Biotechnology Research Offers Competitive Advantage

A priority research area since the University's inception, HKUST's multidisciplinary work in biotechnology has pushed back the frontiers of scholastic achievement, assisted economic growth, and laid the foundations for a flourishing biotech industry in Hong Kong and the Mainland.

More on pages 4 and 5
Scaling New Heights on First-Rate Foundations

Over the past year, Hong Kong has been faced with unprecedented challenges resulting from the SAR’s economic transition and a lingering global economic depression. Higher education budgets have been cut. Yet we have striven to increase revenues and cut costs, without compromising our innovative spirit or tradition of excellence. HKUST intends to be a first-rate university that produces first-rate graduates, who in turn will help create a first-rate society. I am glad to say that our goal is gradually becoming a reality.

First-rate students

A first-rate university must attract first-rate students. Indeed, HKUST, together with HKU and CUHK, surpasses all other institutions in terms of the quality of its undergraduates. This is especially remarkable since we have neither a medical school nor a law school, and represents an achievement that the whole HKUST family can be proud of. The admission of outstanding students signifies the importance we attach to improving our overall academic standards. With this goal in mind, the University recently welcomed the first intake of gifted Form 6 students onto our new Early Admission Program. The program will receive every support to make it a success, as exemplified by the six-week summer program that faculty and Council members organized to prepare the early entrants for their new lives at HKUST.

First-rate teaching and research

A first-rate university must also nurture first-rate faculty and facilities. In academia, peer rating is a recognized criterion for assessing faculty performance. I am therefore delighted to report that HKUST’s Department of Accounting has been ranked the international No. 1 for the number of papers published in the world’s top five academic journals in the field; while our School of Humanities and Social Science, along with those of Harvard and Stanford, has been ranked amongst the world’s top five for the number of papers it has published in three leading China studies journals. In the competition for Research Grants Council earmarked funding, HKUST boasts both the highest success rate for project funding, and per capita funding achieved by any of Hong Kong’s tertiary education institutions. Total research awards amounted to more than HK$101 million. This figure only slightly lags the HK$108 million allocated to HKU, whose faculty body is twice the size of our own. I am also pleased to report that HKUST outperformed its peers in terms of grants allocated by the Innovation and Technology Fund.

Major plans for the year to come

The Hong Kong Jockey Club Charities Trust announced in August that it would donate HK$175 million to create a biotechnology company with HKUST, which will be headed by our own Prof Nancy Ip. This donation is the largest made to any local institution for biotechnology development, since the Trust first donated HK$130 million to HKUST in 1990 for the establishment of the Biotechnology Research Institute. Such a substantial donation reflects the sponsor’s recognition of the University’s strength in this field. The new company will expand on HKUST’s existing expertise and develop new technologies, helping Hong Kong carve an international niche in biotechnology, while working for the good of all humanity.

In these financially challenging times, HKUST is determined to deploy resources more efficiently and strengthen its collaboration with industry and business. After discussions with faculty, we have decided to maintain the balance between basic and applied research, and focus our short to medium term research efforts on (1) nano materials, science and technology; (2) biotechnology; (3) logistics management; (4) environmental science and engineering; and (5) IC design and electronic packaging.

With the support of the community, HKUST will continue to extend the boundaries of knowledge, develop new technologies and nurture talent, thereby facilitating Hong Kong’s economic progress and improving the well being of the peoples of Hong Kong, Greater China and beyond.
Building Hong Kong as a Logistics Hub

Globalization and China's entry into the WTO bring both challenges and opportunities to Hong Kong's logistics industry. With increasing trade between Asia and the rest of the world, the growth opportunity for Hong Kong's logistics industry is tremendous. Hong Kong's excellent airport and port facilities, plus sound infrastructure in telecommunications, financial services and transparent customs service give its logistics industry solid competitive advantages over its counterpart in the Chinese Mainland. The biggest disadvantages, compared to neighboring cities such as Shenzhen and Guangzhou, are relatively high operating costs and difficulties in handling cross-border goods movements. To sustain its leading position, Hong Kong needs to reinvent itself from a pure transportation hub to an efficient logistics hub by providing greater value to the goods flowing in the global supply chain that connects the greater China region with the rest of the world.

Integrate with the global supply chain

The current global economic environment, marked by increased demand, decreased customer loyalty, short product life-cycles and mass product customization, forces companies to lower costs while increasing the quality and variety of their products and services. To meet these challenges, companies are extending their value-chains by cooperating with partners, such as suppliers and logistics service providers, whose complementary capabilities can give the whole supply chain network a competitive edge.

Logistics service provides support to the storage and movement of goods through the entire supply chain. One of the major strategies a logistics service provider can adopt to add value for its customers in production and marketing, is to integrate its service process with that of its customers by offering efficient and effective flows of physical goods, financial, customs, and other transactions, and demand and supply information. The key to achieving this capability of integration is the information technology (IT) infrastructure. Developing an IT infrastructure that facilitates seamless integration of players from different industries (transportation, manufacturing, retailing, trading, etc) and transactions of a different nature (financial, customs, insurance, etc) is not an easy undertaking. The Hong Kong SAR Government should play the role of facilitator or leader to support IT infrastructure development.

Improve efficiency through research and training

Enhancing efficiency is another major strategy to stay competitive as a logistics service provider. With relatively high costs of resources in labor and facilities, logistics companies can gain efficiency by improving management and control of these resources. For example, they can increase productivity and improve human resource quality through education and training, and utilize information technologies and decision support systems to make better and more intelligent business decisions.

To help the local logistics industry gain efficiency, the Hong Kong SAR Government has a vital role to play in improving transportation infrastructures between Hong Kong and the Pearl River Delta region, and working with the mainland government to create a simplified and efficient cross-border customs procedure. This would reduce transportation costs and shorten service time—two of the key competitive performance measurements of logistics service.

HKUST is committed to assisting the industry. We recently established the Logistics and Supply Chain Management Institute (LSCMI) to incorporate the expertise of different disciplines at the University. Our efforts include: pursuit of excellence in research and dissemination of research results through industry collaboration, education and training for logistics operators and managers, and interaction and networking with government and industrial organizations through roundtables, forums, conferences, meetings and newsletters.

Mission

1. To acquire, advance and disseminate knowledge of technologies and methodologies in the design, development and management of integrated logistics networks and global supply chains through research, education and industry cooperation.

2. To provide world leadership in logistics and supply chain management research and to enhance collaboration between HKUST and the local industry.

3. To work with Government and industry to enhance the development of logistics and supply chain management in Hong Kong.

4. To promote integration of Hong Kong and its vicinities to help improve the Hong Kong economy.

Focuses

1. Logistics management
2. Supply chain management
3. Information technology and e-business
4. Transportation management
5. Education and training
6. University, Government and Industry collaboration

In addition, LSCMI also aims to integrate the current activities of the Transportation and Logistics Laboratory with the Supply Chain Management Forum, as well as enhance the undergraduate degree program in logistics management, the Master of Technology Management in Global Logistics Management program (MTM-GLM) and the Executive Diploma program in Transportation Logistics Management (EDTLM).

For further information, contact Prof Chung-Yee Lee, Director. Tel: 2335-7110 Fax: 2335-1753 Email: cylee@ust.hk
Bioscience and Biotechnology: High Impact Areas

HKUST has been at the forefront of advances in the fields of bioscience and biotechnology. In fact, its expertise pre-dates the University's official existence, with the opening of the preeminent Biotechnology Research Institute (BRI) in 1990.

Through a diverse program of interdisciplinary research, HKUST continues to make important breakthroughs and develop new applications, laying the foundation for a growing biotechnology industry in both Hong Kong and the Chinese Mainland. Below we detail some notable examples of the University’s world-class research, applications and product development.

Cutting-edge discovery helps fight against cancer

This summer, a team led by Dr Chun Liang, Assistant Professor of Biochemistry, identified a new protein called Noc3p that plays an essential role in the initiation of DNA replication.

Dr Liang’s findings have opened the door on new lines of research into DNA replication in normal and cancer cells. “The study is crucial for the understanding of cancer development, because every cancer cell must replicate its DNA before division,” explained Dr Liang.

“The discovery will not only advance our study on DNA replication, but hopefully also help in the fight against cancer itself,” he concluded.

Such is the significance of Noc3p that the team’s findings were published in the 28 June edition of Cell—the first time that research from Hong Kong has ever been published in this prestigious journal.

New technology propels drug research

A combination of new research and cutting-edge technology is being applied at HKUST’s High-Throughput Drug Screening Center to help the pharmaceutical industry discover new drugs.

Prof Yung Hou Wong of the Department of Biochemistry is responsible for the development of a unique series of “universal G16-based chimeric adapters for the detection of G protein-coupled receptors (GPCR).”

GPCRs are targets for around 50% of all currently marketed prescription drugs. Since each newly discovered GPCR represents a potential therapeutic target, Prof Wong is able to use the adapter proteins to screen traditional Chinese medicines (TCM) at the High-Throughput Drug Screening Center, and search for lead compounds with which to treat a range of afflictions, including neuro-related diseases and drug addiction.

“As we change the structure of these proteins, we are able to produce an almost universal GPCR adapter, ready to be used on any GPCR with our High-Throughput Drug Screening technology,” said Prof Wong, detailing how this process will speed up the search for new drugs through his collaboration with pharmaceutical companies.

The High-Throughput Drug Screening Center was established in 1999 with a HK$9.67 million grant from the Innovation and Technology Fund, and matching funds from VivoQuest Inc. A donation from the K S Lo Foundation was recently secured to support drug initiatives, and in the past few years, the Center has succeeded in establishing strategic partnerships with a number of pharmaceutical companies.

Skincare industry applies research

Dr W K Wong, Associate Professor of Biochemistry, has developed a cost-effective way to mass-produce human epidermal growth factor (hEGF), a protein that stimulates skin growth and helps in the treatment of wounds, burns and ulcers. Dr Wong’s discovery has been commercialized for cosmetic use and incorporated into skincare products that are widely available on the open market.

The use of hEGF was initially hampered by its cost—approximately HK$5 million per gram! However, Dr Wong’s research now enables hEGF to be mass-produced faster and at much lower prices, facilitating its medical application. He and his team are currently collaborating with the United Christian Hospital (UCH) on a study into hEGF treatment for diabetes foot ulcers.

These examples demonstrate how the University’s bioscience and biotechnology research contribute to both society and the economy. With the continued support of the Government and corporate sector, HKUST looks forward to advancing the frontiers of these important disciplines for the benefit of all mankind.
“Lab-On-A-Chip” — Latest Biotech Breakthrough at HKUST

Imagine replacing the laboratory and all its equipment with a microchip. Incredible as this might seem, such a development is now a partial reality: “We have integrated the entire micro-process of amplification and DNA analysis into a single chip of 2.5mm x 3.5mm x 0.35mm, which is like a highly efficient, automatic micro-laboratory,” said Dr Nikolaus Sucher, Assistant Professor of Biology and member of HKUST’s Biotechnology Research Institute (BRI).

Supported with grants from the Hong Kong Jockey Club and the Innovation and Technology Commission, Dr Sucher and his research team have made a global impact with their “lab-on-a-chip” innovation. Detailing their findings in the 1 July edition of the American Chemical Society’s renowned Analytical Chemistry journal, Dr Sucher revealed that the technology could be used to identify and genotype genetic material, specifically traditional Chinese medicines (TCM).

The chip offers several advantages over traditional lab-based tests. These include compressing the speed at which results are obtained from days to hours, and reducing the risk of results being contaminated. In the future, lab-on-a-chip may also become a common tool in the doctor’s office, allowing doctors to prevent, diagnose and treat diseases based on a patient’s DNA profile.

From a more immediate point of view, lab-on-a-chip will help with the quality control of TCM by ensuring that only genuine drug sources are used. It is not unheard of for rogue TCM dealers to attempt to pass off cheap, alternative substances to patients. One such example arises in distinguishing different species of the common TCM, Fritillaria. The well-known F.cirrhosae is used to effectively treat coughs, but unscrupulous dealers have been known to sell the cheaper and more toxic F.thunbergii in its place.

HKUST is currently the only research institution in Hong Kong to employ silicon chip technology for the development of TCM identification, and is recognized as a world-leader in the field.

Funding Success for 9th Year

The University has once again been recognized for the strength of its multidisciplinary research. A summer announcement by the Government’s Research Grants Council (RGC) revealed that HKUST would be awarded HK$101.2 million in the 2002/03 competitive earmarked research grants (CERG) funding round. The awards confirm HKUST as Hong Kong’s best performing grant applicant for the ninth successive year, with an overall application success rate of 64%. Of the 257 applications submitted by HKUST, a total of 165 received approval. This surpassed the 41% average of local institutions.

In terms of funding per capita, HKUST outperformed its peers, receiving an average of HK$219,078 per faculty member, compared to the HK$137,025 of the next-best performing university. Collectively, the RGC’s four subject panels received a total of 1,698 grant applications from Hong Kong’s higher education institutions. HK$428 million was divided between 691 research projects, with the University being the top recipient in both the engineering and natural science categories.

Not only was HKUST’s overall number of successful applications remarkable, several applications also attracted exceptional levels of funding. 10 research projects merited support worth over HK$1 million each. Of these, four were awarded in the Department of Biochemistry, three in the Department of Biology, and two in the Department of Chemistry.

Special mention should also go to Dr M K Cheung, Assistant Professor of Biochemistry, who for the second year in a row has become HKUST’s single largest grant recipient, this year attracting HK$2.35 million for his research into neural tissue proteins.

The whole University performed exceptionally well in the funding round. HKUST received nearly a quarter of the total sum that was allocated by the RGC, while for the whole tertiary sector, overall Government funding rose by 6% this year compared to last.
Prof David Zweig
Bringing greater understanding of China

Prof David Zweig has borne witness to some of the most tumultuous events in China's recent history. The Canadian political scientist, who joined HKUST in 1996 and is now a professor in the Division of Social Science, studied in Beijing during the Cultural Revolution. In April 1976, he bicycled into Tiananmen Square to see 400,000 people gather to commemorate the death of Premier Zhou Enlai and protest against the Gang of Four. He was there again in the square when troops opened fire on 4 June 1989.

Less dramatically, he has also spent many days slogging through muddy paddy fields to conduct research and gain first-hand knowledge of life in the countryside. For Prof Zweig, being in on the ground is essential to learning about the Chinese Mainland.

"There is an interesting relationship between the values and policies the leadership is advocating, and what people and local governments are actually doing," he said. "There is a gap between rhetoric and reality, which is not supposed to be there in a centrally controlled society." The gap, according to Prof Zweig, is caused by local interests, and exploring that gap has kept him fascinated with the Mainland for the past 30 years.

He lived there as a foreign student and visiting scholar/researcher for several years between 1974 and 1992, developing close friendships and observing how life changed from Mao's China to today's market-oriented society.

His research over the decades has resulted in a large and eclectic volume of published work. His fourth and latest book, *Internationalizing China: Domestic Interests and Global Linkages*, published as part of the prestigious Cornell University political economy series, examines China's opening up to the world at the local level. "In the first 20 years, there was so much room for growth, there were many winners, making the opening very popular. With WTO, the losers will become more obvious. There is greater pain potential under WTO," said the author.

Prof Zweig's arrival at HKUST six years ago has benefited Hong Kong students and has increased the University's pool of talented specialists in the China studies field—one of HKUST's high impact areas. "HKUST has perhaps the best group of social scientists on China in Hong Kong, and one of the best in the world," he commented.

At the University, Prof Zweig has organized the successful Social Science Dinner Seminar series, which brings together academics and members of the community in an informal setting to discuss contemporary issues related to China and Asia. Past speakers have included China specialists Ezra Vogel and Nicholas Lardy. Prof Zweig is now collaborating with the Shanghai WTO Consulting Center and Fudan University on a two-year project to look at how China's entry to WTO has affected the relationship between central and local governments.
HKUST Researchers Gain Recognition

Prof Ka Ming Ng, Professor and Head of the Department of Chemical Engineering, has been awarded the prestigious "Excellence in Process Development Research Award" by the American Institute of Chemical Engineers. The international award recognizes outstanding achievements in process development—a multifaceted subject involving basic sciences, engineering sciences, practical know-how, business and management.

Prof Wilson Tang of the Department of Civil Engineering has been elected to the US Offshore Energy Center's Hall of Fame as a Technology Pioneer in Reliability-Based Design of Marine Structures. In permanent recognition of Prof Tang’s outstanding accomplishments that have impacted the oil and gas industry, a plaque is displayed aboard the Ocean Star Offshore Drilling Rig and Museum, located in Galveston, Texas.

President Paul Ching-Wu Chu, the three Vice-Presidents and Deans of the four Schools extended a warm welcome to new students on 26 August. The students mingled with faculty and staff in an informal setting after short speeches by Prof Chu and Tony Shun-Bun Chan, President of the Students' Union.

The Staff Association held its second annual general meeting on 4 July and elected the executive committee for 2002-03. Dr Raymond Wong and Dr Grace Au were re-elected President and Vice-President respectively.
New Office to Recruit Non-Local Students

HKUST has gained another global dimension with the setting up of the International Students Office (ISO) in July, to coordinate expansion of the University's non-local intake.

The ISO helps extend activities related to the Schools' exchange programs and increase the number of international students studying full-time at HKUST, particularly at undergraduate level. It is headed by Associate Vice-President for Academic Affairs, Prof T C Pong.

Currently, less than 1.5% of the University's undergraduate population is non-local. In the next three to five years, the aim is to reach 5%. Initial target areas for recruitment are Southeast Asia and the Chinese Mainland, followed by North America and Europe.

"As the campus becomes more international, all students will definitely benefit," said Prof Pong. "Increased interaction with students from different parts of the world will help local students gain the exposure and communication skills vital in the global economy."

"The community can also take advantage of a more international student body by retaining top non-local graduates in the Hong Kong workforce," said Vice-President for Academic Affairs, Prof Yuk-Shee Chan.

Although there is competition for international students from locations such as Shanghai and Singapore, Prof Chan feels Hong Kong will prove a more attractive draw. "The quality of our faculty and programs, Hong Kong's position as an international commercial center, and the fact that China will be one of the fastest-growing economies in the next few decades make it good to gain an education here," he said. "There are tremendous opportunities for non-local students in Hong Kong."

Exchange Scholar Joins German Center

The German Center in the University's Europe Institute (EI) has gained a new visiting scholar with the arrival of zoologist and neuroscientist Dr Michael Hörner.

Dr Hörner, Associate Professor of Cellular Neuroscience at the University of Göttingen's Institute of Zoology/Anthropology in Germany, will continue his research at HKUST and promote two-way academic and research exchanges between Germany and Hong Kong.

"It was a personal challenge and a bit of an adventure to live in Hong Kong, without previous work experience in Asia," said Dr Hörner, who started at the German Center and the Department of Biology in June. "Getting to know new people, sharing views and being supported is essential for 'newcomers' like me, and in this respect my first few months have already been an exciting experience. I have found an open-minded, stimulating, international atmosphere at HKUST."

Dr Hörner's position at the German Center was offered by the EI and German Academic Exchange Service (DAAD). As well as assisting Hong Kong students to study in Germany, he will be forging links between the German Center, the academic community and German organizations in Hong Kong, and also encouraging German students, especially postgraduates, and scientists to come to HKUST and other universities in the SAR.

The German Center opened in 1999 and since then has been actively involved in academic exchanges and research collaborations. Student exchange programs have been established with leading German universities and partnerships forged with well-known German companies.
Forum Steps Up Community Debate on Hong Kong's Future

The thought-provoking and well-received HKUST Forum on the Future Development of Hong Kong held its third and final session on 12 July. The Forum series was organized by the University to promote informed discussion among different sections of the community on the economic and social challenges facing the SAR.

The three sessions, held from May to July, attracted more than 600 participants, including top government officials, senior figures from the business sector, academics, think tanks, students and other members of the community interested in securing Hong Kong's future. Important issues such as myths about Hong Kong's economy, structural problems, economic integration with the Pearl River Delta, Hong Kong's competitiveness, R&D and high-tech development, education and human resources, and lack of vision and direction were brought up, with wide-ranging recommendations resulting from all three discussions.

The third session dealt with the HKSAR Government's role in the economy. Participants gave insights into the Government's past and present position in relation to the economy and generated a series of significant proposals for change.

The two earlier sessions focused on Hong Kong's position in relation to the Pearl River Delta in manufacturing, services, infrastructure and logistics, and jobs and human resources, and the importance of innovation and entrepreneurship to Hong Kong's future.

An overall report on the Forum and its proposals for change has been presented to the Government for policy reference. The report can be downloaded at www.ust.hk/HKUST_Forum/hkforum_report.pdf

The Forum's major recommendations

• Actively pursue economic and technological cooperation between Hong Kong and the Pearl River Delta to keep the region competitive in the face of rising competition from other areas of China. Address Hong Kong people's isolationist mentality and develop a shared vision of the SAR as the "Dragon Head" of South China.

• Increase public investment in R&D and encourage greater private investment in technology firms and start-ups to create an environment where innovative enterprises can flourish and help to give Hong Kong competitive advantage through technological advances.

• Align Hong Kong's education system with the human resource needs of a knowledge society. Re-think higher education cuts given universities' essential role in developing the research and human resources to sustain the new economy. Provide institutions and funding for re-training low-skilled workers.

• Ease immigration policies on bringing talented people from the Chinese Mainland to work in Hong Kong to solve the current shortage of knowledge workers, fast-track the community's transition to the knowledge economy, and boost economic activity as a whole for Hong Kong.

• Introduce advanced manufacturing to Hong Kong focusing on R&D, product and process design, supply chain management, customer services and green technologies.

• Increase transparency on land policy to put certainty into the market and restore confidence.

• Improve border controls to facilitate flows of people, goods, capital and technology, and reduce costs. Develop a common platform for Hong Kong and mainland customs to process clearance electronically.

• Encourage greater sharing of information and open discussions to enhance the quality of public debate in Hong Kong and widen understanding of the economic and social issues the community faces.

• Inspire people to work towards turning Hong Kong into a truly world-class city, one that offers its inhabitants a good environment, rich cultural institutions, modern housing, top quality education, and excellent recreational programs.
Faculty Publications Top World and Region

HKUST faculty are top in research publication. In 2001, our accounting faculty gained the No. 1 spot in the world for the number of articles published in five leading academic journals in the field, for the second consecutive year.

Prof Gary Biddle, Head of the Department of Accounting and Associate Dean of Business and Management, pointed out that such internationally renowned research was a major asset for teaching, enabling students to gain knowledge that "won't appear in textbooks for another 10 years". HKUST accounting graduates are thus equipped with top skills to succeed in the developing global economy and gain a competitive edge with employers in the job market, he said.

The accolade comes for research published in 2001 in Contemporary Accounting Research, the Journal of Accounting and Economics, the Journal of Accounting Research, the Review of Accounting Studies, and The Accounting Review. HKUST joins Stanford, Columbia and Pennsylvania in being the only universities to rank in the top 10 for the past four years.

Meanwhile, with world-wide attention increasingly focused on China, Hong Kong has powered ahead internationally in China studies, with HKUST's School of Humanities and Social Science faculty leading the way. The total number of articles published in the last five years in the top three English journals in the field shows HKUST ranked first among universities in Hong Kong, and among the top five internationally along with Harvard and Stanford. The journals were the China Journal, China Quarterly and Journal of Asian Studies.

Revamped HKUST Website — Tailor Made for You

The Internet provides the fastest and most convenient way for you to access information about HKUST, so it is essential that the University's website be a resource that is easily navigable, contain the information that you are looking for, and generally serve your every need.

To better achieve this goal, HKUST recently undertook a revamp of the parent website at www.ust.hk, to bring the University and you, our stakeholders, closer together.

Moving away from the previous, University oriented approach, the new parent site has been tailored to address the requirements of students who may be thinking about joining HKUST, parents, academics and researchers, business and industry, donors, casual visitors, alumni and the media. A cleaner, more coherent and contemporary site design has been adopted, and the information contained on the site has been re-arranged so that it is more easily retrievable, no matter what you want to know about the University.

Other useful features have also been introduced. These include: a Chinese language version, a pull-down menu entitled "HKUST for you" that provides clearly categorized prompts to guide you to what you are looking for, a "Giving to HKUST" section to facilitate donations to the University, scrolling news and event items, as well as an enhanced search engine.

The September re-launch marks a new phase of enhanced Web interaction between the University and its stakeholders. It introduces a website that is more coherent and powerful, an accomplished communication tool that will act as a virtual interface between you and HKUST.
Students Meet Corporate Donors

A recent informal get-together offered HKUST students the opportunity to meet senior business executives and to personally thank them for their support.

The cocktail party, hosted by the Jebsen Educational Foundation on 5 June, brought together 17 HKUST students and staff, and 18 senior executives of Jebsen & Co Ltd in a casual exchange. The students presented a jar of 748 handmade "lucky stars", each representing an awardee under the Jebsen scholarship program since 1995, to Mr Hans Michael Jebsen, Chairman of the Board of Trustees of the Foundation and of the company.

Speaking at the party, Mr Jebsen said that it was a great delight to meet with the talented and dedicated HKUST students and that he was touched by their gift. "Education is not an option but the bedrock of all modern societies. HKUST is at the spearhead of providing solid tertiary education, and thus is playing a pivotal role in helping Hong Kong retain her regional leadership. We are proud and honored to be associated with HKUST through the Jebsen Educational Foundation in establishing scholarship and bursary programs to help shape the next generation of business and community leaders for Hong Kong," said Mr Jebsen.

Leung-Hang Ma, a Biology Year 3 student who attended the party, was impressed with the senior executives’ concern for the younger generation. "The party was a very special occasion. I appreciate the opportunity to share my aspirations with successful business executives and learn from them how to equip myself for my future career. I am grateful to Mr Jebsen and all the staff at Jebsen & Co Ltd for their generosity in nurturing Hong Kong’s next generation," said Ms Ma.

Since its establishment in 1995, the Foundation has donated HK$7.76 million in scholarships and bursaries to local and mainland students at HKUST, at both undergraduate and postgraduate levels. The company has also provided internship and employment opportunities for some of the awardees.

How a Donation Brings World-Class Breakthroughs

Making a donation is not just a matter of money. It takes vision, especially in supporting such long-term endeavors as research.

In 1992, Dr William Mong, Chairman and Senior Managing Director of Shun Hing Group, made a decision to donate HK$10 million to HKUST in the area of electronics and material science. The contribution, through the Shun Hing Education and Charity Fund, led to the establishment of the William Mong Solid State Clusters Laboratory in 1993. The mission of the Laboratory is to bring together faculty members with diverse backgrounds and expertise to make world-class contributions in the area of solid state clusters research.

"This modern laboratory is set up to facilitate research in a range of advanced technologies in the areas of semiconductors, lasers and optics. It will train scientists and technicians much needed in society. It will enable them to investigate new fields that will secure Hong Kong a place among the world leaders," said Dr Mong at the naming ceremony in 1993.

Seven years later, the Laboratory became the birthplace of the world’s smallest single-walled carbon nanotubes, which have a diameter of only 0.4nm. This breakthrough discovery has created new potential for developing microcomputers, ultra-thin electronic devices and even hydrogen-driven electric cars. It was hailed as one of the greatest inventions of 2000.

The vision and generosity of the donor, coupled with the relentless quest for excellence and hard work of HKUST’s researchers, have resulted in great achievements that have drawn the world’s attention to Hong Kong. Following the success in 2000, HKUST physicists discovered that the nanotubes had superconducting properties, another breakthrough that opens a window onto a whole new world of science.

Other important work of the Laboratory includes the development of new particles in electrophotographic fluid (better known as “smart fluid”) that improve the material’s stability, and the design of an innovative semiconductor cluster beam machine to facilitate the study of the photofragmentation of small selenium clusters.

"As a research university, HKUST requires resources to further its work at the cutting edge of science and technology. The vision and support of donors is very important to us, and may result in achievements that benefit all mankind. The generosity of different sectors of the community will enable HKUST to realize our full research potential to make further contributions to society," said President Prof Paul Ching-Wu Chu.

If you would like to support HKUST, please contact our Fundraising Unit at 2358-6109, or email donation@ust.hk. For donation information, please visit www.ust.hk/en/ai/index2.html
In Action

JUST Walk Helps Fund New Hall

On 20 October, over 1,000 HKUST family and friends gathered on campus for JUST Walk—a sponsored walk to raise funds for construction of the University's new student residence. Officiating were Dr the Hon Sir Sze-Yuen Chung, Pro-Chancellor and Chairman of the Court, Dr John C C Chan, Chairman of the Council, President Prof Paul Ching-Wu Chu, and representatives of students, alumni and staff. The route led to Tai Po Tsai and included a tour of the Old China City television studio, thanks to TVB, the event’s official supporting organization. After the walk came Fun Day, with games, bouncy castles and clowns to enjoy on the LG7 lawn. The S27-place hall is due to open in 2004. The Hong Kong Jockey Club Charities Trust and Government have also pledged to support construction costs.

HKUST/Jiao Tong Join Forces

HKUST and Shanghai Jiao Tong University launched a jointly taught part-time Master in Technology Management (MTM) program in Shanghai on 13 September. The 18-month modular course is aimed at senior managers based in the Chinese Mainland, and will exploit standards of excellence deriving from synergies between the two institutions. It is the only program of its kind approved by the Chinese Ministry of Education.

22 students from multinational and domestic companies enrolled on the program, which is based on HKUST's original MTM. Teaching will focus on technology management, products and business development, and make extensive use of case studies concerning mainland enterprises. Students can also look forward to informative study trips within China, and as far afield as the US.

Campus Offers Handball Welcome

15 college handball teams from the Chinese Mainland, Taiwan, Singapore, Macau and Hong Kong gathered at HKUST between 22 and 28 July to participate in the 19th Chinese Universities Handball Championships and HKUST International University Handball Invitational Competition, 2002. The tournament was last held at HKUST five years ago to commemorate the first anniversary of the 1997 Handover. Its return this year coincided with the inauguration of the University's first standard beach handball court.

Early Admission Program Off to a Flyer

On 15 July, President Prof Paul Ching-Wu Chu welcomed the inaugural intake of 56 Form 6 students to HKUST's Early Admission Program (EAP). The students had arrived to undertake a six-week enrichment course to facilitate their transition to university life. Program highlights included a range of academic classes, and an informative weekly talk by University Council member, Mr Ronnie Chan, entitled "The 21st Century and Me".

Participants reported finding the enrichment program both practical and inspiring. The EAP was introduced in March to accelerate the admission of Hong Kong's gifted young students into the University, and promote the concept of a first-class tertiary education in Hong Kong rather than overseas.

Chemical Engineers Host Global Event

The Department of Chemical Engineering hosted this August's 17th International Symposium on Chemical Reaction Engineering (ISCRE). The Symposium convened outside North America and Europe for the first time, at Hong Kong's Convention and Exhibition Centre. 300 attendees debated subjects that included molecular dynamics, miniaturization and biotechnology. Research results were shared and lectures given on a variety of subjects, amongst them; multi-scale methodology, molecular dynamics in chemical reaction, and the impact of chemical reaction engineering on the development of the Asia Pacific region.

Prof Po-Lock Yue, Professor and former head of the Department of Chemical Engineering, was Chairman.
COUNCIL MEMBER
Mr Peter T S WONG
王先生

Mr Peter Wong is Chief Executive Officer Hong Kong and Director of Standard Chartered Bank with governance responsibility for the Mainland, Hong Kong and Taiwan. He received widespread approbation for his leadership of the bank during its purchase of Chase Manhattan’s Hong Kong consumer banking division, a deal that was Standard Chartered's biggest-ever single acquisition in one country. As Chairman of the Hong Kong Association of Banks, Mr Wong guided the organization through banking sector de-regulation in 2001. He is Chairman of Hong Kong Interbank Clearing Limited and a member of various financial committees, including the Risk Management Committee of Hong Kong Exchanges and Clearing Limited, and the Banking Advisory Committee.

A Board member of the Community Chest, and Honorary Vice President of the Amateur Athletics Association, Mr Wong is deeply involved in community service outside the banking sphere. He is a graduate of Indiana University and holds Masters degrees in both computer science and business administration.

ASSOCIATE VICE-PRESIDENT FOR ACADEMIC AFFAIRS
Prof Ting-Chuen PONG

Prof Ting-Chuen Pong is a founding member of HKUST, having acceded to the position of Senior Lecturer in the Department of Computer Science upon his arrival from the University of Minnesota in 1991. His appointment to the post of Associate Vice-President for Academic Affairs follows his fulfillment of a variety of roles in the University, which include his previous functions as Associate Dean in the School of Engineering, and five years as Director of the University's Sino Software Research Institute.

Prof Pong holds a BSc from the University of Wisconsin and received both his MSc and PhD from the Virginia Polytechnic Institute and State University. His research expertise rests in the areas of computer vision, in particular motion and video analysis, image processing, multimedia computing, artificial intelligence, pattern recognition and distance learning. Amongst the honors and awards that Prof Pong has received are the Annual Pattern Recognition Society Award in 1990, and last year's HKUST award for Excellence in Teaching Innovation.

DEAN OF BUSINESS AND MANAGEMENT
Prof K C CHAN

Prof K C Chan joined the University in 1993 as a Reader in Finance from Ohio State University. He was appointed Head of the Department of Finance in 1994, Associate Dean of Business and Management in 1996, and became acting Dean in 2001. Prof Chan received his BA in Economics from Wesleyan University, and his MBA and PhD from the University of Chicago. He is best known for his research on the pricing of risky assets and the performance of stock market trading strategies. His other research interests include microstructure and regulatory issues dealing with the efficiency of financial markets.

A regular contributor to leading academic finance journals, Prof Chan is an editor of the International Review of Finance, and President of the Asia Pacific Finance Association. He is a member of the Hong Kong Council for Academic Accreditation, and a part-time member of the Government's Central Policy Unit. Prof Chan has also served as a director of the Hong Kong Futures Exchange.

HEAD AND PROFESSOR
DEPARTMENT OF CHEMICAL ENGINEERING
Prof Ka Ming NG

Prof Ka Ming Ng received his BSc from the University of Minnesota and his PhD from the University of Houston. He was previously Professor of Chemical Engineering at the University of Massachusetts and held visiting positions at MIT, DuPont Central R&D, and the National University of Singapore. He joined HKUST in 2000 and established the Consortium of Chemical Products and Processes.

Prof Ng's research focuses on product and process system synthesis, where basic sciences, engineering sciences, practical know-how, business and management are integrated to reduce the time, effort and money spent on manufacturing, while improving product quality. He has consulted extensively with various blue chips, including Unilever and ExxonMobil, and is Corporate Science and Technology Advisor to Mitsubishi Chemical Corporation. He is also an editorial board member of the Korean Institute's Journal of Chemical Engineering.

Prof Ng is the recipient of a host of awards, including the General Electric Outstanding Teaching Award in 1992 and this year's Excellence in Process Development Research Award from the American Institute of Chemical Engineers.
HEAD AND PROFESSOR
DEPARTMENT OF COMPUTER SCIENCE
Prof Lionel M S NI
倪明選教授
Prof Lionel Ni joins HKUST from Michigan State University. He received his BSc from National Taiwan University, his MSc from Wayne State, and his PhD in electrical engineering from Purdue University. In 1994, Prof Ni was made a Fellow of the IEEE for his work in the fields of parallel processing and distributed systems. His other areas of expertise include high-speed networks, VLSI design automation and benchmarking techniques. Prof Ni has served as an editor of several prestigious international computing journals and was the director of the US National Science Foundation's Microelectronic Systems Architecture Program.

Prof Ni has published over 200 technical articles in refereed journals and proceedings. His co-authored paper "The Turn Model for Adaptive Routing" was selected as one of the most significant computer architecture papers of the last 25 years at the 19th Annual ACM/IEEE International Symposium on Computer Architecture. He was a co-founder of CC&T Technologies, developer of award winning Internet-related products that include Voice over IP hardware and Internet emulator software. He has also served on the advisory boards of many organizations, including the National Science Council of Taiwan.

HEAD AND PROFESSOR
DEPARTMENT OF ECONOMICS
Prof Leonard K H CHENG
鄭國漢教授
Prof Leonard Cheng returns to his position as Head of the Department of Economics. He previously held this position from 1995 to 2001, and under his headship the department achieved remarkable growth in its research productivity. Between 1993 and 1996 Prof Cheng was also the Associate Dean of Business and Management.

A graduate of the Chinese University of Hong Kong, Prof Cheng received both his MA and PhD from the University of California, Berkeley.

Prof Cheng is an accomplished scholar in international economics and applied microeconomics. His expertise in the fields of foreign direct investment in China and market integration has made him a valuable advisor to various bodies, including the Organization for Economic Co-operation and Development (OECD) and the Hong Kong SAR Government. Prof Cheng has held positions at the World Bank and the University of Florida, and acted in an editorial capacity for various publications, amongst them the Journal of International Economics and the Pacific Economic Review.

HEAD AND PROFESSOR
DEPARTMENT OF INFORMATION AND SYSTEMS MANAGEMENT
Prof Kar Yan TAM
譚嘉因教授
Prof Kar Yan Tam joined HKUST from the University of Texas at Austin in 1992, and is a founding member of the Department of Information and Systems Management. He was Deputy Head of the Department from 1992 to 1998, became Director of Undergraduate Programs and Associate Dean of the School of Business and Management in 1999, and was appointed Director of the Center for Electronic Commerce in 2001. Prof Tam received his BSc from the University of Illinois, and his MSc and PhD from Purdue. His research interests span multimedia and Internet applications, the adoption and diffusion of information technologies, and electronic commerce.

Prof Tam has extensive professional relationships with world-renowned organizations. He is an active member of the IS community and has served as Vice President of the Association of Information Systems. He is currently a Fellow of the International Centre of Electronic Commerce, and fulfills editorial responsibilities with a number of academic journals.

HEAD AND PROFESSOR
DIVISION OF SOCIAL SCIENCE
Prof Yanjie BIAN
樊燕杰教授
Prof Yanjie Bian is a renowned sociologist on contemporary China. He joined the University in 1997 from the University of Minnesota, where he was an associate professor and Director of Graduate Studies in Sociology. In 1999, Prof Bian founded the Division's Survey Research Center and in 2001 he was appointed Associate Dean of Humanities and Social Science.

Prof Bian received his BA and MA from Nankai University, China, and his PhD from the State University of New York at Albany. His current research embraces social and occupational mobility of workers in Hong Kong and the Chinese Mainland, and a study of social capital and comparative advantage amongst Chinese firms. He has received a variety of honors and awards, including, most recently, honorary professorships from the People's University of China, Xiamen University and Zhongshan University. He is a council member of the Hong Kong Sociological Association and the current President of the North American Chinese Sociologists Association.
VISITING ASSOCIATE PROFESSOR OF BIOLOGY; PROGRAM ADVISOR TO THE GERMAN CENTER, EUROPE INSTITUTE

Michael HORNER

1989 Dr rer nat
1997 -

Research Interests

University of Göttingen (Neurobiology and Electrophysiology)
Associate Professor, University of Göttingen
Transmitter function and neuromodulatory role of biogenic amines; electrophysiology and immunocytochemistry of amine-containing neurons; neuroethology.

VISITING ASSISTANT PROFESSOR OF ELECTRICAL AND ELECTRONIC ENGINEERING

Alex Ka Nang LEUNG

2002 PhD

Research Interests

Hong Kong University of Science and Technology (Electrical and Electronic Engineering)
Analog integrated circuits and circuit techniques for telecommunications; power management integrated circuits.

VISITING ASSOCIATE PROFESSOR OF MARKETING

Asim ANSARI

1993 PhD
1998 -

Research Interests

New York University (Marketing)
Associate Professor, Columbia University
Customization and targeting; product differentiation and positioning; bayesian modeling; game-theoretic models of marketing.

ASSISTANT PROFESSOR OF INDUSTRIAL ENGINEERING AND ENGINEERING MANAGEMENT

Kaijie ZHU

2002 PhD

Research Interests

Stanford University (Management Science and Engineering)
Supply chain and operations management; modeling; inventory control.

ASSISTANT PROFESSOR OF COMPUTER SCIENCE

Qiong LUO

2002 PhD

Research Interests

University of Wisconsin-Madison (Computer Science)
Database systems; web data management; query processing over the Internet.

ASSISTANT PROFESSOR OF ACCOUNTING

Gilles HILARY

2002 PhD

Research Interests

University of Chicago (Accounting)
Disclosure and corporate governance; behavioral economics; international accounting.

ASSISTANT PROFESSOR OF ELECTRICAL AND ELECTRONIC ENGINEERING

Amine BERMAY

1998 PhD
2002 -

Research Interests

Paul Sabatier University (Microelectronics and Microsystems)
Senior Lecturer, Edith Cowan University
VLSI circuits and systems; packaging technologies; CMOS image sensors and smart vision systems; VLSI implementation of artificial neural networks.

ASSISTANT PROFESSOR OF ACCOUNTING

Xiaohong LIU

2002 PhD

Research Interests

University of British Columbia (Accounting)
Lecturer, Shanghai University of Finance and Economics
Incentives and control in organizations; economics of auditing; financial disclosure.
ASSISTANT PROFESSOR OF ECONOMICS

Yuk Fai FONG
Boston University (Economics)
Auction theory; behavioral economics (applications of economics to psychology); industrial organization (the study of competition and organizational structures in industries).

Hiromi NOSAKA
University of Wisconsin-Madison (Economics)
Macroeconomics; labor economics; economic theory.

ASSISTANT PROFESSOR OF FINANCE

Jie GAN
Massachusetts Institute of Technology (Finance)
Assistant Professor, Columbia University
Corporate finance, financial institutions, real estate finance; emerging markets.

ASSISTANT PROFESSOR OF MARKETING

Inseong SONG
University of Chicago (Marketing)
Dynamics of the demand for new products; measuring and exploiting consumer heterogeneity; understanding firms' strategic and competitive behaviors.

ASSISTANT PROFESSOR OF HUMANITIES

Jianhua CHEN
Harvard University (Chinese Literature)
Chinese classics hermeneutics; late-Ming and late-Qing literary culture; early republican Shanghai study; visual and literary modernity.