



香港大學

THE UNIVERSITY OF HONG KONG

# BULLETIN

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## ARTS AND ACADEMIA

Intellectual Explorations into Culture and Our Heritage



**Battling AIDS**  
Vaccine progress brings new hope



**El Niño and Global Warming**  
Tree rings study signals link





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## Professor Peter Mathieson Appointed HKU's 15<sup>th</sup> Vice-Chancellor

After a global search and selection exercise that took two years, the University Council unanimously approved on October 4, 2013 the appointment of Professor Peter Mathieson as the 15<sup>th</sup> Vice-Chancellor of HKU, succeeding Professor Lap-Chee Tsui. He will assume the position on April 1, 2014.

Professor Mathieson is a teacher, clinician, medical researcher and academic leader, and is currently the Dean of the Faculty of Medicine and Dentistry at the University of Bristol. He holds an MBBS (with First Class Honours) from London University and a PhD from the University of Cambridge, where he also taught and was awarded the 'Teacher of the Year' award by Cambridge medical



students. He is a distinguished nephrologist with a clinical interest in autoimmune renal diseases, and has rich experience in developing research and innovation strategies for the University of Bristol and the higher education sector in the UK. Professor Mathieson is a Fellow of the Royal College of Physicians (London) and an elected Fellow of the Academy of Medical Sciences.

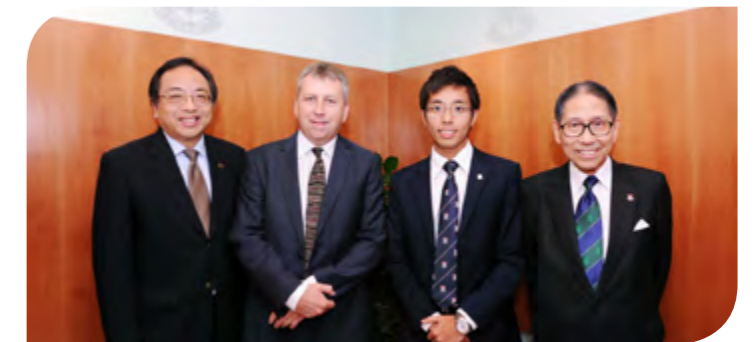
Three forums were held at HKU for Professor Mathieson to meet members of the University: the staff, students and alumni. The University's Senate subsequently met and resolved to recommend him to the Council for appointment.

The Chairman of the Council and of the Vice-Chancellor Selection Committee Dr the Honorable Leong Che-hung was delighted with the appointment of Professor Mathieson. He said: "Professor Mathieson meets the selection criteria adopted by the Council because of the excellence of his academic standing and leadership, his integrity, his vision, the demonstration of his

management capabilities, and the effectiveness of his interpersonal and communications skills. I am confident that Professor Mathieson will lead the University to reach the next level of excellence."

Professor Mathieson was pleased and honoured as well: "HKU is an established, comprehensive research-intensive university with an international reputation and major strengths that must be cherished and nurtured. I am confident that I can lead HKU to ever greater contributions to education, research, leadership and public engagement in the region and on the global stage, and I will do my utmost, together with the University community, to take the University to new heights."

The current Vice-Chancellor Professor Lap-Chee Tsui extended his congratulations to Professor Mathieson on his appointment: "I wish him all the best in his Vice-Chancellorship and I look forward to seeing HKU go from strength to strength under his leadership." ■



From left: Vice-Chancellor Professor Lap-Chee Tsui, Vice-Chancellor-designate Professor Peter Mathieson, HKU Students' Union President Laurence Tang and HKU Council Chairman Dr the Honorable Leong Che-hung.



Professor Mathieson (left) shares his vision for the University with HKU students, staff and alumni at one of a series of forums.

## Vice-Chancellor Honoured, Twice

Vice-Chancellor Professor Lap-Chee Tsui, who is already a world renowned geneticist, received two further exceptional honours in May.

He was conferred an honorary doctorate from Fudan University in Shanghai, at a ceremony officiated by the President of the University Professor Yang Yuliang. The ceremony was then followed by a lecture

named 'The genes of a scientist' given by Professor Tsui.

Professor Tsui is grateful to be given the honour: "Shanghai is the place where I was born. After leaving for half a century and having travelled half the globe, I am home to be awarded this honorary doctorate. I am deeply pleased and honoured."

In late May, when Western University (The University of Western Ontario) of Canada celebrated its 301<sup>st</sup> Convocation in Hong Kong, Professor Lap-Chee Tsui was also conferred an honorary degree, in recognition of his scientific achievements throughout the years. ■



Professor Lap-Chee Tsui (left) and Fudan University President Professor Yang Yuliang (right)

Professor Lap-Chee Tsui (left) receives an honorary degree from Western University (The University of Western Ontario) of Canada in its 301<sup>st</sup> Convocation in Hong Kong

## Fifth State Key Laboratory Established at HKU Research Centre for Obesity, Diabetes and Cardiovascular Complications

With the approval of the Ministry of Science and Technology of the Central Government, the Partner State Key Laboratory of Pharmaceutical Biotechnology has been established at HKU in July, in strategic collaboration with the State Key Laboratory of Pharmaceutical Biotechnology at Nanjing University, bringing the number of State Key Laboratories at HKU to five.

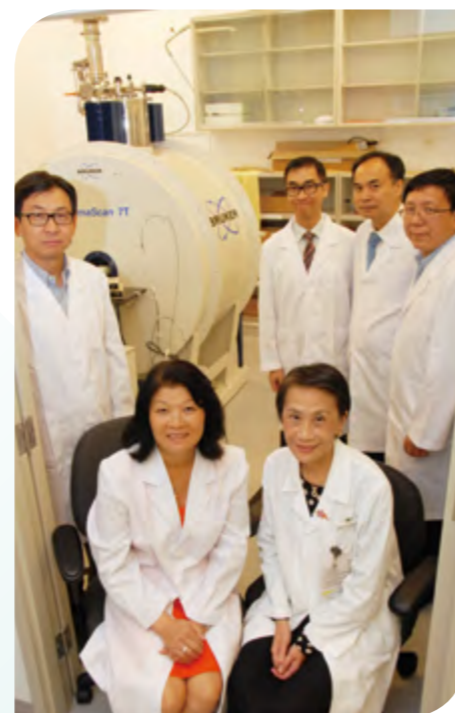
Located at the Li Ka Shing Faculty of Medicine, the Partner State Key Laboratory of Pharmaceutical Biotechnology is run by the Department of Medicine and the Department of Pharmacology and Pharmacy, with a team of nearly 80 researchers.

The Laboratory aims to conduct basic, clinical and translational research on obesity, diabetes and its cardiovascular complications, and to facilitate scholarly and research exchanges with the Mainland and international scientists for the

benefit of pharmaceutical industries and clinical practice in Hong Kong and Mainland China.

Being regarded as key components of China's science and technology research system, the State Key Laboratories serve as the base for top-level basic research and applied basic research development, assembling and nurturing outstanding researchers, as well as scholarly exchanges for the country. There are over 260 State Key Laboratories throughout China.

Currently, HKU has five State Key Laboratories; the other four are Partner State Key Laboratory of Emerging Infectious Diseases, Partner State Key Laboratory of Brain and Cognitive Sciences, Partner State Key Laboratory on Synthetic Chemistry and Partner State Key Laboratory for Liver Research. ■



## Saluting Academic Excellence HKU Scholars Win Worldwide Recognition



Professor Ying Chan receives the Lifetime Achievement Award from the Asian-American Journalists Association

HKU boasts many local and international scholars whose work continues to win accolades from around the world. Professor Ying Chan, Director of Journalism and Media Studies Centre; Professor Kathryn Cheah, Chair Professor of Department of Biochemistry; and Professor Anthony Yeh, Head and Professor of the Department of Urban Planning and Design, have received international acclaim in recognition of their contributions in their respective fields of study.

Formerly an experienced and award-winning journalist, Professor Ying Chan was presented with the 2013 Lifetime Achievement Award at the Asian-American Journalists Association's national convention in New York this August. This prize is awarded to an Asian American or Pacific Islander who has demonstrated courage and commitment to the principles of journalism



Professor Kathryn Cheah – Fellow Elect of The World Academy of Sciences

over the course of a life's work. It recognises Professor Chan's contributions to the media and society, as well as her efforts in developing professional journalism in Asia.

At the 24<sup>th</sup> General Meeting of The World Academy of Sciences (TWAS) held in Argentina in October, Professor Kathryn Cheah, together with other 51 outstanding scientists, was elected as a Fellow of the Academy. Professor Cheah's research focusses on the regulation and function of genes and mechanisms of disease with an emphasis on the skeletal system, human degenerative skeletal disorders and the inner ear. The elected Fellowship recognises the scientific excellence of her work and her long-standing contributions to the advancement of science. The new TWAS Members, comprised of 46 new Fellows and six Associate Fellows, will be inducted at the



New Academician Professor Anthony Yeh is welcomed by the Academy of Social Sciences

Academy's 25<sup>th</sup> General Meeting in 2014, bringing the total TWAS Membership to 1,115.

Professor Anthony Yeh was named an Academician by the United Kingdom's Academy of Social Sciences. All selected Academicians have a wide range of expertise in the social sciences, including education, urban studies, social policy, gerontology, law, politics, sociology, criminology, geography and linguistics. Professor Yeh is among the 51 leading social scientists who have been awarded with this prestigious honour this year. Aiming to promote social sciences in the UK for the benefit of the public, the Academy of Social Sciences has over 900 Academicians from universities and the policy and practice communities, and 46 member learned societies, representing almost 90,000 social scientists. ■

## Promoting iResponsibility

### HKU Hosts the First Asian International Baccalaureate World Student Conference

In view of the emergence of a great variety of online tools in a fast-changing digital world, HKU and the International Baccalaureate (IB) hosted a five-day conference themed 'iResponsibility: Explore How We Engage in the Online World' in August with the participation of 150 high-school students from all around the world.

This IB World Student Conference, the first in Asia, consisted of interactive sessions and workshops taught by industry leaders and academics, including HKU alumni who have successfully started their own social entrepreneurship projects. Vice-Chancellor Professor Lap-Chee Tsui remarked in the opening ceremony: "I hope you work together with your peers and learn from your mentors to use the power of social media to change this world for the better."

In order to help high-school students master online tools of all kinds responsibly and positively, participants were not only given a chance to learn in a university environment, but also to discover the fast-paced, technology-savvy, 24/7 metropolis of Hong Kong through all sorts of activities and trips around the city, including interactive and inspiring tours of high-technology multimedia centres in Cyberport, a creative hub for digital content tenants. Participants then put what



they had learnt in class into practice, by continuing to engage with each other through various social media platforms after the five-day conference was over. ■

## Urban Farmers in Action

### HKU Students Kick off Rooftop Farming on Campus



Steve Cannon, HKU Executive Vice-President (Administration and Finance), and Mrs Ann Kung, Head of Personal Banking (General Manager) at the Bank of China (Hong Kong).

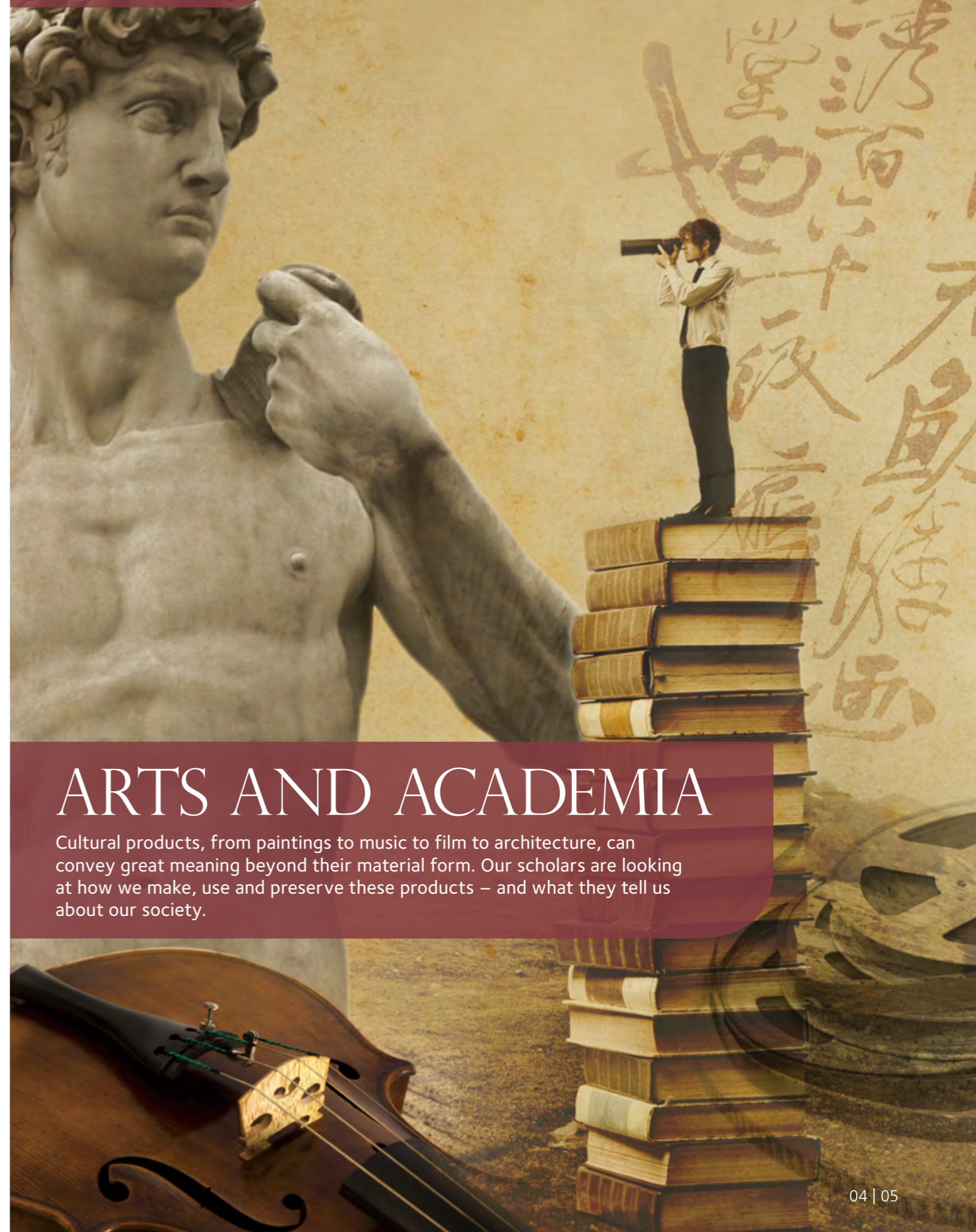
Co-organised by the General Education Unit and the Sustainability Office of HKU, the 'Rooftop Farming Project' not only connects people and farming, thereby fostering a sense of responsibility to the natural environment, but also serves as an example of putting the sustainable food cycle onto practice – the plants will be used in a vegetarian restaurant on campus so as to encourage consumption of local produce with

a minimal carbon footprint and in return, the food waste from the restaurant can be composted.

A group of urban farmers, comprising students from various disciplines, will undertake the maintenance of the farm under the guidance of farming instructors. From time to time, urban farming workshops and activities will be organised to engage more HKU students and staff, and the farm will be open for the general public twice a year.

The 'Rooftop Farming Project' is sponsored by the Bank of China (Hong Kong) Charitable Foundation, and supported by Time To Grow, Greenwoods (HKU Students' Union), and Bijas Vegetarian Restaurant. ■

With urban farming becoming an up-and-coming trend, HKU has brought the green concept of organic farming to the campus by initiating a 'Rooftop Farming Project' with over 25 different plants set up on top of the Runme Shaw Building, to further promote sustainable development and responsible citizenship. A kick-off ceremony was held on September 19, in the presence of officiating guests Dr



## ARTS AND ACADEMIA

Cultural products, from paintings to music to film to architecture, can convey great meaning beyond their material form. Our scholars are looking at how we make, use and preserve these products – and what they tell us about our society.



Faculty of Architecture works with the Urban Renewal Authority on the Central Market Oasis project

# INVESTMENTS IN THE PAST

A multidisciplinary team from HKU is doing groundbreaking work in the area of conservation, working on a new methodology for assessing cultural heritage impact.

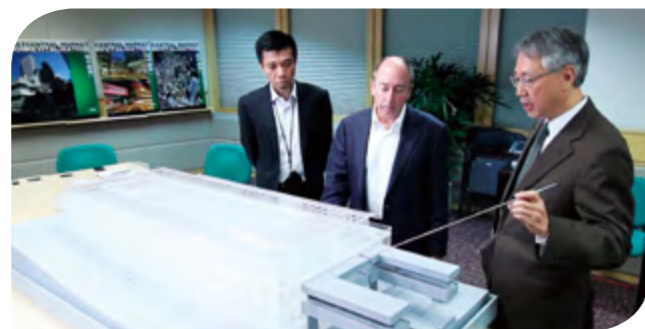
Conservation first became a global concern 40 years ago with the Stockholm conference on sustainability and the introduction shortly thereafter of the World Heritage Convention. In those days most of the emphasis was on natural heritage – saving the forests, the seas and animals such as tigers and pandas, which swiftly became the icons of the movement.

More recently, cultural heritage has moved to centre-stage – saving the world’s historically significant buildings for generations to come. It’s a trend that Hong Kong has taken to heart, as the public has voiced increased concern over the disappearance of too many cultural sites to make way for ever more high rises.

HKU is at the forefront of the fight to preserve the city’s heritage, partly through its Architectural Conservation Programme (ACP), which has been running for 13 years and contributed both internationally and locally to the preservation of structures. ACP Founder

Professor David Lung, Lady Edith Kotewall Professor in the Built Environment, who is also a former Chairman of the Hong Kong Antiquities Advisory Board and holds the UNESCO Chair of Cultural Heritage Resources Management in the Faculty of Architecture, is now heading up a multidisciplinary team working to develop a methodology for undertaking cultural heritage impact assessment (CHIA) that will be recognised globally.

Joining him on this mission is long-term colleague Dr Richard A Engelhardt, Visiting Research Professor at HKU and a former UNESCO Cultural Advisor and expert in heritage conservation. He believes many more places of historic significance in Hong Kong



Dr Richard A Engelhardt, Visiting Research Professor at HKU (centre), has been working with Professor David Lung (right) to develop a methodology for undertaking cultural heritage impact assessment.

will be recognised as having heritage value as a result of this work.

Asked why CHIA is necessary Dr Engelhardt replies: “Before, cultural heritage was really only viewed as a tourism resource, and the tourist industry is notorious for its ‘eat them up, spit them out, then move onto the next one’ approach, whether it’s a beach or a monument.

“It is known as building recycling, not necessarily using it for the same purpose, but finding a new life for it.”

Professor David Lung



Having been engaged in architectural conservation locally and internationally, Professor David Lung (left) takes his students to Kaiping Diaolou World Heritage site.

## Brutally over-exploited

“Now, with the realisation that cultural heritage is in fact part of the sustainable development equation – and a part that has been brutally over-exploited – it has become necessary to put the brakes on this exploitation and change the paradigms completely. That is, to take action that will actually add asset value to heritage resources, in just the same way that you need to plant more trees, clean rivers, etc.



“It is a move away from an ad hoc response to how we go about preserving the heritage resources of our urban spaces to a more systematic way of determining what is valuable, what is recyclable. And what is the most sustainable way to utilise our investments in the past,” says Dr Engelhardt.

A prime example of what they are doing is the Central Market Oasis project, which they and a team of graduates are working on with the Urban Renewal Authority (URA). The team advised the URA on how the run-down Central Market could be conserved usefully – not as a market but as a leisure or recreational hub for public use. “It is known as building recycling,” says Professor Lung, “not necessarily using it for the same purpose, but finding a new life for it. Instead of tearing it down and having the chaos and noise of building another 60-storey high rise to jam the skies and block the airflow, causing traffic jams etc, the impact of saving it has been obvious.



The exterior (top) and interior (bottom) of the historically significant Central Market, built in 1939, before being revitalised into a leisure-cum-recreational hub for public use. (Courtesy of Urban Renewal Authority)

“We have retained good airflow, the traffic has not been disrupted, there is the lightness of having a low-rise building in the area. Plus, it adds value to the historic neighbourhood, such as the Graham Street open market and the Sun Yat-sen trail, by blending in with what was there before, so the ambience of the district has been maintained.”

Professor Lung hopes to use the project as an example for heritage impact assessment. “There is no negative impact as there is no threat to this building because it has been saved, yet the very fact a heritage building has been saved has a positive impact on the neighbourhood and on the environment, especially in the heart of the Central Business District.”

Heritage is by nature a multidisciplinary subject: In addition to the team leaders’ expertise as archaeologists and architects, others on the network are planners, historians, anthropologists, sociologists, economists and public administrators – understanding government thinking is important since it is the administrators who are responsible for intergenerational asset management.

“We need to capture both the government and the regulation sides when formatting the method,” says Professor Lung, “because governments want to know what the procedure is – in particular, when engaging with the community – what are the rules of the game and what is the measurable outcome.”

“Hong Kong has the best and strongest assessment methodology for cultural heritage assessment in the region, and the government has understood the need to develop the process method further,” says Dr Engelhardt.

“The cutting-edge research is going to come out of Asian cities and that is going to inform cities around the world,” concludes Professor Lung. “We hope this research will have a very significant global impact.” ■

# CULTURE AND THE LAW

Playwrights and lawyers had a cosy relationship in Shakespeare's time. A similar cross-fertilisation between the arts and law is being cultivated at HKU.



Language and the construction of stories are at the heart of literature, and also law. But the two are often boxed off from each other: legal scholars and students focus on statutes while those in the arts focus on literature and more recently film.

It's a shame, says Associate Professor of Law Dr Marco Wan, because there is so much they can learn from each other.

Dr Wan is among those trying to build a bridge between the two by pursuing research in areas where law and the arts intersect. He is also helping to teach the new double degree in Law and Literary Studies, launched by the Faculties of Law and Arts in 2011 to provide students with a firm foundation in both fields.



"Within the Faculty of Law there is this realisation that we need to move beyond seeing the law as rules and doctrines, and really get a different perspective on the law as a linguistic product and part of cultural and historical heritage," he said.

"There are a lot of commonalities between literature and the law. A literary critic working on a novel and a barrister arguing a case in a trial seem to be doing very different things but at the end of the day they are both working with language and narrative. Law has a lot to learn from literature and vice versa."

## Reflecting the legal concerns of the day

These commonalities were recognised in Shakespeare's time when some of his plays were performed in the Inns of Court in London. Legal problems and questions were also incorporated into literature, for example, in *The Merchant of Venice* which considers

whether law or equity is best suited to achieving justice.

Dr Wan is seeking to bring a similar awareness of the connections and mutual influences between law and the arts to modern-day Hong Kong. In one study, he looked at Hong Kong films with a legal theme from 1984 to 1997, straddling the *Joint Declaration* and the handover. The films ranged from 1985's *The Unwritten Law* with Andy Lau Tak-wah to 1997's *Lawyer, Lawyer* with Stephen Chiau Sing-chi.

"In the period leading up to the handover, the law was very much on the minds of Hong Kong people," he said. "You had the drafting of the *Basic Law*, concerns about human rights after Tiananmen Square Incident, the drafting of the *Bill of Rights*, the choice of Chief Justice, and the creation of the Court of Final Appeal.

"Films reflected people's anxieties about the law at the time and they gave us something

we can't get in formal legal history textbooks, which are interpretations of events and facts. They gave us a sense of what it was like living in that period, of lived experience."

## A kaleidoscopic view

Dr Wan has also looked at instances where law and literature intersect more directly. He recently completed a manuscript on the literary trials of the 19<sup>th</sup> century, including that of Gustave Flaubert who was charged with obscenity for *Madame Bovary*. Dr Wan showed how the densely metaphorical language of the cross-examination was used to support the charges against Flaubert.

He has also compared the situations of Mainland artist Ai Weiwei and Irish playwright Oscar Wilde, who both encountered trouble with the law. Mr Ai was arrested ostensibly for tax evasion in 2011 but had also riled Mainland authorities with statements and artistic works critical of the government. Mr Wilde was tried for sodomy which affronted the Victorian morals of his time. Dr Wan draws a connection between the two.

"I'm interested in the fact they are both transgressive figures and transgression almost always brings people into contact with the law. I think transgression is an interesting concept – it's not necessarily a bad thing, it's often done

by people who see things differently or see beyond the horizon of what a society considers acceptable or normal," he said.

In a sense, that is what the combination of law and literary studies aims to do. The goal is to get students to see beyond the laws and statutes and understand a situation in all its human complexity.

"It's a shift of perspective. You're used to thinking of a discipline in a set way, then suddenly it's like a kaleidoscope. You shift the lens and see all these different patterns. You can always come back to the first point but your perspective will be enhanced," he said. ■



Dr Marco Wan compares the lawsuit faced by Ai Weiwei, an outspoken Mainland artist who was arrested ostensibly for tax evasion in 2011, to that of Oscar Wilde, an Irish playwright who was prosecuted for his 'trial for gross indecency' with other men in his time.



Dr Wan looks into the connections between law and the arts in modern-day Hong Kong by studying legal-related Hong Kong films from 1984 to 1997 including *Lawyer, Lawyer* (1997). (Courtesy of Mei Ah Entertainment)



PhD student Austin Yip conducts his own composition at the concert celebrating the Music Department's 30<sup>th</sup> anniversary

# HITTING ALL THE RIGHT NOTES

It's one of the smallest departments in HKU in terms of numbers, but the Music Department is making a big impact, producing award-winning composers, in-demand graduates and gaining a world-class reputation.

When Chairperson of the Music Department Dr Chan Hing-yan visited the University of York in June 2013 to guest lecture there, and to see his former MPhil student Daniel Lo, he was immediately faced with two questions from teachers there. "First they asked me 'are all your students this good?' And then, 'please can you recommend more to come here?'" he says.

This reaction is indicative of the Music Department's 'small but high impact' programme, whose graduates are repeatedly winning prizes for composition as well as scholarships to some of the best academic institutions around the world.

In addition to Daniel Lo, alumni and students have been making a splash around the world for composition and musicology, while within HKU, the Department has produced four laureates of the prestigious Li Ka Shing Prizes since its inception in 1991, and two have been

won by Dr Yang Yuanzheng – one for his MPhil thesis and the other for his PhD thesis. "That is quite an achievement, it is also unique," says Dr Chan. Dr Yang is now an Assistant Professor in the Department.

Dr Chan puts the success down to three main reasons: quality of the staff, research excellence and a recruitment policy that has given rise to a diverse and unconventional student body. Things haven't always been this good. In what he terms the 'dark days' of the early 2000s there were just four teachers – including Dr Chan – to run the Department together with the postgraduate programme. Now there are seven. "In terms of academic staff," says Dr Chan, "the relationship among colleagues and in terms of the individual profiles of each teacher – that is individual research profile and international standing – this is the best moment I have ever experienced."

Postgraduate research is another area of pride. Says Dr Giorgio Biancorosso, Postgraduate Coordinator of the Department: "There's a tradition of doing research in our Department that has been there since its establishment in 1982, and is partly down to one of the Department's Founders, Nicholas Cook, who is now Head of the Music Department at Cambridge. In the past five to ten years the Department has gained a consistent reputation for postgraduate study, both locally and regionally – which is in line with HKU's general shift to a more research-based culture.

## Clear agenda

"We are a more cohesive department now, with a good distribution of expertise across the fields, a clear agenda on what needs to be done, both in terms of recruitment and what to teach – what is valuable to the young men and women who come and study with us."

The international composition of the faculty is diverse both in terms of nationality – Hong Kong, Mainland China, Korea, Italy, Malaysia, UK, and strong connections with Australia and the US – and in terms of coverage and expertise – Professor Daniel Chua, who is also Head of Humanities, is a Beethoven scholar; Dr Biancorosso covers film, opera and aesthetics of Western art music; Dr Youn Kim, a theorist from Korea, does history of music theory in the late 19<sup>th</sup> century to the early 20<sup>th</sup> century; Dr Yang Yuanzheng covers cultural identity in Chinese and Japanese music... the list goes on.

And if the faculty are diversified, the student body is even more so. Attracting an international range of students has been a deliberate part of the recruitment programme, formulated by Dr Biancorosso.

"We have been careful to cultivate the Department's reputation, with frequent attendance at overseas conferences and now the sheer diversity of the student body suggests that HKU Music has real pull abroad," he says. "Current MPhil and PhD students hail from Hong Kong, Xi'an, Taiwan, England, Spain, Japan, the US and Korea.

"Music's postgraduate programme is among the most international in HKU and in Hong Kong. This is unusual, particularly for a small department, and it speaks strongly for our ability to attract top-quality students from all parts of the world."

"This Department is unconventional compared with other music departments in the region," adds Dr Chan, "and we attract very unconventional students because we don't just look at their musical achievement when we admit them, we look at the person too. Postgraduate education is not about being a good student, it's about being original."

**"I think the key to our success is that we have been very good at creating a different kind of environment which speaks to the interests of the contemporary student."**

*Dr Giorgio Biancorosso*

England, I think the key to our success is that we have been very good at creating a different kind of environment which speaks to the interests of the contemporary student," concludes Dr Biancorosso. "It isn't always easy to teach because we combine composers and musicologists – very different animals – but that is one of our strengths, to have both practitioners and scholars. It adds a lot of flavour to the learning environment." ■

"Given that we are too small to compete with the biggest universities in the US and



MPhil student Carrie Carter performing on the taiko at the Department's celebratory concert



Dr Chan Hing-yan (left) and his former MPhil student Daniel Lo (right), who is now pursuing a doctoral degree at the University of York.



# THE WORK OF AN ANGRY MAN

The graffiti-like paintings of 19<sup>th</sup> century Guangdong artist Su Renshan have been dismissed as the work of an eccentric, but new research argues they fill a missing gap in Chinese art history and reflect the turmoil experienced by southern Chinese in the wake of the Opium Wars.

When Dr Koon Yee-wan, Associate Professor of Fine Arts, first gazed at the paintings of Su Renshan, with their thick black angry calligraphy, her reaction was immediate.

“I thought they were the ugliest paintings I’d ever seen. He knew how to paint and I didn’t understand why he would make his paintings this way,” she said.

The jolt of that reaction, though, led her down a path of discovery. She came to see that Su had a wider significance than her initial response gave him credit for. “I realised he was a very angry man. And the idea of anger in Chinese painting is something completely different from before.”

Su was of the scholarly class, but he had a contrary temperament. He failed his exams and refused to take them again, and some years later his father had him imprisoned for filial impiety for reasons that remain unclear.

More importantly, he was working in a time of turmoil. China had suffered humiliating defeat after the First Opium War in the 1840s and southern China, where Su lived, bore the brunt of the effects. The area was also plagued by pirates. With all this going on, Su had little regard for the Confucian values expected of an educated man of his times.

“He was a self-imposed outsider. He questioned the whole system of education and he made lots of angry paintings with calligraphy saying Confucius was a robber, a thief, a bandit who opened the doors to hell.

“He’s generally known as a madman or genius who was responding to the times and who saw the need for change,” Dr Koon said.

“He’s generally known as a madman or genius who was responding to the times and who saw the need for change.”

Dr Koon Yee-wan

## New twists on an old art form

Su’s response included bringing new ideas and forms into his paintings that challenged the value of traditional ink painting at the time. Apart from writing long, irate commentaries about Confucius, he adopted strong graphic images such as zigzags and circles for things like waterfalls, and played with conventional images. Women had a special place in his paintings because he thought they should have a more important role in society. In one painting, he depicted the traditional Chinese New Year gods as women.

“I wouldn’t call him a feminist because that idea didn’t exist then, but he was challenging the *status quo* of accepted beliefs and long-held values that had been going on since the 12<sup>th</sup> century,” Dr Koon said.

She believes his daring work could be a missing link in Chinese art history between the traditional style that prevailed during the late 18<sup>th</sup> century and the modernist vibrant art that emerged in Shanghai in the 1860s. Su’s unusual style and location made him an ideal candidate to bridge the two periods.

Political turmoil aside, Guangzhou in the 1800s was a hub of commerce and merchants were emerging as the main patrons of art, as opposed to the imperial court which continued to favour landscape painters. Merchants also had more money to spend and travelled to Shanghai and other ports.

“I think Guangzhou was very active in the transition away from the landscape literati tradition. Art that is less literati-based, more

colourful and draws more on folk traditions and auspicious images has always been patronised by merchants,” she said.

## A man of his times, and all times

This art has generally been ignored by art historians, who typically regard 19<sup>th</sup> century Guangzhou as a centre of ‘export art’ – of oil paintings depicting life in China aimed at Westerners interested in knowing more about the country or collecting souvenirs – rather than a place of serious art.

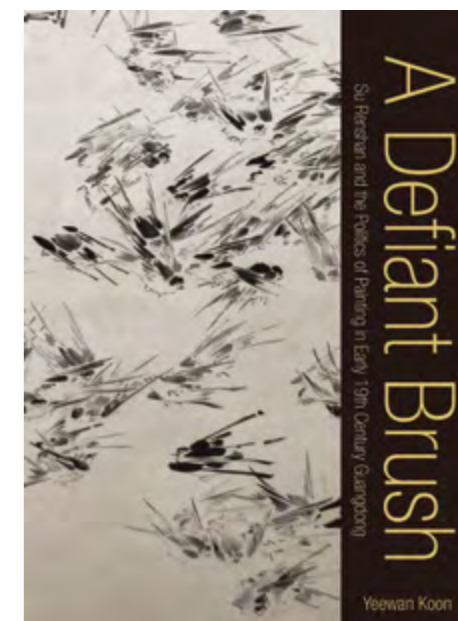
But Su was a serious artist and Dr Koon said his blending of classical and modernist styles made him a pivotal figure in the transition to the Shanghai art scene.

Interestingly, his work re-emerged in Hong Kong in the second half of the last century, when exhibitions of Su’s paintings were held in the wake of the 1967 riots and again in the approach to the handover. Tellingly, these were times when people were contemplating their Cantonese identity.

“He becomes a nice mouthpiece for a claim of individuality because that was what he was doing in his own time and it resonates with people,” Dr Koon said. ■



A portrait of Wang Anshi by Su Renshan



A Defiant Brush – Su Renshan and the Politics of Painting in Early 19<sup>th</sup> Century Guangdong, written by Dr Koon Yee-wan, will be published by Hong Kong University Press.





# WINNERS AND LOSERS IN THE ART MARKET

Hong Kong's mantle as a global financial centre is well established. Now, it's a centre of the global art world, too. But some have paid the price in that transition, as sociologist Dr Tang Ling-yun is discovering.



Art Basel made its debut in Hong Kong in May this year, attracting lots of art aficionados.



“In Hong Kong there has been a lot of soul searching about the role of local art producers. Is our success mainly in terms of an elite global audience or is something being given back to locals?”

Dr Tang Ling-yun

Art Basel, the international art fair, staged its first show in Hong Kong in May this year, attracting tens of thousands of visitors and giving official recognition to Hong Kong as the world's third largest art market, behind only New York and London. That status was achieved only in the past few years and people are still trying to digest what it means.

Dr Tang Ling-yun, Assistant Professor of Sociology, has been studying the Hong Kong art scene, focussing on networks and interactions between individuals and institutions and the effects of globalisation on art.

“In Hong Kong there has been a lot of soul searching about the role of local art producers. Is our success mainly in terms of an elite global audience or is something being given back to locals?” she said.

At first glance, the global audience, and those who serve it, are easily winners. Top galleries from around the world are trying to find commercial space here and although the high costs have deterred some, “everything has become more exclusive, more elite, more commercial,” she said.

## Tough times for local artists

Local artists have paid a price, though. First, they struggle to find affordable space for studios – a problem faced by artists in many cities, but made that much worse by Hong Kong's high cost of living.

“When I talk to artists, they keep coming back to space and real estate. It impacts their decision on whether to become an artist or not and it affects the kind of work they do. They say they focus on smaller-scale paintings

because they don't have floor-to-ceiling space for larger paintings,” she said.

Moreover, global preferences for contemporary art from Mainland China mean local artists are under-represented in local galleries, restricting their exposure.

“One comment I have heard from a lot of people is that Hong Kong galleries have a lot of ‘red smiling faces’ and political art from the Mainland. Young Hong Kong artists are not as interested in doing something so overtly political. They do more personal work and they don't care about these trends.”

## But more choice

Nevertheless, the international nature of Hong Kong's art scene is not so bad for one local group – the audiences.

There is more choice than ever, driven by Hong Kong's attractions as a free port with the rule of law and low taxes. Both contemporary works and antique pieces are often displayed in galleries and exhibitions for anyone to view, so the recent boom in the art market has brought wider benefits to the public.

“What we can say is that in having all of these different artworks for sale or enjoyment, for people to see and feel and experience, the scene has become much more pluralised. Art is now part of the bigger boom in the luxury market where people have all these options that they didn't have before,” she said. ■



Sotheby's first auction in Hong Kong in 1973, with Julian Thompson, former Chairman of Sotheby's Asia (centre), as the auctioneer. (Courtesy of Sotheby's)

## Antiques had a head start

Chinese antiques are proving as popular as contemporary Chinese art in the global marketplace, and Hong Kong has had a central role in that development, too.

Dr Tang has also been researching this aspect of Hong Kong's art market, which has roots stretching back to the 1940s, especially from 1949 when many collectors fled turmoil in China and came to Hong Kong. They brought their antiques and antique appreciation practices with them, and provided fertile ground for the development of a global centre for Chinese antiques.

collecting and it was seen as a good place to do business, although there was some trial and error involved. The auction houses themselves made the buying and selling process much more transparent because they were publishing prices,” she said.

The flood of antiques onto the market after the Cultural Revolution and open-door policy of 1978 were an enormous boost to the market, and Hong Kong was well placed to take advantage of that. The 1980s were a golden period that laid the foundation for Hong Kong's current success at the heart of the Chinese antique market.

“Hong Kong has played a very important role in globalising the collecting of Chinese antiques,” Dr Tang added.

“The auction houses started coming here from 1973 because Hong Kong had a group of people who were already interested in



Local artists have difficulty in finding affordable space for studios and industrial buildings have become an alternative. Art studios in Fo Tan have thereby formed a unique art community.



Formerly a slaughterhouse, the Cattle Depot Artist Village was renovated and developed into a village for artists in 2001.

# GIVING VOICE TO THE MIGRANT'S MEMORY

Hong Kong is a city of migrants but few have had a chance to give creative expression to that experience. A new project is trying to change that.

Plenty of films from Hong Kong and China deal with crossing borders and taking up a life in a strange, new place. But to Dr Esther Yau, a scholar of these films and a migrant herself (she spent 26 years in Los Angeles before returning to Hong Kong a few years ago), what has been missing is a more authentic voice.

Earlier this year she launched a project, Migration and Memory, to help young migrants tap into that voice and express themselves in words and images.



Dr Yau (centre) meets and brainstorms with HKU student volunteers for the project

"These personal stories make up what we can call cultural memory," Dr Yau said. "The disruption and tensions of the migration experience make it easy to become silent about that experience or be locked into feelings of homesickness or nostalgia or cultural alienation. We want to recognise the value of these individuals who are not socially prominent but whose stories make up a rich and varied layer of cultural memory in this city."

Examples of cultural memory include what it means to leave grandparents behind, or to return to one's home village and find that modernisation and development have erased favourite places from childhood. It also encompasses the experience of getting to know a new city and its places and people.

"We're trying to elicit not just the memories of moving, but the before and after, and what sense people make of it," said Dr Yau, who is Associate Professor in the Department of Comparative Literature.

## Learning to express themselves

The project was delivered this spring using HKU student volunteers who were trained by Dr Yau and her team to help draw out young people's memories and encourage them to express these in a creative way.

Workshops were organised for primary and secondary school students in collaboration with Neighbourhood Advice Action Council centres in Tai Po and Tung Chung, where there are large numbers of migrant families.

Each group was given two two-hour sessions where they played games, such as imagining the migration of a certain fruit to Hong Kong, interviewed each other to understand different cultures, and used different materials to express their own memories. A six-year-old boy, for instance, made a paper horn because he remembered his father playing the musical instrument in Indonesia before they came to Hong Kong.

*Migrants are encouraged to express themselves in various creative forms*

Others wrote poems or prose about their migration stories, in Chinese or English, and simply the production of these was revealing.

"The older students in particular did not like to talk about their experiences in China in the workshops and it was only when they wrote creatively that they revealed where they came from. It seems they wanted to be seen to be like everybody else, and they saw it as a stigma to be new or different," Dr Yau said.

## Sharing contributes to a 'cultural memory'

Selections of the participants' work have been posted on a special website to make them accessible to the public and to get people thinking about migration in all its forms. The contributions range from the personal to the allegorical, and some have been created in collaboration with parents.

Other members of the community have also been welcome to submit work. For instance,

"We're creating a public space for the inclusion, sharing and celebration of migration experiences and I believe this will enrich the long-term development of Hong Kong's cultural memory."

*Dr Esther Yau*

one man, Bong, writes about moving to the UK as a child, returning to Hong Kong as an adult, and wanting to return to the UK again. Another poster, Dreamy, writes thoughtful poems about changes going on in Hong Kong society.

"We're creating a public space for the inclusion, sharing and celebration of migration experiences and I believe this will enrich the long-term development of Hong Kong's cultural memory," she said.

The 'Migration Memory and Our Hong Kong' website is at <http://www.complit.hku.hk/hkmmcn/>



The 'Migration Memory and Our Hong Kong' website provides a platform for migrants to share their migration experiences



Participants and student volunteers at a knowledge exchange gathering at HKU

# STORMY WEATHER

A study of tree rings and volcanic eruptions has corroborated the long-suspected connection between global warming and El Niño activity.

Scientists have long questioned the connection between global warming and El Niño. Some studies suggested that global warming would make El Niño more extreme, others that there would be no change, and yet others even less extreme. "In short," says Dr Li Jinbao of the Department of Geography, "there was a lot of confusion!"

Dr Li has now dispelled that confusion by leading an international research team in a study of tree rings which found that El Niño has been aggravated by global warming, and as a result we can expect more extreme weather conditions in years to come.

## Floods and droughts

Since El Niño has a significant effect on weather in the Pearl River Delta, these extremes, including floods and droughts, will affect Hong Kong directly, so the findings have great implications for the city's long-term water resource management.

Indeed, those extremes have already begun. "The 1990s saw a great deal of extreme weather," says Dr Li. "The decade of 2000s seemed less extreme, but the most recent few years see a new upsurge. Indications are that the general trend is upward ever since the beginning of 20<sup>th</sup> century."

The study involved the analysis of more than 2,200 tree-ring chronologies from Asia, New Zealand, and North and South America, and was the first to cover such a large area and to include trees up to 700 years old from the tropics. Instrumental records on El Niño only date back about 150 years, not long enough to ascertain if they have been affected by global warming. Dr Li's

study shows that tree rings can provide that opportunity.

El Niño and La Niña, the unusual warming and cooling that occurs in the tropical Pacific every two to seven years, spark severe weather worldwide. Their activity can be ascertained through tree rings because, basically, El Niño prompts warm surface temperatures in the eastern Pacific, which in turn gives rise to unusually wet winters in regions like southwest North America. The wetter the winter, the wider the tree ring.

“Our findings provide crucial constraints for improving climate models, and will lead to more accurate predictions on future extreme climate conditions.”

Dr Li Jinbao

including data over such a long time period," says Dr Li. "Usually tropical trees die young, only living a couple of hundred years or so as they can't survive too long in such wet conditions. But our researchers headed to very remote, dry regions in the tropics – such as the South American Altiplano where trees like *Polylepis taracacana* live much longer."

The methodology is relatively straightforward: using increment borers – equipment which changed little in more than a century – the team collected samples from more than 50,000 trees along the Pacific Rim. It took them more than a decade.

Putting these tree-ring data together, the team found something hitherto unknown about El Niño. "We discovered that recent El Niño activity is at its highest for the past 700 years, possibly a response to global warming," says Dr Li. Finding the connection also has implications for improving climate models. "There's been no guidance for improving climate models, and scientists have been struggling to find ways to go about it. Our findings provide crucial constraints for improving climate models, and will lead to

more accurate predictions on future extreme climate conditions."

## Volcanic effects

They also studied the effects of volcanic eruptions on El Niño. "In the year after a large tropical volcanic eruption, our record shows that the east-central tropical Pacific is unusually cool (La Niña), followed by unusual warming (El Niño) one year later. Like greenhouse gases, volcanic aerosols perturb the Earth's radiation balance. This supports the idea that the unusually high El Niño activity in the late 20<sup>th</sup> century is a footprint of global warming," explains Li. "This discovery is very important, because next time there is a large tropical volcanic eruption, we will know what climactic conditions to expect."

Dr Li says he has been lucky to work with many top scientists in the field, including Professor Xie Shangping (University of California at San Diego) who was his post-doctorate adviser, and Dr Edward R Cook (Columbia), his PhD adviser.

Looking back, Dr Li recalls that as a fresh postgraduate student he wasn't sure what area of research to pursue. "Climate was not a hot topic as it is today," he says, "but the thought of doing research in beautiful forests around the world appealed. And then when we realised we could use tree rings to comment on El Niño, it all came together." ■



Dr Li Jinbao



Dr Li Jinbao (centre) and his team take samples from an 800-year-old Qilian juniper (*Juniperus przewalskii*) in the Qilian Mountains, northwest China, in 2001.



The team has also discovered large tropical volcanic eruptions could cause worldwide extreme weather through their effects on El Niño

# MISSION POSSIBLE

Research led by Dr Chen Zhiwei, Director of HKU's AIDS Institute, has brought new insights and implies that scientists have the capability to invent a novel AIDS vaccine, thereby bringing hope to more than 34 million sufferers worldwide.

"If the vaccine works on humans the implications are enormous," says Dr Chen. "Not only a giant leap towards preventing and treating Human Immunodeficiency Virus (HIV) infection – but also for designing vaccines for other diseases such as cancer."

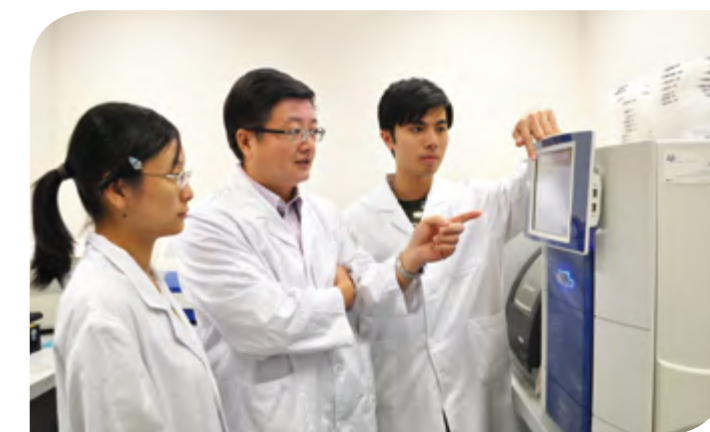
So far the vaccine, which induces a high frequency of the CD8<sup>+</sup> T cells – whose function is to eliminate HIV-infected cells – has proven highly effective on mice, and Dr Chen and his team are now seeking funding for testing in larger animals and then humans. "We worked to provide a proof of concept using mice, aiming to see whether we could use a specific antigen design for the vaccine, to elicit a strong host immunity," he says. "That study has already obtained an international patent, signifying that HKU researchers have the capability to invent novel AIDS vaccines."

Before coming to HKU Dr Chen worked at the Aaron Diamond AIDS Research Center (ADARC) [affiliated with Rockefeller University] with renowned scientist Dr David Ho, Scientific Director and Chief Executive Officer of ADARC, inventing two kinds of vaccine – vector-based and DNA-based – which then proceeded to human testing. "With the human data generated, we realised both vaccines were very safe and both were immunogenic, but they were not as strong as we initially expected."

At that time a regulatory molecule – called the PD1 – was discovered to interact with dendritic cells, which is related to the function of CD8<sup>+</sup> T cells. Dr Chen and his team in Hong Kong have been able to find a way to use PD1 as a tool to enhance the process of transferring antigen via dendritic cells which has resulted in far higher levels of qualitatively enhanced and long-

“ My dream is that we can use this technology to make effective multivalent vaccines for human use – against different types of Human Immunodeficiency Virus (HIV) in the same vaccine, perhaps HIV and tuberculosis in another. ”

Dr Chen Zhiwei



The study is led by Dr Chen Zhiwei, Director of HKU's AIDS Institute (centre), and other key researchers including Dr Allen Cheung Ka-loon, Post-doctoral Fellow (right) and Ms Zhou Jingying, final-year PhD candidate (left).

lasting HIV specific CD8<sup>+</sup> T cells for killing and removing virus-infected cells.

Using mice, Dr Chen did a viral challenge study to evaluate its efficacy as a preventive vaccine. At the same time he generated a cancer model, aiming to see whether this kind of T-cell could eliminate cancer cells. Significantly, the results showed if high levels of CD8<sup>+</sup> T cells were present, they could eliminate most HIV-infected cells or a cancer cell carrying the HIV protein. Part of the research has been published in the *Journal of Clinical Investigation*.

## Potent and effective

"We are at a stage where we feel confident about the uniqueness of this vaccination. Not just the different types of immunity we elicited but the quality in terms of killing the virus of the cells and also the cancer cells – it is rather potent and very effective."

The findings have implications not only for HIV, and cancer, but also pathogens like malaria and tuberculosis (TB). "For all these diseases

you need to elicit a high level of CD8<sup>+</sup> T cells," says Dr Chen. "In the paper we discuss the potential for developing a way to specifically elicit a high level of CD8<sup>+</sup> T cells, not just against HIV, but maybe different types of antigen that would make this technique very useful for future disease prevention and for immunotherapy."

He is now seeking funding for and investment in the research. The regular Research Grants Council (RGC) funding is not enough: "The RGC General Research Fund HK\$1 million is not even enough to produce this type of vaccine for human testing," he says. "We calculate testing the vaccine on humans in China would cost close to HK\$30 million."

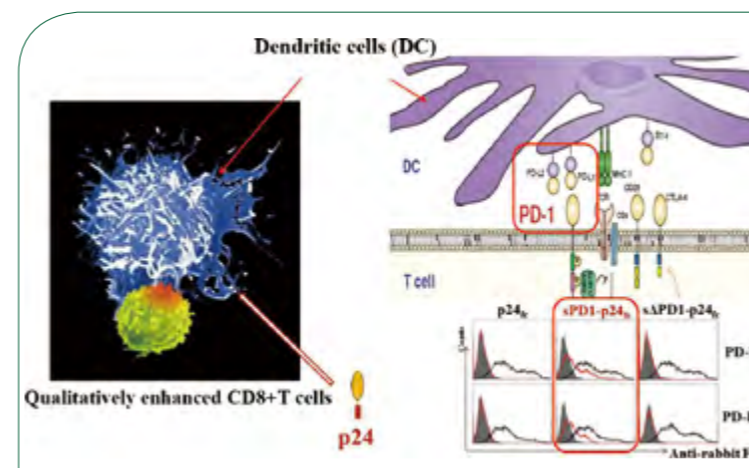
And there's the rub. "Under Hong Kong's current mechanism, there is no structure to support research institutions, nor to maintain a team of well-trained doctors for long-term research development."

He feels this is leading to wasted opportunities – for Hong Kong and for HKU: "There are so many excellent discoveries made in the Faculty

of Medicine each year, but what percentage actually make it into daily human use? The Hong Kong Government needs to address this."

In the meantime, to help draw global attention to his discovery and to foster potential collaborations, the AIDS Institute recently co-directed an HIV course and a public lecture, attended by international experts, including Nobel Prize-winner Professor Françoise Barré-Sinoussi.

"My dream," says Dr Chen, "is that we can use this technology to make effective multivalent vaccines for human use – against different types of HIV in the same vaccine, perhaps HIV and TB in another. Then, I'll call it a breakthrough." ■



The team has discovered that a specific molecule on dendritic cells can induce a high frequency of CD8<sup>+</sup> T cells, and hence is a breakthrough in creating a novel AIDS vaccine for AIDS prevention and treatment.



Nobel laureate Professor Françoise Barré-Sinoussi speaking at an AIDS Institute public lecture this summer



Archaeopteryx – a German long-tailed bird

# A TAIL TO TELL

Dinosaurs to birds? It's one of evolution's big questions – how a type of ground-dwelling theropod evolved into birds in the sky.

Man's earliest inkling that birds are a type of theropod dinosaur (two-legged, carnivorous dinosaurs including *Tyrannosaurus rex*) came in the mid-19<sup>th</sup> century with the discovery of *Archaeopteryx* – a fossil bird with a long tail resembling those from theropods known at that time.

The evolutionary history of theropods is well studied, and Dr Michael Pittman from the Department of Earth Sciences has added to our understanding of these animals with his recent research on their tails. His study is the first to quantitatively evaluate the biomechanical consequences of the tail's morphological transformation.

"The research question is a big one about a classic evolutionary change," says Dr Pittman. "This change is as striking as when fish first left the water to become amphibians. Earlier theropod dinosaurs lived on the ground but one later theropod subgroup, the birds, took to the skies – it was a huge evolutionary transition."

His research has yielded significant results – revealing how the tail of the theropod dinosaurs evolved from a basic counter-balance enabling them to stand, into the short tails of modern birds used as an aerodynamic surface to produce highly proficient and manoeuvrable flight. The aerodynamic surface is a fan of rectrices (tail feathers) controlled by tail muscles. Living birds with fanning capabilities have short, wider than tall, tail vertebra indicating that their intervening joints are difficult to bend. From this characterisation the research revealed that tail fanning appeared – 30 million years earlier than previously thought – at the ornithomorph rather than ornithuran node.

"This work is an important new step towards broader reconstructions of tail evolution in birds that incorporate all of the forces acting on the tail, including aerodynamic ones," says Dr Pittman. "The research suggests that as birds evolved they became more proficient and manoeuvrable flyers. Other authors have reached similar conclusions but our new, quantitative approach strengthens this hypothesis."

The research was partly inspired by JH Long's work on dolphin spines, which included measurements of the force required to bend vertebral joints through a given angle, a property called joint stiffness. "He related joint stiffness to the vertebral geometries associated

“ This work is an important new step towards broader reconstructions of tail evolution in birds that incorporate all of the forces acting on the tail, including aerodynamic ones. ”

Dr Michael Pittman



Dr Michael Pittman excavating dinosaur fossils in the Gobi desert

with each joint," says Dr Pittman. "He found that certain dimensions of the vertebra were correlated with joint stiffness in the vertical plane, as you moved along the tail.

## Tail reconstruction

"This model provided an exciting opportunity to reconstruct tail joint stiffness in dinosaurs since their fossils do not readily preserve soft tissue. Our research is the first that uses a large theropod dataset, and includes horizontal joint stiffness, as dinosaur tails moved mainly horizontally rather than vertically, as in dolphins. The science behind the model relates to lever and beam mechanics, which is Newtonian physics, so this should be applicable to all vertebrates, including dinosaurs."

Dr Pittman was interested in how tail joint stiffness evolved between earlier theropods and birds – "I took the vertebral geometry data for all of the tails I studied and used these data to reconstruct the same vertebral geometries

at the common ancestors of the theropod tree; these hypothetical tail morphologies were used to infer joint stiffness at these nodes. With these reconstructions I studied changes in tail joint stiffness along the line of descent from early theropods to birds and evaluated their biomechanical consequences."

He found that the tail of the theropod common ancestor is much taller than wide, which indicates that it is stiffer vertically than horizontally. So before birds evolved, theropods were well adapted to holding their tail up and using it as a static counter-balance.

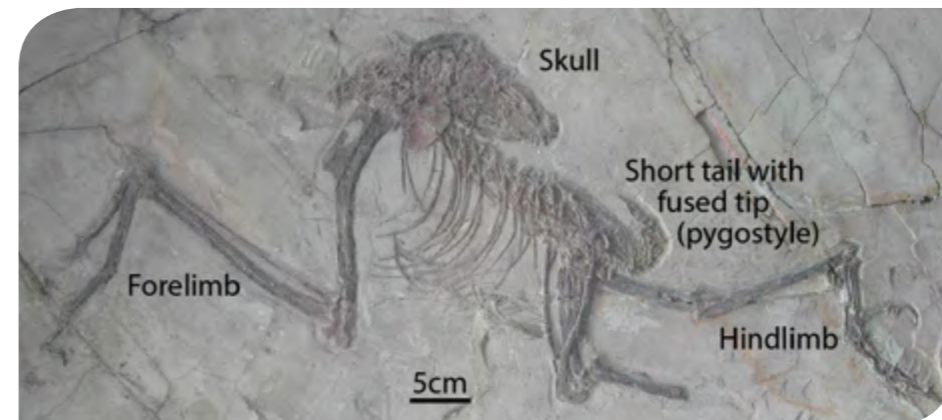
"As non-avian theropods evolved, joint stiffness decreased in both the vertical and horizontal planes," he says, "allowing the tail to become more effective at using movements to maintain balance, as a tightrope walker uses the movements of a pole to keep balanced.

"But then with birds, the joint stiffness pattern reverses. We hypothesised that joint stiffness would keep decreasing as the tail shortened,

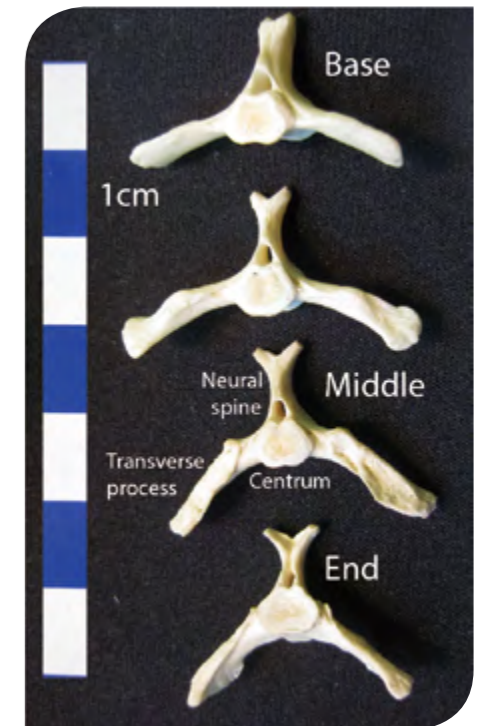
but what we actually found in birds was the opposite. We think that this discrepancy relates to the tail's aerodynamic function."

With a stiff tail birds could produce larger forces with their muscles, which in turn allowed them to use larger lift forces during flight with their shorter, more feathered tails.

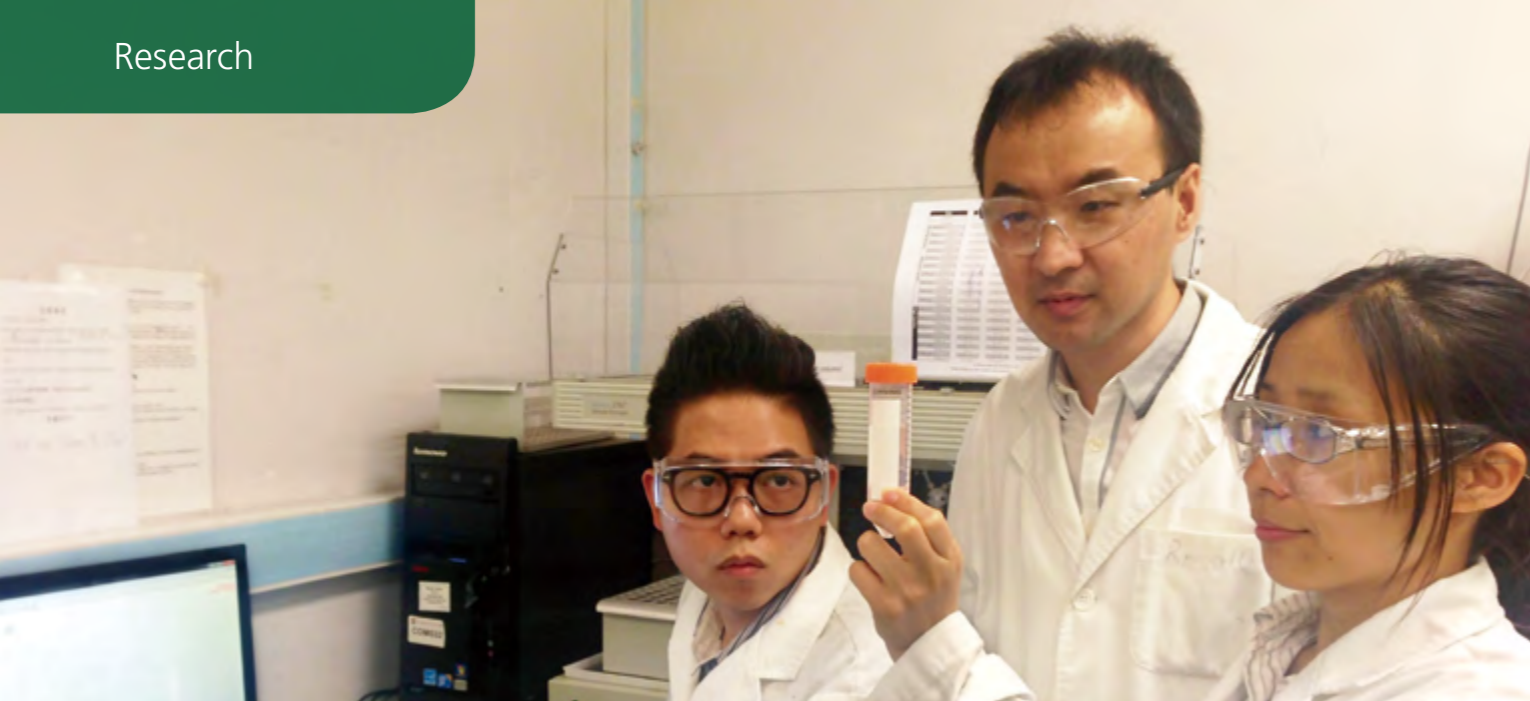
Hand-in-hand with that, the most recent bird tails became more mobile with the loss of bony vertebral articulations. "This change and the tail's ability to use larger lift forces allowed birds to produce a wider range of aerodynamic forces," says Dr Pittman, "and this led to the amazing flight skills seen in birds like swallows." ■



Sapeornis – a Chinese short-tailed bird



Turkey tail bones



# NEW HOPE ON ANTIBIOTIC RESISTANCE

Superbugs that outsmart antibiotics have become a medical concern around the world. New discoveries in our Department of Chemistry offer promise of a solution.



A research team led by Dr Li Xuechen (third from left) has developed the world's first total synthesis of daptomycin using chemical methods

One of the most serious pathogens around is methicillin-resistant staphylococcus aureus (MRSA), which causes a deadly infection and has emerged in both hospitals and the community. There are no treatments available apart from the drug daptomycin, which was developed a decade ago and has become the treatment of last resort for 'superbugs' that resist other antibiotics. The problem is that MRSA, like other bacteria, is expected

to evolve and develop resistance to this drug. What will doctors do then?

Dr Li Xuechen, Assistant Professor of Chemistry, may have an answer. After several years of research that has combined a separate investigation into chemical synthesis with his own interest in antibiotics, his research team has developed the world's first total synthesis of daptomycin using chemical methods. The

methods used will enable scientists to tinker with the drug's inner workings and potentially build up its defences against resistant strains of bacteria. "We need to develop a new drug in anticipation of daptomycin-resistant bacteria. It is just a matter of time before this will happen. It's a battle between the bacteria and scientists," he said.

Dr Li and his team have tipped the scales in the scientists' favour by applying powerful new technology they developed that enables them to synthesise large proteins by piecing smaller fragments together. "The value of a synthetic protein is that once you know how it works, you can design and synthesise a better, newer one," Dr Li said.

## Put to good use

This basic research, reported earlier this year in the *Proceedings of the National Academy of Sciences, USA*, has many possible applications, but Dr Li chose to focus first on something that could have wide benefits to the community.

After much experimentation, he chemically synthesised daptomycin – a great feat

“It’s a no-lose situation. Even if we can’t develop a drug, at least we can answer some very basic questions.”

Dr Li Xuechen

considering the drug comes from bacteria and it has a circular peptide structure, which added to the complexity of the task.

“It’s very challenging to develop new antibiotics because bacteria evolve so rapidly,” he said. “Penicillin has many derivative products on the market but they share the same mechanism and it has been easy for bacteria to develop resistance.

“When we started our work, the strategy for producing daptomycin was through fermentation and there was no way to modify the structure, so you couldn’t make a derivative from this compound. Our technology has changed that because we can synthesise this drug chemically, which means we will be able to easily make daptomycin derivatives for the development of daptomycin-based next-generation antibiotics.”

## No-lose situation

The achievements with daptomycin were reported earlier this year in the *Journal of the*

*American Chemical Society* and have attracted keen interest from an American pharmaceutical company, which is now finalising an agreement with HKU to develop the work further.

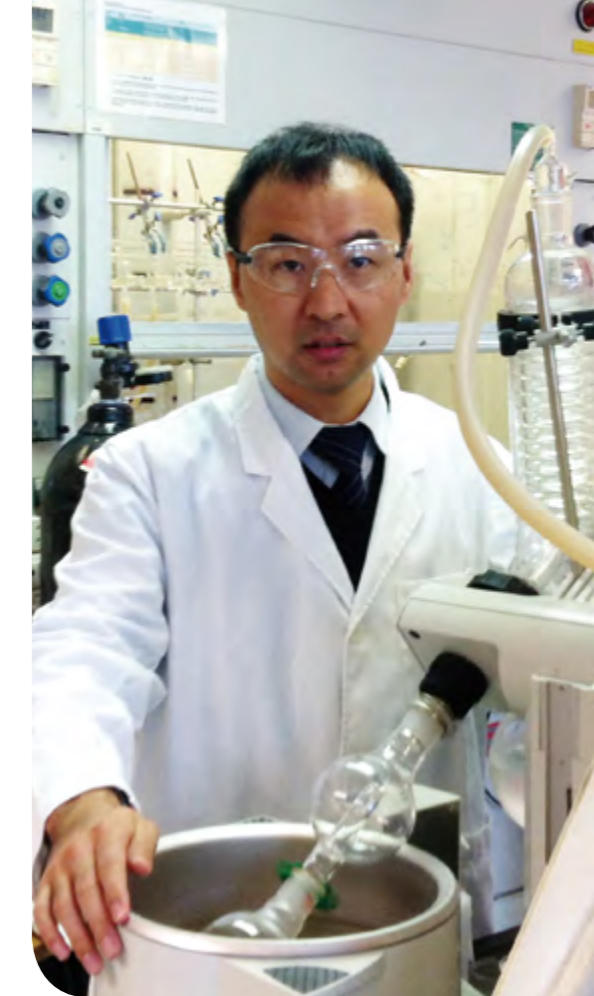
Dr Li has had close contact with the firm and sees the next step developing along two paths.

“First is the application and the development of a new drug. The other thing is very fundamental. People don’t clearly understand daptomycin’s killing action on bacteria so now that we can make an analogue of it, it will give us a unique tool to study it for further research.

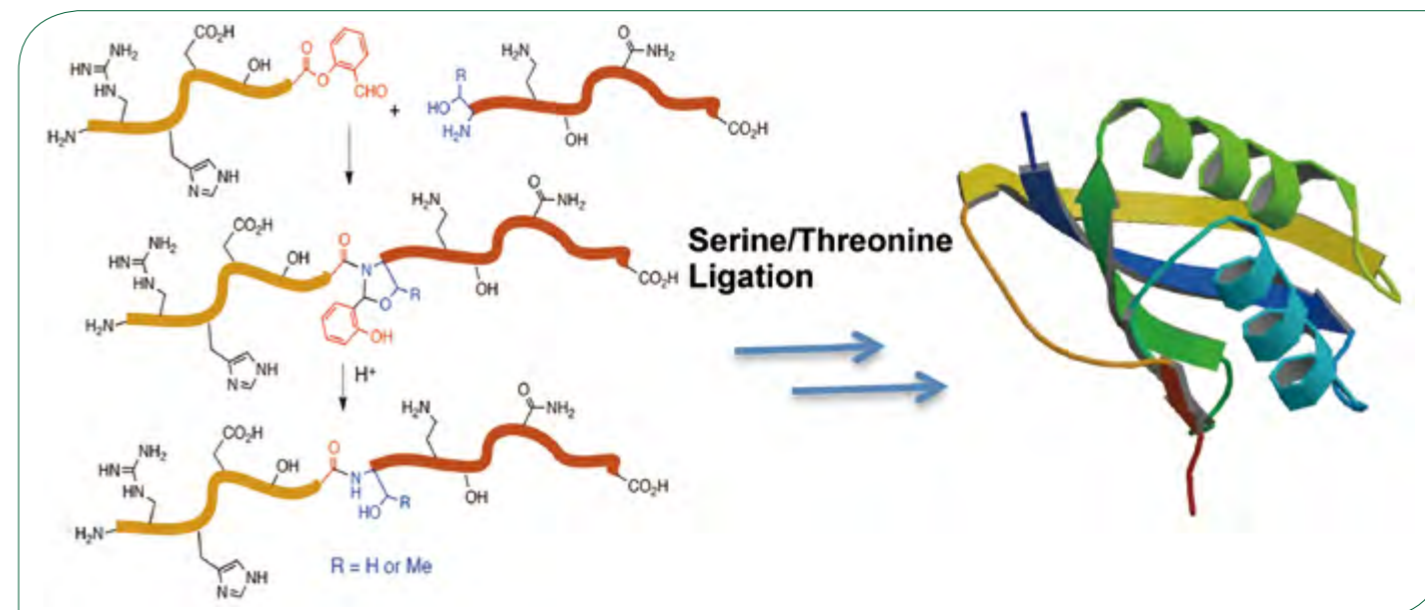
“It’s a no-lose situation. Even if we can’t develop a drug, at least we can answer some very basic questions.”

Dr Li added that the work had been fulfilling both academically and in a deeper sense.

“In university, we conduct fundamental science and we educate students. These are both very important. But overall, if you do something



meaningful that can benefit the community, it makes your research even better. I have just started my laboratory, we are attracting outside interest and we will have real value in future. I’m very excited about this project from a fundamental science point of view and for its future application,” he said. ■



Dr Li's team has developed a chemical method to act as peptide 'ligase' to selectively hook together short peptide fragments into proteins. This technology has allowed them to synthesise a human erythrocyte enzyme, a cancer-related mucin glycoprotein and an antibacterial circular peptide-daptomycin.



# SUPPORTING ACADEMIC EXCELLENCE

After 15 years of management at Aberdeen University, Dr Steve Cannon has come to HKU to take up the newly created role of Executive Vice-President.

HKU Council established the new post of Executive Vice-President to provide strategic leadership and administrative oversight. More specifically, says new incumbent Dr Steve Cannon, the aim is “to come up with a more coordinated approach to supporting HKU’s academic efforts.

“The University’s administration includes many areas of professional specialisation and expertise. We see the potential for them to become more cohesive and aligned, and my role is to facilitate and provide the leadership and direction for this,” he says.

Dr Cannon’s initial priorities are “to listen, to learn and take the time to understand the culture of the organisation, the sensitivities”. He considers this crucial, particularly having coming from a different university, and a different societal culture. At the same time, universities across the world have many characteristics in common, and he is finding more things familiar here, than unfamiliar.

The bottom line, he says is: “Universities are about excellence in teaching and research. My role is to support that academic excellence – all my team’s efforts will be focussed on that.”

Dr Cannon believes very strongly that universities should be led by academics. “I believe very strongly in the idea of a university as a self-governing community of scholars. However, I believe equally strongly in the importance of a strong and well-organised team of professional support staff. I am grateful that HKU has given me the opportunity to lead such a team.”

He has come to HKU from 15 years at Aberdeen University. When he first arrived there the administration, he says, was not held in high regard – “if anything, it was seen as getting in the way of academic endeavour rather than assisting it.”

To rectify that thinking, he and his team identified three audiences that they needed to satisfy: students, academics and ‘ourselves’. It’s an ethos that will provide guidance in his mission at HKU.

“First, when it came to our student ‘audience’, our thinking was that they were our customers and we could not take their loyalty for granted. We had to make the University attractive to students and work to satisfy their support needs and give them an experience that they would remember.

“Universities are about excellence in teaching and research. My role is to support that academic excellence – all my team’s efforts will be focussed on that.”

*Dr Steve Cannon*

“The second group, the academic community, we looked upon as clients. We were providing them with a service and therefore should provide them with as good a service as we possibly could. Universities get funded to teach and to do research; they don’t get funded to administer, so we needed to make sure that our efforts were channelled towards that academic goal.

“Thirdly, ourselves. We knew we had a talented team throughout the organisation and we wanted to acknowledge that and to celebrate it. Our aim was to gain parity of esteem across the University’s support services. And what I said in Aberdeen and I will say here is that we will earn that parity of esteem, and then demand it.”

## Community values

‘Customers’ and ‘clients’ may sound like business terms, but he is quick to clarify: “I don’t see a university as a business in a commercial sense – the values are very different. A university is more like a town or a community. The values that bind the university community together are not profit-driven business values, but community values.”

One of the great attractions of HKU for Dr Cannon was its reputation and global

standing. “I’ve never been interested in league tables for the sake of league tables. But why would you not want to be the very best that you could possibly be? I am inspired by HKU’s ambition and by what it has achieved already, as well as its potential.”

He is no stranger to Hong Kong or to HKU, having made frequent trips here over the past 10 years. HKU and the University of Aberdeen have long had strong links, and Dr Cannon strengthened the administrative bonds between the two with an exchange programme he set up with Mr Henry Wai, the Registrar, enabling support staff to get experience overseas.

Outside of work, Dr Cannon’s interests include watching sport, listening to music and family life. He moved to Hong Kong in the summer and will be joined by his wife next year when their youngest son Jack finishes high school. His eldest son Robert is working in New York, while daughter Alice is a trainee solicitor in Edinburgh.

For now though, the centre of his thinking will be work-focussed. In exercising his strategic new thinking for HKU, Dr Cannon will be guided by his enduring motto: “Think globally, behave ethically, act promptly.” ■



Dr Steve Cannon, HKU Executive Vice-President (Administration and Finance) (third from right), officiates the kick-off ceremony of the HKU Rooftop Farming Project on campus.



# NO BED REST FOR A BUSY DOCTOR

The Faculty of Medicine is juggling several ambitious projects, including rolling out two new hospitals and revamping a third. A familiar face, Professor Gabriel Leung, will have his days packed full as the new Dean.

The Faculty of Medicine has been extremely busy in recent years, embracing new research technology, developing new hospitals, and diversifying its range of healthcare programmes. Many of these changes were inspired by Professor Lee Sum-ping, who stepped down this summer as Dean of Medicine. But while the Faculty is recognised as one of the best in Asia and the world, its ambitious work is far from realised.

The new Dean, Professor Gabriel Leung, who first joined HKU in 1999 and has also been Under Secretary for Food and Health in the Hong Kong Government, as well as Director of the Chief Executive's Office, is clear about his role.

"This is a time of consolidation and execution, that is of transactional leadership. The focus is on the details and making sure we consistently achieve the highest standards. It is important to have vision and principles, but to deliver on them is even more critical," he said.

He has already tightened up his management team and identified key goals in each of the Faculty's main areas of work, which will be refined at 'town hall' meetings this autumn with staff, students and alumni.

## Technological innovations

On education, the heart of the Faculty's work, Professor Leung sees two areas of opportunity. First is to keep the walls down and continue tapping into the collaborative possibilities of having medicine, nursing, Chinese medicine, pharmacy and public health under one roof.

Second is to venture into massive open online courses (MOOCs), which promise a new era of learning. HKU has joined edX, a joint effort by 28 leading universities including Harvard and Massachusetts Institute of Technology (MIT) to expand access to education to anyone with an internet link. Professor Leung has volunteered to lead the way by teaching one of the four foundational MOOCs at HKU, on multidisciplinary aspects of infectious disease control.

On research, the Faculty has notched up many successes in securing funds and producing world-class outputs. But here, too, technology is changing things.

"Every successful researcher will tell you they are constantly running out of laboratory



Dean of Medicine Professor Gabriel Leung (left) at the Farewell Lecture by Professor Lee Sum-ping, former Dean of Medicine (right).



Professor Leung (left) welcomes freshmen in the Medical Faculty's White Coat Ceremony in early September

“If one phrase sums up my thoughts on what we should ultimately do as students and faculty, we must ‘dare to err’.”

Professor Gabriel Leung

space. That's a positive thing. With newer technologies coming on stream, we need to continuously upgrade our equipment and invest in large infrastructure projects that will become a set of platform technologies. On that front we have a specific Assistant Dean portfolio dedicated solely to platform technologies.

"I see the role of Faculty leadership not as one of directing research but of providing the right environment and cultivating an atmosphere that encourages innovation and freedom of enquiry."

Achieving these research and teaching goals means having the right people in place. An entirely new Associate Deanship will be tasked with attending to 'human capital' to focus on recruiting and retaining the best talent. This includes students as well as staff, and attending to student affairs and welfare needs.

## New hospitals, and a 'powerful hub'

Finally, the area where there will be the most visible change is clinical services. There are three projects. The HKU-Shenzhen Hospital opened last year, but it will take some time before its 2,000 beds are fully commissioned. Gleneagles Hong Kong Hospital, a tripartite partnership with the private sector in Wong Chuk Hang, has just been given the green light. Its target completion date is 2016-2017 and much effort will be devoted to ensuring the facility is fit for purpose.

And Queen Mary Hospital and other facilities along Sassoon Road are being modernised. Professor Leung sees this as much more than a simple building project.

"We want to make it a contiguous, cohesive whole in terms of planning so all of Sassoon

Road will become a powerful hub where basic science laboratories sit alongside the most intensively cared beds in the world, and translational science is practised daily.

"We have the individual pieces of the puzzle, now we have to bring it all together. It will be a symbolic climax for the Faculty's 130<sup>th</sup> anniversary in 2017," he said.

The pace of work will be breathless and Professor Leung anticipates bumps along the way. But that's okay because, he says, it's the only way to make progress.

"If one phrase sums up my thoughts on what we should ultimately do as students and faculty, we must 'dare to err'. Unless you aren't afraid of making mistakes, you will not really innovate, and universities are the ideal place to trial, fail and eventually succeed." ■

## A renaissance man

Professor Leung is a high-flyer: an accomplished scholar, administrator and musician, former senior official in the Hong Kong Government, adviser to national and international agencies such as the World Health Organization and World Bank, and College Master, who continues to practise medicine and teach. And he only just turned 41 this year.

Music is his great passion. He began learning piano at age four, joined the Hong Kong Children's Choir then Yip's Children's Choir as a boy soprano, picked up percussion, the pipe organ and orchestral conducting, and minored in music during

his undergraduate years in Canada. As a doctor in Ontario and then master's degree student at Harvard he continued to perform, and he kept up the pace after returning to Hong Kong in 1999. He still plays piano regularly as a chamber musician and is guest conductor with the Hong Kong Children's Symphony Orchestra, which he led on tour to Italy and France this summer.

Professor Leung can achieve so much because he's a master of time management who knows his priorities. He has even taken on more by



As the honorary guest conductor with the Hong Kong Children's Symphony Orchestra, Professor Leung led a concert tour to Europe this summer.

volunteering to teach the Faculty's first massive open online course as part of the University's initial foray into edX. The extra demand on his time doesn't worry him. "I'm a teacher after all. To doctor is to teach," he said.





Fifteen women executives drawn in the first intake and (from left in the first row) Professor Gary Biddle, PCCW Professor and Chair Professor of Accounting; Mr Nick Marsh, Managing Director, Harvey Nash Executive Search Asia Pacific; Mr Donald Brydon, Chairman, The Sage Group, Smiths Group and Royal Mail Group; Professor Amy Lau, Director of Executive Education, Chair Professor of Accounting; and Ms Kirti Lad, Director, Harvey Nash Executive Search Asia Pacific.

# CRACKING THE GLASS CEILING

Women hold up half the sky but they hold only about one-tenth of board directorships in Hong Kong and Asia. HKU hopes the world's first programme on women's directorships will help to change that.

The Faculty of Business and Economics has teamed up with international executive search firm Harvey Nash to offer the Women's Directorship Programme, an executive education course that seeks to improve female membership on boards in response to calls for increased diversity.

From September this year, all listed companies on the Hong Kong Stock Exchange, the world's fifth largest, are required to have a policy on board diversity and targets and implementation plans. Although increased gender diversity is not the only goal, it is an area where companies can do much better.

Less than 10 per cent of Hong Kong directors are women. In China and Singapore the figure is about eight per cent. That compares with about 25 per cent in the UK where Harvey

Nash has launched a '30% Club' to improve the ratio, and 20 to 25 per cent in the US.

"Given the movement to increase board diversity, it is a good time for us to focus on this issue," Professor Amy Lau, Director of Executive Education and Chair Professor of Accounting, said. "Initially we are targeting the region but it's important to attract participants from around the world."

The programme is the first certificated course of its kind and it draws on the Faculty's expertise in executive education and Harvey Nash's connections in the business world.

## High-flyers on the guest list

The first intake met in the spring over two three-day sessions and was linked by video and

in person to 16 high-flying executives, such as MasterCard's Chairman Rick Haythornthwaite, General Electric's Vice Chairman John Rice, the China Chair of International Law Firm Freshfields Teresa Ko, and the Chairman of Lloyds Banking Group Sir Win Bischoff, as well as HKU academics.

They discussed such things as the advisory role of board members, stock exchange rules and regulations at the world's major exchanges, insider dealing, leadership, ethics and compliance, and other relevant issues. For example, Sir Roger Carr, a former Member of Cadbury's board, talked about how they handled a takeover bid.

"This programme is very different from other programmes, which focus on the technical aspects. We also have experience sharing and



Each participant is awarded with a certificate upon completion of the Women's Directorship Programme



An experience sharing by guest speaker Mr Jean-Pascal Tricoire, President and CEO, Schneider Electric.

“With this type of programme, you can't make up the excuse that there are not qualified people.”

Professor Amy Lau

經濟及工商管理學  
Faculty of Business



advice from the guest speakers," Professor Lau said.

This proved to be a draw card for the first intake, which included 15 women executives working in Hong Kong, Beijing, Singapore and Dubai.

Jennifer Chua, a banker who sat on the internal board of a subsidiary of her employer, was interested in learning how to become an independent non-executive director.

"The information was excellent and the speakers they lined up were very experienced, so in terms of exposure and knowledge, the programme has done what I expected. In addition, there was the network of women professionals in our class. I would not usually have met so many senior professionals from different industries and it was wonderful to interact with them," she said.

## Networks and bottom lines

Christine Brendle, formerly Managing Director of Dow Jones and Publisher of *The Wall Street Journal* in Asia Pacific, said she was attracted by the opportunity to network and learn what business leaders were looking for in board members. "Where do you get to dialogue with such prominent chairmen who also have an interest in promoting women on boards?" she said.

"I also liked that there were only women in the class and certainly it helped with bonding. Having said that, the substance of the course itself would be of value to anyone wanting to polish their skills or simply check that being a director is something for them."

Professor Lau agreed the material was applicable to both genders, but focussing on women was still of value. Speakers were more

interested in the focus on women, as similar gender-neutral courses in the US and UK typically attracted more than 80 per cent men. She also felt the women opened up more than might be expected if men were in the room.

Women on board also could bring value to the bottom line. Professor Lau said one study showed that boards benefited when they matched their diversity to their consumer base – a lesson that has not yet penetrated to Hong Kong listed companies. Hopefully they will start to see the light as the programme admits its second intake early next year. "With this type of programme, you can't make up the excuse that there are not qualified people," she said. ■



Some of the magnificent houses in Kaiping county built with money remitted from overseas

# THE IN-BETWEENERS

Dr Elizabeth Sinn's new book *Pacific Crossing: California Gold, Chinese Migration, and the Making of Hong Kong* challenges traditional thought on a crucial turning point in Hong Kong's development.

Much has been written about the migration of tens of thousands of Chinese to America during the California Gold Rush of the mid-19<sup>th</sup> century and after, yet little has focussed on the migration process itself. Perhaps even more surprising, even though Chinese migration as an economic and social phenomenon has been closely connected to Hong Kong since that time, no previous scholar has focussed on it.

Dr Elizabeth Sinn's book fills those gaps. It takes a unique approach to migration studies – putting emphasis on the mobility of people, goods, money, information, ideas, practices and values – while at the same time bringing together two very important historical developments: Chinese migration and its impact on Hong Kong and in turn, Hong Kong's impact on Chinese migration.

"Most previous work has been on political history," says Dr Sinn, "but there is very little on shipping, finance or international business. It's interesting considering shipping and import/export are so synonymous with Hong Kong."

## External view

One of the points she emphasises is that because Hong Kong has so many external dimensions you really have to look at it from the outside. By doing so, she was able to look at movement out and in, the trading and personal networks, the same-native-place networks, the financial and shipping aspects, and band all these together to see what made the place tick.

The Gold Rush of the 1850s was a turning point for Hong Kong, which until then had relied largely on a single trade, opium. Now, it was able to compete with the new treaty ports of Shanghai and Xiamen, and since it was a duty free port, ships and merchants from anywhere could come and go without restriction, and without having to pay too many kinds of dues. Further, the cost of

doing business in Hong Kong was low, and it was safe – especially after 1855 and the first Chinese Passengers Act, when the government undertook to check that emigrants leaving Hong Kong were not enslaved, coerced, or tricked into going.

The book challenges stereotypes about the 'coolie trade' and the restriction on Chinese women migrating to California. The coolie (from the Indian word 'kuli' meaning a hireling) trade grew after the African slave trade was abolished in Britain, but they still wanted cheap labour. They found it in India at first and later China. These manual labourers were sent by the British to places like the Caribbean, Peru and Cuba as cheap – and often forced – workers.

But this is totally distinct from the Chinese going to America at this time, who went because they wanted to go. "They were after California gold," Dr Sinn says. "They wanted to go so badly they would even borrow money for their passage and pay very high interest. However, because there was this trade, people looking at it from the outside often assumed that all Chinese were coolies."

"My argument is that there were different kinds of Chinese migrants: those that went involuntarily and those that went voluntarily. But in America in the 1860s–1870s they didn't like the Chinese and so they called them all Chinese coolies and accused them of being slave-like. As a historian, it is important to draw the line between what is slavery and what is not."

## The in-between place

The book applies new methodology to the study of migration, in that it looks at the phenomenon of the 'in-between place'. Most migration studies concentrate on the sending place and the receiving place. These are perceived as the two ends of the passage, but often it is not that simple. "Hong Kong was usually neither the sending nor the receiving

place, but had a hugely important role in determining where people went and how they got there and also how and where they returned to," says Dr Sinn.

"I argue that Hong Kong was an in-between place. So was San Francisco, because when they arrived people would often stay and work awhile before heading for their intended destination of, say, Sacramento or Los Angeles."

At the same time, migrants in California used Hong Kong as the base to supply their needs – the biggest exports being food and prepared opium. It was also where the Chinese immigrants in the US would remit money to their families.

As trade grew, Hong Kong and San Francisco became distribution centres and vitally important in the whole migration process.

Officially, Dr Sinn says, the book took 12 years to write, commencing in 1999 when she got a grant from the Research Grants Council to write about Hong Kong's development as an emigrant port. "But really the book is the cumulative effort of 30 years' research – including that which I used for my first book on the Tung Wah Hospital," she says.

"A lot of the ideas about charitable work, global networks and the Chinese merchants



in Hong Kong reappear in this book. It is a culmination of new ideas, old ideas taking new directions, and associations being made that I didn't see before."

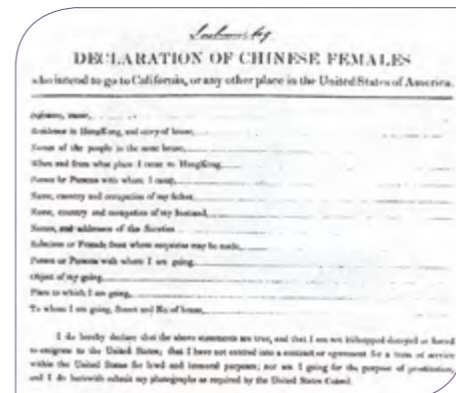
*Pacific Crossing: California Gold, Chinese Migration, and the Making of Hong Kong* is published by HKU Press. ■



Dr Elizabeth Sinn is an Honorary Professor in the School of Humanities and Hong Kong Institute for the Humanities and Social Sciences, with research interests covering Chinese social organisation, philanthropy, business, migration, women's history, just to name a few.

“ My argument is that there were different kinds of Chinese migrants: those that went involuntarily and those that went voluntarily... As a historian, it is important to draw the line between what is slavery and what is not. ”

Dr Elizabeth Sinn



After 1875, Chinese women wishing to go to the US had to declare that they had not been kidnapped, decoyed or forced to emigrate, and were not going for immoral purposes or to become prostitutes.

# HONG KONG'S DEEP CONTRADICTIONS

Hong Kong has encountered tensions and contradictions as it simultaneously integrates with the Mainland while keeping its doors wide open to the rest of the world. A new book by Professor Richard Wong looks at the nature and escalation of these tensions, and suggests a possible first step towards resolving them.

Hong Kong has become a city of haves and have-nots, where nearly half the population lives in public housing but cannot afford to break out due to astronomical property prices. This conflict is playing out in the city's politics and also represents one of its deep contradictions, according to Chair of Economics, Professor Richard Wong, Philip Wong Kennedy Wong Professor in Political Economy.

Professor Wong recently released a book of essays that examines the roots of the city's current political impasse. The opening of China, globalisation and the 1997 handover have forced Hong Kong to balance between integrating with both the Mainland and the world economy, and insulating itself while maintaining a free and open economy and society.

The lack of political action to address these conflicting goals has polarised opinion and left society less equal. But Professor Wong says there is a solution: start fixing housing.

"If we can fix one thing first – one thing that is important and easy to fix and would open up the possibility of fixing other more difficult problems – then it should be to reform the public housing sector," he said.

"There would be immediate windfall gains and it would restore hope by addressing the problem of the haves and have-nots. I see this not as addressing a housing problem but as a first step to addressing Hong Kong's deep contradictions."

## A subsidy with few benefits

Professor Wong's interest in public housing dates back to the 1980s, when it was being argued that a tenant paying HK\$1,000 for a public housing flat valued at HK\$3,000 received a direct subsidy of HK\$2,000. His research found this to be a wild distortion because people had no choice where they lived.

"Let's say you give me premises in Tuen Mun. I work in Pokfulam so I have more commuting time. My children have to go to school in Tuen Mun. And my wife is stranded there and knows no one. My situation is not a lot better

“ People need human capital and financial and other assets to stay afloat. You need to offer them a good education and subsidise the poor more heavily, and one good way to help them is to give them an asset. If you do that society will be less divided. There won't be other fixes that could have this big bang. ”

Professor Richard Wong



off. Taking into consideration my cost and other dimensions, the benefit is not HK\$2,000 but HK\$200. And the real benefit varies from household to household.

"I was shocked by my findings. Generally the poor didn't get much out of public housing and the units were very small. They might have lived in a different unit if they went to the market but public housing was so cheap. From that time onwards I began to urge people to privatise public housing.

"Then another problem arose [in the 1990s]. Private sector housing values went through the roof so there were now haves and have-nots, who were not able to keep up with the times in terms of property prices. They couldn't afford to go elsewhere."

## The big bang : privatise public housing

All of that underscored the need to reform public housing, he said. Giving flats to tenants to do with as they please, including selling them, would be costless because the land the flats occupy does not have value – it cannot be used for anything else. This would also free public money to invest more aggressively in education and healthcare, which has been lagging.

"People need human capital and financial and other assets to stay afloat. You need to offer them a good education and subsidise the poor more heavily, and one good way to help them is to give them an asset. If you do that society will be less divided. There won't be other fixes that could have this big bang."

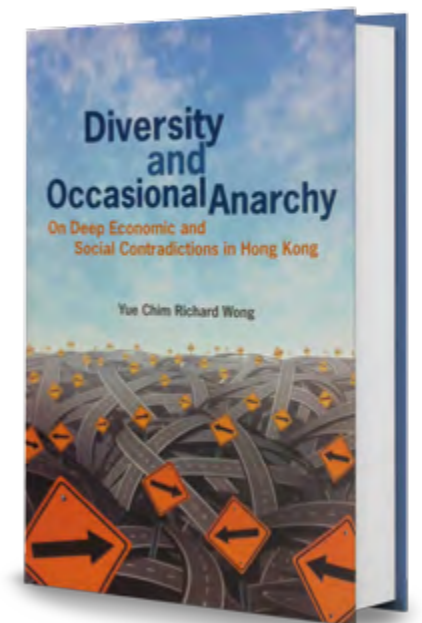
But the only way to do that is from the top, he said. Reforming public housing requires leadership that sees the value – and votes – in

taking action, and a democratically-elected Chief Executive would be best placed to recognise this.

Professor Wong said he had received encouraging indications his proposals would be adopted, perhaps even in the next administration.

In the meantime, he will keep delivering his message: "Let the have-nots become haves. Hong Kong belongs to its people, what's wrong with giving a chunk to the poor? It's not a bad idea for helping society to achieve consensus on the way forward. The alternative is an impasse or revolution and the people in the middle, a generation, will suffer."

*Diversity and Occasional Anarchy: On Deep Economic and Social Contradictions in Hong Kong* is published by HKU Press. ■





What strikes you first is the colour – vibrant pinks and purples, brilliant orange, yellow and, significantly as it turns out, red. “This art has come out after 50 years of drabness – of socialism in Burma – and 25 years of military dictatorship. You’d expect perhaps something dark, depressing, or at least subdued.”

Professor Ian Holliday, of the Department of Politics and Public Administration, is talking about the work of artists from Myanmar, artists who are finding new room for creative self-expression now that the country’s political reforms are unfolding. He recently held an exhibition, *Painting the Transition: Contemporary Art in Myanmar*, on campus of the works of some of these emerging artists. It was a vibrant example of how contemporary painters are capturing a society embarking on a new journey.

“During the worst years of the regime, creativity was stifled and artists either gave up entirely, or operated in secret, sharing their work only with trusted friends,” he says. “Political subjects were banned, as were images of Aung San Suu Kyi and the colour red – as it is the colour of the National League for Democracy (NLD).”

Professor Holliday has been visiting Burma for 10 years. “During the junta’s rule, there was no opportunity for research. But I kept going, kept talking to people, meeting my contacts and listening to what was going on. I gravitate naturally to civil society, and the artistic world tends to overlap with that, particularly in Yangon, so I found myself talking to artists – some political, others not.

### On the quiet

“Some artists kept working on the quiet,” he says, “you would see them touting their work, hidden in carrier bags, around tea houses in Yangon and selling paintings for a few dollars.”



Professor Ian Holliday (left) and Professor Lui Tai-lok (right) at the exhibition

The Pansodan Gallery in Yangon was his main introduction to Myanmar’s art scene. Run since August 2008 by husband and wife team Aung Soe Min and Nance Cunningham, the gallery started out by working under the radar to connect painters with each other, and with potential buyers.

It has helped launch a new generation – though their ages range from early 20s to 70s – of alternative artists who have emerged since the relaxation of controls on society. Indeed, the Pansodan’s Aung Soe Min has made it his mission to rescue Myanmar’s lost artists. In one case, he took 10 blank canvases to the home of a former artist who hadn’t painted for years and was hesitant about starting again. He simply said: “Go on, paint again!”

The exhibition’s paintings are Professor Holliday’s own. “At first I bought at random, just a few pieces I liked. But gradually, I began to see these paintings as a way of opening a window on Myanmar. Most people have only a few images in their head – Aung San Suu Kyi, the military junta and possibly monks and the Saffron Revolution... that’s it.

“Now that it’s opening up, maybe the paintings are a way for people outside to get a sense of what is going on inside Myanmar today. Let them see beyond the stereotypes.”

### Creativity everywhere

This new creativity is happening in other areas of the arts too – writers are giving readings at newly created literary festivals, musicians are being heard through rap and hip-hop, there is far more performance art on the streets of Yangon.

Professor Holliday staged the exhibition to coincide with the annual conference on Myanmar he has held at HKU for the past seven years. He invites experts, whose skills

“ Now that it’s opening up, maybe the paintings are a way for people outside to get a sense of what is going on inside Myanmar today. Let them see beyond the stereotypes. ”

Professor Ian Holliday

span academia, government and civil society and who come from Myanmar, China and the region.

Since 2008, he has also been taking students to the Thailand/Burma border to teach English to refugees and migrants living there. “The education system in Myanmar is hopeless,” he says, “the average person does 3.9 years of schooling. The NLD has a mission to improve social conditions including education, environment etc and has built an education

network. Now we have students teaching inside Burma as well – there are currently about 15 teaching on the border and 15 inside.”

Professor Holliday would like the exhibition to go to a wider audience, and to expand it to something bigger – perhaps a festival to include film screenings, debate, and a chance to meet the artists. “The idea is to spread the message,” he says, “to open up the conversation on Myanmar.” ■



The exhibition at the Faculty of Social Sciences draws a crowd of art aficionados



Professor Lap-Chee Tsui (third from left) attends the opening of the exhibition

# PORTRAIT OF THE ARTISTS

The *Painting the Transition* exhibition of paintings by Myanmar artists displayed at the Faculty of Social Sciences earlier this year gave fascinating insight into a country emerging from darkness and artists suddenly allowed creative expression.



Science and Art Crossover Programme for junior secondary school students

# NOT 'OR', BUT 'AND'

Science or Art? That is the question. For decades, students have been asked to make a choice between the two. But a recent Knowledge Exchange (KE) workshop posed a new question – since the two disciplines are dynamically intertwined, shouldn't it be both?

As far as Dr Benny Ng Chun-hei is concerned the traditional division between Science and Art streams has always been questionable. "Science and Art are poles apart in some areas, but absolutely intertwined in many more," he says. "They are the twin dynamics in the cultural development of civilisations. While students may want to specialise in one or the other at some stage, asking them to choose too early leads to people closing the door on vast areas of curiosity, inquiry and knowledge."

To help open that door, Dr Ng, who is a Lecturer in the Faculty of Science, conceived the idea of a KE workshop promoting the Science and Art crossover and involving a multidisciplinary team from HKU.

Dr Ng deliberately targeted the workshops at junior secondary school students. "This is the first outreach programme aimed at forms one to three, so they're 13 to 15 years old," he says. "Usually, KE workshops are aimed at senior students but I wanted to target junior students because of the changes in the curriculum at secondary schools to a more holistic approach."

## Visualise science artistically

He and the team set out to create workshops that would really spark the imagination by

mixing the two disciplines in inspired and exciting ways. "For example, a 3D drawing has elements of both science and art," says Dr Ng. "That's where we started – finding ways to visualise science artistically."

The one-day programme began with Dr Patrick Ng Tuen-wai from the Mathematics Department giving a lecture entitled 'Geometry and Origami', in which he demonstrated angle tri-section – one of the three classical problems of antiquity – with nary a protractor nor compass in sight.

Dr Tony Feng Shienping from the Mechanical Engineering Department explained the 'Lotus Effect', or why droplets of water will form a bead on the lotus plant. In 'Science of Painting', Professor Aleksandra B Djurišić from the Department of Physics showed how chemical compositions of paint evolved and how optics such as reflection and refraction effect the depth of an image.

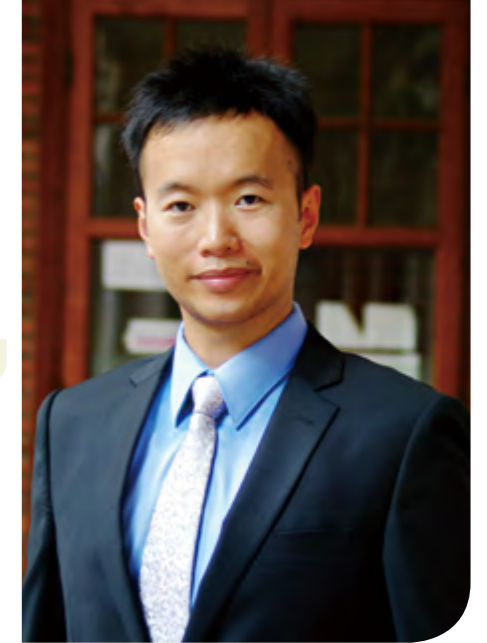
Talks were followed by a choice of four hands-on workshops. 'Capture the Moment in Laboratory', led by Kevin Lau from the



Students acquire basic photography techniques in the 'Capture the Moment in Laboratory' workshop

“ A 3D drawing has elements of both science and art. That's where we started – finding ways to visualise science artistically. ”

Dr Benny Ng



Journalism and Media Studies Centre, demonstrated basic photography techniques and then took participants on a laboratory tour to apply the techniques they had just learned.

Mr Cheung Pak-leong, a postgraduate student from the Department of Mathematics, showed how to make Platonic Solids and Archimedean Solids using coloured plastic sheets, and how to use coloured thread to create geometric patterns including curves from straight lines.

'Painting on Canvas', led by Dr Tsing Nam-kiu, from the Department of Mathematics, and Mike Chan, an HKU alumnus, gave participants a choice of painting one of two subjects, either a famous scientist or a scientific phenomenon, thereby giving them the chance to learn about the scientists and their work.

## Escher in 3D

Possibly the most intriguing workshop was 'Create the Impossibility by LEGO® – Learn Escher, Go On!', in which students produced 3D reconstructions of the famously impossible pictures of Dutch painter MC Escher using LEGO®. His works, such as *Belvedere* and *Relativity*, apply many mathematical elements including impossible construction symmetry, and explore infinity and architecture.

"The LEGO® idea came from my colleague Dr Rachel Lui," says Dr Ng. "She wondered if we could do something with Escher's works. At first we were going to get participants to paint them, but then we had the idea of constructing them. A LEGO®-selling company came on board as sponsors and experts from the company helped the students make the models."

The one-day programme was followed by an exhibition in the Learning Commons, and

feedback from HKU students and staff was excellent. The exhibition has since moved to different secondary schools and residential clubs around Hong Kong.

Feedback from student participants and their teachers has also been overwhelmingly enthusiastic – and Dr Ng has applied for KE funding again next year to continue the workshops, and to introduce new ideas and exercises. "Although the KE Office does not usually fund the same project in two consecutive years, I am thrilled that it recognises the values and impacts created by this project and supports it again next year. Still, I am worried that I cannot make it a sustainable programme unless I can secure external funding," he says.

"Next year I want to include a short movie-making section – again using the Escher models, but having LEGO® men walking up and down, filmed in stop-start motion," he

says. "I would also like to do a cooking and science workshop, a sort of *MasterChef* meets Master Scientist. The theme could be, say, antioxidants. You give a lecture on antioxidants first, then participants are challenged to cook something picking out the antioxidant ingredients from a choice of many."

And for maximum excitement he envisages "a kind of chemical magic show, complete with explosions on stage." Says Dr Ng: "If you can show people that science is fun, you can spark their interest in investigating it further. And that includes so-called 'Arts' people... the option should not be Science or Art, it should be Science and Art."

For more information about the Science and Art Crossover project, including registration and donations for next year, please visit <http://scixart.science.hku.hk/> ■



By applying mathematical and architectural theories, participants reconstruct paintings by renowned Dutch artist MC Escher and turn them 3D with LEGO®.



Winning teams of the junior category and the organisers of the Lightning Detector Design Competition

# LIGHTNING THE PATH

They say lightning never strikes twice in the same place, but that's not the case with HKU's Knowledge Exchange (KE) Fund programme which continues to expand the boundaries of learning beyond the classroom and within the community.

The Engineering Faculty teamed up with the Hong Kong Observatory (HKO) and the Hong Kong Meteorological Society (HKMetS) to hold a Lightning Detector Design Competition to enhance knowledge in information technology and meteorological instrumentation among the younger generation. This followed another KE-sponsored competition in 2011–2012, also in cooperation with HKO, to come up with a visibility measurement method.

The Lightning Detector Design Competition drew 380 pupils from 43 primary and secondary schools who took part in talks, workshops and visits before building their devices.

At the award presentation in May, HKU Assistant Dean of Engineering Dr Wilton Fok praised the next generation of engineers and scientists for their creativity, their ability to integrate hardware with software and their excellent presentation skills.

There were prizes for the junior and senior winners and runners-up as well as awards for the most creative and the most attractive designs. Two of the entries which particularly caught the eyes of the judges were a detector housed inside a remote-controlled toy truck and a fish-eye lens connected to a webcam relaying images of the sky for analysis by a computer program.

Professor Francis Lau Chi-moon was Principal Investigator of the KE-funded competitions,

which were led by two meteorological computing researchers, Dr Beta Yip Chi-lap and Dr Ivy Wong Ka-yan, who have been working together for 10 years. As well as being Fellows of HKMetS, they were also responsible for two previous, smaller competitions before the KE programme – to design a rain gauge in 2006, and an anemometer, which measures wind speed, in 2008–2009.

However, since the launch of KE funding they have been more than keen to take advantage of what it offers and have a number of other projects they hope to pursue.

"In 2013–2014, we will work on another KE project, 'Birds of Hong Kong in your hands', in partnership with the Hong Kong Bird Watching Society, to enable mobile device users

worldwide to access multimedia information about Hong Kong birds for free," says Dr Yip.

"We hope that apart from partnerships with the government sector, knowledge exchange can be done with the general public through partnerships with non-governmental organisations. Knowledge should be free to share and be used for the good of people, and HKU has a duty to demonstrate that," he adds.

Dr Wong agrees. "It is important for HKU to connect with the community. Through these competitions, we can share our findings and knowledge. The participants have the chance to visit the University and experience learning in the University. This two-way relationship is important." ■



Students from various primary and secondary schools participate in a workshop on 'Light, Electric and Magnetic Field Detection' held in December last year.



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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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