







臘神話中,普羅米修斯盜火予人類,遭受到的懲罰是被綁石上,每天讓巨鷹啄食其肝臟。到了新的一天,肝臟會自動長出,又成為巨鷹食糧,如此日復日長受無盡之苦。

人類器官相信只有在神話中才會自動重生,直至再生醫學 的出現。

再生醫學可說是現代生物醫學科技的最前沿,旨在修復或 複製因疾病或創傷而受損失去功能的人體組織或器官,研 究領域包括醫療裝置、人工器官、組織工程、生物材料、細 胞治療、臨床轉化等。

中大校長、利國偉利易海倫組織工程學及再生醫學教授**段** 崇智·為國際知名生物醫學科學家·專長肌肉骨骼生物學及 組織再生研究。他對肌肉骨骼組織的研究開創新天·為再 生醫學的迅速發展提供了莫大助力。

成人人體有超過二百骨塊。骨塊的主要作用有二:負重和運動。骨與關節的正常協作,令人得以進行各項日常活動。但二者會因創傷受損,或隨年齡而退化,過程不可逆轉。舉骨關節炎為例,這個疾病的成因是骨關節的軟組織磨損,影響着六十歲以上人口的10%至15%。估計到了2050年,將有一億三千萬人會受骨關節炎之苦,而且此症迄今無藥可治。

好像修補馬路上的坑洞需要混凝土或瀝青一樣,修補軟骨的第一步是尋找適合的替代物料。理想的物料其實近在眼前,就是人類幹細胞。幹細胞可以在乳齒及臍帶等地方找到,它具有自我複製能力,而且在一定條件下可以分化成多種功能細胞,所以是很理想的原材料。如果幹細胞來自組織需要修補的同一個人身上,效果更佳。

接下來,細胞需要一個架構或支架來凝聚。段教授研發出

兩種仿生材料支架。第一種名為「電紡納米纖維支架」,製造方法是先把聚合物溶液(一種經美國食品藥物管理局認可的可吸收生物材料)滴流過電流,在其他大氣條件配合下得出纖細的條狀物質,然後把細胞加進這個納米纖維支架。細胞自會黏上支架轉化成合用的生物材料(圖一)。

另一個方法是把細胞放進聚合物溶液中,然後以投影光固 化三維打印技術造出水凝膠。這個方法的好處是水凝膠可 以按需要造出不同的形狀及大小(圖二)。

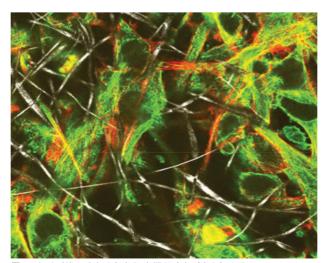
最後一步,把支架放進生物反應器,作用就如一個焗爐或孵化器,供應所需的養分和氧氣以塑造一個活生命體的內在環境。有實驗顯示,物料放進一個橫軸旋轉生物反應器(圖三),七星期後會轉化成在多方面非常接近且硬度達原生關節軟骨75%的物質。

經這些技術製造出來的軟骨替代品,已經在豬和山羊等動物身上試驗成功。段教授為了下一階段的人類試驗,特別

利用微型生物反應器平台複製人類關節,成功製造了首個 名為「微關節」的三維關節(圖四),用作研究及測試治療 骨關節炎疾病的藥物,可望將來研發出有效治療這個頑疾 的藥物或程序。

段教授尋骨究柢,原來源自他博士論文的研究興趣。他當時對為甚麼吹彈欲破的雞蛋會孵化出骨骼健全的小雞很好奇——柔怎生得出剛來?他後來發現,原來雞骨的鈣來自依附在蛋殼上一層叫尿囊絨毛膜的薄膜。如果把雞胚胎置於一個沒有蛋殼的環境孵化,孵出來的小雞將會嚴重缺鈣,出現胚胎軟骨病徵狀。

在段教授的領導下,中大已整合了多個學系及研究單位在 幹細胞及再生醫學方面的專長及能量,正蓄勢待發。段教 授的科學創新或許會令傳說中的獅身人面獸也得修正其謎 語:「甚麼動物早上四條腿走路,中午兩條腿走路,到了晚 上則仍是兩條腿走路?」



圖一: 細胞 (綠色和紅色) 在納米纖維支架 (白色) 生長 Picture 1: Seeded cells (green and red) interact with nanofibrous scaffold (white)



圖二:投影光固化三維打印技術製造的水凝膠 Picture 2: Hydrogel fabricated by PSL 3D printing technique

n Greek mythology, the punishment Prometheus gets for stealing fire for humanity is the daily torture of having his liver eaten up by an eagle. A new liver grows back in the next morning so that the torture can repeat for the new day, and the next ad infinitum.

A human organ that regenerates itself exists only in myths. That is, until regenerative medicine came along.

Regenerative medicine is the branch of modern biomedical technology that aims to repair or regenerate diseased or damaged tissues or organs of the human body. It encompasses the development of medical devices or artificial organs, tissue engineering, biomaterials, cellular therapies, and clinical translation.

Prof. Rocky S. Tuan, Vice-Chancellor and President and Lee Quo Wei and Lee Yick Hoi Lun Professor of Tissue Engineering and Regenerative Medicine of CUHK, is a world-renowned biomedical scientist specializing in musculoskeletal biology and tissue regeneration. His seminal work on musculoskeletal tissues has scripted an important chapter in the big book of regenerative medicine.

There are over 200 bones in a human adult. They serve two major functions, namely, weight-bearing and locomotion. The proper functioning of the bones and the joints ensure that human beings can carry on with their daily activities. Bones and joints, however, get damaged through injuries or degenerate with age and the process is irreversible. Take osteoarthritis, for example. The malaise, due to the breakdown of the joint cartilage and the underlying bone, affects 10% to 15% of the population over 60. It is estimated that 130 million people would be affected by it by 2050. And there's no cure for it.

Like mending a pothole in the ground which requires concrete or asphalt as the filling material, the first step is to find the material to replace the lost or damaged cartilage. In this case, the raw material is human stem cells which can be found in many parts of the human body such as baby teeth and the umbilical cord. Stem cells are ideal material because they have self-renewing power and the potential, when planted in a new environment, to develop the properties or functions relevant in that environment. It is preferable that the stem cells come from the same person in need of a repaired or renewed part.

Second, a mould or scaffold is needed for the cells to bind with and merge in. Professor Tuan had pioneered two types of such biomimetic scaffold. The first is electrospun nanofibres which are made by dripping polymer solution, consisting of FDA-approved resorbable biomaterials, through electric currents which would, in the right mix of other atmospheric conditions, yield noodle-like threads, though on a nano-scale. The stem cells are then seeded into a scaffold of such nanofibres. The cells would cling to and interact with this nanofibrous scaffold turning the whole into a biomaterial fit for the purpose (Picture 1).

The second method is to dip the stem cells into the polymer solution and fabricate hydrogel pellets with the use of projection stereolithography (PSL) 3D printing technique. This method has the advantage that the hydrogel pellets may be tailored to different shape and size requirements (Picture 2).

Lastly, the scaffold is put in a bioreactor, much like an oven or incubator, into which nutrients and oxygen are fed to simulate the inside of a living organism. In one experiment, the substance that had been incubated in a horizontal axis rotating bioreactor (Picture 3) for seven weeks resembles the natural joint cartilage in most aspects with 75% of its hardness.

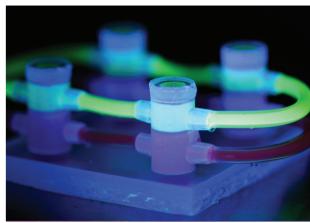
The replacement cartilage thus engineered has been



圖三: 橫軸旋轉生物反應器
Picture 3: Horizontal axis rotating bioreactor

successfully tested on animals such as pigs and goats. To extend the trials on human beings, Professor Tuan has developed the first 'microJoint', a 3D replica of the human joint using a microbioreactor platform (Picture 4), which can be used to study and screen for potential therapeutic agents for osteoarthritis. The prospect of developing drugs and treatment for osteoarthritis in future is not as bleak as in the present.

Professor Tuan's interest in the bone dates back to his doctoral student days when he observed that while the egg appears to be all softness and no bone, the chicken thus hatched has a normal skeleton frame. The young Tuan was intrigued by the question: how could something seemingly come of nothing? He did his PhD dissertation on this problem and found that the calcium



圖四: 微關節晶片 Picture 4: Bioreactor for microJoint chip—first prototype

for the bone of the chicken comes from a thin membrane lining the inside of the eggshell called the chlorioallantoic membrane. This can be demonstrated by incubating a chicken embryo in a no-shell environ. The chicken thus hatched would have serious calcium deficiency and show signs of embryonic rickets.

Under Professor Tuan's leadership, stem cell and regeneration research at CUHK has combined and leveraged on a number of disciplines and institutes. Professor Tuan's scientific innovation may prompt the mythical Sphinx to rephrase her riddle: what is the creature that walks with four legs in the morning, two at the noon-time, and still two in the evening?

T.C.



為慶祝五十五周年,中大舉辦「智慧的探索」公開講座,匯萃中大傑出學人的知識與經驗,傳承智慧。八場講座於鄭裕彤樓一號演講廳舉行,涵蓋轉化醫學、人工智能、糧食與永續農業、宇宙與物理、歷史和心理學等範疇。段校長於1月11日主講的「再生醫學的前途與挑戰」為首場講座,其餘講座詳情如下:

To celebrate the 55th anniversary of CUHK, the University launches 'The Pursuit of Wisdom' Public Lecture Series which amasses the wisdom, strength and distinction of CUHK experts from across different disciplines and disseminates these in the community. Held at Lecture Theatre One of Cheng Yu Tung Building, the eight lectures encompass translational medicine,

artificial intelligence, food supply and sustainable agriculture, physics and the universe as well as history and psychology. The lecture delivered by Vice-Chancellor Prof. Rocky S. Tuan on 11 January titled 'Regenerative Medicine: Promises and Challenges' was the first in the series. Details of the remaining lectures are as follows:

| 日期 Date (5:00 – 6:30 pm) | 講者 Speaker | 講題 Topic |
|-----------------------------|-------------------------------|--|
| 15.2.2019 | 盧煜明教授 Prof. Dennis Lo | 科研的挑戰與樂趣 The Joys and Challenges of Scientific Research |
| 1.4.2019 | 林漢明教授 Prof. Lam Hon-ming | 大豆研究:一段從實驗室到農田科研之旅 Soybean Research: A Journey from Laboratory to Field |
| 24.5.2019 | 朱明中教授 Prof. Chu Ming-chung | 宇宙的美好缺憾 Beautiful Asymmetries in the Universe |
| 3.6.2019 | 蒙美玲教授 Prof. Helen Meng | 懂聽懂説的人工智能如何改善人類的學習及生活 Artificial Intelligence for Speaking and Listening for Learning and Well-being |
| 9.9.2019 | 科大衛教授 Prof. David Faure | 孝道與產業:為甚麼「孝」有助商業發展? Filial Piety and Business Enterprise: Why is Filial Piety Good for Business? |
| 23.9.2019 | 趙志裕教授 Prof. Chiu Chi-yue | 心想事成 : 美滿人生心理學 Mindset and Success: The Psychology of a Flourished Life |
| 14.10.2019 | 莫樹錦教授 Prof. Tony Mok | 待定 To be announced |



破解植物液泡起源

Plant Vacuole Biogenesis Unravelled



生命科學學院卓敏生命科學教授姜里文教授帶領的港日美三地科研團隊,在探索植物主要細胞器——液泡起源方面取得重大突破。團隊利用世界領先的三維電子斷層掃描技術,以納米分辨率揭示液泡乃由多囊泡體融合衍生而來,過程中多種蛋白參與融合。研究將重寫教科書中有關植物液泡的概念,並為提升農作物抗逆能力和抵抗病原體感染,以及用植物液泡生產藥用蛋白提出新見。

A research team led by Prof. Jiang Liwen, Choh-Ming Li Professor of Life Sciences has made a major breakthrough in revealing the molecular mechanisms of vacuole formation in plants. Taking advantage of cutting-edge 3D electron tomography at nanometre resolution, the team comprised of researchers from Hong Kong, Japan and the US discovered that vacuoles are mainly derived from the fusion and maturation of multivesicular bodies, which involve multiple regulated consequent fusions. This revolutionary finding redefines the concept of plant vacuole nature and formation in textbook, and is set to throw light on ways to improve crop quality to overcome environmental stress and pathogen infection, and the manipulation of vacuoles in plant bioreactor for pharmaceutical proteins.

讓城市呼吸

Let the City Breathe



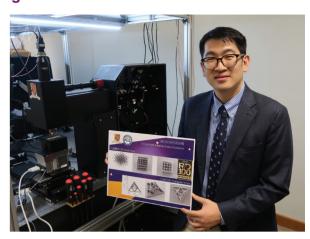
建築學院、未來城市研究所以及環境、能源及可持續發展研究所合辦的第三十四屆國際低能耗建築及城市設計會議於2018年12月10至12日在中大舉行,為該會首度在港舉辦的國際會議。是次會議以聯合國政府間氣候變化專門委員會倡議之「活在兩度以內——智慧與健康的建築及城市設計」為題,廣邀三百名來自全球的業界人士、學者和研究員探討如何透過環保建築和節能設計應對氣候變化和城市氣候,達至永續發展。

The School of Architecture, The Institute of Future Cities and Institute of Energy, Environment and Sustainability jointly played host to the 34th International Conference on Passive and Low-Energy Architecture and Urban Design, the first being held in Hong Kong from 10 to 12 December 2018. Themed 'Smart and Healthy Within the Two-Degree Limit' as advocated by the Intergovernmental Panel on Climate Change, the conference drew over 300 industry practitioners, experts and researchers from around the world to explore how green building and low-energy design can mitigate climate change and urban climate and engender a sustainable environment.

納米速印奪創科奧斯卡

Invention Oscar for Nano 3D Printing

機械與自動化工程學系陳世祈教授及其團隊研發的「數碼全息納米3D打印機」榮獲有「創科界奧斯卡」之稱的「全球百大科技研發獎」。打印機突破傳統三維打印機單焦點低精度的局限,採用前沿的數字全息雷射掃描及光束整形技術,以多焦點高速掃描,打印精度達納米級別,有助研發高端納米科技、先進材料、微支架及藥物傳輸技術。新技術可以在三維空間隨機掃描,移動至任何一點打印懸垂結構,毋須額外支撐。採組裝設計的打印機更設雙光子顯微成像功能,能準確刺激生物,如小鼠和斑馬魚大腦中多個神經元,裨益醫學和生物研究。



Prof. Chen Shih-chi and his team at the Department of Mechanical and Automation Engineering have been presented the influential 2018 R&D 100 Award, famously hailed 'The Oscar of Invention' for developing the Digital Holography-based 3D Nano-Builder. Pushing the envelope of single-point scanning in traditional 3D printing, the Nano-Builder employs revolutionary random-access scanning that allows tens of laser foci to simultaneously write structures at high speed. The nano-prototyping is most suited for applications in research and development, such as printing photonic, robotic, metamaterials, micro-scaffolds and drug delivery devices. As the focal point can be moved to anywhere in space, complex overhanging structures can be printed without supporting structures. Moreover, the modular design of the Nano-Builder enables its turning into a two-photon excitation microscope, whose femtosecond lasers can stimulate cells, such as that in mouse brains or zebrafish, with precision and accelerate discoveries in medicine and science.

流感檢測無難度

A No-frills Tool for Flu Diagnosis

十二位工商管理、工程、生物醫學及生命科學本科生組成的基因工程隊伍,憑研發流感快速測試系統,在美國波士頓舉行的國際遺傳工程機器設計世界賽中榮獲金獎,為中大在該比賽第七度奪金。系統利用流感病毒的核糖核酸檢測和辨別其類型,半小時內即知結果。市民只需智能手機、小巧探測儀和配件,便可自行檢測是否染上流感,及時求醫。

A genetic engineering team of 12 undergraduate students of business administration, engineering,



biomedical science and life sciences took home a Gold medal at the International Genetically Engineered Machine (iGEM) 2018 Giant Jamboree held in Boston, US with a novel rapid influenza diagnostic tool, the seventh time a CUHK team has won gold in the premier synthetic biology competition. The tool detects and distinguishes the flu virus's type by detecting its RNA target sequence and takes only around 30 minutes for the results. Together with a smart phone, people can use the small and light detector on their own to detect whether they catch flu.

書屋伴成長

Paradise for Little Readers

中大建築學院Peter W. Ferretto 教授與廣州大學建築與城市規劃學院蔡凌教授率領研究團隊,策劃和興建「高步書屋」,歷時兩年,書屋去年12月於中國湖南省高步村開幕。團隊期望項目能保存當地侗族社會傳統建築的特色和活化內地農村社區。為培養當地小朋友的閱讀興趣,書屋設計亦增添互動元素。

The Gaobu Book House, a collaborative project masterminded by Prof. Peter W. Ferretto of the School of Architecture at CUHK and Prof. Cai Ling of the School of Architecture and Urban



Planning at Guangzhou University was opened at Gaobu village of the Hunan Province in December last year. Spending two years planning and developing the Book House, the research team hopes to preserve the Dong ethnic group's traditional architectural design and re-energize the rural community through the initiative. By building interactive elements into the design, it also hopes to stimulate children's interest in reading.

新法研百草

New Inroads into Old Wisdom

李達三葉耀珍中醫藥研究發展中心與生命科學院胡秀英植物標本師於2018年12月2至5日聯合舉辦第二屆分子科技鑑定、質控與保育草藥材國際會議,逾一百二十名來自十個地區的科研、草



藥業界和監管機構人員就分子科技在草藥鑑定、演化和藥理研究,以及質量檢測和控制上的應用發表灼見。

The Li Dak Sum Yip Yio Chin R & D Centre for Chinese Medicine and Shiu-Ying Hu Herbarium in the School of Life Sciences jointly hosted the 2nd International Conference on DNA Technology for Authentication, Quality Control and Conservation of Herbal Material between 2 and 5 December 2018. Over 120 scientists and representatives of the herbal industry and regulatory agencies from 10 regions converged to discuss the applications of DNA technology in the medicinal herbs' authentication, quality assessment and control, as well in the study of their evolution and pharmacology.

襄贊教育

A Big Gift to Education



聯合書院於2018年11月29日舉行「蔡繼有教育及慈善信託」與「蔡冠深教育基金會」支票捐贈儀式,銘謝蔡冠深博士(右二)及蔡關穎琴女士(右一) 慷慨捐贈五千萬港元,支持書院發展。

The CKY Education Charitable Trust and Choi Koon Shum Education Foundation Cheque Presentation Ceremony was held by United College on 29 November 2018 in honour of Dr. Jonathan Choi Koon-shum (2nd right) and Mrs. Janice Choi Kwan Wing-kum (1st right), who made a \$50 million donation to support the college development.

澆灌正向工作間

Cultivate a Positive Workplace

正向工作間及員工發展委員會於去年12月14日舉辦年度員工感謝日。段崇智校長早上向全體員工發電郵,值上任將滿周年之際表達謝意,並鼓勵同仁互道感謝,讓正能量注滿生活和工作間。委員會下午舉辦員工感謝日派對,段校長亦親臨向同事致謝。今年委員會贈與中大員工的小禮物為空氣鳳梨,該植物易於種植,在關懷愛護下更會開花,正如一句道謝,能讓辦公室開滿心花。

The Committee on Positive Workplace and Staff
Development held the annual Staff Appreciation Day
on 14 December 2018. On the morning, Vice-Chancellor
Prof. Rocky S. Tuan sent a thank-you message to all staff
and called on them to express thanks to each other. He
also hosted the Staff Appreciation Party in the afternoon.
This year, the Committee gave air plants to CUHK staff as
a gift. Easy to grow and capable of blooming under care
and appreciation, an air plant is analogous to a positive
workplace—a simple thank-you can make it beam.

兩教授膺IEEE院士

Two Professors Elected IEEE Fellows



首個支援網上學習的知識與教育雲端平台。

Prof. Tsang Hon-ki (top) of the Department of Electronic Engineering and Prof. Irwin King (below) of the Department of Computer Science and Engineering, both associate deans of the engineering faculty, have been elected fellows of the Institute of Electrical and Electronics Engineers in 2019. Professor Tsang's research field-silicon photonics-is now a mainstream optical communication technology key to supporting the continued growth of internet data traffic, whereas Professor King is an expert in machine learning and social computing, whose brainchildren include, inter alia, VeriGuide, the plagiarism detection software and the Knowledge & Education Exchange Platform (KEEP) for e-learning.

侃侃而談

All the World's Her Stage



中大英語演講比賽冠軍、法律二年級生 Kuterera Myrmidon Zvikomborero Kangara 於去年12月5至9日在北京舉行的「外研社・國 才杯」全國英語演講大賽再下一城,歷經四輪 激烈的已備演講、即席演講及問答環節,最終 擊敗一百九十名選手,勇奪亞軍,並獲邀7月前 往美國喬治梅森大學交流。

The CUHK English public speaking champion Year 2 law student Kuterera Myrmidon Zvikomborero Kangara took another winning lap in the 'FLTRP • ETIC Cup' English speaking contest held in Beijing between 5 and 9 December 2018. Battling her way through four rounds of prepared speeches, impromptu speeches and Q&A sessions, Myrmidon beat out 190 contestants and took home the first runner-up with her stunning performance, complete with an opportunity to head to the George Mason University on exchange in July.



重溫Myrmidon演辯風采 Revisit Myrmidon's commanding stage presence

永續發展掀新章

A New Chapter in Sustainability

賽馬會氣候變化博物館於2018年12月15日舉辦五周年慶典暨「聯合國可持續發展解決方案青年網絡」香港地區分會成立典禮。同場安排參觀館內最新的「氣候變化歷史廊」,透過嶄新的「擴增實境」科技了解氣候變化歷史和最新資訊。

The Jockey Club Museum of Climate Change (MoCC) celebrated its fifth anniversary and launched The United Nations Sustainable Development Solutions



Network Youth Hong Kong on 15 December 2018. On the occasion, guests were invited to take part in a guided tour of the revamped Climate History Gallery of MoCC, which makes use of augmented reality to illustrate the history and latest developments of climate change.

我們的波叔

Our Beloved Uncle Por

逸夫書院「芳艷芬藝術傳承計劃」於去年12月10日舉辦「梁醒波的舞台藝術」公開講座,二百五十名師生和公眾人士聚首一堂,懷緬一代文武生暨丑生王其人其藝。講座開首由梁醒波長孫梁智宏先生介紹梁氏生平,及後粵劇名伶尤聲普先生(右)和阮兆輝教授(左)於台上暢談與「波叔」相處的軼事點滴、其唱腔藝術以及伶影雙棲的非凡成就。



The Public Lecture on Leung Sing-por under Shaw College's The Art of Fong Yim-fun Sustainability Project took place on 10 December last year and drew 250 participants in remembrance of the life and art of the late comedian legend. Opening with an introduction of Leung's life by his eldest grandson, Mr. Andrew Leung, the lecture had Cantonese opera virtuosos Mr. Yau Sing-po (right) and Prof. Yuen Siu-fai (left) join in and discuss their encounters and impressions of 'Uncle Por' (Leung's nickname), his singing style and phenomenal career straddling the stage, silver and television screens.

■ 到任同仁/Newly Onboard



Information in this section can only be accessed with CWEM password.

若要瀏覽本部分的資料, 請須輸入中大校園電子郵件 密碼。

宣布事項/ANNOUNCEMENTS



續任校董

Reappointed Council Member

何子樑博士續任大學校董,任期三年,由2019年1月21日起生效。

Dr. Ho Tzu-leung has been reappointed as a Member of the Council for a further period of three years with effect from 21 January 2019.

人事任命 Appointments



| 新任 New Appointment | 姓名 Name | 上任日期 Start Date |
|--|---------------------------------|--------------------|
| 晨興書院院長 Master of Morningside College | 汪寧笙教授 Prof. Nicholas Rawlins | 7.12.2018 |
| 工程學院院長 Dean of Engineering | 黃定發教授 Prof. Martin D.F. Wong | 4.1.2019 |

非教學僱員經「中大人事信息系統」(CUPIS) 查閱整體表現評分及增薪點 Information on Overall Performance Rating and Merit Increment (for Nonteaching Staff) to be Accessed via CUPIS

全職非教學僱員現可透過「中大人事信息系統」(CUPIS)之僱員自助服務功能(ESS),查 閱其按績效評核和發展制度(PRDS)/績效獎賞計劃(PLRS)於2017/18評核年度之整體 表現評分及所獲發的增薪點。僱員可於登入CUPIS後到以下頁面查閱有關資料:

主要功能表 ▶ 自助服務 ▶ 績效管理 ▶ 我的績效文件 ▶ MI and Overall Ratings

請各部門通知其僱員上述安排。

Full-time non-teaching appointees may now refer to information on their overall performance ratings and Merit Increment granted for the 2017/18 review exercise, under the Performance Review and Development System (PRDS) / Performance-Linked Reward Scheme (PLRS), in the Employee Self-Service (ESS) of CUPIS. Such information may be accessed via the following navigation path after login to CUPIS:

Main Menu ► Self Service ► Performance Management ► My Performance Documents ► MI and Overall Ratings

Departments/Units are requested to convey the information above to their appointees.

鋼琴長號二重奏音樂會——遺產:美國作曲家的音樂

Concert by the McCain Duo—Heritage: Music by American Composers

| 日期 Date | 24.1.2019 (星期四 Thursday) | |
|-------------|---|--|
| 時間 Time | 8:00 pm | |
| 地點 Venue | 利黃瑤璧樓利希慎音樂廳 Lee Hysan Concert Hall, Esther Lee Building | |
| 鋼琴 Piano | Artina McCain | |
| 長號 Trombone | Martin McCain | |

音樂系舉辦,免費入座,歡迎參加。

Presented by the Department of Music. All are welcome, free entrance.

「午間心靈緑洲」音樂會

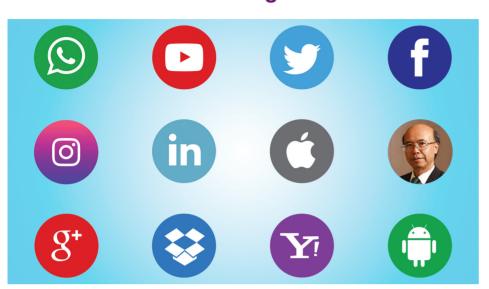
Midday Oasis Lunchtime Concerts

| 1:30 pm – 1:55 pm | 崇基學院禮拜堂 | Chung Chi College Chapel |
|-------------------|---|---|
| 21.1.2019 | 長笛及鋼琴音樂會 ・陳子俊 (長笛) ・溫可瑩 (鋼琴) | Flute and Piano Concert · Brian Chan (Flute) · Joanna Wan (Piano) |
| 28.1.2019 | 鋼琴獨奏音樂會 · 李嘉齡 (鋼琴) | Solo Piano Concert · Colleen Lee (Piano) |
| 11.2.2019 | 「雅樂合奏團」室樂音樂會 · 何永佳(木笛) · 楊嘉倫(文藝復興低音管) · 鄧宇滅(手鼓及鈴鼓) · 李慧珊(管風琴) | Chamber Music Concert by Concerto da Camera · Henry Ho (Recorder) · Karen Yeung (Dulcian) · Tang Yukit (Frame Drum & Riq) · Lee Wai Shan (Organ) |
| 18.2.2019 | 小提琴及鋼琴音樂會 ·嚴天成博士(小提琴) ·潘曉彤博士(鋼琴) | Violin and Piano Concert · Dr. Patrick Yim (Violin) · Dr. Poon Kiu Tung (Piano) |



■ 字裏科技/Tech Talks

媒體就是推拿 The Medium is the Massage



高速發展的資訊科技為我們帶來形形色色的媒體平台及形式,如網上報刊、新聞網站、博客、YouTube、維基百科、公民新聞學、自媒體及數據新聞學。馬歇爾·麥克魯漢(1911–1980)的名句——「媒體就是信息」——聽來仍合時宜。

中大新聞與傳播學院**蘇鑰機**教授解釋·麥克魯漢認為各種科技(媒體)本身就是信息·而不是媒體傳達的內容。現代媒體可看成是人類感官的延伸·每一種媒介對人類的感覺中樞都有一定的「推拿」作用·一是令人感到舒服、享受:一是令人眩惑、麻醉。麥克魯漢後來與平面設計師Quentin Fiore合寫一書·索性以《媒體就是推拿》為題。

各式各樣媒體已經打進我們日常生活的每個層面,仿如一張天網。科技控制了人們的工作 日程、社交節奏和如何運用私人時間。蘇教授舉例説:「很多人都有手機和智能腕錶,這些 工具監控着我們走路吃飯、把我們和他人聯繫起來、監察我們的健康狀況、提供各類資訊、 安排娛樂消遣。」

蘇教授認為互聯網是現代影響最深遠的科技。依他分野:1995年出現以電腦為主的網上媒體是第一代:2009年左右出現的社交媒體及「數據優先」是第二代:2013年我們有了移動媒體及「移動優先」,是為第三代:第四代則山雨欲來,而且多會靠人工智能推動。

蘇教授不諱言科技發展對人類的自主、私隱及自由都會帶來挑戰,但他同時也充滿希望:「在一個科技主導的世界裏,不論任何年紀,都要掌握更多科技知識,積極向前,做好裝備,迎接美麗新世界。」

Marshall McLuhan's (1911–1980) famous dictum—'The medium is the message'—strikes a special chord today, as rapidly developing information technology has engendered a large number of media platforms and formats such as online newspapers, news websites, blogs, YouTube, Wikipedia, citizen journalism, we media and data journalism.

Prof. **Clement So** of CUHK's School of Journalism and Communication explains that for McLuhan, technologies (the media) but not the content of communication are the messages themselves. Modern media are extensions of the human senses. Each communication medium has certain 'massaging' effect on the human sensorium. The audience may find the medium soothing and enjoyable, or deceiving and intoxicating depending on the type of media concerned. Hence the title of a later book by McLuhan co-authored with graphic designer Quentin Fiore—*The Medium is the Massage* (1967).

The media are so pervasive in all aspects of people's lives that there is no way to hide from them. Technology has gradually taken over people's lives, controlling their work routines, social rhythms and even spare time. Professor So gave an example: 'The mobile phones and smart watches have made themselves indispensable to us. These devices monitor our time and diary, keep us connected with one another, give us all sorts of information, check on our health status, guide our ways on the road, keep us company by providing entertainment, etc.'

Professor So regards the Internet as the most important technological invention in the age we live in. By his count, Web 1.0 started in 1995 and was defined by online media and 'computer first'. Web 2.0 emerged around 2009 and was characterized by social media and 'digital first'. Web 3.0 came to the scene in about 2013 and gave us mobile media and 'mobile first'. Web 4.0 is now on the horizon and likely to be powered by artificial intelligence.

While fully aware of the risk of surrendering our control, privacy and freedom, Professor So is equally optimistic of what the future holds for us: 'For us to better adapt and thrive in this technology driven world, we have to become more tech savvy and forward-looking. Technology literacy has to be promoted for people of all ages, and we should be psychologically ready to embrace the brave new world.'

藝士匹靈/ARTSPIRIN

N S S

穿梭百年香港

A Curious Time Travel to the Old Hong Kong





昔與今:德輔道往北朝向畢打街

Then and now: North of Des Voeux Road facing Pedder Street

現代人習慣用智能手機拍照,輕易記錄生活點滴,很難想像一百五十年前的蘇格蘭攝影師 湯姆森(1837-1921)如何帶着笨重的木盒式相機、三腳架和玻璃底片遠赴香港,到處拍攝 英殖時期的人文風景。我帶着好奇心參觀中大圖書館舉辦的「百年影像:湯姆森眼中的香港」展覽。

甫走進展覽廳,發現這些巨形舊照十分清晰,中大圖書館助理館長及特藏組主管**李麗芳**女士説:「這是濕版攝影的獨特之處。」此名字源於攝影師要先在玻璃片上塗上液體火棉膠,且要在拍攝和沖印過程一直保持濕潤。攝影師要趕在火棉膠揮發前完成整個程序,而塗火棉膠時易沾灰塵,顯影過程亦會產生紋路和斑點等瑕疵,絕不輕易,但此工藝比紙本底片沖印的相片更為清晰。

湯姆森於1868年在皇后大道中成立攝影工作室,兩年間記錄不少香港的都市風景。展覽包括原藏於維康圖書館的十四張湯姆森攝影作品和歷史遺珍攝影基金會的十二幅彩色香港近照,也展出中大圖書館收藏的香港舊照片和明信片,讓參觀者了解香港今昔。

我在畢打街今昔街景照片前佇立良久,歷史遺珍攝影基金會的彩色近照有熙來攘往的街道 與商店,湯姆森的黑白照卻展示出林蔭大道、鐘樓和維多利亞式建築群,還有等候生意的 華人轎夫、駐守街頭的印度侍衞。跟其他展出的今昔街景照片一樣,兩者相映成趣,映照百 多年的香港變遷。

「百年影像: 湯姆森眼中的香港」 展覽即日起至4月30日於大學圖書館展覽廳舉行, 免費入場。查詢: 3943 7305 / spc@lib.cuhk.edu.hk。

Smartphones enable easy photographing nowadays. It's hard to imagine the Scottish photographer John Thomson's (1837–1921) laborious work bringing his wooden-box camera, a bulky tripod and glass negatives to photograph colonial Hong Kong 150 years ago. To pamper my curiosity, I visited the 'Hong Kong Through the Lens of John Thomson' exhibition held at the CUHK Library.

Arriving at the exhibition area, I was struck by the sharpness of these 150-year-old images on exhibit. 'This is the uniqueness of wet plate collodion photography,' said Ms. Li Laifong, Sub-Librarian and Head of Special Collections of the Library. Before taking photos, the photographer pours collodion solution onto a glass negative, which is kept wet from image capturing to developing. The process is quite a challenge. It has only minutes to take the photo and develop it before the negative dries. And dusts may settle on the glass negative while collodion is being poured, resulting in grains and spots in the final photograph. But images produced by this process enjoy greater sharpness and clarity than paper negatives.

Thomson set up a studio on Queen's Road Central in 1868 and took many urban photos in the next two years. To help the audience understand the city's past and present, the exhibition shows Thomson's 14 photos kept at London's Wellcome Library alongside 12 colour photos commissioned by The Photographic Heritage Foundation (TPHF) in recent years. It also features some Hong Kong old photos and postcards in the CUHK Library collection.

I stood in front of the juxtaposed distant and recent images of Pedder Street for some time. TPHF's colour photo simmers with the hustle and bustle of the commercial district familiar to us, whereas Thomson's photo shows an outlandish but serene boulevard with a bell tower and Victorian buildings, as well as Chinese sedan chair bearers waiting for patrons and Indian guards stationing in the area. The two photos, as indeed all the others in the exhibition, are parentheses to 150 years of Hong Kong.

The 'Hong Kong Through the Lens of John Thomson' exhibition is now on until 30 April at the exhibition area of the University Library. Admission is free. Enquiries: 3943 7305 / spc@lib.cuhk.edu.hk.

J. Lau

──口談實錄/Viva Voce

阮兆輝教授

Prof. Yuen Siu-fai

七歲從藝,初為電影童星,後踏上粵劇舞臺,自此氍毹逐夢六十多載,除醉心演出,更以傳承粵劇藝術為己任,積極向學界推廣粵劇。2018至19年度,俯允中大主講通識課程「中國戲曲欣賞」。 Professor Yuen began his performing career at seven as a child film star. Later, he took on Cantonese opera and over the past 60-odd years has devoted himself to the art. A seasoned performer, he spares no effort in promoting Cantonese opera in the academic world. In 2018–19, he taught a CUHK general education course entitled 'The Appreciation of Chinese Opera'.



為何答允中大講授中國戲曲課程?

讓學生認識戲曲是我數十年來的心願,英國人都知道莎士 比亞,意大利的村婦亦對歌劇如數家珍,日本無人不知能 劇,雖然不普及,但起碼通過家庭和學校,對自己國家的表 演藝術有所認識和尊重。為何我們的年輕一代會不認識中 國戲曲?

學生對粵劇哪些地方最感興趣?

小學生定是服裝和化妝,我會拿新事物吸引他們,例如告訴他們把花旦的片子弄得貼貼服服的刨花是中國千年歷史的純天然髮膠。中學生分析力較高,抗拒和接受都比較強烈,歷史故事是很好的切入點。

這次在中大授課,如何設定内容?

原意是介紹戲曲的正規輪廓,包括一些現在看不到原貌的傳統戲曲特質,為學生建立欣賞的基礎。我很高興出席者不都是戲迷,不是為捧場而來,而是真正會筆記提問。文化藝術的培植需要時間,不是朝種樹晚鋸板。我不是要年輕人明天就去買票看粵劇,只是希望他們認識這塊廣東文化瑰寶。

粤劇在革新方面步伐如何?

小心別亂了步伐。戲曲的鑼鼓音樂、臺步舞蹈、唱做唸打、 服飾舞臺,緊密糅合成為一套完整的程式,割裂改動便會 亂套,便不是戲曲。話劇、西方歌劇可以革新其中一些元 素,羅密歐與朱麗葉穿了牛仔褲,仍可唸莎劇的臺詞,唱他 們的詠歎調,但革新了戲曲的服裝,那水袖如何耍起來?水 髮如何甩起來?

絲毫也不能動?

可以賦予舊故事新生命,同是講長平公主,唐滌生跟清代的黃韻珊便對清廷有不同程度的鞭撻。《白蛇傳》可以在愛情故事之上突出社會控訴。我寫《文姬歸漢》,道盡蔡文姬的無可奈何。所謂高臺教化,就是呈現社會現象、人生困境,引起觀眾共鳴,從而思索如何自處。

拜師學藝和學院訓練兩者比較如何?

師徒制是捆綁式,以前師徒同住,弟子服其勞,徒弟在師傅教導別人的時候可以偷師,茶餘酒後與同輩切磋,或向前輩請益,也是從旁學習的機會。用心聆聽揣摩,無論技藝或待人處事,定必受用不已。可是一邊拜師學習,一邊上學校,又會疲於奔命。

學院系統訓練勝在循序漸進,條理分明。但是如果開辦的是大專課程,這個年齡學戲太遲了,只得兩至四年學習,也未足夠。最好是成立包含文化課程的寄宿戲曲學校,藝術的比例重一點,例如六年中學畢業後,文化科等同初中水淮。

七歲開始演藝生涯的你如何看「神童」的美號?

「神童」只是引誘觀眾入場的口號,不要自我迷戀,掉進名氣的陷阱裏。小孩子只要一點兒漂亮功夫便容易博得稱讚,但如果不自我增值,長大了何以為繼?在我之前的「神童」,好多只是短暫輝燦便歸於沉寂,我目睹觀眾對他們的失望離棄,視為最大警惕。我十六歲拜師,還要是全行最凶的老倌。就是因為自知不足,要跟隨嚴師重新學起。



Why did you agree to teach a course on Chinese operatic art at CUHK?

It's been my wish for decades to introduce students to the art of Chinese opera. Britain has Shakespeare, Italy its operas, Japan its Noh. They may be highbrow, but these arts are at least known and respected by most people in the countries. Why is it that our young people know so little about Chinese opera?

What do students find interesting about Cantonese opera?

Primary school pupils are always fascinated by the costumes and the make-up. They would be fascinated by my saying, for example, that the leading actress uses a natural substance discovered more than a thousand years ago to gel her hair. Secondary school students are of an impressionable age. It's better to analyse and reason with them. Historical stories would be more effective.

What were your considerations when designing the CUHK course?

My intention was to give students a general understanding of traditional Chinese opera, including features no longer seen today, laying down for them the foundation for appreciating the art. I am glad to see that not all the students were Chinese opera fans; they were serious learners who took notes and posed questions. The cultivation of artistic appreciation is not something that can be achieved overnight: it takes time. I don't expect young people to make a beeline for the box-office after the course, but I do hope they will learn to appreciate this piece of gem in Cantonese culture.

How is Cantonese opera in innovating?

Care and caution must be taken when introducing changes. The music, stage movements, dancing, singing, acting, recitation, martial art displays, costumes, stage setting, etc., all form an interlocking whole. Any change or deviation might turn it into something else. It's relatively easier to innovate in drama and Western opera. Romeo and Juliet in jeans, for example, can still speak Shakespeare's lines or sing Gounod's arias without looking odd. But if the Cantonese opera players were dressed in modern outfits, how could they do the 'willowy sleeves' or the hair swinging?

Does this mean that no change should be contemplated at all?

Old stories can be endowed with new lives. For instance, Tang Ti-sheng's *Princess Changping* is different from Huang Yunshan's. Social criticism can be introduced into the love story of *White Snake*. I hope to convey a sense of inevitability in my *Cai Wenji's Return to Han Soil*. The purpose is to lay before the audience the human predicament amidst social reality for them to reflect upon.

How would you compare the traditional apprentice system with today's college training?

The traditional apprentice system means a very close tie between master and apprentice: they live under one roof, and the apprentice carries out all the chores for the master. The apprentice may take away something when seeing how his master taught others, or compare notes with his peers at leisure, or consult his seniors for instruction. He would benefit a lot, in both performance techniques and social skills. However, serving as an apprentice and going to school at the same time is very demanding.

College training, on the other hand, is systematic and methodical. But I am afraid it may be too late to start the training at college level, not to mention that college is only two to four years. It is better to have a boarding school of opera with a six-year curriculum tilted towards Cantonese opera performance but at the same time offering grammar school subjects up to Secondary 3 level.

You made your debut at the tender age of seven. How do you see the label of 'child prodigy'?

The label is only a marketing ploy and one should not be too serious about it. It's easy for a kid to win applause with cute little tricks, but to sustain people's interest one must keep improving as one grows up. I witnessed many so-called whiz kids before me whose star faded after just a very short stint. That was a wake-up call and reminded me of my inadequacy. That was why I started my apprenticeship to learn everything from scratch under a very strict master at the age of 16.

S. Lo