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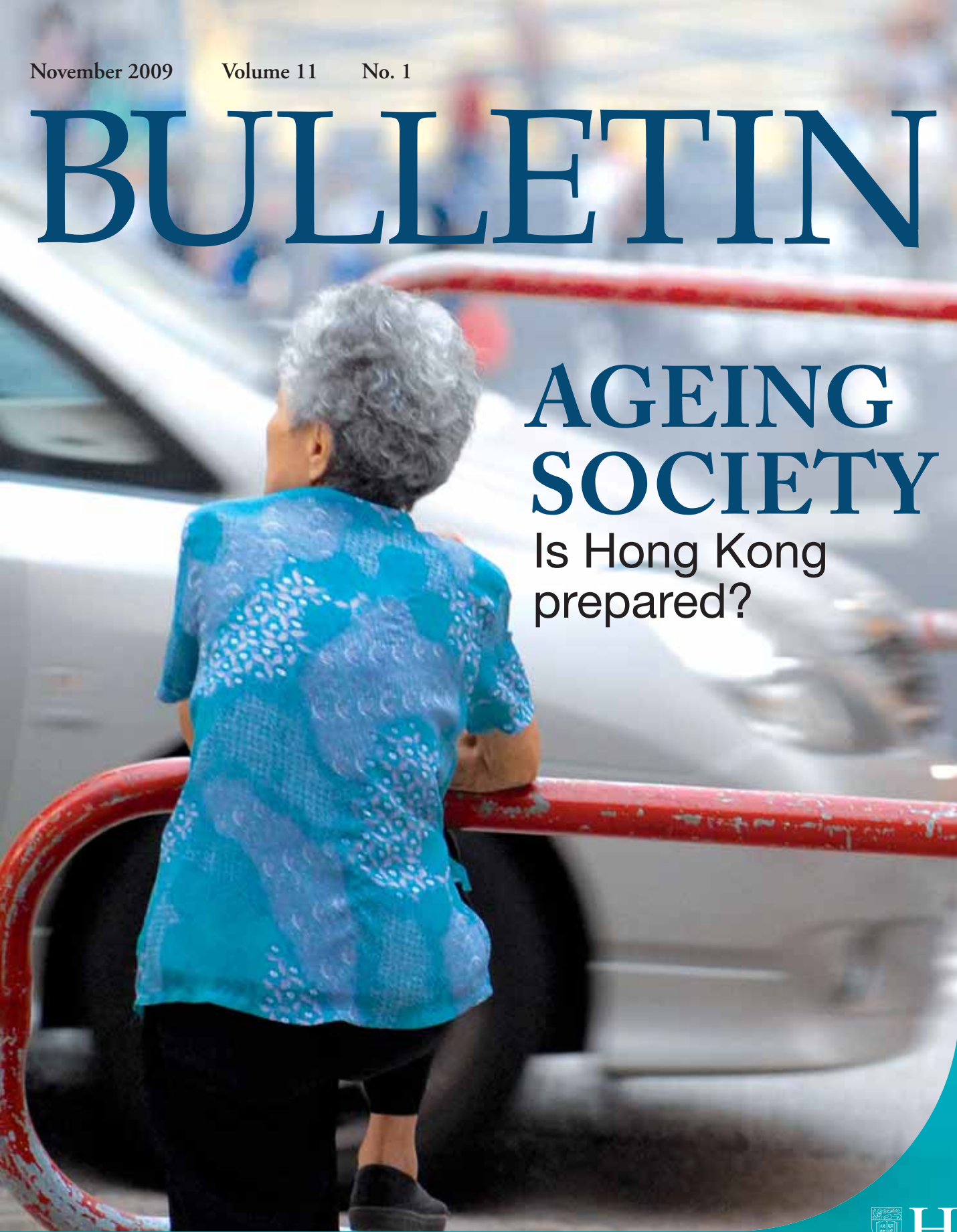
Volume 11

No. 1

BULLETIN

AGEING SOCIETY

Is Hong Kong
prepared?



READING THE CORALS

New research on Bermuda coral reveals a link between the North Atlantic Oscillation and climate warming



ANG LEE

Film director Ang Lee shared his views on film industry at HKU



HKU

THE UNIVERSITY
OF HONG KONG
香港大學

Contents



NEWS IN BRIEF

- 1 HKU is World's 24th Best University
- 2 From Strength to Strength:
A New Council Chairman
Praise Where it's Truly Deserved
- 3 Donations for Body and Soul
A New Home For Researchers
Across Disciplines
- 4 Fighting Climate Change: A New
Major in Environmental Science
HKU's New MFA in Creative Writing
- 5 Joint PhD Programmes Approved
Diversity Through Food and Faith

COVER STORY

- 6 Preparing for an Ageing Society

RESEARCH

- 12 Standout Success in Research Funding
- 14 The Race is on to Avert a New Pandemic
- 16 Reading the Corals
- 18 Seeing the Light

TEACHING AND LEARNING

- 20 New Landscapes for Hong Kong
- 22 A Cosmopolitan Perspective, by Design

PEOPLE

- 24 Not Doing it by the Book
- 25 The Intellectual Coffee House
- 26 Responding to the Rhythm

ARTS and CULTURE

- 27 Ang Lee Keeps a Promise
- 28 Taking a Fresh Look at Ancient
Treasures

CAMPUS DEVELOPMENT

- 29 Greening the Campus
- 30 Fitting into the Community

BOOKS

- 31 Light and Shade: Sketches from
an Uncommon Life
- 32 The Bilingual Child: Early
Development and Language
Contact

News in Brief

HKU IS WORLD'S 24TH BEST UNIVERSITY

The ranking exercise also named HKU the best university in Hong Kong and China, and the second in Asia.

Awards

• Reader's Digest Trusted Brands Award

HKU received the Platinum Award again in this year's *Reader's Digest* Trusted Brands Survey, in the category of 'universities' in Hong Kong. This is the third win for HKU since the category was introduced to the Survey for the first time in 2007.

• Yahoo! Emotive Brand Awards 2008-2009

The University of Hong Kong has won the 'Yahoo! Emotive Brand Awards 2008-2009' in the University category. The Awards aim to encourage Internet users to vote for the brands that are most appealing to them.

The University of Hong Kong has been ranked 24th amongst the top 200 universities globally by the *Times Higher Education-Quacquarelli Symonds (THE-QS) World University Rankings* this year.

The THE-QS World University Rankings result released on October 8 has placed HKU the best university in Hong Kong and China, and the second in Asia to the University of Tokyo.

The Times Higher rankings focus mainly on the strength of a university's teaching and research excellence, its reputation among its peers and its international outlook. Among the parameters used, the University saw improvements in the peer review scores, which were reflected across almost all the academic disciplines including Arts and Humanities, Engineering and Information Technology, Life Sciences and Biomedicine, Social Sciences, and Natural Sciences, which saw the largest jump. The scores on staff-student ratios and percentage of international students also increased.

HKU Vice-Chancellor and President Professor Lap-Chee Tsui attributed the University's reputation and success to the hard work, contributions and dedication of all members of the HKU community.

"The aggregate results point to one encouraging fact, however, and that is we are taking the right direction in internationalizing the campus community and emphasizing teaching and research. Our vision and strategic directions are increasingly recognized by our peers around the world."

He said the University should continue to elevate the quality of teaching and learning, and to produce more academic and research work of high impact. ■

Information

Further details about the rankings can be found at <http://www.hku.hk/cpao/Urankings2009>



FROM STRENGTH TO STRENGTH: A NEW COUNCIL CHAIRMAN

The University of Hong Kong announced on September 29 that Dr Victor K.K. Fung, Chairman of Council, will be stepping down from his post on November 6, 2009.

The University's Chancellor, Dr the Honourable Donald Tsang Yam-kuen, has appointed Dr the Honourable Leong Che-hung to be the next Chairman of Council, in accordance with the Statutes. The



Dr Leong Che-hung (right) to succeed Dr Victor Fung as HKU Council Chairman.

change of leadership is in keeping with the Government's six-year rule.

Since his appointment in 2003, Dr Fung has been instrumental in developing and augmenting a wide range of strategic developments at HKU, including reforming the University's governance and management structure to align it with international best practice, the Human Resource Management reform, the Centenary Recruitment Scheme (which enables the University to recruit 200 new teachers to prepare for the new four-year curriculum), and the Centennial Campus Development to expand the University's campus. During his Chairmanship, the University's dependence on Government funding decreased significantly due to better financial resource management, investment performance and fundraising.

During Dr Fung's tenure, the University has also seen its standing rise in international rankings like those by the respected *Times Higher Education-Quacquarelli Symonds (THE-QS) World University Rankings*.

Dr Leong Che-hung, who will assume the Council Chairmanship on November 7, 2009, graduated from HKU in 1962 and worked in the Department of Surgery from 1964 to 1978. He has been an elected Member of the Council of the University since 2004, is Chairman of the Council's Grievance Panel, an Honorary Professor of the Faculty of Medicine and an Honorary (DSc *honoris causa*) Graduate of the University.

Dr Leong has led an illustrious public service career. He is a non-official Member of the Executive Council, Chairman of the Elderly Commission, Chairperson of the Council on Human Reproductive Technology, and a Member of ICAC Complaints Committee, the Family Council and the Honours Committee.

Dr Leong was appointed Justice of the Peace in 1993, awarded an OBE in 1991 and a Gold Bauhinia Star in 2001. ■



DONATIONS FOR BODY AND SOUL

The new 'Gallant Ho Service Learning Scheme - Family Values' has been launched with a \$5 million donation to promote a sense of social responsibility and an appreciation of family values in our students, while the Carol Yu Centre for Infection has been named on the back of a \$50 million donation towards scientific discoveries in emerging infectious diseases in China.

The service learning scheme, made possible by HKU alumnus Gallant Ho, will see the Centre of Development and Resources for Students organize programmes that send students into the community to offer services related to their academic learning. For example, nursing students will provide care for the elderly. This kind of experiential learning is an important feature of the new four-year curriculum which comes into effect in 2012.

The Centre for Infection has been named the Carol Yu Centre for Infection following a generous donation from Professor Richard Yu, also an alumnus of HKU, and his wife Carol. The centre was established in 1998 and has been a leader in research, education and clinical service. The endowment will further enhance its work in understanding emerging infectious diseases in the region and in tackling such issues as antibiotic resistance. ■

PRAISE WHERE IT'S TRULY DESERVED

The Honorary University Fellowships Presentation Ceremony held on September 22, 2009, honoured ten distinguished individuals for their exemplary contributions to the University and the community.

Traditionally, the Fellows have been respected academics, professionals or society leaders who have generously supported the University in spirit and deed. And in the sense that they are greatly respected in their respective fields, this remains the case with this all of year's Fellows.

They are Ir Francis Bong Shu-ying, Dr Ho Tzu-leung, Mr Kenneth Kwok Hing-wai, SC, Mr Peter Lee Ka-kit, Mr David Mong Tak-yeung, Mr Raymond Or Ching-fai, Dr Wilson Wong Kin-lae, Ms Catherine Woo Mo-han and Professor Enoch Young Chien-ming.

However, this year, a Fellowship was also bestowed on Ms Yuen So-moy, who served at University Hall for over four decades, from 1957 until her retirement in 1998. Her official job titles – Cook IV, Assistant Cook and Hall Attendant – belie the importance of what she has given to the Hall and to HKU, for she not only helped in the kitchen, but also assumed the role of a kindly maternal figure to the young men. Affectionately known as [三嫂] (or 'Third Auntie') to University Hall residents (or 'Castlers'), she contributed to higher education in the most fundamental ways: by nurturing, sustaining and strengthening the emotional well-being of generations of Castlers.

Generations of Castlers, not surprisingly, were in turn there at the ceremony to enthusiastically cheer her on. Well done, 三嫂! ■



A NEW HOME FOR RESEARCHERS ACROSS DISCIPLINES

The groundbreaking ceremony of the Hong Kong Jockey Club Building for Interdisciplinary Research was held on October 14, 2009.

"The construction of the future home of the Human Research Institute is part of a comprehensive development plan of the University's strategic research initiatives," said Vice-Chancellor Professor Lap-Chee Tsui at the ceremony.

The Building will provide the space, the technologies and the facilities to cultivate a multidisciplinary and interdisciplinary environment that will enhance collaboration amongst researchers within HKU.

Phase 1 of the Human Research Institute (HRI) will accommodate specialized research laboratories and state-of-the-art interdisciplinary and multidisciplinary centres, including the Magnetic Resonance Imaging Engineering Centre, the Behavioural Sciences and Holistic Health Centre, the Institute of Human Performance Research

Centre, the Clinical Trials Centre, the Genome Research Centre, the Medical Physics Research Centre, and the Chemical Biology Centre. The Building will have an environmentally-friendly design, which will include vertical greening on the outer wall of the building and the installation of solar panels.

In recognition of the generous donation of \$133 million by the Hong Kong Jockey Club through its Charities Trust, the HRI (Phase 1) Building will be named 'The Hong Kong Jockey Club Building for Interdisciplinary Research'. The construction of the Building is due to be completed in mid 2011. ■





FIGHTING CLIMATE CHANGE:
A NEW MAJOR IN ENVIRONMENTAL SCIENCE

Societies across the globe are facing increasing environmental problems brought on by global warming, dwindling natural resources, and governments and industries are demanding the experts necessary to understand and combat these issues. With that demand in mind the Faculty of Science has launched a new major in Environmental Science.

Its multi-disciplinary approach offers undergraduates the opportunity to explore the interface between humans and the Earth, and gain a deeper, broad-based understanding of how we impact on the planet and its resources.

The major will provide new students with a solid scientific grounding in environmental issues, stimulate their curiosity and arm them with the necessary critical skills to

appreciate the complexities of the issues at hand. It will also prepare them from careers in various industries and governmental bodies where they will be expected to manage the resources for which they are responsible.

Dr Nathalie Goodkin, Assistant Professor in the Department of Earth Sciences, and one of the teachers on the course, said, “It’s meant to give students an interdisciplinary exposure to environmental science. To really understand environmental science you need to understand biology, physics and chemistry. Students will have to take courses amongst those disciplines, but then they will have to take additional courses that tie them all together and encourage them to think about the social and economic impact of environmental problems.” ■

So you want to be a writer?
HKU’S NEW MFA IN CREATIVE WRITING

The new MFA in Creative Writing, at the School of English, is a unique part-time, mid-residency programme, allowing participants to design, edit, and craft their creative writing, based on historical and contemporary developments in the field.

The two-year part-time programme hopes to help students establish a sound body of work. It will also allow students to work with fellow writers and establish patterns of writing that can be life-long.

MFA Director, Dr Page Richards says: “Our aim is that students can acquire, by the end of the programme, both a wide body of knowledge and greater self-confidence in the art of creative writing.”

The MFA, which has evolved from the Department’s Postgraduate Diploma in Creative Writing, offers both depth and specialization and may contribute professionally to advancement in teaching, journalism, and communications.

The class of 2009 hosts approximately 30 students will be taught this year by Dr Page Richards, Marina Ma from the School of English, and Rajeev Balasubramanyam from the Society of Scholars, who will be offering sessions or special events throughout the year. ■



What is written without effort is
in general read without pleasure.
Samuel Johnson

JOINT PhD PROGRAMMES APPROVED



South Kensington Campus, Imperial College

HKU has agreed with King’s College to offer a joint PhD and has signed a Memorandum of Understanding with Imperial College to do the same, after the Senate approved such programmes with other universities of compatible quality and standing earlier this year.

The joint PhD with King’s College will allow students doing scientific research to work in the laboratories of both universities, be supervised by members of both faculties and be examined to the standards of both. They will receive a PhD jointly conferred by HKU and King’s College.

HKU and Imperial College have also agreed to develop a joint PhD programme. During the summer the University offered a course on transferable research skills based on one offered at Imperial, that was attended by PhD students from HKU, Imperial and Tsinghua University.

Pro-Vice-Chancellor, Professor Paul Tam, said joint PhDs benefited students by enabling them to tap into two complementary research groups and to live and study in a different society. Students are expected to spend a significant period doing research in the other university.

“The partner institution may have researchers operating in the same field and they may have different expertise and study materials. The students will benefit from the synergy of two collaborating research groups,” he said.

In addition to joint PhD degrees, the University will also bolster structured teaching for research postgraduate students, to strengthen their methodology and other basic research skills. Although these courses have always been offered, they will be intensified and benchmarked against similar programmes in other top universities. “We’re quite happy with the teaching we offer, but we feel we can always make improvements,” Professor Tam said. ■



Waterloo Campus, King’s College

DIVERSITY THROUGH FOOD AND FAITH

In another example of the University’s commitment to establishing a culturally diversified campus environment, a Halal Food Corner was opened on September 9, 2009, in the Fong Shu Chuen Amenities Centre, Swire Building.

This outlet serving Halal food is the first of its kind among all tertiary institutions in Hong Kong and is a very important step in furthering multi-cultural understanding on campus.

The University currently has a small population of staff and students of Islamic faith and this is expected to grow with the University’s plan to increase the intake of students from Islamic countries in the coming years. The Halal Food Corner, which sells food permissible under Islamic law, will not be just an additional food outlet, but also a relaxed and social setting for introducing Islamic culture to HKU students and staff. ■



Corrigenda

In the previous *Bulletin*, under the Teaching and Research Awards, we identified Dr Edmund Lam Yin-mun as an Assistant Professor. He had in fact been promoted to Associate Professor before we went to print. We also identified Dr Siok Wai-ting as Assistant Professor in the Department of Physics, when it should have been the School of Humanities. Our deepest apologies are extended to Dr Lam and Dr Siok for any embarrassment or confusion this may have caused.

PREPARING FOR AN ageing society

Hong Kong's population is getting older, a situation that is becoming increasingly costly for individuals and the government. HKU scholars have been in the thick of efforts to address this challenge.

The sight of an old woman struggling to push a trolley laden with paper and cardboard boxes that she will sell to recyclers for a few dollars, is a sad reminder that growing old in Hong Kong can be a hardship.

Fifteen per cent of residents are aged 60 and over – more than one million people, of whom 200,000 depend on government social assistance. The proportion of over 60s is expected to rise sharply over the next two decades, to 25 per cent by 2021 and nearly one-third by 2036.

What worries people is that individuals and the government have not made the necessary preparations to financially support this army of elderly.

"Hong Kong didn't introduce the Mandatory Provident Fund until 2000 so the majority of people retiring over the next 20 years will not have enough protection for their old age," says Nelson Chow Wing-sun, Henry G Leong Professor in Social Work and Social Administration, Associate Director of HKU's Sau Po Centre on Ageing and a long time advocate for the elderly.

"A lot of people in Hong Kong are earning really from hand to mouth and have nothing to save. The vast majority expect their children to support them, but they don't have as many children as before, and with social mobility a lot of these children have migrated to other countries or even if they live in Hong Kong, they've moved to new towns. So both the financial and personal care support is not as available as in the past."

More mouths, fewer hands to feed them

Last year every elderly person in the city was supported by six people of working age, but that ratio will drop by more than half by 2036, so every two elderly people will be supported by five workers, according to government estimates. How can society afford to look after its old?

Similar dilemmas are cropping up in most developed countries and in China, where the one-child policy means every adult in future will have to support two parents and four grandparents. In fact, fertility is a factor in Hong Kong too because the fertility rate in 2008 was only one birth per woman, well below the replacement rate for a population.

Dr Paul Lau Sau-him, Associate Professor in the School of Economics and Finance, has been looking at how fertility and mortality changes affect savings, retirement age and capital accumulation.

"It really depends on how many mouths you have to feed versus how many pairs of hands that are working in the society. It's very intuitive and it's related to a basic feature of the human economic life cycle. Most of us begin and end with periods of dependency, with a long duration of producing more than consuming in between," Dr Lau says.

What worries people is that individuals and the government have not made the necessary preparations to financially support this army of elderly.

"As the birth rate decreases, there are not as many resources coming in. On the other hand, mortality reduction means that more people are in the old-age dependency stage. If individuals expect to live longer but the working versus retirement periods of their lives don't balance out, either their standard of living will be reduced or they will have to rely on resource transfers from their children or the government. Eventually there will be some constraint on the individual or the government."

"The trends of declining fertility and improving longevity are very clear in many societies. This situation doesn't move as fast as a financial crisis, where everybody reacts immediately, but you still can't delay making the right decision."

People could work longer

One obvious response would be to raise the retirement age. This is happening in other developed countries, where retirement ages are being nudged up to 67 or even 70. Hong Kong's civil service and most private companies set retirement at only 60 – considerably younger than the expected life spans of 79 years for Hong Kong men and 85 years for women.

Delayed retirement is being promoted at the policy level by the Sau Po Centre on Ageing and at the community level by Cadenza, a five-year project for the elderly initiated by The Hong Kong Jockey Club Charities Trust in collaboration with HKU and the Chinese University of Hong Kong. Cadenza has set up the Elderly Friendly Employer Practice programme to encourage businesses and the government to retain elderly employees or create job opportunities for them, as much for the individual's well being as for the economy.

"When you get to 50-something, people are waiting for you to disappear from your job. And when you retire and stay at home, you are in the way. You lose your self-esteem. You don't want to just learn an instrument or play golf. You want to do something more substantive so you can contribute to society," says Professor Jean Woo, Cadenza's Director, Honorary Professor in HKU's Faculty of Social Sciences and Chair Professor of Medicine of the Chinese University's medical faculty.

The retirement issue is starting to be discussed by the government. The Commissioner for Census and Statistics, Fung Hing-wang, recently said a statutory retirement age should be considered as he released statistics plotting the growth in elderly numbers over the coming years. This could ease the pressure on government resources, but it does not provide much of a solution to older people who are poor.



Older Hong Kong people do not want to move over the border... The main reason is medical.

Retire to China?

Encouraging the elderly to move to China, where the cost of living is cheaper, could help to give them a better living standard and reduce the cost of an ageing population, but this proposal has thus far fallen on deaf ears. Older Hong Kong people do not want to move over the border.

According to Professor Joe Leung Cho-bun of the Department of Social Work and Social Administration, who is also Acting Director of the Sau Po Centre on Ageing and who has done a study on portable benefits for the government, only a few thousand elderly people have taken up a Hong Kong government offer to live in Guangdong and Fujian and collect their social assistance payment there. An attempt by the Jockey Club to set up homes for the elderly over the border also received scant interest.

“The main reason is medical. The medical care system in Hong Kong is reliable but in China, on the one hand they don’t have medical insurance and on the other hand they may find medical care is not affordable and they may be uncertain how much they will be charged,” he says.

“Half of Hong Kong’s hospital users today are elderly people and the daily cost of a hospital patient is \$3,200. Why can’t there be a scheme worked out with the Mainland authorities, with a hospital there that’s reliable, where the Hong Kong government pays, say, \$1,000 for a person’s medical coverage in China? It would be a win-win situation. I think it’s important for both governments to facilitate social integration, not only economic integration.”



Economic immigrants could help

There are wider economic arguments in favour of encouraging people to move on. A report* by Professor Richard Wong Yue-chim and Dr Wong Ka-fu of the School of Economics and Finance shows Hong Kong is unlike other economically vibrant cities because its population distribution is becoming unstable. Elsewhere, older workers tend to leave the city when they retire (for example, moving from New York City to Florida), making room for younger, economically active people to come in and seek their fortune and keeping the numbers in balance.

Not only are Hong Kong elderly not moving on, but immigration to Hong Kong has become largely driven by family reunion, rather than economic motivation, as Mainland wives and children join their Hong Kong husbands and fathers. These immigrants are less educated and not able to meet the demand for skilled workers that will help the economy to grow.

Professor Wong and Dr Wong suggest changes in immigration policy could help to ease the financial burden of an ageing society and buoy up the economy. The border could be made more porous to economic migrants who could fill shortages for skilled workers, while Hong Kong’s tertiary education sector could be opened wider to attract more top students from the Mainland in the expectation that some of them will stay on.

“[Fast-growing Chinese] cities are attracting educated workers not only from the rest of China, but from Hong Kong as well. If their business and working environments continue to improve with China’s liberalization, and if Hong Kong keeps to its usual course in the policies centring on immigration, education and public spending, it is not difficult to predict what lies ahead,” they say.

The growing number of elderly, and the failure to attract young workers, would cause hardship not only for those trying to fend for themselves in old age, but for the economy as a whole. ■



QUALITY OF LIFE matters

Hong Kong people have the second longest life spans in the world after Japan, but those extra years may not be such a blessing if they are characterized by loneliness, a lack of support and poor preparation for the inevitable end.

Some 12 per cent of Hong Kong’s over-60s live alone – equivalent to nearly 100,000 people. This doesn’t chime with the traditional Chinese expectation that children will look after their parents.

“There’s often this impression that elderly people are supported by their families and live with their children. That’s a myth. Of course it looks like that if you compare it to the US and Europe where only two to three per cent of elderly parents live with their children. In Hong Kong it’s about half, but co-residence is dropping off,” says Professor Nelson Chow.

That leaves society picking up the slack by offering residential care and services in the community. This is by no means a perfect solution and scholars at the University are trying to help out by identifying improvements and establishing service models.

One concern is the limited number of spaces in nursing homes, particularly in government-subsidized homes that provide appropriate supervision for residents with chronic health conditions such as dementia. Professor Joe Leung conducts multidisciplinary research into ageing, has helped to draw up assessment tools for the government that identify the people most in need.



* ‘The Importance of Migration Flow to Hong Kong’s Future’ by Professor Richard Wong and Dr Wong Ka-fu appeared in *Hong Kong Mobile: Making a Global Population*, edited by Helen F. Siu and Agnes S. Ku and published by Hong Kong University Press in 2008.



"In the past some of the residents in care and attention homes may have been physically and mentally able. Now those who are there are the ones with real social and medical needs," he says.

Meanwhile, Cadenza, a five-year project established by The Hong Kong Jockey Club Charities Trust with HKU and The Chinese University of Hong Kong, is pioneering and evaluating novel services to improve the care and quality of life for seniors in the community.

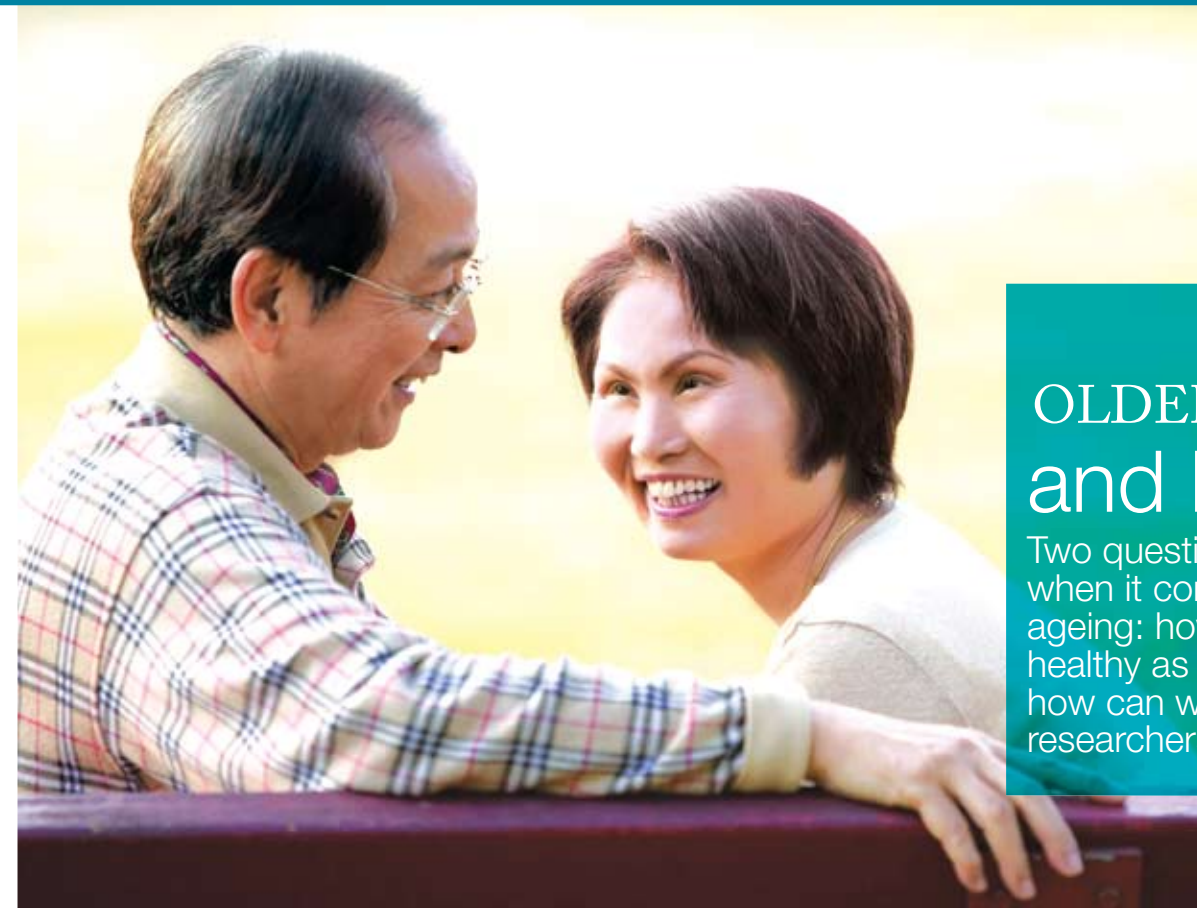
The project has set up a primary care hub that integrates health and social needs in the community, including chronic disease management programmes to raise health literacy and empowerment and initiatives on health promotion and maintenance. The Cadenza Fellowship programme is also evaluating the outcomes of a community-based service in which elderly patients who are discharged from Queen Elizabeth Hospital receive visits and phone calls from trained volunteers for one month after discharge.

Another HKU-related project also funded by the Jockey Club Charities Trust, Enable, has focused on a subject closely related to ageing – preparing for death. Researchers have been training frontline workers and educating the elderly, and they have also surveyed people on their attitudes to death and dying.

While elderly people were willing to talk about the subject, young and middle-aged people regarded it as bad luck and thought it would hasten the end of their loved ones. More than a third of respondents also thought it was bad luck to visit the home or family of someone who had died in the previous few months.

"Death is a big cultural taboo in Hong Kong, especially for the young and middle-aged," Andy Ho, head researcher of the study and Research Officer with the Centre on Behavioural Health, says. "But it raises serious social problems. Families can't get help when they need it, and it prevents advance care directives, setting up wills, funeral plans – any planning in that regard."

Mr Ho says they are considering ways to further develop the Enable project to break down the taboos among the young and the middle-aged and educate people to appreciate the meaning of life from a Chinese cultural perspective. "Preparing for death can avoid a lot of family dramas and arguments," he says. ■



OLDER... and healthier?

Two questions are paramount when it comes to health and ageing: how can we stay healthy as we get older, and how can we live longer. HKU researchers are investigating.

One of the most dreaded ageing-related diseases is Alzheimer's, which is characterized by memory loss, disorientation and changes in mood and personality and affects the family as well as the patient.

A multidisciplinary team from the Faculties of Medicine, Science and Social Sciences formed the Alzheimer's Disease Research Network last year to investigate the causes and treatments of this disease, as well as the psycho-social issues faced by patients and their care givers.

So far, they have found that men with low testosterone levels are more prone to Alzheimer's even when they are in the early pre-dementia stage, opening up possibilities for diagnosis and treatment.

They have also measured differences in blood flow and volume in the brains of sufferers using MRI and functional MRI, and are now using this tool to measure brain function, providing a much quicker way of assessing the disease's progress than clinical observation.

"We hope we can develop this technique so all normal elderly people can be screened each year to achieve early diagnosis of Alzheimer's," Dr Chu Leung-wing, chairman of the Alzheimer's network and Honorary Clinical Associate Professor of Medicine, says.

Researchers have also shown that a Chinese herb, known as wolfberry in English, is good for the brain and hope to test it in a clinical setting. They are also participating in multi-centre clinical trials of new Western medicine drugs.

The Alzheimer's Network was initiated under the strategic research theme, Healthy Ageing, which is focusing on four diseases common to Hong Kong: diabetes, coronary heart disease, degenerative diseases of the nervous system and osteoporosis.

Professor Karen Lam Siu-ling, Rosie T.T. Young Professor in Endocrinology and Metabolism, is convenor of the theme and Head of the Department of Medicine, says longer life expectancies mean doctors will be seeing more ageing-related diseases.

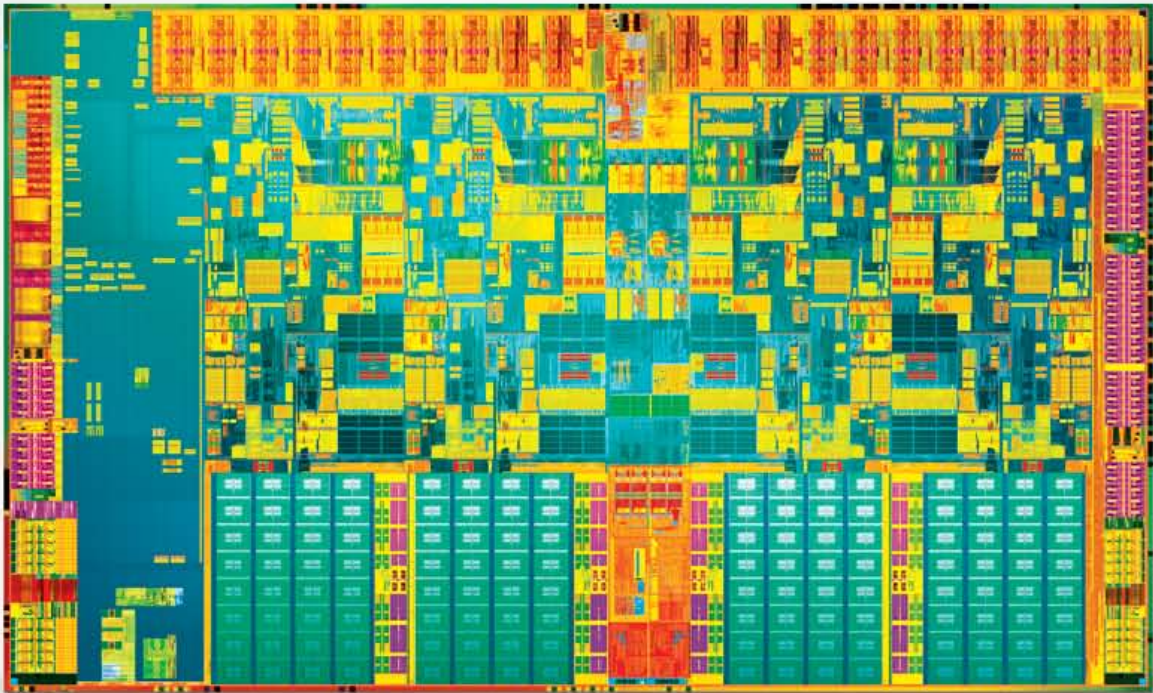
"People are living longer. You want them to live not just longer but in good health, with a good quality of life. This is why you have to develop better treatment for these ageing diseases. Better still is to be able to prevent them."

Even better could be to delay ageing and extend the average human lifespan. Current research suggests ageing may be due to the reduced function or dying off of stem cells. Dr Zhou Zhongjun, Associate Professor of Biochemistry, and his team are investigating this role in mice that have progenia, a syndrome that causes premature ageing.

They surmised that oxidative stress may be harming stem cells so they injected the mice with a small molecule that has anti-oxidative properties, to see if this could rescue the stem cells. The results have been astonishing.

"The signs of ageing in these mice appeared much later compared to untreated mice and they lived 30 to 40 per cent longer. Now we are trying to understand why this happens. We also want to see if the same beneficial effects can be seen in normal ageing," Dr Zhou says. ■





STANDOUT SUCCESS IN
research funding

HKU scientists are big winners in the annual Areas of Excellence competition.

Three of the five research initiatives awarded grants under the Areas of Excellence (AoE) competition are led by HKU scholars, a recognition of the stellar research capabilities of the University.

The three projects together received \$274 million, representing more than 70 per cent of the total funds available. The AoE is organized by the University Grants Council to help Hong Kong institutions further develop their existing research strengths.

The three projects were titled Centre for Nasopharyngeal Carcinoma Research, the

Institute of Molecular Functional Materials, and Theory, Modelling, and Simulation of Emerging Electronics. In addition, HKU is a significant participant in a fourth project on network coding led by the Chinese University of Hong Kong.

“[The] selected proposals that thrived in this highly competitive scheme are truly outstanding and their research teams are on par with leaders in the international research community in their respective fields,” the Convenor of the AoE Group, Professor Willard Fee, said.

“We believe that the knowledge generated by the projects will contribute to the social, economic and academic development of Hong Kong.”

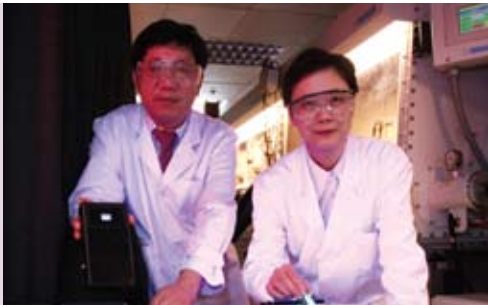
Vice-Chancellor, Professor Lap-Chee Tsui, said the results were a testament to the University’s research excellence.

“The latest AoE results indeed underscore the very high quality of research being conducted at HKU and the University’s commitment to inter-disciplinary and inter-institutional research collaboration at the cutting edge,” he said.



The Centre for Nasopharyngeal Carcinoma (NPC) Research will seek a better understanding of this disease at the molecular and genetic level with the aim of translating basic findings into the clinic and becoming an international hub for NPC research worldwide. NPC is prevalent in southern China but relatively rare elsewhere, and it tends to strike people in the prime of life. It is usually not detected until the late stage.

The research team, led by Professor Maria Lung of the Department of Clinical Oncology, will investigate how the disease develops and identify new diagnostic tools for better and earlier diagnosis and more effective treatment strategies. They aim to improve current patient treatment outcomes, develop novel approaches for NPC treatment, and enhance the personalized care of patients.



The Institute of Molecular Functional Materials will bring together expertise in chemistry, physics and engineering to develop new classes of molecular materials, with the aim of addressing energy-related issues from a chemistry perspective.

The research team, led by Professor Vivian Yam Wing-wah, Philip Wong Wilson Wong Professor in Chemistry and Energy, includes members who have achieved national and international recognition for their expertise and it will involve working with leading research groups from around the world. The results are expected to have an impact on frontier science, particularly in the exploration of new frontiers in supramolecular science, the development of high efficiency organic and polymer light-emitting diode materials, high efficiency organic photovoltaic/organic thin film transistor materials, and robust photocatalysts, and contribute to the development of the high-technology industry in Hong Kong and the region.



The Theory, Modelling, and Simulation of Emerging Electronics project is concerned with rapid advances in the miniaturization of electronics. Current devices will reach their physical limits before 2020 and new device structures and operation principles will need to be found to incorporate the emerging sub-22 nanometer technologies.

Professor Zhang Fuchun of the Department of Physics is leading the research team, which will focus on modelling and simulation of sub-22 nanometer technology. The team will work closely with research institutes and semiconductor companies in the region, and aims to establish Hong Kong as a premier research centre for modelling emerging electronic devices and circuitries.

Membership of AoE Teams

Centre for Nasopharyngeal Carcinoma Research

Professor M.L. Lung (HKU)
Dr H.L. Chen (HKU)
Dr A. Chiang (HKU)
Dr D. Chua (HKU)
Professor X.Y. Guan (HKU)
Professor W. Hsiao (HKBU)

Professor P.L. Khong (HKU)
Professor D. Kwong (HKU)
Professor A. Lee (Pamela Youde Nethersole Eastern Hospital)
Dr C. Liang (HKUST)
Professor N.K. Mak (HKBU)
Dr W.T. Ng (Pamela Youde Nethersole Eastern Hospital)
Dr R. Ngan (Queen Elizabeth Hospital)

Professor R. Poon (HKUST)
Dr R. Qi (HKUST)
Professor G. Tsao (HKU)
Professor W.I. Wei (HKU)
Professor R. Wong (HKBU)
Professor E.X. Wu (HKU)
Dr Z.G. Wu (HKUST)
Dr T. Yip (Queen Elizabeth Hospital)
Dr G. Zhu (HKUST)

Institute of Molecular Functional Materials
Professor V.W.W. Yam (HKU)
Professor C.M. Che (HKU)
Professor H.F. Chow (CUHK)
Professor T.C. Lau (CityU)
Professor B.Z. Tang (HKUST)
Professor R.W.Y. Wong (HKBU)

Theory, Modelling, and Simulation of Emerging Electronics
Professor F. Zhang (HKU)
Professor P.C.H. Chan (HKUST)
Professor G. Chen (HKU)
Professor W.C. Chew (HKU)
Professor H. Guo (McGill U, HKU)
Professor J. Wang (HKU)

THE RACE IS ON TO AVERT a new pandemic

New research takes HKU scientists one step closer to potentially eliminating future influenza pandemics.

Scientists in the Department of Microbiology are piecing together a jigsaw puzzle that is rewriting the evolutionary history of influenza viruses and may, ultimately, succeed in averting future flu pandemics.

Led by Professor Guan Yi and Dr Gavin Smith, of the State Key Laboratory of Emerging Infectious Diseases in the Li Ka Shing Faculty of Medicine, the research turns previously held convictions on their head by showing that the three worst influenza outbreaks of the 20th century (1918, 1957 and 1968) did not emerge suddenly, as previously thought, but circulated in either swine or humans for years before triggering the pandemics.

The research also asserts that these viruses did not jump directly from birds to human – as previously thought – but from pigs.

In particular, the H1N1 virus which caused the 1918, Spanish Flu, and went on to kill an estimated 50 million people worldwide, was most likely generated by genetic exchanges between swine and human viruses.

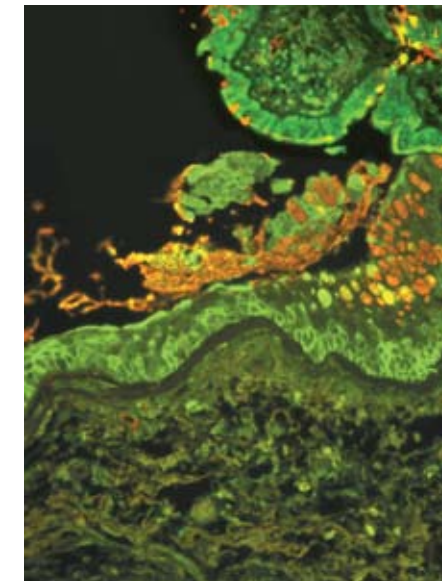
Staggeringly, these virus genes appear to have been in humans for between two and 15 years before triggering the pandemic. Similarly, the H2N2 virus which caused the 1957 pandemic seems to have been in the human population for up to seven years before the pandemic took off. And likewise the H3N2 virus implicated in the 1968 Hong Kong flu appears to have been around for up to five years before the pandemic started.

The research, published in the prestigious *Proceedings of the National Academy of Sciences (PNAS)*, raises fresh concerns about the current swine flu virus circulating the globe and suggests that surveillance of influenza viruses in humans should be altered to consider all virus genes not just two – the HA and NA viruses.

Professor Guan says: “This turns earlier research on its head, it rewrites history and the impact will be long felt. By correcting a historical mistake we may have changed the impact of future pandemics.”

He added that the results of this large-scale evolutionary study were possible thanks to the use of a new methodology – an advanced molecular clock method – which was employed to estimate the time at which each gene of the pandemic influenzas was introduced to humans.

“Hong Kong’s flu group (an Area of Excellence team comprising over 30 researchers across four universities) is now entering a new phase,” he says. “We already know where the viruses that triggered the last pandemics came from, how they were generated and which pathway they took, we are now putting all our energy, all our manpower and finance towards one end, and maybe we will have a chance to avert the next pandemic. So this is very good.”



“But now we need to identify the key knowledge gap in the field. What is that knowledge gap? Well nobody can tell you when an influenza virus will mutate to become a mature pandemic virus.”

Indeed, knowledge of the viruses that caused the three 20th century pandemics was sketchy throughout most of the last century. “When the 1918 Spanish Flu pandemic happened they didn’t even know what the virus was. It was not identified until 1930 when it was isolated from pigs, and then from humans three years later,” explains Professor Guan.

A fragment of the virus that caused the Spanish Flu was not isolated until 1997 when Dr Jeffrey Taubenberger, from the US Armed Forces Institute of Pathology, started to screen preserved tissue samples from 1918 influenza victims.

However, it was not until retired pathologist Johan Hultin retrieved preserved lung tissue from a female body buried in permafrost in an Alaskan village that Taubenberger was able to complete the whole genome.

Between 1997 and 2005 the Taubenberger team was able to sequence the entire genome of the 1918 Spanish Flu virus, publishing their findings in top scientific journals.

“But,” says Professor Guan, “each time they interpreted the findings incorrectly. They kept saying it was from an avian source and had jumped directly to humans. This became an indisputable truth and this concept misled scientists for years.”

Guan credits his two mentors – Robert Webster and former HKU Professor, Ken Shortridge – with teaching him to trust his own intuition and to question the accepted wisdom, helping him see beyond the so-called ‘indisputable truth’ to establish this new breakthrough.

Meanwhile, further research shows that the current swine flu virus – a H1N1 virus that has the potential to cause the 21st century’s first influenza pandemic – may have been circulating in humans since January this year, several months before the outbreak in Mexico was first detected.

A multi-University team, again led by Professor Guan and Dr Smith along with Dr Andrew Rambaut, of the University of Edinburgh, has shown that the virus circulated in swine for at least ten years before leaping the species barrier.

The results, published in the journal *Nature*, highlight the need for systematic surveillance of influenza swine and provide evidence that new genetic elements in pigs can result in the emergence of viruses with pandemic potential in humans.

Professor Guan says that despite the widespread surveillance of influenza viruses in humans in recent years, the lack of a systematic surveillance in swine has allowed the undetected persistence and evolution of the potentially deadly strain. ■

READING
the corals

New research on Bermuda coral reveals a link between the North Atlantic Oscillation and climate warming.



The impact of global warming is considered one of the greatest challenges facing mankind in the 21st century. Increasing greenhouse gas concentrations from the burning of fossil fuels and deforestation is blamed for escalating temperatures which are expected to continue soaring, causing rising sea levels and more extreme weather events.

For nearly a century climatologists have been closely observing the behaviour of the North Atlantic Oscillation (NAO) – a measurement of the atmospheric pressure at sea-level between the polar low and subtropical high, that controls winter weather over large parts of North America, Europe and North Africa. The bigger the pressure difference, the stronger the storms, and the more northern the storms.

Now, new research by Dr Nathalie Goodkin, Assistant Professor in the Department of Earth Sciences, and her co-workers at Woods Hole Oceanographic Institution, in the USA, has generated the first continuous ocean- based record of the NAO, and has discovered that climate change may be altering its long-term behaviour.

The research, published in *Nature Geoscience*, found that the NAO has experienced larger changes from high to low values decade-to-decade during the latter part of the 20th century than it did in the early 1800s, pointing to the Industrial Revolution and human-related warming as culprits.

Dr Goodkin explains how variations in the NAO impact on the economies of Europe and North America. “In the 1980s,” she says, “we had the longest period of positive NAO with extreme values. This kind of event effects precipitation and temperature from the mid west of America all the way through Europe and into Russia. It causes severe droughts and heat waves – for instance the one in France and Europe in 2003, which was NAO related – it drastically changes fisheries in the north Atlantic, as well as changing wave heights and affecting shipping lanes. The economic impacts of changes in the NAO are quite large.”

One question that troubles scientists attempting to predict the NAO is “whether human activity has shifted the way the NAO behaves.”

“Our evidence is showing that there’s a distinctive difference in the way the NAO behaves in warm weather versus cold weather. There were indications in other records that this was the case, but the coral allowed us to explore the phenomena in detail.”

What makes Dr Goodkin’s research unique is that it is the first time continuous NAO patterns have been documented in oceanic records. Previous studies have concentrated on terrestrial sources, such as tree rings, but says Dr Goodkin “corals are really the only paleo record where you can look at a seasonal time-scale.

“With corals you can extract information at approximately monthly resolution and if you want to study climate features such as the NAO you need to be looking just at winter.”

The research was conducted in Bermuda – the northernmost point where corals grow in the Atlantic – and resulted in a detailed 218-year-long NAO record.

However, establishing a one-location record is insufficient to predict the future behaviour of the NAO. “It is a very dynamic system, but if we’re just looking at Bermuda and the Bermuda signal changes then that could just mean that the signal at Bermuda has changed. Not necessarily that the NAO changed,” explains Dr Goodkin. So she compared her results to larger geographical land records and confirmed that they show very similar behaviour.

“That gives a stronger indication that it’s happening everywhere, but we need a lot more sites to improve prediction,” she adds. “The minute you can better understand the behaviour of the NAO the better you can prepare for the economic impacts of what will happen in the next five or ten years.” ■



SEEING the light

A new project highlights the city's problem with light pollution.

It has inspired generations of poets, philosophers and scientists. Indeed, the night sky, with its celestial patterns, has been a source of fascination since earliest times. But in Hong Kong new generations are missing out on this great natural wonder thanks to our love affair with neon.

For many of the millions of tourists who visit this 'City of Lights' each year their lasting image is one of forests of neon signs, towers of incandescent colour, and a nightly laser show that blazes across the harbour.

There was a time when these dazzling displays were confined to the city's busiest districts. But, increasingly, this obsession with all things bright is spilling over to parks and rivers that ignite like Christmas trees as soon as the sun sets.

But the backlash against such outrageously lavish displays has begun led, in part, by a physicist at HKU. Assistant Professor, Dr Jason Pun Chun-shing is passionate about astronomy and what it can teach us, and he is troubled by the fact that, thanks to increasing light pollution, more and more Hong Kong children fail to experience the wonder of the night sky.

"As an astronomer I was disappointed that, compared to when I was younger, there are now no good places to see the stars in urban areas," he explains. "That got me thinking about what to do."

So, in 2003 he began a project to measure the brightness of the night sky in both urban and rural areas. "At the same time a group of amateur astronomers met with the then Secretary for Home Affairs to propose ideas such as a night sky preservation zone, like the marine reserve. There are places around the world where these measures are in place, but to this day Hong Kong does not have any regulations governing the use of outdoor lighting."

That initial 2003 project was extended the following year with a final-year undergraduate student and together they established that the city night sky was 30 times brighter than that of the countryside.

"This study was limited by many factors – the night sky changes nightly depending on weather condition and the position of the moon, the level of air pollution so we were

comparing data from different nights – a Monday in Sai Kung versus a Wednesday in HKU which was not very satisfactory."

However, when that same student began studying for his MPhil they began to move in a new direction.

"Previously we had been using a traditional astronomy technique which is very accurate but only very few people were capable of conducting it and the instruments were prohibitively expensive. Then we discovered the Sky Quality Meter which we now use,



it's small and convenient and much easier for the general public to use."

So, in 2007, armed with a grant from the government's Environmental Conservation Fund they bought 30 Meters and relaunched the project.

"We tried to raise public awareness about the issue," he explains. "But it was not popular at that time. In fact, even the press didn't understand the concept. They understood air pollution and water pollution. But what is light pollution? There was this conviction that Hong Kong is supposed to be bright and that lights are a sign of prosperity."

It took a while to engage the public but when they understood the concept he found enthusiastic volunteers in secondary school students, amateur astronomers, and members of the Camping Association who helped gather data. He went on to develop a web page and create a public forum, increasing public understanding of the problem.

Now he says, "We are not proposing that we turn off all the lights but many of our lights shine up not down. This is wasted energy. We're also concerned about the amount used – parks seem to use as much light as they possibly can. In some situations it's understandable, but a lot of it is unnecessary. It's extremely bad for the trees, wildlife and birdlife.

"This improper usage of light is the fight we are up against," he says. But the public appears to be catching on. The number of

complaints about light pollution are on the increase which reflects changing attitudes.

"However," says Dr Pun, "There is no government agency to officially deal with this issue. In cities like Singapore and Taipei they have a lighting plan, which means that different areas have different usage. Heritage sights might be lit but other areas are not. We are way behind in that sense because anything and everything can be lit up in Hong Kong, even outside the heavy urbanized areas.

"Fortunately, in his Policy Address this year the Chief Executive reiterated his intention to cut greenhouse gasses. But it's not just about that, it's about environmental protection too."

Finally, he says, "The fantastic night sky, and all the stories you can tell your kids about the stars, that is what we are losing. Why do people care about astronomy? It's hard to explain, but a natural connection does exist. The night sky fascinates people, it is mysterious and inspirational. It's part of our nature." And for that reason alone, it should be cherished. ■

NEW LANDSCAPES FOR Hong Kong

The University launches new undergraduate major in Landscape Architecture.

The trend towards greener cities, and a growing awareness of the need for a sustainable approach to development, has spurred an increasing demand for Landscape Architects. To meet this demand the Faculty of Architecture has launched a new Landscape Architecture major within the Bachelor of Arts in Architectural Studies.

In addition to core courses from the undergraduate architectural course, students will take modules in landscape sciences and ecology, planting design, contemporary landscape design, strategic planning and history and theory of landscape.

“We are currently seeking approval for this major to become a BA in Landscape Studies with a minor in environmental sustainability,” says Assistant Professor Matthew Pryor, Head of the Division of Landscape Architecture. “Last year we changed admission to the two-year Master of Landscape Architecture (MLA) programme from alternate year to annual intake.

“Landscape architecture is growing so strongly in the region, that even in these difficult times, there is still virtually no unemployment in the profession.

“Improving the quality of our living environment is now a central theme within both HKSAR and PRC Government policy, and developers fully appreciate the sales value of a clean environment and quality landscape settings for their projects.”

Earlier this year, MLA students were invited to enter the ‘U+L’ competition – a China-wide initiative for university students. They were given ten days to solve a brief which involved creating innovative ideas for environmental improvement of urban districts.

The following are some of their entries:

The Landscape Sandwich – Wah Fu Estate, Aberdeen

Stevie Wong won an Outstanding Award for this concept, which involved creating gardens ‘sandwiched’ between residential floors in high rise blocks.

She explains, “I grew up in Wah Fu Estate in Aberdeen, one of the first public housing estates in Hong Kong, and my father still lives there so I know the area well and was aware of what might improve it for the residents.

“I did some research and found that there are around 4,000 vacant units on public housing estates – flats that no-one wants to live in. So, my idea was to find some other use for these units, so that the people who live in the block can enjoy the space. By tearing down the walls, taking out the windows and filling the spaces with trees and plants you can create a garden between the residential floors – a landscaped sandwich if you like. You could have four or five units in one block to serve this purpose.

“Elderly people who may not be very mobile can enjoy a green space, an easily accessible garden within their own block. And the people could tend the garden themselves which would give older people a hobby, a pastime, and also create a sense of community within the block.”

Seizing the Urban Void

Allen Cheung, Stephanie Lai and Eric Wong’s idea gained an Honourable Mention. They set out to improve the environment at tram stations across Hong Kong. Using the tram route, which has run from west to east across the length of urban Hong Kong for more than a century, their plan was to create a green corridor.

Stephanie says, “While waiting for a tram, the roadside environment is not particularly attractive or pleasant, so we thought of creating some kind of oasis. Trams are already one of the most environmentally-friendly mean of transport and we tried to improve on that by creating lawns along the route.”

Although, Eric points out, that this is not possible along the entire length because of the many utility cables buried underground.

“Additionally we thought of placing solar panels above the stations that could create enough power to light them,” says Stephanie.

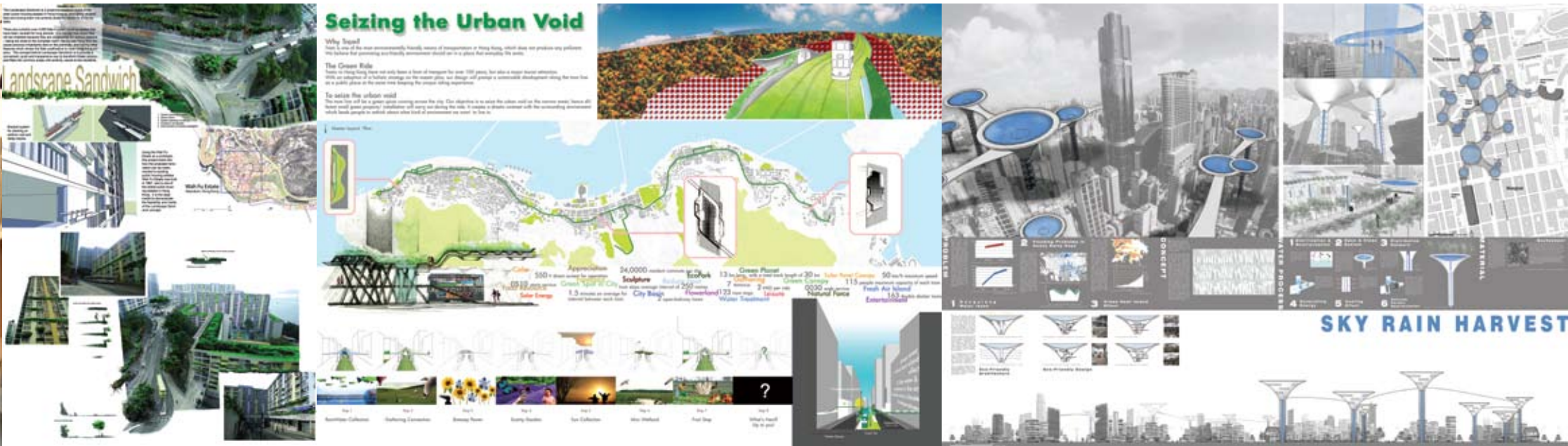
“We also thought there could be a system for rainwater collection on the canopies above the stations and that this could be utilized as irrigation water,” explains Allen. “At the moment all the stations look the same, there’s nothing to distinguish one from another, so we wanted to create a different image for every station, by using different planting designs.”

Sky Rain Harvest in Prince Edward

Gloria Lee, Benni Pong and Ken Law teamed up to find an innovative solution to flooding in urban areas.

Benni says, “We thought about Mong Kok and the flooding issue they have there from time to time, and it made us think about the use of water. We have an abundance of water in Hong Kong, to the extent of suffering from flooding during heavy downpours, but we don’t use our water very efficiently. So we came up with this design which is quite futuristic.”

Gloria explains, “We thought about upturned umbrellas that would gather water and funnel it into a water supply, for use as grey water rather than drinking water. We considered having a series of umbrellas that would not just catch water but also provide shelter, and about interlinking them with green landscaped walkways and perhaps sky gardens. But our problem was one of scale. Maybe our scale here is too big.” ■



A COSMOPOLITAN PERSPECTIVE, by design

The University's efforts to inject a global perspective into the curriculum has received a boost from the enormous success of the Faculty of Architecture's Shanghai Study Centre.



Undergraduates in the Department of Architecture have been given a unique opportunity to broaden their cultural and educational horizons by immersing themselves in the architectural and urban issues pertinent to China.

Since its launch, last year, the Shanghai Study Centre has proved enormously successful with students, who are keen to gain a more international learning experience.

Of the 70 students admitted to the programme annually, 35 spend the spring term of their second year in Shanghai, while the other half pass the autumn term of their third year at the Centre.

"For Architecture students," says Dean, Professor Ralph Lerner, "that means design studio, plus a constellation of other courses, which cover building technology, history and theory of architecture, professional practice, building structures and environmental systems.

"With the exception of the history and theory courses, they are all taught by teachers local to Shanghai – people who are either teachers, or architects, working in the city."

Additionally, the Centre hosts joint programmes at the postgraduate level in Architecture with Columbia, Harvard, Yale and Tsinghua Universities; an extremely popular public lecture series; and regular exhibitions. Starting next year it will also accommodate a class of 12 Landscape Architecture students.



Located in the General Post Office Building, a heritage site in the heart of Shanghai, the Centre also houses an office of the University's Journalism and Media Studies Centre, and was established, in part, with the generous support of a donor.

Professor Lerner says, "This year we experimented with a Summer Programme which was a visiting school by the Architecture Association (AA) and HKU, run by one of our teachers on behalf of the AA. That accommodated 50 students from 20 different countries, five continents."

The 11-day programme on parametric design – which included lectures, studio design projects and symposia – was, says Professor Lerner, "wildly successful. So next year we are going to attempt three such programmes."

However, he confesses that, "At one point I thought Shanghai might be a little bit like administrating castor oil. But, it's turned out to be wildly popular, we've had almost no problems. The students have been enthusiastic and the reports very positive."

Indeed, student, Dan Luo, describes her semester in Shanghai as "a really extraordinary experience," singling out the lecture series and field trips as particular highlights.

"Unlike in Hong Kong, where we can only see pioneering architecture in books, magazines or on the Internet, in Shanghai we had the opportunity to visit projects by MADA s.p.a.m. and Wang Shu, as well as traditional Chinese gardens," she says. ■



NOT DOING IT BY THE book

They may have been with us since antiquity but new technology has revolutionized the way libraries are accessed and utilized.

At the heart of every university is its library, but 21st century libraries are not simply repositories for printed materials and other media, they have evolved beyond their physical boundaries to provide access to tremendous stores of knowledge 24 hours a day.

At HKU our Libraries have changed dramatically under the leadership of Dr Tony Ferguson. Libraries, he says, do three things – acquire content, help people find that content, and provide a place for study. “In the eight years that I’ve been here our library has changed radically in all three of those areas.”

When he arrived from Columbia University, in 2001, the University Libraries were spending around 12% of their materials budget on electronic information. “This year we surpassed 70%,” he says.

“Increasingly e-books are becoming more important, but even if that weren’t the case why should we buy them? Well, space is a huge problem, we have a half million volumes in Hing Wai storage and it’s full. Now we are leading a campaign to build a shared storage facility in Kowloon (with Hong Kong’s sister institutions). Another reason is that electronic information is available 24/7. When I first came we had about 17,000 journal subscriptions (2002). We now have more than 55,000 and they’re all electronic.”

The day of the printed journal, he says, is already over. But quenching this ever-increasing thirst for knowledge is a costly business. Lack of funding, and lack of space, are the twin evils that constrain a library’s growth and relevance. “We tend to buy journals in packages and we spend more than \$12.9 million annually, on Elsevier alone for just 3,000 scientific journals.”

And access to this vast repository of knowledge is all very well, but locating the book, journal or DVD has become an art in itself. “So we’ve changed the way we help people,” says Dr Ferguson. Reference can now be done by telephone, text, e-mail, chat, Twitter, or in person. “We have tried to become more specialized and upgrade skills amongst our staff.



“We require that our professionals all have a bachelor degree and a master’s degree in library science and we are encouraging them to get masters, or doctorate, in other subjects – these are the people who select books, and some of them head up branch libraries like Medicine, or are in the collection development department.”

The Libraries employs nine subject specialists and Dr Ferguson is keen to start a serious preservation programme for books, journals and electronic files. He wants to hire a preservation specialist who can teach bindery staff how to restore rare books.

They are also trying to put many of their skills classes (like how to find information in biochemistry) onto the web so they can be accessed any time, relieving students of the need to sign up for a class.

In visual terms too the library is quite a different place to what it was a decade ago, with regular exhibitions, book talks and, thanks to the demands of the new curriculum, freedom to socialize, eat, drink and even talk above the traditional library whisper, in selected areas.

“With a problem-based curriculum students need to get together and work as a team, so the library has had to change. We have to recognize that kids are different today – if you’re going to protect the books from everybody and not allow food and drink, if people, aren’t allowed to talk you’re going to have a mausoleum. We’ve tried to make it much friendlier.” ■

THE INTELLECTUAL coffee house

What Hong Kong needs, says the new Head of the School of Humanities, is greater cultural capital.



Professor Daniel Chua Kwan-liang is on a mission to raise the profile of the Humanities in Hong Kong, and to create a new sense of ‘identity, unity and purpose’ for the School.

A musicologist and former professor at King’s College London, Professor Chua is only 18 months in the job and is well on the way to achieving his mission with a number of new projects.

“I want to form a series of creative clusters,” he says. “If I provide a space where different people and different disciplines can interact, something new and exciting may happen; but it’s not the sort of thing that I can fully determine.”

The first of those ‘creative clusters’ occurred in July and August this year when the Arts Faculty attracted scores of newcomers to campus with a series of musical and literary events organized under The Summer Institute in the Arts and Humanities.

Professor Chua describes it as “a huge messy celebration of the Arts and Humanities within HKU. We filled the campus with lots of activity for local and international students as well as the public. Many of these events were quite innovative, so we received a fair bit of media coverage. Hopefully such clusters of activity will spark off other ideas.”

He has also founded the Society of Scholars which brings together some of the best graduates in the Humanities from all parts of the world to live and interact in Hong Kong for two years. Launched in September with scholars in Fine Arts, English and History, the Society will expand next year with scholars in Linguistics, Philosophy, Music and Comparative Literature.

“The idea is that they will all do a new research,” explains Professor Chua. “They don’t have to interact with each other, but because they form a group of very bright people in residence at Robert Black College, something creative will happen, I’m sure.

“Over 400 people applied for these scholarships and the quality was so high it even surprised the staff in the School. The scholars will interact with the various departments so this should stimulate new ideas, new types of research, and will hopefully inspire our own students.”

It is hoped that that these scholars will become long-term ambassadors for the University, helping to raise our research profile in the Humanities overseas.

“Another thing I’ve done is set up a new Centre for the Humanities and Medicine – a joint venture between the Faculty of Arts and Medicine; this is genuine interdisciplinary research. Again it’s about creative clusters. A huge number of people in the Humanities and Medicine are interested in each other’s work, but you’ve got to create an environment in which the interest can blossom and bear fruit.”

These projects reflect what he would like to see in the Humanities at HKU as a whole – a sense of collegiality, or what he terms “coffee houses, where we sit and talk to each other. Much of our research is done in isolation; we do not collaborate in the way that scientists do. So I’m trying to create a kind of intellectual coffee house for scholarly ideas to mingle. We facilitate rather than control or manipulate.”

Professor Chua wants the intense aroma from such ‘coffee houses’ to waft beyond the wall of academia. “After all, the Humanities is about how we should live in the world,” he says. “It’s about thinking creatively and critically. It’s an outlook. We give students knowledge for life rather than training people for a fixed profession.”

He hopes that the proposed West Kowloon Cultural District (which intends to bring together a vibrant mix of performing and visual arts) will allow the Humanities to contribute further within the community.

“Hong Kong has a lot of hard currency. But what about the intellectual currency? Can we at HKU provide the intellectual currency for cultural growth? Because a mature society has both, and Hong Kong seems to be at the verge of a cultural awakening. Perhaps the School of Humanities can help shape something significant at this critical time.” ■

For more than a decade Lung Heung-wing and Mark Lung have been charming audiences worldwide with their father-son performances on a variety of percussion instruments.

And in November they played at HKU, where father Lung Heung-wing is University Artist and son, Mark, is studying Business.

The pair has played together since Mark was six years old, although Mrs Lung insists her son has been gripped by the rhythm since he was in the womb. “She says that during an African drum performance by his father he was jumping up and down and only stopped when the performance ended,” laughs Dr Lung.

“The drum is one of the world’s oldest instruments,” he says. “All children are natural drummers, it reflects the heartbeat. People like percussion because it’s natural, everything from tapping your fingers when you’re bored, to walking has a rhythm.”

In 2003, Mark won critical acclaim as soloist with the Hong Kong Philharmonic Orchestra in their Asian and European tour. *The London Times* described his performance at the Barbican Hall, London, as “Remarkable, impossibly cute, with absolute precision, and engineering gestures with uncanny accuracy.”

Since then, despite his love of music, he has chosen to branch out and is now in the second year of his undergraduate degree in the Faculty of Business and Economics. However, he has not fully abandoned the drum and continues to perform regularly.

As University Artist, Dr Lung will give a series of concerts and interact with colleagues and students through workshops and performances. He plays a variety of both tuned and untuned percussion instruments including the vibraphone and marimba, a five-octave keyboard instrument.

A pianist since the age of six, he started playing the xylophone with the Hong Kong Children’s Choir. His lucky break came in 1978 when he auditioned for the Hong Kong Jockey Club Music Fund and won a place at the Guildhall School of Music and Drama in London to study percussion. After graduation he went to study at Juilliard School in New York and took his masters at the University of Reading in the UK. On returning to Hong Kong he spent 19 years as percussionist with the Hong Kong Philharmonic Orchestra.

RESPONDING TO THE rhythm

A father and son duo got the audience clapping to the beat at their November concert.

“I was very keen on world music,” he says. “Despite my work with classical musicians and the Hong Kong Philharmonic I loved conga, bongo, and the African drum. In 1991 my colleague and I started the first African drum group in Hong Kong.”

His many awards are too numerous to mention here but, in 2002 and 2007, he made headlines by leading 10,000 young percussionists in a performance to mark the fifth and the tenth anniversaries of the Establishment of the Hong Kong SAR and the events set two new Guinness world records.

At the HKU concert, in addition to play with Mark, Dr Lung teamed up with percussionist Choy Lap-tak and pianist Peter Fan to play the work of composers Mui Kwong-chiu, a HKU graduate, and Ng King-pan, currently undertaking a PhD in HKU’s School of Humanities.

Ng King-pan’s *Wild Thinking Piece* (translated from Chinese), “is a very nice and challenging piece,” says Dr Lung. “I used the marimba, and play a duet with the piano. Another movement called Emotions includes ‘Emptiness’ ‘Happiness’ and ‘Anger’ so there was a lot of variety in the notes, expression, speed.

“I have been working together with Mui Kwong-chiu for a few years now and he likes to do multimedia. *Percussive Colours* includes a movement called *Water* so I used a lot of water and wine bottles, another is called

Bamboo, Wood and Stone so I used bamboo chimes and different stones. It also had visuals, a film projected on-screen of water and colours flowing to music. You have to be really open-minded to look for objects that create different sounds,” he says. “However, we only perform the Overture for the HKU concert which will include a lot of drums.”

Clearly, there’s plenty of room for improvisation. “Percussion is all about experimentation, finding new sounds. On Father’s Day one of the shopping malls invited my son and I to give a concert so we had to find things that reflected father figures. I went to the warehouse and bought traffic signs, road barriers, safety helmets, traffic cones so kids could join in. We even found anvils and the children played using hammers. It was a lot of fun.

He must drive his wife crazy at home. “Yes,” he laughs. “She refuses to go to the supermarket with me because I only go to try out new sounds on wine bottles, pots and pans!” ■



ANG LEE KEEPS A promise

When Academy Award-winning director, Ang Lee, filmed *Lust, Caution* at HKU in 2006, he promised to return. He appeared in October before a packed and appreciative audience at Loke Yew Hall.

HKU’s Main Building may be the grandfather on campus, but to Ang Lee its tiled floors and wide, arched balconies resonate with the innocence of society before war and revolution brought radical change. That made it the perfect setting to film the early scenes in *Lust, Caution*, based on Eileen Chang’s short story, which deals with espionage and dark sexual lust during the Japanese occupation of China.

“It’s very hard to find a place like this, in Hong Kong or anywhere, where you can totally devote yourself to the age of innocence. The courtyards, the hallways – the place hasn’t changed. It’s really a place of innocence. The sense of innocence and innocence lost is a common theme that appears in just about all the films I’ve made,” Lee said.

Lee’s own innocence stretches back to the moment when he discovered his love of the theatre, an experience he found echoed in Chang’s story. He had disappointed his father by failing the university entrance exams twice, and went to an arts college where he tried out the stage.

“I was facing darkness and as the spotlight hit my eyes, I remember my eyelid kind of sparkling. It was a magical, electrifying moment for me and I knew my life would be changed. I belonged to somewhere out there and not in real life. After that I was in a state of shock. I went out that night eating with my friends, walking and singing in the drizzling rain. It was exactly the same picture as the scene in Eileen Chang’s story,” he said.

“One of the reasons I made the film was because of how much she loved the stage, how much she loved that illusionary world which is more truthful than the real world. In some ways I believe in movies more than I do in real life.

“Only through pretending, through acting, do you actually get in touch with the true self. Which is a fascinating idea. It’s kind of existential, a yin-yang thing. Maybe the negative space is more truthful because it doesn’t have matter, it doesn’t change. Maybe something fixed on celluloid is more permanent.”

He does not elaborate on the loss of innocence in his life, but it is fair to say the reaction in Asia to *Lust, Caution* bit hard. There were strong opinions, negative and positive, and Lee felt the weight of them.

“For me a strong response is a good thing because I think the movie is disturbing, provocative, it really challenges our collective consciousness, our karma together, our history. I think patriotism, the group structure, is something we so much rely on as being Chinese.

“[But] I got crushed by the expectations and thinking psychologically that I was facing the whole Chinese community, so to speak. It pushed 10 times more nerves than portraying an American gay couple,” a reference to *Brokeback Mountain*, for which Lee won the Best Director Oscar in 2006.

One of the problems was that, for a change, Lee was an insider to the subject he was filming by virtue of being Chinese. He usually

prefers to describe himself as an outsider – a Taiwanese director based in the US who grew up on an island far from his parents’ home villages in China.

“As an outsider, you see things differently. You want to be honest with yourself, you want to make a statement, you want to be truthful. What an outsider doesn’t have is narcissism. When I make a Chinese film I have some of that and I have to deal with it. It’s harder to break through with some true statement. Making American films is much easier,” he said.

Being an outsider also helps in, of all things, love. “My closest feeling to love is actually quite abstract. It’s a lot like *Brokeback Mountain*. You find yourself chasing the meaning of it, trying to get a clear picture of it, but you can never find it. The more you’re confused, the more romantic and grand it is. That’s how I believe in love. I think if we knew what love was, we would have stopped making love stories 3,000 years ago. Being an outsider, not knowing what love exactly is, that’s okay. I like being able to watch things in the mist.”

Lee was in Hong Kong for the opening of his latest film, *Taking Woodstock*. He is currently making a movie based on the book, *The Life of Pi*. ■

TAKING A FRESH LOOK AT ancient treasures

A new exhibition hopes to revive interest in a neglected era of Ming porcelain production.

For many, the Ming Dynasty is synonymous with exquisite porcelain. For centuries the distinctive blue and white ceramics have been prized and endlessly copied.

In the 16th century, Portuguese kings were so enamoured of the finely executed treasures that they lined a ceiling in Lisbon's Santos Palace with the distinctive plates and bowls.

Quality control in the production of Ming imperial porcelain was so rigorous that these blue and whites are considered indisputably superior to those of any other period.



Underglaze blue covered jar with floral design. Wanli Period. Width 13 cm, Height 14 cm

Indeed, the trade in blue and white porcelain helped turn China into an economic powerhouse. It has been estimated that half the silver produced in the Americas during the Ming Dynasty found its way to China to pay for porcelain, silk and tea.

However, until recently, the material ware of the late Ming period has been largely overlooked in the belief that, due to an ailing economy, its quality does not meet the peerless standards set in earlier periods.

The University's Museum and Art Gallery is hoping to turn that belief on its head with the world's first exhibition devoted exclusively to the imperial ware of the late Ming Dynasty.

This collection of 120 stunning pieces created for two separate imperial households – during the reign of Jiajing (1522-1566) and Wanli (1573-1620) – has been a year in the preparation.

The exhibits, mostly produced in the Jingdezhen Kiln, Jiangxi province between 1520 and 1620, come from the Museum's own small collection, plus over 100 pieces loaned from nine private collectors in Hong Kong.

Museum Director, Mr Yeung Chun-tong says, "Some collectors may think the quality is not as good as those in the early Qing and early Ming Dynasties, but they were made for the Emperor so the quality at that time should have been the best. We have launched this exhibition to try and study their styles and increase their status."



Yellow-glazed bowl with green dragon and phoenix design. Jiajing Period. Diameter 14 cm, Height 7 cm

Underglaze blue dish with dragon design. Wanli Period. Width 20 cm, Height 4 cm

The largest group on display is the famous blue and white porcelain, but a smaller group of stunning *wucai* (five colours) ware can also be seen.

The decorative style is particularly distinctive. "All imperial ware contains dragon and phoenix motifs," explains Mr Yeung. "But even judging from this you can still see differences. The dragons during this period have very big, bulging eyes, it's a very special feature of the late Ming, and the dragon's head may be over-exaggerated. They liked to paint the dragon in this unrealistic way, because during that period the painter was trying to stress the power of the dragon head."

"Before Ming – during the Yuan Dynasty – the dragons in ceramics had smaller heads and stronger bodies, completely different proportions that signified the power of the Mongols who had expanded their power into Central Asia and Eastern Europe. Here the power is in the body not in the head. By the late Ming all the power is in the head."

Because of Jiajing's fascination with religious Daoism as a means to longevity many of the pieces are decorated with symbolic Daoist motifs, such as the auspicious *shou* character, cranes and the eight immortals.

'The Fame of Flame: Imperial Wares of the Jiajing and Wanli Period' exhibition runs at the University Museum and Art Gallery until February 28, 2010. ■



GREENING the campus

The Centennial Campus development will provide a new, modern learning environment, but it is not the only physical transformation underway at the University. Nearly 500 trees are being planted to enhance HKU's function as an urban oasis in the neighbourhood.

The trees will be planted in both the Main Campus, such as along the Sun Yat-sen steps and the courtyard between the Run Run Shaw and James Hsiung Lee Science buildings, and in the Centennial Campus. Trees will also line the two-level University Street that will connect the two campuses.

The Centennial Campus itself will have substantial greenery running through it. There also will be a central lawn of about 1,900 square metres and a rooftop garden of 4,000 square metres on top of new service reservoirs being built within the campus. A footpath will lead to the Lung Fu Shan Country Park.

The new plantings will more than compensate for the need to fell 168 trees for the Centennial Campus construction, none of which are of high ecological value or suitable for transplant. The Central and Western District Council approved their removal in March this year.

In addition to greening the campus, the University is reviewing amenities on campus. Staff and students were surveyed in late 2008/early 2009 and gave highest priority to a food court, canteen and supermarket. Architects Wong & Ouyang (HK) Ltd proposed in September that the new campus include five food and beverage outlets, a convenience store, bank, fitness centre, book store and special purpose rooms. ■





FITTING INTO THE community

The new student hostel is being built on Lung Wah Street will meet two needs: to provide more residential places for students and to integrate the University more closely with the local neighbourhood.



Construction has already started on the Lung Wah Street student hostel, but there are continued opportunities for local residents and students to have input on its design and operation.

The hostel will provide about 1,800 places by 2012 and consist of four blocks of 22 to 25 storeys. An old banyan tree on the site has been preserved and incorporated into the design.

The hostel's location in a dense urban area is a sensitive one, though, given the number of people who will be affected by its construction and use. Recognizing that, the University has held on-going consultations with District Councillors and residents, who have been able to air their views and provide input on refining the design of the hostel.

A community engagement workshop was also held in March 2007, in which views from residents were incorporated into the design such as enhancing air flow, reducing the height of the buildings and further enhancing greenery and landscape design on the podium.

Residents were also consulted in August this year on the design and management of a small park on the site that will be open to the community.

A liaison group has also been established with representatives from HKU, the District Councillors, contractors and residents to allow for on-going communication during the construction and operation of the project.

Meanwhile, students are being given a say on the indoor design of the project. A mock-up of proposed student rooms was posted at Haking Wong podium in September and students are invited to give feedback.

An underlying theme in the construction of the hostel is integration with the neighbourhood and students living in the hostel will be encouraged to participate in outreach programmes that provide voluntary social service to the community.

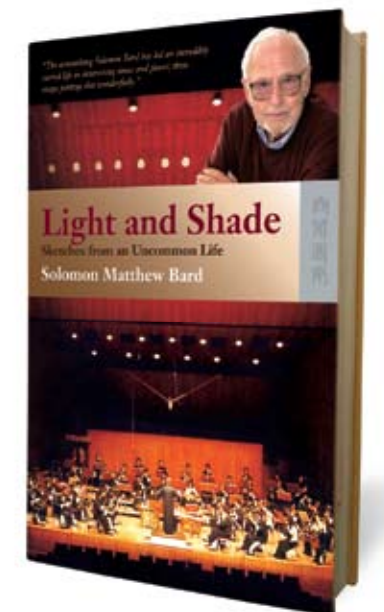
The Dean of Student Affairs, Dr Albert Chau, said the Lung Wah Street hostel would meet the current shortfall in places, but future demand would be a problem.

"It is going to help with accommodation problems by giving us what we need now. But by the time it is completed there will still be a shortage of about 1,700 places because of the 3-3-4 reform [in which undergraduate education will extend to four years from 2012] and the expansion of international places," he said.

The University is seeking additional solutions to meet this shortage. It recently introduced an option for non-local full-time degree students to receive a \$20,000 grant to live off-campus and has acquired Hon Wa School on Pokfield Road, which will be modified into a residential block for about 150 postgraduate students. ■

TALES FROM A well-travelled life

A new book from HKU Press traces the passions and the sorrows of a remarkable journey.



Solomon Bard's life reads like a novel, which is perhaps appropriate given that he has now committed his adventures to paper.

Born in Siberia in 1916, he and his family moved to Harbin, China, in 1924 after their house was appropriated by the Soviet State. There his musical talent, which was to play a prominent role in his life and career, first blossomed. However, he chose to pursue a more practical career and, in the 1930s, followed the well-trodden Russian émigré's road to Shanghai where he studied English for entry to the University of Hong Kong, arriving here in 1934.

A cholera outbreak and one of the worst typhoons ever to hit the territory, in 1937, read like omens of the traumas to come. In 1939 War was declared and Mr Bard joined the Hong Kong Volunteers Field Ambulance Unit. When the colony fell to the Japanese in 1941, he was interned as a Prisoner of War at the Sham Shui Po camp, where he employed his medical skills to secretly treat fellow prisoners.

After the war, and a few years in the UK, he returned to Hong Kong and his alma mater to found the University's medical service. Retirement, in 1976, provided an opportunity to follow his twin passions of music and archaeology. From 1976 to 1983 he served as executive officer of the Antiquities and Monuments Office and in his spare time he conducted the Hong Kong Philharmonic Orchestra and, from 1983 to 1987, served as assistant music director of the Hong Kong Chinese Orchestra.

Mr Bard's life and experiences are vividly recounted in a series of essays that make such entertaining reading one wonders why writing hasn't played a more prominent role in his life.

Earlier this year, the remarkably youthful Mr Bard, now 91, returned to Hong Kong to share his memories with an audience at HKU's Main Library.

The University in the 1930s appears to have resembled a holiday camp rather than an educational institution. "When I arrived at my hostel, in 1934 as a first-year medical student, there were quite a number of students sitting around, playing cards,

not attending lectures," he recalls. "The atmosphere was very casual, the attitude was that you didn't have to attend lectures, they weren't compulsory, you didn't even have to pass exams for that matter.

"The overseas students – Russians, Chinese, Sri Lankans, Malaysians – would stay on and on. Daddy would send the money and they would just stay here. It was a lot of fun and everybody tried to enjoy themselves very well.

"At that time there were only three faculties – Medicine, Engineering and Arts – and about 450 students. Out of the 45 students who started first-year medicine with me, only 15 passed on to the second year, and only five graduated. The record at the time was ten years spent on a three-year course!" ■

Light and Shade: Sketches from an Uncommon Life by Solomon Matthew Bard, published by Hong Kong University Press.

EARLY DEVELOPMENT
AND LANGUAGE CONTACT

the bilingual child

A new book from the Department of Linguistics, detailing fresh findings on bilingualism in early childhood, has scooped a prestigious prize from the Linguistic Society of America.

For Dr Stephen Matthews, and his wife, the birth of their children proved a double blessing. For, along with the usual joys of parenthood, these two linguists were inspired by their newborns to take their research in a new direction.

Dr Matthews, Associate Professor in HKU's School of Humanities, and his wife Professor Virginia Yip, of the Chinese University of Hong Kong (CUHK) – who are joint directors of the newly-established Childhood Bilingualism Research Centre between HKU and CUHK – have now gathered that groundbreaking research into an award-winning book: *The Bilingual Child: Early Development and Language Contact* (published by Cambridge University Press).

The book, which recently won the prestigious Leonard Bloomfield Book Award, presents new findings on how children acquire two languages from birth



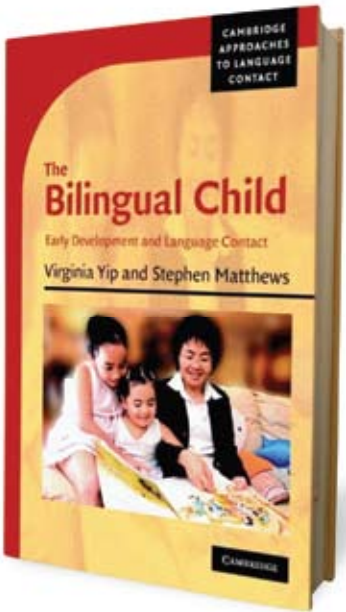
and throws fresh light on the acquisition of English and Cantonese in childhood – a hitherto under-researched area.

“It took us roughly ten years to write, from research to publication, and we started with our own son and two daughters, and also looked for children in a similar situation, by which we mean one parent, one language,” explains Dr Matthews.

“With our own children we looked at them from age one to five. Back in 1993-94 almost nothing was known about bilingual children acquiring English and Cantonese together. Most of the research came from Europe, or Canada, and involved European languages. That research seems to show that there are no particular developmental issues, that there is no interaction between the European languages.

“But we wondered whether we would find the same thing with languages as different as English and Cantonese, or whether we would see the interactions.”

What they found took most linguists by surprise in the field. “If you listen to our children’s English in the early years you can hear surprising features that are like Cantonese in their grammar. In English, they will ask ‘you say what?’ And we can trace that to Cantonese, it is a straight-forward example of transferring Cantonese grammar to English.” This had never been recorded systematically before in Hong Kong bilingual children.



“We argue in the book that our children go through a stage in which they treat English the same way as Cantonese does with regard to questions – they say ‘I know it’s where’, instead of ‘I know where it is’. We have one chapter where we argue that the child’s Cantonese is also affected by their English, but that’s more difficult to see.”

The couple is now convinced that parents who delay exposing their children to both languages fearing it will be too much for them to absorb, are labouring under a misapprehension. “We think it’s better for them to learn both in tandem,” says Dr Matthews. “It’s a very complicated argument because early on the children already demonstrate the ability to differentiate the two languages and by age four or five they have figured it out. We think it’s a good thing for children to be exposed to both languages from birth, there’s the obvious practical advantage, but there are some deeper and more obvious benefits too.”

In fact, research shows that bilingual children have cognitive advantages over their monolingual peers. Indeed, Professor Yip stresses that they are more creative and better decision makers.

“They are better at problem-solving and thinking outside the box. Their minds are naturally more flexible,” she says. ■

The Bilingual Child: Early Development and Language Contact by Virginia Yip and Stephen Matthews, published by Cambridge University Press.

The University of Hong Kong Bulletin

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The Bulletin is the University magazine that features our latest activities, events and plans. It aims to keep the local and international community, informed of new breakthroughs in a wide range of disciplines initiated by members of the University.

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