the UST community to play their part in making the project a success.

The 3-3-4 system not only stands for significant curriculum changes, it also implies a tilt towards whole-person education; an additional 33% increase in student population; a corresponding increase in academic and research staff; a new admission system, a double cohort of student intake, plus a plethora of accompanying measures to ensure the smooth operation of the university administrative machinery.

More than a System Upgrade

The ERP project is much more than an information system upgrade. As Prof Roland Chin said, "The IS Project is one of the many initiatives that we must undertake in order to meet the enormous challenges ahead. We need an integrated administrative computing environment that is responsive to changes and blessed with an enhanced access to information."

"This project gives us an excellent opportunity to review and streamline our work procedures. The project is not only about changes in our information system, it is a journey of transformation that allows us to align our business processes with best practices in higher education."

The Core of the Changes

The University has recently acquired an Oracle PeopleSoft package comprising the Student, Finance and Human Resources modules which would replace the existing in-house systems for finance, personnel and student administrations.

Prof Y S Wong explained, "In the past, we developed our automation systems in-house because the functions and flexibilities of readily available system packages were limited."

"But with the advent of information technology, it is now possible to shop for commercial system packages with multiple functions, features and capabilities. They have highly flexible workflow designs and are very user-friendly."

The Steering Committee

Steering us towards this brave new world will be the following members from the Information System Project Steering Committee

Sponsor:
Prof Roland Chin, VP-AA (DP)

Sponsor & Chairman:
Prof Yuk-Shan Wong, VP-AB

Deputy Chairman:
Mr Philip Wong, AVP-AB and DF

Members:
Prof Kar Yan Tam, Dean of Undergraduate Education
Mr Bob Brashear, DARR
Ms Yvonne Ho, DHR
Mr Lawrence Law, DITSC
Mr Sammy Lo, DPur
Mr William Tung, DIS

Apart from the Steering Committee, the University has also set up an Information Systems Project Committee for planning and managing the day-to-day running of the ERP project. The Committee is chaired by Mr Philip Wong as the Project Director. Its constituent members include project managers for each major functional area.

Schedule and Contacts

Phase 1 of the implementation will only be the starting point. The University will continue to enhance and build on the platform e.g. in research administration and e-learning. So, stay tuned for ERP project updates in Genesis-HKUST newsletter or visit ERP project website at *https://w3.ab.ust.hk/ispj/*. Meanwhile, you can direct your views and concerns on the project to the Steering Committee or ERP Project Change Manager Ms Clara Kwan at *erpclara@ust.hk* or *teamust@ust.hk*.

Change 鼓足拼勁 迎接變革

我屏息　靜氣　向外踏步
把變革引進

我以從未感受到的力量
邁步
向舊有的安樂窩吻別
然後把門關上
鎖好

摘自佚名作品《我的安樂窩》

科大全體師生注意了——請各位做好準備，向我們的安樂窩（也就是我們一貫感覺良好的工作習慣）告別，鼓足拼勁，迎接多項空前的變革！三三四課程改革如箭在弦，科大將更新資訊系統，改變我們的工作模式。在未來多個月裡，變革將成為科大的常規。

為引進這些變革，科大最近啟動了一項名為「Teamust」的 ERP 項目，由副校長（行政）黃玉山教授出任主席，目的是建立一套可過渡至 2012 年的資訊基礎設施，以配合三三四學制所帶來的轉變。

這個項目由資訊系統項目督導委員會的兩位發起人——首席副校長錢大康教授和副校長（行政）黃玉山教授親自主持。項目並於 2008 年 12 月 18 日舉行啟動儀式。當日，朱經武校長雖身處外地，仍透過電視影像，號召科大全體師生積極參與，為項目爭取成功。

三三四學制不僅代表課程的重大改動，還意味連串變革，包括：進一步實踐全人教育理念、學生人數再增 30%、學術及研究人員相應增加、新設入學制度、新增其他行政基建設施，以及林林總總的配套措施，確保大學順利過渡至三三四學制全面實施的階段。

豈止於更新系統

ERP 項目絕不止於提升資訊系統，一如錢大康教授所言：「為迎接未來的巨大挑戰，我們必須推行多項計劃，資訊系統項目正是當中之一。我們需要一套協助我們處理行政事務的綜合電腦資訊系統，既可應付種種變革，又能為不同單位的同事提供更豐富的資訊。」

「我們將充分利用這個項目，檢討及優化工作慣例或程序。所以這個項目並非改革資訊系統那麼簡單，而是一項改革，幫助我們調節工作流程，以符合高等教育的標準和典範。」

變革的主要內容

科大最近購置了一套 Oracle PeopleSoft 軟件套裝，內含學生、財務及人力資源等單元組件，而現時內部開發的財務、人事及學生管理系統將逐步淘汰。

督導委員會主席副校長（行政）黃玉山教授表示：「過去，市場出售的現成軟件，在功能及靈活性上非常有限，我們不得不自行開發自動化系統。」

「但是，資訊科技日新月異，現在市面上已經買到配備多樣功能、特色及性能的商業系統軟件套裝，這些軟件的工作流程設計十分靈活，使用容易。」

督導委員會

資訊系統項目督導委員會由下列科大同事組成，帶領我們迎接可預見及不可預見的變革。

發起人：
首席副校長錢大康教授

發起人兼主席：
副校長（行政）黃玉山教授

副主席：
協理副校長（行政）兼財務處處長黃世邦先生

委員：

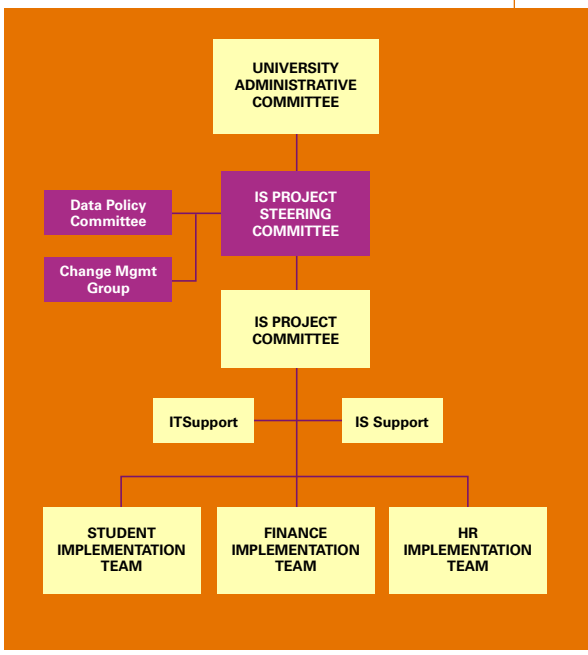
本科生教務長	譚嘉因教授
入學及註冊處處長	白士柏先生
人力資源處處長	何佩賢小姐
資訊科技服務中心主任	羅琰先生
採購處處長	羅錦添先生
信息系統處處長	董志雄先生

除督導委員會外，科大還成立了資訊系統項目委員會，負責企業資源計劃項目的規劃及日常管理事務。該會由黃世邦先生領導，成員包括各主要職能範圍的項目經理。

時間表及聯絡人

第一期的實施工作只是起步點，科大將繼續努力拓展及構建整個平台，範圍包括：研究管理、電子學習等。因此，請密切留意同創 - 科大通訊內有關 ERP 項目的最新消息，或瀏覽網站 *https://w3.ab.ust.hk/ispj/*。此外，歡迎電郵 *erpclara@ust.hk*或 *teamust@ust.hk*，向督導委員會或 ERP 項目變革經理關慕霞小姐表達對項目的意見及關注。

Governance structure of the HKUST IS Project
科大資訊系統項目管理架構



teamust

Follow your Heart
Aim High and Dare
On the 16th Congregation

by May Cheung

"Follow your heart, find out what you truly love to do and, if possible, do that".

This is the advice Nobel laureate Prof David Gross gave to graduates and students at HKUST's Congregation held in November 2008.

"I do not think that you can truly succeed unless you are engaged in what you really love to do. If you are working in what you love to do, then you will be able to marshal the concentration, creativity and hard work that is necessary for success, and most important, you will enjoy the journey," Prof Gross said.

Distilled from his scholarship and pursuits of scientific dreams spanning four decades, his address was charged with passion and insight, and utterly inspiring to the audience.

Another piece of advice Prof Gross gave the graduates was that they should always aim high and dare to take risks.

"The second bit of advice is to aim high and dare to fail, do not be afraid of taking a risk. If you never attempt goals that might seem to be impossible, you are guaranteed never to achieve these goals. If you try to achieve impossible goals you might very well fail, but so what? You might succeed, and in any case, you will know that you gave it your best shots and will have fun along the way — especially if you are engaged in what you love."

And Prof Gross ended his address on an uplifting note, "So take a chance to make a difference in all aspects of life. Don't sell your dream short. Don't be afraid to follow your most ambitious plans and to pursue your most outlandish and crazy ideas. Dare to connect with other human beings. Dare to love deeply - and if you do, there will be many moments like this, moments of triumphs and moments of hopeful beginnings."

The 16th Congregation, held on 12-14 November, 2008, was marked by degrees conferred to more than 3,400 HKUST graduates and honorary doctorates to the following academic and social leaders:

Prof David Gross, winner of Nobel Prize in Physics (2004) and Frederick W. Gluck Chair in Theoretical Physics, University of California at Santa Barbara (Doctor of Science honoris causa)

Dr Chan Sui-Kau, Chairman of Yangtze-kiang Garment Ltd (Doctor of Social Sciences honoris causa)

Prof Aaron Ciechanover, winner of Nobel Prize in Chemistry (2004) and Distinguished Research Professor, Faculty of Medicine, Technion-Israel Institute of Technology (Doctor of Science honoris causa)

Prof Shuji Nakamura, Professor of Materials, University of California at Santa Barbara (Doctor of Engineering honoris causa)

Prof Chia-Wei Woo, President Emeritus and University Professor Emeritus of Hong Kong University of Science and Technology (Doctor of Business Administration honoris causa)

隨心之所繫 敢於闖 望得遠
to Fail 第16屆學位頒授典禮

HKUST Honorary Doctor of Science Prof David Gross encourages HKUST graduates to pursue their dreams

Honorary doctorate degree awardees: (from left) world renowned scholars Prof Shuji Nakamura, Prof Aaron Ciechanover and industrialist Dr Chan Sui-Kau

President Paul Chu addresses the congregation for the last time

「找出你真正的興趣，然後從事有關的工作。」

這是科大榮譽理學博士，2004年諾貝爾物理學獎得主大衛・格羅斯教授（Prof David Gross）在香港科技大學第16屆學位頒授典禮上給予學生的第一項忠告。

他還說：「除非你愛你所做的工作，否則你很難取得甚麼具體成就。只有當你真正喜愛你的工作，你才可以全情投入、專心致志，把創意盡情發揮——不但讓自己樂在其中，還可能取得成就。」

格羅斯教授的發言，字字珠璣，由心而發，顯然是他40多年來對學術的不懈追求及在科學領域上不斷摘星的經驗之談。

格羅斯教授對畢業生的另一項忠告是「把目標訂得高，看得遠，並且勇於嘗試。為自己訂立看似遙不可及的目標，並且努力把目標實現。不敢嘗試，不敢走出第一步，那就永遠不可能達標。若然你勇於嘗試，你可能會失敗，也可能會成功，但無論如何，你已做了你喜愛做的工作，感到好玩有趣之餘，又可以把自己的才華盡情發揮——若果依然失敗，那就無話可說。」

格羅斯教授最後鼓勵在座的畢業生，「千萬不要把自己的夢想賤賣。抓緊機會，為自己帶來改變。勇於實現你的計劃和夢想 - 無論它們顯得如何荒誕不經、離經叛道。勇於與人聯繫，敢於刻骨銘心地愛——也只有這樣，你才可以抓緊創始的光輝，凱旋的喜悅。」

出席典禮而除了3,00位畢業生外，還有下列五位獲頒授榮譽博士學位的學者/社會傑出領袖：

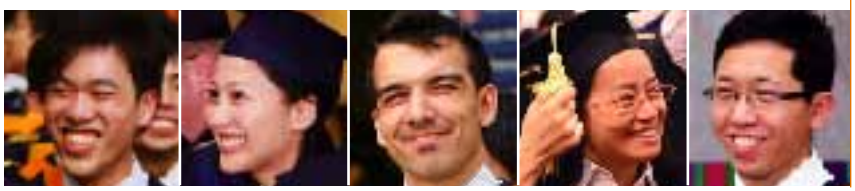
大衛・格羅斯教授（Prof David J Gross）：榮譽理學博士
2004年諾貝爾物理學獎得主、現任加州大學聖達巴巴拉分校理論物理研究所所長兼 Fredereick W Gluck 講座教授

陳瑞球博士：榮譽社會學博士
長江製衣有限公司主席

阿龍・西查諾瓦教授（Prof Aaron Ciechanover）：榮譽理學博士
2004年諾貝爾化學獎得主、現任以色列科技理工學院醫學院榮譽研究教授

中村修二教授：譽博工程學博士
加州大學聖達巴巴拉分校工程學院材料學系教授

吳家瑋教授：榮譽工商管理學博士
香港科技大學榮休校長及榮休科大講座教授



Face-to-face with the Hon Donald Tsang
與特首曾蔭權真情對話

by Philip Yeung

Whenever the Chief Executive comes to visit a university, it always creates a stir. But when he comes calling to listen to students on their views about what is happening in society or how it is governed, it creates a definite buzz of excitement.

That is exactly what happened when Chief Executive Donald Tsang came for an open dialogue with students in September, as part of his preparation for his annual Policy Address.

Hundreds of students crammed into a cavernous lecture hall. Four of them were lucky enough to sit on a panel with Hong Kong's top leader, each given time to briefly express his or her concerns and pose a burning question for the Chief Executive. For the lucky quartet, it was an experience of a lifetime.

The Chief Executive had no lack of student inquisitors. Most raised questions of larger social significance, such as what the government plans to do about introducing minimum wages laws to protect the rights of low-skilled workers to a decent livelihood, or about the need to diversify Hong Kong's economy, and reduce our over-reliance on financial services as a pillar industry.

There was a sprinkling of questions of more immediate concerns to our students, such as job prospects of new graduates. Mostly, the questions were candidly asked and cogently answered. But as befitting an academically free community, there was one ticklish question from a brash youthful interlocutor who demanded to know why the CE dismissed popularity ratings as something light and fluffy as the passing clouds. He also wanted to know if the CE would follow the sorry footsteps of his predecessor and step down from office for his "poor" performance. These might be embarrassing questions, but Mr Tsang took them with good grace and responded with humorous seriousness.

Whatever the view, the important thing is that this forum exists and it is the platform for what after all was supposed to be a genuine dialogue and frank exchange between the CE and his younger audience. At the end, the Chief Executive received a standing ovation from those present who came to challenge as well as those who came to listen.

特首每次造訪，總會引起一陣哄動。然而，這次來訪的目的是聆聽學生對社會狀況和特區政府管治的看法，令大家翹首以待。

去年年底，特首曾蔭權在預備施政報告期間，選擇了到訪科大與學生公開對談。

數以百計的科大學生擠滿了演講廳，當中四位更幸運地與特首同坐台上，輪流表達他們關心的社會問題，並向特首發問。這肯定是他們人生中的難得經驗。

學生們都勇於發問。大部分的問題都跟社會議題有關，如：最低工資立法、如何發展香港經濟多元化和減低對金融業的過度依賴。

部分提問直接關心到科大學生，例如應屆畢業生的就業前景。會談中，問者直率，答者坦誠，大部分的提問都得到中肯的回答。然而，在這個崇尚自由開放的校園，一名直言無隱的同學追問特首，何以視民望如浮雲。他還問特首，若市民繼續不滿其工作表現，他會否效法董建華下台。這令人尷尬的提問，曾蔭權特首欣然地以幽默的態度回答。

儘管眾人的看法各異，重要的是這個論壇，為學生和特首提供真誠對談的機會。最後，特首在熱烈的掌聲中離開會場。

Another Art Form from Another Era
The HKUST Revival of Cantonese Opera
承傳粵劇神韻　連繫大專校園

HKUST is not only about science and technology. It is also about culture and heritage. In October, it became the first tertiary institution to officially launch Hong Kong's first Cantonese Opera Promotion Project .

This one-year project aims to enrich the knowledge and appreciation of Cantonese Opera among students and staff of tertiary institutions. It also strives to serve the community by providing a venue for amateur groups to stage performances for the general public to enjoy.

The project's launch ceremony in the HKUST Hong Kong Jockey Club Atrium was jointly officiated by the Chairman of the Cantonese Opera Development Fund Executive Committee and Advisory Committee Dr Stephen Chow; Chairman of the Hong Kong Bar Wo Organization Ms Lisa Wang; renowned Cantonese Opera artist Mr Law Ka-ying; and HKUST Vice-President for Academic Affairs Prof Roland Chin.

The launch included a short demonstration, given by master artist Mr Law Ka-Ying on the elements of Cantonese Opera acting, followed by a performance given by artists Ms Cheng Wing-mui, and actor Mr Hung Hai.

The project, organized by the HKUST Center for the Arts, received funding of $200,000 from the Cantonese Opera Development Fund operated by the Home Affairs Bureau. The Project encompasses four types of activities—demonstrations, workshops, Cantonese Opera performances and a photo contest. There was no lack of Cantonese Opera devotees. A total of 33 students and staff members from seven tertiary institutions have so far joined the workshop.

科大主辦的大專粵劇推廣計劃於 2008 年 10 月正式展開。這個惠及全港所有大專院校的粵劇推廣計劃，為期一年，旨在提高全港大專學生及教職員對粵劇的認識和欣賞，並為社區人士提供粵劇節目及免費場地。開幕典禮在科大香港賽馬會大堂舉行，出席嘉賓有粵劇發展諮詢委員會及粵劇發展基金會執行委員會主席周振基博士、香港八和會館主席汪明荃小姐、粵劇紅伶羅家英先生及科大首席副校長錢大康教授。

開幕儀式完畢後，主辦單位隨即進行一個粵劇做手身段示範講座，由羅家英先生主講。著名粵劇演員鄭詠梅小姐和洪海先生並作示範表演，演出一齣精彩的「雙仙拜月亭之搶傘」。

大專粵劇推廣計劃由科大藝術中心主辦，並獲得民政事務局局長法團轄下的粵劇推廣基金資助 20 萬元。推廣計劃主要包括四類活動：示範講座、工作坊、粵劇演出及攝影比賽。目前，共有 33 位來自七家大專院校的師生參加工作坊。

EXITE Camp
Spurs Female Interest in Technology
科技夏令營 女生放異彩

by May Cheung

To Prof Irene Man-Chi Lo, HKUST's Professor in Civil and Environmental Engineering, there is nothing more important than "finding your passion and following it". Once found, this passion will drive you to success.

Prof Lo herself is a living testimony of that statement.

Since making up her mind to become an engineering teacher at the not-so-tender age of 26, she has never wavered. It is a dream she still chases, even after she has landed a position in the University as a faculty member.

After 17 years of teaching, and winning in 2006 the university's much coveted Michael Gale Medal for Distinguished Teaching, she remains as passionate about teaching as she was 17 years ago, if not more. The fact that she is the only female faculty member amongst the department's 24 academic staff has never distracted her from giving her best. Gender issues do not concern her. "It's not a matter of whether you are a man or a woman, it is a matter of whether you want to contribute in that position."

This declaration by Prof Lo at the EXITE (Exploring Interest in Technology and Engineering) Camp sums up its theme—to help young women realize their potential, and cultivate their interest in technology-related fields. This exciting camp is jointly organized by IBM China/Hong Kong Limited and HKUST.

The IBM EXITE Camp, now into its fourth consecutive year in Hong Kong, took place in August 2008 on HKUST campus and enjoyed the participation of 36 girls aged 11-13 from four secondary schools in Hong Kong— Belilios Public School, Maryknoll Convent School, St Paul's Convent School and St Stephen's Girls' College.

The students learnt how science and technology can improve daily life through engaging in activities such as building an earthquake alarm, assembling a temperature sensor, and creating their own "3D glasses", simulating the technology used in the Nintendo Wii remote.

At the Camp's closing ceremony, HKUST Vice-President for Academic Affairs (Deputy to the President) Prof Roland Chin encouraged participants to engage in the study of life sciences, energy and the environment— crucial to the scientific developments of the 21st century.

"It is a pity that so few woman scientists were involved in major research discovery and scientific breakthroughs that have drastically shaped and transformed our lives— electricity, air travel, penicillin and the Internet. This situation has to be changed and I'm glad that it is changing," Prof Chin said. He hoped that in the years to come, more and more young women would be able to study science and technology subjects and contribute to scientific and technological advancement.

對於科大土木及環境工程學系教授勞敏慈來說，沒有甚麼比「找尋及追求燃點心中熱情的興趣」更為重要。勞教授強調，熱情必須發自內心，而非由外力推動。

勞教授本身就印證了這套人生哲學。

自從在 26 歲「高」齡找到了她的「一生熱愛」——要成為一位教授工程的「人之患」後，她就堅定不移地向著她的目標邁進，並加入香港科技大學成為教授。

即使她的教學生涯已步入了第 17 個年頭，亦已擁有科大教學的最高榮譽——祁敖卓越教學服務獎章——她對教學的熱愛絲毫不減。身為系內 24 名教授中唯一女性，反倒加強了她要事事做到最好的決心。性別，從來就不在她的議題之內。「重要的並非你是巾幗抑或是鬚眉；重要的是你是否有決心在崗位上作出貢獻，」勞教授表示。

勞教授的體驗，正好反映了於 2008 年 8 月在科大舉行的「科技異彩夏令營」的目標。這項由科大與國際商業機器中國香港有限公司 (IBM) 合辦的活動，旨在及早培養女生對科技的興趣和啟發其潛能。

IBM「科技異彩夏令營」在香港已連續第四年舉辦。今年有 36 位 11 歲至 13 歲的初中女生參加，她們分別來自四家著名女校——庇理羅士女子中學、瑪利諾修院學校、聖保祿學校及聖士提反女子中學。

夏令營安排參加者分組合作，在充滿趣味和啟發性的活動中——例如製作地震警鐘、裝嵌配有數碼顯示屏的濕度感應器、模擬任天堂 Wii 遙控器所用的技術自製立體眼鏡等——領悟到科技如何改善日常生活。女生們又出席了 IBM 和科大專家主持的講座，吸收資訊科技方面的知識，以及了解在科技領域的事業發展機會。

在活動的閉幕儀式上，科大首席副校長錢大康教授特別鼓勵在座參加者投身於生命科學、能源及環境這三大科學領域。

他認為這三個科學領域掌握了人類未來科學發展的關鍵，將會大放異彩。由於種種社會及政治因素，女性在過去未能在科學領域內作出應有的發揮和貢獻。「在過去百年來，世界有四大發明，大大改善了人類的生活，這四大發明是電力、飛機、盤尼西林及互聯網。很可惜這些發明都沒有女性的參與。這種現象必須改變，」錢教授說。他希望愈來愈多女生加入科研的行列，為科研作出更大的貢獻。

From the Beijing Olympics to the InnoCarnival HKUST Products Never Cease to Dazzle

科大揚威創意科技嘉年華

For three days in October 2008, the InnoCarnival organized by the Government's Innovation and Technology Department trotted out Hong Kong's latest innovative products. Even against stiff competition, HKUST products still managed to dazzle the crowd.

One of the products, "Moxi" (meaning "drama of ink" in Chinese), was the brainchild of HKUST PhD graduate in computer science Mr Chu Siu-hang, who spent six years developing this digital ink painting software.

Capable of creating unprecedented visual effects, this technology recreates the virtual effects of distinctive characteristics of ink painting. In fact this technology stole the show at the spectacular opening ceremony of the Beijing 2008 Olympics.

Meanwhile, the Robotcop (a robot policeman) jointly developed by HKUST and the Hong Kong Police also managed to snare the attention of Financial Secretary John Tsang, who came over for a chat after officiating at the opening ceremony. When Robotcop asked the Financial Secretary if he knew what narcotics were, the Financial Secretary asked, "Will I get a prize for a correct answer?" This drew a round of applause and laughter from the real people around.

科大的獨特產品在「創意科技嘉年華」中大放異彩。

其中一項產品「墨戲」，是由科大計算機科學學系博士畢業生朱紹恆花了六年時間研發出來的數碼水墨畫技術軟件。

朱紹恆表示，這項技術可以造出前所未有的視覺效果，例如水墨的暈染和淡化特色。事實上，北京奧運開幕式也採用了他這技術！

此外，由科大與警務處合作研製的機械人「機靈先生」就吸引了主禮嘉賓財政司司長曾俊華與它對話。當機械人問曾司長什麼是毒品時，曾司長更反問一句「答中有冇獎？」，引起哄堂大笑。

「創意科技嘉年華」由政府創新科技署主辦，於2008年10月期間一連三天在沙田的香港科學園舉行。

Braving the Deep

HKUST is blessed with a shoreline campus. The sea is never far from our mind or from our sight. Last autumn, the HKUST jetty was crowded with divers participating in "Dive Into Your Full Potential at HKUST".

In keeping with HKUST's community service spirit, a number of disabled persons as well as youngsters from underprivileged families were sponsored to join this year's event, making it particularly meaningful and memorable.

The first to take the plunge was HKUST's Acting President, Prof Roland Chin, launching the event with a big splash. He was followed by more than 80 HKUST alumni, students and staff who braved the deep off the shores of our beautiful campus.

Emerging from the deep, Prof Roland Chin is all smiles.

HKUST alumni Choi Man-hin and his wife Au Suk-fun, who were among the participants said: "This event is an opportunity to show our love for both our community and our environment. It is so very moving to see disabled divers determined to overcome their handicaps in order to take part in the event."

The event, jointly organized by HKUST, the Hong Kong Underwater Association and the Sai Kung District Council, was a splashing success.

勇闖深海

2008年9月28日，科大碼頭雲集眾多潛水愛好者，出席一個富有意義的活動——「盡顯『潛』力在科大」。

這次活動由香港科技大學聯同西貢區議會及香港潛水總會合辦。在主辦單位的贊助下，部分殘疾人士和來自低收入家庭的青少年得以一嘗潛水滋味，使這次活動別具意義，令人難忘。

活動由科大首席副校長錢大康教授率先下水，揭開序幕。接著，超過80位校友、學生及教職員陸續加入，勇闖科大校園對開獨一無二的美麗水域。

校友蔡文軒及其太太區淑芬表示：「這次活動顯示大眾人士都關懷社會和生態環境。看到殘疾人士克服身體上的缺憾，參與活動，我們都深受感動。」

科大為前副校長**張立綱**舉行追思儀式
Former Vice-President Fondly Remembered

A memorial service in honor of HKUST's former Dean of Science and Vice President for Academic Affairs Prof Leroy Chang was held at the University on 10 September 2008. Prof Chang passed away in California in August 2008.

On that day, friends old and new gathered together to pay their last tributes to Prof Chang. They included Chairman of the University's Court Sir S Y Chung, former Vice-President for Administration and Business Mr Ian MacPherson, former Dean of Business School Prof K C Chan, and some retired faculty, fully demonstrating the respect and love Prof Chang commanded from his peers.

Mourning the passing of one of HKUST 's favorite sons, President Paul Chu said that Prof Chang would always be remembered by colleagues, students and alumni who knew him for his inspired leadership, approachability and energy. During the seven years at this University, Prof Chang made numerous and significant contributions to this young institution.

"Anyone who has the privilege of working with him will remember vividly his unique ability to energize and inspire," Prof Chu said.

Prof Chang was Dean of Science from 1993 to 1998, and Vice-President for Academic Affairs from 1998 until his retirement in 2000, when he was bestowed the title of University Professor Emeritus.

Prof Chang graduated from Stanford University with a PhD in Physics. In the course of his illustrious academic career, he enjoyed the rare privilege of being honored by five academies of science in the US and China, including Taiwan—Chinese Academy of Sciences, Academica Sinica, US National Academy of Sciences, US National Academy of Engineering, and Hong Kong Academy of Engineering Sciences.

科大於 2008 年 9 月為前理學院院長及副校長（學術）張立綱教授舉行追思儀式。張教授於美國加州病逝。

出席悼念儀式的除科大師生外，更有校董會主席鍾士元爵士、前副校長（行政）麥富誠先生、前商學院院長陳家強教授及不少退休教授，充分顯示出張教授深受敬重。

科大校長朱經武教授對張教授逝世表示哀悼。他表示：張教授是一位廣受愛戴的人物。他精力充沛，幽默雋智，魅力過人。任何與他共事過的同事都會對他的非凡感染力有深刻印象。

張教授由 1993 年至 1998 年擔任科大理學院院長， 1998 年至 2000 年升任為副校長（學術）。他於 2000 年退休後，獲科大頒授榮休講座教授。

張教授在美國史丹福大學取得物理學博士學位。他學術成就輝煌，曾獲美國及中國（包括台灣）五個科學學院的院士榮銜，包括中國科學院、台灣中央研究院、美國國家科學院、美國國家工程學院及香港工程科學院。

The Death of an Angel
徐豔　我們一生有您

Members of the HKUST community crowded into the Tin Ka Ping Hall last October to mourn the sudden passing of Miss Xu Yan, a second year Social Science PhD student who was lost to acute leukemia.

News of Miss Xu's sudden death shook and saddened those close to her— her family, friends, teachers and fellow students. It was only a matter of six days between her admission to the hospital and her untimely death.

Prof Y S Wong, our Vice-President for Administration and Business, led the memorial service. Those who were near and dear to Miss Xu, among them her friends from her alma mater the Huazhong University of Science and Technology, gathered to pay their respects and honor her memory. The University's Mainland Student and Scholar Society also sent representatives. All were left pondering the unmeaning of the passing of one so young and so full of promise.

Ms Xu was the only child in the family. Her death has hollowed out the lives of her parents, both elderly and retired. For them, financially and existentially, the promise of tomorrow is no more. Members of the University were moved to launch a donation campaign to offer what comfort and relief they could to the bereaved.

不少科大同學及教職員於 2008 年 10 月 17 日在田家炳廳聚集一堂，出席博士生徐豔的悼念儀式。徐豔是科大社會科學部二年級博士生，因急性白血病遽然離世。徐豔由病發入院到逝世，前後不過六天；消息來得突然，令所有親她愛她的人感到極為哀痛，更為她摯愛的雙親帶來難以承受的打擊。

悼念儀式由科大副校長（行政）黃玉山教授主持；出席儀式的除了徐豔在科大的教授、同學和新知舊雨外，還有她的母校華中科技大學的同學及科大內地學生學者聯誼會的代表。

作為家中的獨女，徐豔的離去，不但令其已退休的年邁雙親悲痛莫名，而且頓失所依。為此，科大師生特別在校內發起籌款活動；所籌得的善款，已送交徐豔雙親，以舒緩他們在生活上的壓力。

HKUST Hosts International Finswim Relay
科大舉辦國際蹼泳接力賽

HKUST is the proud venue provider and co-organizer of the 12th Hong Kong International Long Distance Finswimming Competition held in the waters off our campus on 14 December 2008. Teams from Mainland China, Macao, South Korea and Hong Kong SAR took part in the 3,000-meter race. Director of Facilities Management Mr Mike Hudson presented the HKUST Cup to Mr Jian Ka from Mainland China (Men's Champion), Mr Lee Hee Won from South Korea (first runner-up) and Mr Jiang Feng from Hong Kong SAR (second runner-up).

香港科技大學是第十二屆國際長距離蹼泳邀請賽的合辦單位，並為賽事提供場地，讓來自中國內地、澳門、南韓及香港的泳隊在科大防波堤對開海面進行 3,000 米蹼泳賽事。圖為科大校產設施管理處處長克遜先生頒授科大杯予男子組冠軍簡卡（中國內地），亞軍 Lee Hee Won（南韓）及季軍江峰（香港）。

Who Says We are Nerds or Bookworms ?
科大於工商機構運動會創佳績

Winners of the Table Tennis Event : Zoe Chiu (center), Emma Fung (right) and Dena Chan

Here is proof positive that HKUST has talents in all fields of endeavor—including the sports arena. More than 80 members of the HKUST family under the sponsorship of the Staff Association have demonstrated outstanding performance in the Corporate Games 2008. The University took part in five events— distance running, table-tennis, tennis, badminton and basketball. We emerged with prizes in distance running and table tennis.

Distance Run

Men's Open
1st runner-up (Que Yin Tik)

Men's Master
2nd runner-up (Bradley Foreman)

Men's Master Team Event
2nd runner-up (Bradley Foreman, Bertram Shi, Jaepil Choi, Tongo Chan and David Cook)

Women's Open Team Event
1st runner-up (Queenie Liu, Liming Zhai, Christine Chiu, Clara Kwan and Jaime Shing)

All Group A companies
2nd runner-up (overall score)

Table Tennis

Team Event
3rd runner-up

Women's Singles
Champion (Zoe Chiu)

Women's Doubles
3rd runner-up (Emma Fung, Dena Chan)

All Group A Companies 2nd runner-up (overall score)

Source: HKUST Facilities Management Office's Housing Newsletter Vol 16, Jan 2009

在科大教職員協會贊助下，約 80 多名教職員參與由政府康體及文化事務署舉辦的一年一度全港工商機構運動會，並創佳績，再次証明科大職員智慧與體能同樣卓越。今年科大參加了長跑、乒乓球、網球、羽毛球及籃球等項目，在眾多機構運動員中獲取優異成績，包括：

長跑

男子公開組 個人亞軍〔郭延迪〕

男子先進組 個人季軍〔Bradley Foreman〕

男子先進組 團體季軍〔Bradley Foreman, 施毅明, Jaepil Choi, 陳志霖及 David Cook〕

女子公開組 團體亞軍〔廖蒨鈴、翟黎明、趙瑞文、關慕霞、成燕玲〕

全部甲組機構整體成績 季軍

乒乓球

團體賽 殿軍

女子單打 冠軍〔徐敏兒〕

女子雙打 殿軍〔蘇若懿，陳鳳金〕

全部甲組機構整體成績 季軍

是項活動讓教職員積極參與社群活動，用公餘時間鍛鍊身體，保持身心健康。

資料來源：科大校產設施管理處內部通訊 第 16 期，2009 年 1 月

HKUST's fervent supporters of distance run

四十二公里的誘惑

楊志剛

很多長跑初哥，甚至老手，過終點時已筋疲力盡，通常以「死吓死吓」的面目見人。但在講求形像與包裝的社會，我心想：如果我輩也是這樣，那便白活了半世紀。跑步，也講求「市場策略」。於是在終點前一百米死?死?時已放慢腳步，暗自回氣，待跑近裝有大會照相機的終點區前，馬上挺胸縮肚，高舉雙手，睜大明亮的眼睛，擠出自以為陽光般的笑容，以百米短跑的步姿，光輝勝利的造形，完成42公里的長征。時間多花數秒，形象贏了十分，瞄一瞄終點的大鐘：四小時四十五分鐘。

科年逾半百，才初嚐人生的第一次。沒有春來稍遲的唏噓，反而有雙肩帶盡風和月的踏實。

「風和月」是馬拉松訓練的額外花紅。若非為了迢迢四十二公里的誘惑，怎會矢志不渝地每週五次，於晨曦中、或於星空下，迎風披月，跑盡香江路？

對吃腦族來說，長跑的時間不會白費．筆者些微稍有創意的靈感，全歸功於跑步。長跑時，心身疲累，邏輯思維下降，天馬行空的想像則不斷湧來。不妨一試。

戀愛是甜美的。與長跑邂逅亦然。發力疾走時的激情，有若初戀。無暇練跑時的落寞，就像新婚小別，難以自慰。路途上的驕傲，還得謙虛地稍作收藏。

長跑之戀，還有驚嚇。驚嚇度之高，令我這長跑老初哥為之目瞪口呆。除了廣為人知的膝蓋勞損、腳趾水泡、過度訓練而引起的傷風感冒之外，還有一項：小便排血。

這項驚嚇度高達「五粒星」的警告，來自長跑書 Better Training for Distance Runners。原來有多個案例，顯示馬拉松跑手跑完後，在終點時還可豪氣干云地撐住，但一旦排尿時，駭然見血，使不少長跑鐵漢或鐵娘子嚇到腳軟，癱坐馬桶，威風盡失。

該書云：長跑前，跑手慣常排盡小便，使身心舒暢。但每跑一步，都使體內膀胱擺動。沒有尿液作緩衝，膀胱內壁便互相碰撞，42 公里路程，碰撞數萬次，使膀胱內壁的微絲血管爆裂，嚴重者出血，成為血尿。通常一、兩天便復原。但不知底蘊者，往往嚇到面青，知道底蘊，同樣面青。

讀完該書，雖未血尿，我已嚇得停跑兩週。「跑步啫，駛唔駛咁搏呀？」然而腳癢難消，於是請教長跑名宿，恒生銀行的張樹槐兄。張兄回覆：「從未試過，亦無聽聞其他跑手試過。毋憂！」聽後我頓感釋然，於是再穿跑鞋，奔上長路。

好事，從來多磨。過去三年參加了三次十公里賽，愈跑愈快，老骨頭亦越來越輕。今年「樂」練二十週，超越半馬，直綵全馬，但竟然在跑前一週患了重傷風，咳到雙肋疼痛，頭赤腦脹。長跑名宿忠告：喉部不適尚可跑，胸肺不適者勿跑。醫生勸告：傷風，可勉強跑；感冒，則忌跑。

二月八日，東方欲曉，咳嗽鼻塞持續，但無發燒等感冒症狀。自信不會猝死路邊，於是從容出發。以逾半百之齡，帶病之身，去初試全馬。自我感覺當然良好，右邊嘴角不禁像已故貓王皮禮士利一樣，向上趟了起來。

冠軍級的馬拉松好手，多以約兩小時十多分鐘跑畢全程。美國男子組平均時間約為四小時三十分，而女子組則約為五小時。香港賽的時限為五小時三十分。慢過這時限，有免費巴士，車你回終點。

其實跑得愈慢則愈傷。一位美國馬拉松冠軍曾說：他非常佩服以四小時或以上跑畢全程的跑手。他以兩個多小時完成賽事，已筋疲力盡，要跑四、五小時，他「頂唔順」。

小弟咳足全程 42 公里，可謂半里一痰、百步一咳。頭三里路，7,000 型男索女，擠爆馬路，展步維艱。我以 65 分鐘完成頭十里路，略差於「目標價」的一小時。轉入 10-20 公里，人龍拉長，空間拉闊，大部份跑手已可按自己步伐去跑。這時，我鼻涕已乾，但咳嗽及痰沫居然供應不絕。以兩小時十五分完成頭二十公里。心想 OK 啦！

但 20 公里之後，平時 35 公里才出現的全身疲憊，竟突然來襲。雙腳愈感不聽指揮。到了 35 公里，不單給那位穿淺紫色緊身衣，秀髮輕飄，名叫「紫雁」的美少女拋離，還要蹲在路邊自我按摩雙腳，失禮街坊。「紫雁」這名字，是她在我前輕盈地跑，而我邏輯思維已盡失時，突然在我空白腦海裡浮出來的。

紫雁飛走之後，我頓感失落之餘，唯有強提真氣，入西隧、上天橋、過金鐘。一轉入銅鑼灣，但見兩旁擠滿男女老幼，為每位跑經的健兒吶喊加油。我眾小民，從未試過在街頭有這麼多路人甲乙丙丁為自己打氣，場面溫馨。我不禁鼻子一酸，胸口一熱，一股暖流直奔丹田，而雙腿則直奔終點區。

很多長跑初哥，甚至老手，過終點時已筋疲力盡，通常以「死吓死吓」的面目見人。但在講求形像與包裝的社會，我心想：如果我輩也是這樣，那便白活了半世紀。跑步，也講求「市場策略」。於是在終點前一百米死吓死吓時已放慢腳步，暗自回氣，待跑近裝有大會照相機的終點區前，馬上挺胸縮肚，高舉雙手，睜大明亮的眼睛，擠出自以為陽光般的笑容，以百米短跑的步姿，光輝勝利的造型，完成 42 公里的長征。時間多花數秒，形象贏了十分，瞄一瞄終點的大鐘：四小時四十五分鐘。

逾半百，尚有半百。各位科大人，我們明年組隊參加。路上見！

Fok Ying Tung Immortalized in Sports Stadium

It is a statue that would have made the late Mr Fok Ying-Tung proud. Standing tall at the entrance to the Sports Center is a larger-than-life bronze statue of Hong Kong's sports legend. Clad in a football jersey, and striking a typical footballer's pose, the statue was unveiled on 12 December 2008 by members of the Fok family.

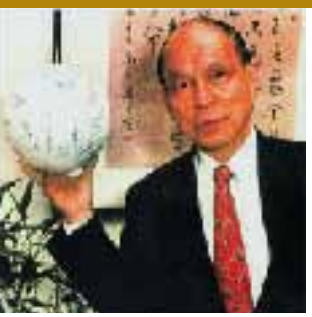
The statue is the work of the sculptor Mr Chu Tat-Shing, who worked hard to immortalize "a football enthusiast who drove the development of sports in Hong Kong and the Mainland."

Alongside the unveiling of the statue, HKUST's sports stadium was renamed to honor Mr Fok for his generous donation of $800 million to the University, making possible the setting up of our new graduate school in Nansha at the heart of the Pearl River Delta. The school is part of HKUST's strategic development plan for 2005 to 2020.

The naming and unveiling ceremonies were followed by a friendly match between the Yau Wing Team founded by Mr Fok and the HKUST team at the Sports Center.

The ceremony was attended by Mr Fok's sons Timothy, Ian, Benjamin, Manson and Michael, as well as his grandsons Kenneth, Eric and Jason. Eric even took to the field as a member of the Yau Wing Football Team.

In its heyday, Yau Wing was a formidable team boasting a number of legendary players — such as Yiu Cheuk-Yin (dubbed "Treasure of Hong Kong"), Wong Man-Wai (former coach of the South China Football Team), Chung Chor-Wai (another football great in the 60s and 70s), and Chu Pak-Wo, a renowned goalkeeper in the 60s.



科大霍英東體育中心命名典禮

轟立於學生體中心入口附近是一個雄姿英發的銅像。銅像身高 2 米，重 600 公斤。銅像的主人翁身穿球衣，腳踏足球，一手按腰，另一手挽著掛於背部的外衣，神情氣爽…

根據銅像創作者朱達誠的手稿，銅像主人翁「親身參與球賽，對賽果及體壇的進步非常高興，笑容親切，肢體的節奏令動態充滿朝氣。」銅像的主人翁是科大的摯友霍英東先生。

科大得以在珠江三角洲的南沙成立研究院，以及落實科大 2005 至 2020 年的策略發展計劃項目，全賴霍先生慷慨捐贈 8 億元。為了感謝霍英東先生對科技大學的慷慨支持，並紀念他對本港和國家體育發展的貢獻，科大除了將體育中心以霍英東先生命名外，亦在體育中心入口樹立一個青銅像。

科大於 2008 年 12 月 12 日舉行「霍英東體育中心命名典禮暨霍英東先生銅像揭幕儀式」，典禮後在霍英東體育中心舉行足球友誼賽，由霍英東先生創辦的「有榮」足球隊對科大教職員隊。

出席當日儀式的除了霍家第二代的霍震霆、霍震寰、霍震宇、霍文遜及霍顯強先生外，還有第三代的霍啟剛、霍啟山和霍啟中先生，霍啟山先生並披甲上陣，與有榮隊員並肩上陣作賽。

不説不知，有榮隊星蓋雲集，成員中有綽號為「香港之寶」的姚卓然、前南華教練黃文偉、六、七十年代著名中鋒鍾楚雄及在 60 年代有「愉園鋼門」之稱的朱柏和等。

A Patriot's Tale Told in Documents
HKUST Library's Invaluable

by Philip Yeung

Prof Lin (left) meeting Deng Xiao Ping

Prof Lin (right) greeting Zhou Enlai

Prof Lin (right) at a meeting with Song Qingling (center)

Being a Chinese patriot has not always been easy. Patriotism at a time when China is strong and respected may have its rewards. But patriotism at a time when China was isolated and poor might carry with it hardships that are hardly conceivable in times of peace and prosperity.

The story of Prof Paul Lin Ta-Kuang, director of the Center of East Asian Studies at McGill University, and professor the University of British Columbia in Vancouver is a case of patriotic hardship.

His was a tale of heartbreak and eventual triumph. Prof Lin suffered enormous personal sacrifice in bringing his family back to China in the early days of the People's Republic where he taught and lived in Spartan conditions for the next 15 years. During his protracted residence in China, he met its top leaders in whose circle he moved as their friend and advisor. These contacts and relationships were preciously and copiously documented in his personal papers, books and memorabilia.

Prof Lin parlayed these relationships into a platform for promoting peace and normalizing China's relations with the West. When rapprochement finally came between the People's Republic and the United States, Professor Lin had had a somewhat catalytic role to play. He first helped China to establish diplomatic relations with Canada, a prelude to the eventual thawing of the Sino-US relationship. Later, Professor Lin became a conduit of secret messages between former US Secretary of State Dr Henry Kissinger and Beijing leaders in American leaders' reaching out to China, resulting in the historic visit by President Nixon to the Chinese capital in 1972. That was Prof Lin's political contributions to the peaceful emergence of China into the international arena. But for years before this historic event took place, Prof Lin was treated with suspicion in official circles in the West as a China sympathizer.

The HKUST library is hugely blessed in acquiring the entire collection of Prof Lin's documents, booklets and pamphlets from his widow Mrs Eileen Lin through the Lins' friendship with Prof Yuk-Shan Wong, our Vice-President for Administration and Business, who knew them back in his days at McGill University.

Honors for Prof Lin came late in his life. He was named one of the 10 Canadians who have contributed most to Canada-Asia relations in the past century by the Asia Pacific Foundation of Canada. In 1998, he was named a member of the Order of Canada, the highest national honor, by the Governor-General of Canada in recognition of his lifelong commitment and contribution to fostering Canada-China relations.

Prof Lin's life was a profile in courage. We at HKUST are lucky to inherit the records of his deeds of courage and acts of love for China. In these records inhabit the memories of a great Canadian and a great Chinese patriot.

科大獲贈
Acquisition 愛國者珍貴文獻

熱愛中國，有時並不容易。在中國國勢富強並享有崇高國際地位時，愛國會獲獎勵；但在中國處於被孤立隔離和貧困的時代，愛國者背負的艱辛，是現今安穩富裕的一代所無法想像的。

加拿大麥基爾大學東亞研究所前所長及溫哥華哥倫比亞大學林達光教授，正是極具代表性的例子。

他的一生因愛國而充滿辛酸，但結局是光輝而凱旋。中華人民共和國成立之初，林教授放棄在美國的安穩生活，舉家回到祖國。往後 15 年，他們過著刻苦簡樸的生活。期間，他結識到中國最高領導層並成為他們的朋友和智囊。有關事蹟，全記錄在他的私人信函、藏書和有紀念價值的雜物裡。

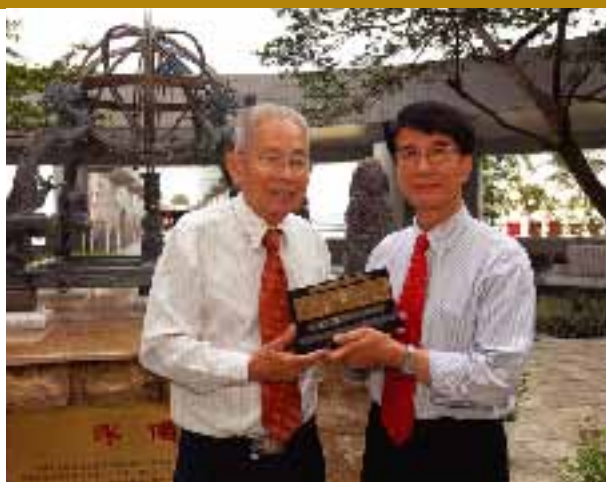
林教授充分發揮這些人際關係，將之引伸為宣傳平台，與西方國家宣揚和平及促進與中國關係正常化。首先，他協助中國與加拿大建立外交關係，誘發中美兩國終止冷戰。終於，有賴林教授擔起催化的角色，中美恢復邦交。其後，在中美建交的過程中，林教授成為美國前國務卿基辛格博士和中國領導層的秘密通訊渠道，並在 1972 年，締造了美國總統尼克遜歷史性訪問中國。以上所述的是林教授政治上的貢獻，使中國的政治舞台能夠和平地與國際接軌。然而，在一切未發生之前，林教授一直因被西方的官方組織懷疑為親中份子，而飽受滋擾。

科大副校長（行政）黃玉山教授與林達光教授相識於麥基爾大學，兩人亦師亦友，情誼深厚。得黃教授的穿針引線，林達光夫人首允將林教授生前的大量珍貴藏書、手稿和文件，捐贈科大圖書館。對於獲贈極具歷史價值的藏書，科大深感榮幸。

林達光教授的成就和貢獻在晚年得到各界的肯定。他被加拿大亞太基金選為上一世紀的十大加拿大公民之一。1998 年，他獲加國總督頒授加拿大最高榮譽勳章，以表揚他對東西文化交流及發展加中關係的功勛。林教授的一生是一本記錄勇敢事蹟的典籍。科大能夠保存所有關於他對祖國的熱愛和勇氣的記錄，實在是萬分榮幸。在這些寶貴的文獻裡，記載了一位偉大的加拿大公民和一位熱愛祖國的中國人的動人情操。

Prof Paul Lin's books on exhibit

(From left) HKUST Dean of Science Prof S Y Cheng, Mrs Paul Lin, HKUST Vice-President for Administration and Business Prof Y S Wong and HKUST University Librarian Dr Samson Soong



Dr Fong Yun Wah (left) receives a souvenir from President Paul Chu at the Dedication Ceremony.

An Ancient Instrument
Comes to a Modern Campus
渾天儀傲立科大

This modern university has recently acquired an ancient icon of science. The HKUST has now not only the "red bird", but also something else to explore the heavens with.

That something is the replica of the Armillary Sphere recently installed at the Fong Shu Chuen Promenade — thanks to the generous donation by the Fong Shu Fook Tong Foundation and the Fong's Family Foundation.

The Armillary Sphere is an ancient Chinese invention, and one of the oldest astronomical instruments in the world for calculating the position of heavenly bodies.

A dedication ceremony for this Armillary Sphere replica was held in September 2008, at which the Chairman of the Fong Shu Fook Tong Foundation and the Fong's Family Foundation, Dr Fong Yun Wah said, "I am pleased to play a part in adding meaning and life to the HKUST campus. The objective of installing this Armillary Sphere replica here is to remind the university community about China's long and distinguished scientific heritage."

According to historical records, the Armillary Sphere is an astronomical device dating back to the Western Han Dynasty. The design evolved through the centuries and one of the earliest originals of the instrument was made over 570 years ago in the Ming Dynasty, and is now housed at the Nanjing Purple Mountain Observatory — one of the five largest observatories in Mainland China.

The Armillary sphere replica, installed at the starting point of Fong Shu Chuen Promenade on the HKUST campus

The replica is a half-dimensional model of the original instrument, measuring 1.41 meters in length and width and 1.525 meters in height. Made of bronze, it weighs approximately one tonne.

This replica holds great cultural significance for the university. It is also sure to attract a hoard of visitors. When the news of the presence of an Armillary Sphere at HKUST reached the public, the university soon received a number of calls from local tour operators, asking if they could bring tourists to visit the university, and view this ancient astronomical device. Tourism Hong Kong, here we come !

最近大學校園增添了不少中國文化氣息。在本科生宿舍第一座和第二座之間的方樹泉廊一邊，矗立著一座以青銅製造球體狀龐然大物，由方樹福堂基金及方潤華基金慷慨捐贈的渾天儀仿製品。

渾天儀是中國古代一項偉大發明，也是世界上歷史最悠久的天文儀器之一，作用是測量天體的位置。

在渾天儀仿製品揭幕儀式上，方樹福堂基金及方潤華基金主席方潤華博士說：「能夠使科大校園添上科技智慧和文化氣息，實在是我的光榮。裝設渾天儀仿造品的目的，是要使科大的師生時刻銘記中國悠長和顯赫的科技傳統。」

根據歷史記載，渾天儀這個天文觀測儀器源於西漢時代。它的設計隨著朝代更替也不斷演變；現存於南京紫金山天文台的原物於明朝正統二年（1437 年）鑄造。南京紫金山天文台是中國五大天文台之一。

渾天儀仿造品按原物一比二的比例製造，複製品長和闊 1.41 米，高 1.525 米，約重一公噸。

這部渾天儀除了具備文化價值外，更深具旅遊觀賞價值。揭幕儀式過後，我們收到不少本地旅業界的查詢，要求安排遊客到科大觀賞這座科技和藝術結晶。

Wing Lung Bank Foundation
Sets Up Scholarships

永隆銀行慈善基金
捐贈一百萬港元成立獎學金

The University received a HK$1 million donation from Wing Lung Bank Foundation for setting up scholarships for outstanding students who have studied here for over a year.

At the cheque presentation ceremony Dr Michael Wu, Chairman of Wing Lung Bank Foundation Limited, said that Wing Lung Bank Foundation shared the same vision with HKUST to build a better Hong Kong by turning it into a knowledge powerhouse in Asia.

In our 2007/08 academic year, there were over 360 continuing students (Year 2 to Year 4) scoring a Cumulative Grade Average of A- or above, representing more than 9% of the continuing student population. With the donation from the Wing Lung Bank Foundation, we can now set up more scholarships to recognize students who have demonstrated remarkable progress in their studies.

香港科技大學最近獲永隆銀行捐贈一百萬元成立獎學金以嘉許成績優異的本科生。於 8 月 28 日舉行的支票捐贈儀式上，永隆銀行慈善基金主席伍步高博士表示，香港知識型社會需要人才配合發展，而科大正努力把香港建設成亞洲人才中心。永隆銀行慈善基金與科大理念同出一轍，同為香港未來繁榮出一分力。

於 2007/08 學年，科大共有超過 360 位在校學生（二年級至四年級）考獲累積平均等級達 A- 或以上的成績，相等於在校學生人數 9% 以上。對於這些持續考獲優秀成績的在校學生，科大認為他們非常值得表揚。承蒙永隆銀行慈善基金的捐助，科大得以設立獎學金，以嘉獎這些學業成績不斷進步的學生。

Dr Michael Wu (left), Chairman of Wing Lung Bank Foundation Limited, presents a cheque to Prof Roland Chin, Vice-President for Academic Affairs

Charity Begins At Home —HKUST Professor Donates HK$1.1 Million to Recognize Students

慈善源於科大教授 捐贈百萬成立獎學金

The University has received a HK$1.1 million donation from one of its own professors— Prof Larry Franklin of the Department of Finance— who made the donation through his family's charitable foundation in the US. The donation will be used to establish a permanent endowment to fund tuition awards for students working for not-for-profit organizations who are admitted to the Kellogg-HKUST Executive MBA Program. The first award cheque was handed out in January 2009.

HKUST will match the donation with an equal amount of contribution from the HKUST Business School. The donor and the School intend to launch a fund-raising campaign to raise an additional HK$2 million to make up an endowment principal of around HK$4 million.

Prof Franklin, who has taught business law and international strategy courses in our EMBA Program for the last 10 years, said, "We wish to include more executives from non-business backgrounds to share their visions for a better world with the business executives in the classroom. I am glad to provide support and impetus to the Program in its pursuit of this meaningful cause," he said.

Anyone wishing to emulate Prof Franklin's example in generosity by giving a pledge or gift to this new Endowment at HKUST can contact Judy Au at 2358-4461 or email her at *bmjudyau@ust.hk*.

財務學系的范凱霖教授透過其家族在美國的慈善基金，捐贈了110萬港元給科大。該筆捐款將為就讀凱洛格—科大EMBA課程並任職非牟利機構的同學建立一項永久性的獎學基金。首項助學金於2009年1月頒贈。

科大商學院將對該項捐款作出等額的配對。此外，捐款者和校方計劃展開籌款活動，額外籌募200萬元，使基金總額達至約4百萬元。

范教授在過去十年為凱洛格—科大EMBA課程授課，主講商業法律及國際策略科。他表示：「我們希望教室裡能包含更多非商業背景的行政人員，將追求美好世界的視野，與來自商界的同學分享。我很樂於促使課程鞏固其具有社會意義的目標。」

如欲以行動支持此基金，請聯絡區敏儀女士，電話：2358-4461，電郵：*bmjudyau@ust.hk*。

Prof Larry Franklin (center) hands out the cheque to Dean of Business and Management Prof Leonard Cheng (right) and School of Business and Management's Senior Associate Dean Prof Steven DeKrey


科大叢書系列
科學就在生活中
詩人科學家
我們為何在此？
霍金：只要活著就有希望


人魚天美
看人魚天美
Gig情管理人
哺乳動物圖鑑
校友叢書系列

Genesis-HKUST Newsletter is published by the Office of University Development and Public Affairs and distributed to members and friends of the Hong Kong University of Science and Technology. The *Genesis-HKUST Newsletter* is published quarterly (Spring, Summer, Fall and Winter) to report on news of recent events and latest development of the University. We welcome reproduction of any parts/articles or photographs in this publication. Please acknowledge the source if any material is reproduced.

Tel: 2358 6103; Email: *mccheung@ust.hk*

《同創－科大通訊》由香港科技大學大學發展與公共事務處編印出版，派發予大學成員及各界友好。本刊一年出版四期（春、夏、秋及冬季），報導大學的最新動態和發展。本刊文章或照片歡迎轉載，惟請註明出處。

電話：2358 6103；電郵：*mccheung@ust.hk*

Printed on recycled paper

PTC-G13060