# 中大/CUHK/通訊 NEWSLETTER/通訊



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態問題牽連日廣,公共衞生更需關注,「智慧城市」 在當今全球發展的相關性日益顯著。慢性疾病漸趨 普及,永續發展成了世界各地人口的共同訴求。若對 嚴峻的現狀視若無睹,後果堪虞。中大未來城市研究所當仁 不讓,致力開發多種技術與裝置,冀為粵港澳大灣區締造更 智慧更可持續的未來。

在大灣區內構建智慧城市群與研究所的願景不謀而合,也符合其可持續發展的全盤目標。遷徙到城市的人口佔全球人口的比例按年遞升,城市規劃與科技的緊密配合成了當務之急。研究所所長**馮通**教授解釋:「現時超過五成人口居住在城市,在三十年內,數字會上升至七成以上,城市基建會更形重要。城市持續演化,我們也必須同步演化。」

研究所在2013年成立,含城市信息學研究計劃,另「社區與地方管治」、「都市歷史文化和媒體」、「土地資源與房屋政策」和「都市可持續性」四個研究中心。每個範疇都由跨學科的學術及研究團隊統辦,成員並不局限於科技專才。要發展一個智慧城市,需從多角度着手考慮,包括身心健康、運輸、經濟、生活上的舒適和方便。

「單憑一個學科、一個視角,不足以應對如此龐大的課題。 我們用的是從下而上的手法,從多個獨特的研究範疇入手,」 馮教授說。「有待解答的問題既多且廣:怎樣把城市設計得更 好?樓宇的設計如何影響公眾衞生?如何同步應用個人資料 和大數據?這都靠我們融會不同領域的專識去探索。」

研究所探討的課題遍及社區和諧、樓價、城市氣候、樓宇重建、健康、文物保育和數據積累,雖然各有特定範圍,而又息息相關,牽涉繁複的參考架構。研究所冀能充當大灣區和亞洲未來發展軸心的支點,榮譽高級研究員**梁怡**教授説:「我們的研究和創新是以人為本的……這是最重要的定位。」

# 由下而上

研究所開發的個人化穿戴科技裝置正是從底層開始構建 智慧城市的實例。該所副所長兼城市信息學研究計劃主任 梁廣錫教授介紹三項有助推動公共衞生和資訊存取的發明時 說:「這些個人佩戴的智慧裝置可累積數據,藉着分析大數據,可監察環境和檢測空氣污染,建立智慧城市的根基。」

穿戴式心電監測系統是一種監察心血管健康的裝置。系統實時把心電圖信息上載網絡介面,專業醫護人員即可遠程監察穿戴者的心血管健康。由人工智能監管的網上平台,幫助斷定和篩檢病症。梁廣錫教授解釋:「相較傳統的儀器,我們這個心電監測系統的優點是易用、舒適和便於攜帶。在威爾斯親王醫院的模擬臨床環境裏,其表現準確可靠,不下於現時通用的較大型裝置。」

輕巧實用的穿戴式懸浮粒子監測系統可以測量穿戴者附近的PM1.0、PM2.5、PM10等空氣污染物,以及溫度和濕度等相關數據。至於隨插隨用的空氣污染監測系統則可以量度一氧化碳、二氧化硫、臭氧、二氧化氮、二氧化碳等空氣污染物,以及輻射、溫度、濕度和氣壓等。只需選擇相應的模塊插入主系統,便可監測不同的項目。梁廣錫教授説:「這個裝置雖然體積較大,也是可以攜帶或佩戴的。可以安放在汽車、單車、無人機或建築物上。這些測量系統的好處是可在室內室

外使用,甚至在摩天大廈樓頂這些少有收集懸浮粒子的位置都可以。」

馬教授補充:「目前香港共有十六個空氣污染監測站,但這個數目對於香港這樣一個複雜多樣的城市和環境是遠遠不足的。所以我們設計這些智能裝置,以便更密集更全面地收集數據,進一步監察環境。」

# 宏大圖像

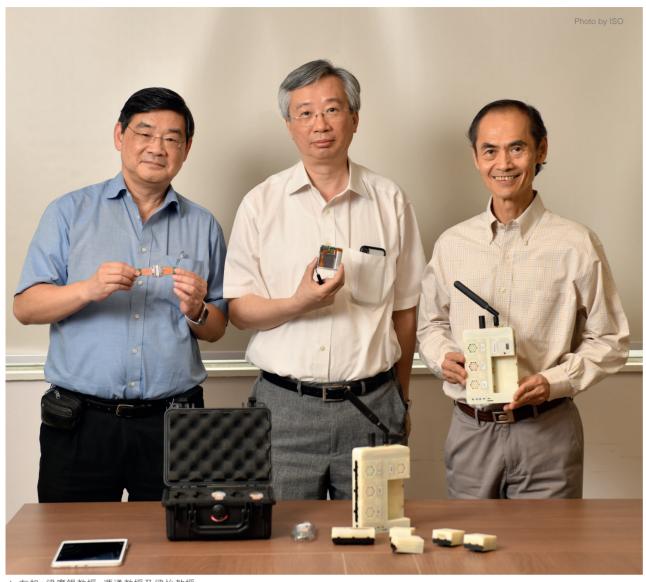
智能裝置的開發和應用是智慧城市的前沿。網上介面負責把從每一部裝置收集得來的信息與從數學模型、衛星和觀察站所得數據整合。個人醫學讀數與環境信息和大數據結合,可供大規模趨勢分析之用,也有助推廣公共衞生。這都是城市人口不斷增加之際必需關注的問題。

馬教授説:「大數據可以用以監察城市在可持續性、廢物處理和公共衞生等方面的表現。」網上平台可以鉅細無遺顯示出公共衞生的現況和污染物分布的圖像。這些日益先進的城市分析,足以使未來城市研究所晉身亞洲跨學科研究和城市發展的重鎮。



梁廣錫教授説:「智慧城市的概念不是我們自創的,而是源自多年前的一個運動,我們希望推廣和落實這個概念。在可預見的未來,也就是說在我們有生之年,智慧科技是不可或缺的。但要強調,這目標不是純粹追求科技,而是要全面改善人類生活。我們應為未來創造讓人們生活得更快樂、更健康並且更合乎永續原則的環境。」

未來城市研究所期於數年內推 出這些裝置·廣加應用·把我們 的城市送進未來。



▲ 左起:梁廣錫教授、馮通教授及梁怡教授 From left: Prof. Leung Kwong-sak, Prof. Fung Tung and Prof. Leung Yee

s ecological issues magnify and public health demands more attention, the notion of 'smart cities' is evolving from relevance to salience. Chronic disease remains pervasive and the demand for sustainability impacts human populations everywhere. Ignoring these plights promises steep consequences. Fortunately, CUHK's Institute of Future Cities (IOFC) shouldered the onus for the Guangdong–Hong Kong–Macau Greater Bay Area (GBA), developing initiatives for a smarter, more sustainable future.

Creating a cluster of smart cities within the GBA aligns with the vision of the IOFC and maintains their overarching goal of sustainability. A higher percentage of the global population migrates into cities with each passing year, necessitating a marriage between urban planning and technology. Prof. Fung Tung, Director of the IOFC, explains, 'Currently, over 50% of the population live in cities. Within 30 years, this number will be upwards of 70%. Urban infrastructure is becoming increasingly important and we're looking to optimize it. As cities continue to evolve, we must evolve with them.'

Established in 2013, the IOFC includes an Urban Informatics Programme and Centres of Community and Place Governance, Urban History, Culture and Media, Land Resource and Housing Policy, and Urban Sustainability. Multidisciplinary faculty and research teams constitute these divisions, hailing from fields beyond science and technology. A singular, technological focus won't catalyse change on its own. Wellness, travel, comfort, economy, convenience—multiple angles need to be considered to approach the development of a smart city.

'One single discipline, one single perspective, cannot solve a problem such as this. We are taking a bottom-up approach from many unique fields of study,' says Professor Fung. 'We have a lot of questions to answer. How can we better design cities? How can the design of buildings impact public health? How can we apply both individual data and big data? We cover a lot of ground across different areas of expertise.'

The IOFC's purview encompasses a confluence of disparate segments, including community harmony, housing costs, urban climate, building renovations, alleviation of health issues, heritage projects, and data accumulation. Sundry frames of reference become imperative. The IOFC aims to be the fulcrum upon which the future of the GBA and Asia pivots. 'Our research and innovation is driven by a human-based approach...the most important perspective,' explains Prof. Leung Yee, Honorary Senior Research Fellow of the IOFC.

## **Bottom Up**

Personalized, wearable technology developed by the IOFC pave the way for grassroots efforts. The IOFC has developed three devices to bolster public health and information access. Prof. Leung Kwong-sak, Director of the Urban Informatics Programme and Associate Director of the IOFC, explains, 'Our smart devices will help us support the city with big data analysis. We can employ these on an individual basis to carry out environmental monitoring and check air pollution from bottom-up.'

The Wearable ECG Monitoring System, a health monitoring device, allows easy and painless observation of cardiovascular health. By connecting real-time electrocardiogram (ECG)

information to an online platform, medical professionals can monitor it remotely. Artificial intelligence also monitors the online server, assisting in disease diagnosis and screening. Prof. Leung Kwong-sak explains, 'The benefit of our ECG device compared to traditional machines lies in its convenience, comfort, and portability. It has already performed accurately and reliably in a simulated clinical environment at the Prince of Wales Hospital. Our device is on par with other popular, bulkier devices currently in use.'

The Wearable Particulate Matters (PM) Monitoring System—small, light, and practical—measures local air pollution variables including PM1.0, PM2.5, PM10, temperature, and humidity. Similarly, the Plug-and-Play Air Pollution Monitoring System informs measurements of air pollutants such as ozone (O<sub>3</sub>), carbon monoxide (CO), sulphur dioxide (SO<sub>2</sub>) carbon dioxide (CO<sub>2</sub>), nitrogen dioxide (NO<sub>2</sub>), radiation, and temperature-humidity-pressure. The responsibility of measuring each variable is divided between distinct modules. 'This third device, while larger, can be carried or worn. It can be placed on vehicles, bicycles, drones, or buildings,' says Prof. Leung Kwong-sak. 'The advantage of these PM measurement devices is that they can be used indoors or outdoors, or even on the top of skyscrapers, where PM is rarely measured.'

'We designed these devices because, currently, Hong Kong has 16 total air pollution monitoring stations. This is inadequate for such a diverse city and environment as Hong Kong. Our smart devices provide a denser, more comprehensive set of data and better monitoring of the environment,' adds Professor Fung.

# **The Big Picture**

The smart devices represent the leading edge of the smart city project. The online platform responsible for the data from each device integrates the information with data from mathematical models, satellites, and observatory stations. The amalgamation of personal medical readings and environmental information with big data affords large-scale trend analyses and promotion of public health—all of which will become more and more necessary as city populations increase.

'Big data can be used to check the performance of cities regarding goals such as sustainability, waste management, and public health,' says Professor Fung. The platform will paint a meticulous portrait of public health and pollutant distribution. These advancements in city analysis play an integral role for the IOFC to become a hub for multidisciplinary research and urban development in Asia.

'This idea of smart cities isn't our own personal concept,' explains Prof. Leung Kwong-sak. 'It's a movement that dates back to 10 years ago. We're trying to push the field. The foreseeable years ahead—within our own lifetimes—need smart technology. But, again, the goal isn't purely technological. To create living environments for people to lead happier, healthier and more sustainable lives is what the future should be about. Improving our lives comprehensively.'

Within the coming years, the IOFC intends to roll out these devices and begin to elevate cities, quite literally, into the future.

Phil Rosen



起語音技術·大家可能想到已故物理學家霍金·他所使用的語音合成器透過追蹤其眼球移動·逐一選擇字母·以機械化的語音拼讀出單字和句子。在6月3日舉行的「智慧的探索」公開講座系列第五場·工程學院**蒙美玲**教授(中)以「懂聽懂說的人工智能如何改善人類的學習及生活」為題·和二百多位現場聽眾分享怎樣用人工智能改進語音技術·同時應用這些技術於語言學習和輔助講通。

現時微軟的語音識別技術誤差率僅5%,與人類相同。遇上不確定的語音,人工智能便會仿效人類,從上文下理推斷。蒙教授運用語音識別技術,開發一套語言學習系統,除可頗準確地辨別語音外,還可顯示發音錯誤之處。蒙教授舉例:「廣東話和普通話沒有齒間摩擦音,母語為廣東話的人常把英文thick [Øɪk]讀作[fɪk]:母語是普通話的則容易讀成sick[sɪk]。」該系統可以顯示這些偏差,說話者便會「知錯」。然後,系統產生糾正反饋,讀出正音,同時以視像示範發音部位的變化,使用者便「能改」。

合成句子比單字層面挑戰更大。一般句子的意義除了根據單字的排序外,也視乎説話人在個別字音會否以拉長、加重或調高音調來達到特別效果。人工智能要完全模擬活人説話,便必須做到這一點。蒙教授的團隊透過研究同一字詞不同處理方法的特徵差異,在合成發聲中充分拿捏箇中分毫,從而傳達準確及完整的意思。另一方面,語音轉換技術可以把某人在一個語言的聲音特徵轉移至另一個語言,例如掌握了霍金説英語的聲音特徵,系統可以運用他的聲音合成維妙維肖的中文發音。

現時香港約五萬人有口語障礙,當中四成沒有口語交流能力。醫院管理局特製了供口語障礙者指圖示意的溝通書。蒙教授的團隊將之改良,製作可個人化的電子版溝通書,用者點擊圖像後,電子書便會讀出相關字詞,用者可按個人需要增減內容,例如輸入親友的相片和稱謂,電子書會把文字轉換成語音讀出。蒙教授的團隊與微軟合作,至今電子溝通書版本已增至十三種語言,涵蓋二十多種口音。蒙教授近年還致力為中風及腦癱等病人研發粵語智能語音系統,以幫助他們發聲。

與其他新興科技一樣,語音技術同樣會帶來安全問題。蒙教授說: 「一些保安系統是用語音來識別身分的,語音合成技術或者可以攻破這些系統。我們也正在研究一些『盾』,以分辨合成的語音和自然語音。」 Stephen Hawking, the late physicist, may come to mind. Tracing his eyeball movement, his speech synthesizer could pick up the letters one by one, and read out rather mechanically the words and sentences formed. Prof. Helen Meng (middle) of the Faculty of Engineering spoke on 'Artificial Intelligence in Speaking and Listening for Learning and Well-Being' in the fifth lecture of 'The Pursuit of Wisdom' Public Lecture Series on 3 June. She shared with the 200 audience members present how artificial intelligence may be applied to enhance speech technology and used in aid of communication and language learning.

The speech recognition technology developed by Microsoft can transcribe human speech with an error margin of 5%, which is as good as human communication. When it is unsure about a certain sound, it can take into account the context of the speech to make better guesses, like humans do. Applying speech recognition technology, Professor Meng developed a language learning platform which can not only identify words accurately, but also detect mispronunciation and perform diagnosis. 'Take, for example, the interdental fricative sounds which are absent in Cantonese and Putonghua. Speakers whose mother tongue is Cantonese may mispronounce "thick [θιk]" as [fɪk] while those of Putonghua may mispronounce the same word as "sick [sɪk]",' said Professor Meng. The platform can detect these discrepancies and generate corrective feedback. In addition to giving the correct pronunciation, the platform uses animation to illustrate the sound's articulation.

The challenges are amplified going from single words to sentences. The meaning of a sentence derives not only from the order of the words but also from whether the speaker has enounced some part of it in a special way to achieve a certain purpose. Al-synthesized speech has

to mimic this if it is to sound perfectly human. Through studying lexicons in their different manifestations in natural speech, Professor Meng's team is able to deliver accurate and full meanings in synthesized speech. Further, speech conversion technology could transport the characteristics of a human voice in a language into another. If the characteristics of Hawking's voice in his spoken English are captured and analysed, then it's possible to re-present his voice speaking Chinese to a Chinese audience.

In Hong Kong, around 50,000 people suffer from speech impairment. Forty per cent of them are unable to communicate orally. The Hospital Authority has published a special book which enables those with speech impairment to communicate by pointing at images. Professor Meng has gone a step further and developed a customizable version of the book-e-Commu-Book. Upon the user clicking an icon thereon, the e-Commu-Book will read out the corresponding lexicon. The user can then edit the content by, say, inputting the picture or the appellation of a family member. The e-Commu-Book will then convert the text into speech. Collaborating with Microsoft, Professor Meng's team has developed the e-Commu-Book in 13 languages covering over 20 vernaculars. In recent years, Professor Meng has been dedicated to developing Cantonese smart speech systems for patients with stroke and cerebral palsy.

Like other emerging technologies, speech technology comes with security problems. 'Some security systems use speech for identification, making speech synthesis a convenient tool for sabotage. Our attention is also turned to creating "shields" to keep synthesized speech distinct and distinguishable from human speech,' said Professor Meng.

M. Mak



# 中大六學者任香港青年科學院院士

## Six CUHK Professors Elected into Hong Kong Young Academy of Sciences

為推動本港創科發展,香港科學院成立香港青年科學院,邀請三十一名在多個科研領域表現優秀的年輕學者出任創院院士,當中六人來自中大,包括生命科學學院的陳浩然教授(右一)、生物醫學工程學系湯啟宇教授(左一)、物理系李華白教授、機械與自動化工程學系盧怡君教授、化學病理學系呂愛蘭教授(右二),以及地球系統科學課程戴沛權教授(左二)。香港青年科學院的成立典禮於6月9日在香港科學園舉行,行政長官林鄭月娥親臨主禮。該院將主力推動中學STEM教育,培養年輕人對科學的興趣。

To promote the development of innovation and technology in Hong Kong, Hong Kong Academy of Sciences set up Hong Kong Young Academy of Sciences (YASHK). Thirty one young scientists with outstanding achievements in

different disciplines and research areas have been elected into YASHK. Six of them are from CUHK, including Prof. Edwin Chan (1st right) from School of Life Sciences, Prof. Raymond Tong (1st left) from the Department of Biomedical Engineering, Prof. Li Huabai from the Department of Physics, Prof. Lu Yi-chun from the Department of Mechanical and Automation Engineering, Prof. Kathy Lui (2nd right) from the Department of Chemical Pathology, and Prof. Amos Tai (2nd left) from the Earth System Science Programme. The inauguration ceremony of YASHK was held on 9 June at Hong Kong Science Park. The Chief Executive of HKSAR, Mrs. Carrie Lam, officiated at the ceremony. YASHK aims to promote STEM in secondary schools and arouse students' interest in science.



# 中國資本市場研究廣獲徵引

## **Research on Chinese Capital Market Recognized**

根據國際會計學術期刊Abacus,中大商學院的學者在中國資本市場金融和會計領域研究方面,於權威期刊的論文發表量及論文獲徵引的次數,位居世界前列,當中會計學院的吳東輝教授(左)和張田余教授(右),在1999年至



2018年間分別發表了六篇有關中國資本市場的研究論文。張教授的論文引用次數達2,493次·吳教授則是1,028次·分列全球第二及第三。

According to the international accounting academic journal *Abacus*, CUHK's Business School houses the top ranked researchers in terms of publication and citation quantities on the Chinese capital market. Prof. Donghui Wu (left) and Prof. Tianyu Zhang (right) from School of Accountancy were named the second most prolific researchers in the world, each with six research papers published in well-respected Tier 1 journals in the past two decades. Professor Zhang's and Professor Wu's research papers received 2,493 and 1,028 citation counts, respectively, ranking second and third in total citations.

# 網絡課程助全球閱讀困難兒童

# Online Course Helps Struggling Readers around the Globe

心理學系Catherine McBride教授(中)設計的大型公開網絡課程「如何教育世界各地閱讀困難兒童」, 為需要照顧閱讀困難兒童的老師、家長及相關人士而設。第一期課程於本年3月31日至4月28日在 Canvas Network網絡課程平台開辦,吸引近七千五百名來自全球各地的人士報名參加。多名來自內地、 香港、菲律賓、伊朗、贊比亞、加拿大,以及美國的專業人士,義務協助學員於網上討論,交流在不同語言 及文化背景中的教學經驗與看法。

Prof. Catherine McBride (middle) of the Department of Psychology designed a massive open online course 'Teaching Struggling Readers around the World' for teachers, caregivers, and other interested parties who are teaching struggling readers. The first run of the course was held on Canvas Network between 11 March and 28 April 2019. Nearly 7,500 students around the globe enrolled. Professionals from mainland China, Hong Kong, the Philippines, Iran,



Zambia, Canada and the US helped students partake in online discussions and share ideas and teaching experiences with different languages and within different cultural contexts.

# 「與傑出領袖對話」圓滿閉幕

# **Dialogue with Women CEOs Concluded**

商學院於5月17日舉辦2018-19年度「與傑出領袖對話」最後一場研討會,主題為「培育新一代領袖」。三位講者包括瑞銀香港區行政總裁盧彩雲女士、花旗集團香港及澳門區行長伍燕儀女士及亞洲保險行政總裁黃子遜女士,她們一致認為,現時僱主要求應徵者具備多方面長處和技能,尤其是靈活變通、毅力、分析思維和人際技巧。參加者包括逾九十家本地中學校長、老師和就業諮詢主任。「與傑出領袖對話」系列由商學院聯同由多位香港金融界的女行政總裁組成的Women Chief Executives合辦,共有五輪對話活動,旨在與年輕人探討和交流有關商界和社會議題的觀點。

CUHK Business School held the last session of Dialogue with Women CEOs 2018-19 titled 'Nurturing the Next Generation of Leaders' on 17 May. Three women chief executives, Miss Amy Lo, Country Head and Chief Executive of UBS Hong Kong Branch; Miss Angel Ng, Chief Executive Officer, Citi Hong Kong and Macau; and Miss Winnie Wong, Chief Executive Officer, Asia Insurance Company Limited, took part in the panel discussion. The three panelists highlighted attributes and skills that employers look for in candidates include versatility, persistency, analytical thinking, and interpersonal skills. Principals, career masters, and teachers from more than 90 local secondary schools attended the event. The Dialogue with Women CEOs series was organized by CUHK Business School and Women Chief Executives, an informal group established by women chief executives from the financial services industry in Hong Kong. Consisting of five dialogue events, it aims to empower the next generation through exchanges of views on business and social issues.

# 陳重娥教授獲美國糖尿病協會嘉許

# Prof. Juliana Chan Honoured by American Diabetes Association

內科及藥物治療學講座教授陳重娥(左)榮獲美國糖尿病協會頒發 2019年Harold Rifkin Award,以表彰陳教授在糖尿病研究方面的 卓越成就和國際影響力。頒獎典禮於6月10日在美國三藩市舉行。

過去三十年,陳教授建立多個大型患者隊列、生物資料庫和數據庫, 以斷定亞洲糖尿病的病因和後果。通過系統研究,陳教授確立了以團隊為本的治療架構有利於減低糖尿病的臨床事故和死亡率。她並創立了十一個國家參與的亞洲糖尿病聯合評估計劃,收集數據,並按個別病人的風險水平,建議照護流程,支援病者,並克服臨床慣性。

陳教授年來發表逾五百篇研究論文和二十篇書籍章節,栽培了數百名 研究生和博士後研究員,並成立研究所、實驗室和糖尿病中心,倡導公 私營協作,其貢獻裨益亞洲以至全球數以百萬計生命。



Prof. Juliana Chan (left) of the Department of Medicine and Therapeutics received American Diabetes Association's 2019 Harold Rifkin Award for Distinguished International Service in the Cause of Diabetes. The award presentation ceremony took place on 10 June in San Francisco.

During her career spanning more than three decades, Professor Chan has established large patient cohorts, biobanks and databases to define the causes and consequences of people with diabetes in Asia. She has systemically confirmed the benefits of a team-based structured care approach to reducing clinical events and mortality in people with diabetes. She also developed the innovative, 11-country Joint Asia Diabetes Evaluation (JADE) programme to gather data and issue personalized reports to empower individual patients and reduce clinical inertia.

Professor Chan has published more than 500 papers and 20 book chapters, trained hundreds of graduate students and post-doctoral fellows, and has established institutes, laboratories and diabetes centres to generate and translate evidence to practice through public-private partnerships. Her efforts to ensure progress in the fight against diabetes has improved millions of lives in Asia and worldwide.



# 認識晚晴照顧

# **Exploring End-of-Life Care**

賽馬會老年學研究所在3月至5月期間舉行四場有關生死教育的講座和工作坊,包括CU@Death Café X 真人圖書、音樂治療、吾好吾理@EOL及晚晴照顧。參加者逾一百二十人,包括長者及超過五十位正在中大修讀老年學和社會工作學系的本科生和碩士生。

講座和工作坊的講者包括輔導心理學家、遺體防腐師、音樂治療師等。學生透過與長者和真人圖書的互動和體驗活動,探討生死和晚晴話題,例如將來病重時可以怎樣面對、規劃及選擇合適的醫療和照顧模式,以及他日工作時碰上晚期病人或家屬,可以用甚麼方法溝通等。



The CUHK Jockey Club Institute of Ageing held four talks and workshops on life and death topics between March and May. More than 120 participants, including seniors and some 50 undergraduates and postgraduates studying gerontology and social work at CUHK, took part in the events. The speakers were professionals from various sectors, such as counselling psychologist, embalmer, and music therapist, etc.

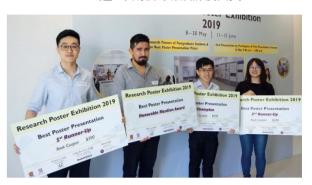
On the other hand, students were motivated to explore and analyse the issues of life and death through experiential activities and interacting with seniors and human books. For example, they thought about how they would handle, plan and choose medical treatments and care if they suffered from severe illnesses and how they would liaise with the terminally-ill and their family members in their future workplace.

# 為研究添色彩

#### **Presenting Research Findings with Posters**

由中大圖書館、研究院及自學中心合辦的「研究海報展覽2019」,分別於5月8日至30日在大學圖書館地下、6月11日至15日在康本國際學術園舉行。展覽鼓勵研究生以海報向大學社群介紹其專研項目,提升學術簡報技巧。是次展覽共選出二十張六個學院的研究生海報,參展者於簡報會介紹其研究成果,並競逐三項「最佳海報及簡報」大獎,最終由兒科學系哲學博士生潘駿生(右二)榮獲冠軍,亞軍為機械與自動化工程學系王乾乾(左一),季軍為兒科學系陳楓(右一),社會學系哲學博士生Francisco Olivos(左二)則獲海報設計優異獎。

Co-organized by the CUHK Library, the Graduate School and the Independent Learning Centre, the Research Poster Exhibition 2019 for CUHK postgraduates was held in the University Library from 8 to 30 May and from 11 to 15 June in the Yasumoto International Academic Park. The exhibition



encouraged postgraduates to present their research to the University community using posters and enhanced their presentation skills. The exhibition this year selected 20 posters submitted by postgraduates across six Faculties. They presented their research to the audience and competed for three Best Poster Presentation Awards in the oral presentation. The champion was awarded to Mr. Chun-sang Pun (2nd right), PhD student of Department of Paediatrics, the first and second runner-ups were Mr. Qianqian Wang (1st left), Department of Mechanical and Automation Engineering; and Miss Feng Chen (1st right), Department of Paediatrics, respectively. Mr. Francisco Olivos (2nd left), PhD student from Department of Sociology, was awarded Honourable Mention of Poster Design.

# ■ 宣布事項/Announcements @



## 榮休教授

# **Emeritus Professor**

文化及宗教研究系黃根春教授獲頒榮休教授名銜,由2019年 8月1日起生效。

Prof. Wong Kun-chun at the Department of Cultural and Religious Studies has been awarded the title of Emeritus Professor, with effect from 1 August 2019.



# 哈佛燕京學社訪問學人資助計劃

Scholarship at the Harvard-Yenching Institute

2020至21年度哈佛燕京學社訪問學人資助計劃現接受申請·獲批者可前往哈佛大學進修或從事研究工作·為期十個月。資助項目包括單人來回機票、生活津貼(以十個月為限)、醫療、聘請研究助理及學術研討會津貼。

申請表格可於人力資源處網頁下載(員工資訊 → 正向工作間與員工發展 → 學習與發展 → External Training Opportunities)。

請把申請表格及有關文件於2019年8月9日或之前,經所屬學系系主任及學院院長送交培訓事務經理周偉榮先生,以轉呈大學考慮。哈佛燕京學社之代表或會來港接見通過初部甄選者,查詢詳情可電郵至hro-staff.dev@cuhk.edu.hk。

Applications are now invited for the Harvard-Yenching Visiting Scholars Programme tenable in 2020–21. This programme allows younger faculty members in the humanities and social sciences to study and conduct research at Harvard University for 10 months. The Scholarship will cover round-trip airfare, a monthly stipend, fees for health insurance, and funding for hiring a research assistant or an editor and for participating in academic conferences in North America.

Application forms are obtainable at the Human Resources Office's website via the following navigation path: Staff Area ⇒ PWSD ⇒ Learning & Development ⇒ External Training Opportunities

Nominees should submit a Summary of Submission (HRO/SR3), also obtainable from the above website, together with the completed application forms and requisite supporting documents, with the endorsement of the Department Chairman/Unit Head and the Faculty Dean as appropriate, to Mr. Daniel Chow, Training Manager, on or before 9 August 2019 for internal review. Shortlisted will be interviewed by the Harvard-Yenching Institute interview panel in Hong Kong. For enquiries, please e-mail hro-staff.dev@cuhk.edu.hk.

# 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。

# 雅 共 賞 / ARTICULATION



# 爸爸辛苦了!

# **Bittersweet Fatherhood**

父親節剛剛過去,大家有沒有趁此機會好好向爸爸表達愛意呢?文物館在此為各位辛勤的爸爸送上一份遲來的父親節禮物。這幅由清末廣東大師居廉(1828-1904)所畫的《牽車圖》相信會令各位爸爸深有共鳴!

這幅扇面的右方是兩個孩子坐在木頭車上玩耍,中間則是媽媽站在車頭一手揚鞭,一手執韁。順着韁繩看過去,我們可以看到牽着車的不是牛,也不是馬,而是手腳繫上韁繩,兩手抓着車把,還一面回頭笑得好疲倦也好溫柔的爸爸。爸爸心裏面在想甚麼呢?我們可以從畫上題詩知道:

自嘆苦生涯。一個家,千觔車,精疲力竭為牛馬。兒飢叫爺,女寒叫爹;胭脂娘子鞭還罵。勸渾家,休怨咱,都是命途差,世事太紛拏,相就些,莫嗟呀。狰牙慧舌何為者,沁心有茶,養目有花,富貴榮華隨他罷,力不加,肩難卸,拖得似人蝦。

《牽車圖》這個題材並非居廉首創。揚州派畫家黃慎(1687-1770)也有《牽車圖》傳世,現藏天津博物館。畫中的爸爸同樣「拖得似人蝦」地拉着一家大小,但卻愁眉深鎖,滿臉滿身的不情願。相比之下,居廉筆下的爸爸雖然臉上也看得出疲態,但會笑着哄老婆說「罵到臉容扭曲不是很無謂嗎?還是喝口茶潤潤心,賞賞花養養眼吧」,真的是個很有生活智慧的暖男呢。

比黃慎時代要晚的袁枚 (1716-1798) 在《小倉山房詩集》中亦有詩回應一幅由許滄亭所畫的《牽車圖》。從他的詩中,我們可以看到相當類似此圖的元素,例如「全家置一車,主人牽以走。車中坐妻孥」和主人「精神難抖擻。猶有眷戀心,一步一回首」的設定、狗與尊罍的出現等。詩中「試問牽車人,何如車上狗!狗態尚安閒,汝身能逸否?」的感慨,相信居廉筆下的爸爸聽到也會大力點頭,表示認同吧。

文物館藏的這張《牽車圖》, 純粹是畫家的「戲筆」, 是一個辛苦愛家的平凡爸爸的自白, 表現作者生活化的幽默感, 也讓我們看到當爸的不容易。

Heidi Wong



# ■ 醫醫筆寫/Doctors' Notes 🖘 🦻



# 防乳癌 求於己

# **Breast Cancer Prevention DIY**

乳癌目前是本港女性最常見的癌症,每十六名婦女便有一人在其一生中患上。乳癌有多個風險因素,不少是個人可控制的。

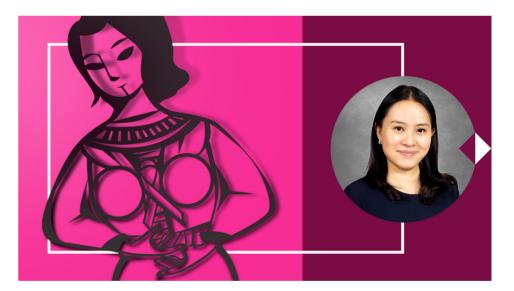
女性患乳癌與雌性荷爾蒙有關,雌性荷爾蒙可以刺激乳房細胞生長,女性受雌性荷爾蒙影響的時間愈長,患乳癌風險愈高。香港乳癌資料庫於2014至2017年間進行對照研究,從人口統計特徵和生活習慣等方面,對五千一百零二名乳癌患者和五千五百二十名背景相若的健康市民進行比較,發現從未生育或第一胎晚育(三十五歲以後)的女性患癌風險較高。反過來説,曾經生育及年輕時生育的女性患癌風險則較低。負責這項研究的賽馬會公共衞生及基層醫療學院陳英凝教授指出:「婦女餵哺母乳期間,雌性荷爾蒙會減少,同樣可以減少患癌機會。餵哺愈久,患癌機會愈低。」

除了荷爾蒙外,缺乏運動和肥胖也會增加患癌風險,約八成病人每週運動少於三小時:肥胖者(體重指數超過25)的風險高46%。逾四成病人表示感受到高度精神壓力,即一年內有六個月或以上感受到壓力,比例是對照組的兩倍。多吃肉類和奶製品,亦增加患癌風險。

與其他癌症一樣,家族病史是乳癌的風險因素。陳教授說:「例如BRCA1突變基因可以誘發卵巢癌和乳癌,影星**安祖蓮娜·祖莉**便是得知遺傳了該突變基因,進行切除乳房手術,以減低患癌風險。」上述針對本港婦女的研究指出,只有一成多病人的直系親屬曾患乳癌。更多其他風險因素卻非不可改變,如年輕生育、餵哺母乳等,個人或有選擇餘地;做運動、減壓和保持均衡飲食習慣,個人也有較大空間可以控制。

Breast cancer is the most common cancer among women in Hong Kong. One in 16 local women are afflicted by breast cancer in their lifetime. While there are various risk factors leading to breast cancer, many of them can be modified by the individuals themselves.

The female hormones which stimulate breast cells to grow are related to breast cancer. The longer the duration that a woman is exposed to these hormones, the higher the risk she develops breast cancer. The Hong Kong Breast Cancer Registry conducted a case-control study on 5,102 patients and 5,520 non-patients whose demographics match those of the patients. By comparing various factors among the two groups, it was found that not giving birth or giving birth to a first child after the age of 35 increases a woman's risk of developing breast cancer. Comparatively, the risk is lower for a woman who has given birth or had an earlier pregnancy. 'The level of female hormones is reduced when a woman breastfeeds,



thus reducing her risk of breast cancer. The longer duration that a woman breastfeeds, the more the risk is reduced,' said Prof. **Emily Chan** of the Jockey Club School of Public Health and Primary Care who led the study.

Hormonal explanation aside, a lack of physical activity and obesity increase the risk of breast cancer. Around 80% of the surveyed patients had less than three hours of exercise per week, while obesity (BMI>25) increased the cancer risk by 46%. More than 40% of the patients reported high levels of stress, i.e., for more than six months in a year, double that of the control group. Diets rich in meat and dairy products also increase the risk.

Like other cancers, family history is a risk factor. 'For example, BRCA1 mutation may lead to ovarian cancer and breast cancer. Aware that she carried the mutation, actress **Angelina**Jolie had a double mastectomy to reduce the risk of cancer,' said Professor Chan. The above research on local cases revealed that only slightly more than 10% of patients had a first-degree relative with breast cancer. Most other risk factors could be modified. It is possible for a woman to reduce the cancer risk by having early pregnancy, breastfeeding, doing exercise, managing stress and maintaining a balanced diet.

M. Mak

# 口談實錄/Viva Voce

# 盧惠玉 Sandra Lo

# 資訊處總編輯

# Chief Editor of Information Services Office

自小熱愛語文,早年任教中文,於報館當翻譯,其後加入一大專院校 出任全校唯一的中文主任。於中大資訊處兢業十二載,揮寫審思,為 各類文稿和刊物把關,是要求嚴格的總編,也是眾人敬愛的老師。

A language lover since childhood, Ms. **Sandra Lo** has carried out a lifelong romance with letters: first as a Chinese language teacher, then as a news translator, and later as the only Chinese language officer in a higher education institution. Her 12 years with the Information Services Office as a gatekeeper for all writings and publications continues this labour of love. In the eyes of her colleagues, she is a scrupulous editor-in-chief and a beloved and revered teacher.



即使家貧,家母也堅持送我進幼稚園,在那個年代,可不是必須的。學校連板間課室也沒有,只有矮矮的屏風,即使坐着也可耳聞目睹鄰班的動靜。我就這樣「兼讀」比我高一班的課,晚上又拿比我高三班的姐姐的課本來看,久而久之,認字多了。上了小一,同學還在用「春天」作句,我已洋洋灑灑把學過的甚麼春回大地百花盛放蝴蝶飛舞入文,寫滿了十乘十的格子簿。

#### 聽說也有父母的影響?

家父在五六十年代曾在《虎報》和《南華早報》任職校對,問他英文讀音,他不會直接讀出來,而是乘時教我們拼音。家母沒受教育,認得的字都是靠讀聖經學回來的,遇上生字,她會多番向我查問,直到她記得為止。她的口語非常生動精準,我家四兄妹平日交談或口角,也很注重用詞準確的。

# 你校對文稿鉅細無遺,如此心細如塵是性格使然嗎?

許是我性格敏感吧,同一句話,我會有很多解讀,所以我容易看到文稿的 歧義。多年批改校對下來,我大約知道問題會出在哪裏,會先看那些地方。 我先生常取笑我有靜待別人犯錯然後跳出來糾正的毛病,我說請你原諒, 那是大半生職業警覺使然。當然,和做人處事一樣,有些毛病如不涉及大 是大非,是可以容忍的。

## 半生為文, 對寫作最深刻的領悟是甚麼?

寫作最理想是情理兼備。我是個感性的人,但隨着人生閱歷的累積,便領悟 到濫情對寫作和人生都沒有益處,開始嚮往和鍾情感性知性兼備的文章。

## 有說以興趣為業,其樂無窮;亦有說工作會扼殺興趣。你怎樣看?

為了謀生而犧牲興趣的例子聽過不少,但興趣是可以在公餘培養的,樂趣是可以在工作尋找的。我們不一定需要與工作談戀愛,但要對它負責。我很感恩一直以來的工作都是與自己的興趣有關。

## 你怎樣看現今世代的語言環境?

語言離不開人的思想和心態。現代人節奏急促,精雕細琢似已不合時宜。 現在我們這些雖非博學鴻儒,但已經是老派了。不論以前或現在,我都是 喜歡簡潔精準,不要絮絮叨叨,歇斯底里。

## 對年輕寫作者有何勸勉和忠告?

太言重了。尊重文字,一字一詞,都有意義,不要囫圇吞棗,含糊了事。寫中文的,多讀點文言文,就從《古文觀止》開始吧。

# 得知你愛好廣泛,可否分享一下?

我參與合唱超過半世紀了,還記得八歲時在教會一位導師教導下,第一次接觸二重唱,和姐姐分唱兩條旋律,顫動出仿似有光量的和諧,幼小心靈感動不已。我學的是西方美聲,但京崑粵越評彈均為我所愛。烹飪是我的另一嗜好,趣味在於可按本子辦事,也可自由發揮。在更深人靜時準備食物,是非常療癒的。

## 退休有何打算?

整理身外物,適度斷捨離,隨性而活,做好事。



How were you initiated into the world of letters?

Despite modest means, my mother insisted on sending me to kindergarten, which was something of a privilege at that time. My neighbourhood kindergarten did not have walls between classrooms but only partitions. The goings-on of the neighbouring class were within earshot and sight. That's how I was tutored in a higher grade. At night, I read the textbooks of my sister who's three grades higher. My vocabulary grew fast and by primary one, when my classmates were still describing spring with 'spring', I was already using metaphors like 'nature awakening' and 'new blooms everywhere'.

Seems like there were parental influences as well?

My father worked for *The Standard* and *South China Morning Post* as a proofreader in the 1950s and 60s. When asked how a word should be pronounced, he wouldn't just say it for us but would approach it phonetically. My mother didn't receive any formal education. Her literacy came from reading the Bible. She would repeatedly ask me about new words until she had learned them by heart. She was always vivid and precise in her expressions. Because of that, linguistic felicity was very much upheld by me and my three siblings, whether in daily conversations or in arguments.

You are meticulous between the lines on a page and beyond. Were you born that way?

Maybe I'm a sensitive person. I could see many meanings behind a single word or phrase. So I pick up the ambiguities in a text easily. My years of editing experience would immediately point me to where most problems might lie. My husband always said I have a knack for lying in wait and pouncing on people at the first sign of a mistake. I would beg his pardon, and blame it on professional reflex. Of course, like many things in life, a mistake can be tolerated if it's not a matter of life and death.

Can you share your deepest insight about writing?

The best kind of writing always carries that perfect blend of sense and sensibility. I am of the sentimental type, but life has taught me that sentimentality does us no good in both writing and life. The older I grow, the more I begin to appreciate and admire writings that touch the heart and pique the brain.

Some say one should do what one loves; others say work kills joy. What's your take on this?

We are no strangers to stories of people sacrificing their interests to make ends meet. But interests can be cultivated outside work, and work can be enjoyable, too. We do not need to fall in love with our work, but we need to be responsible. I am grateful that all the jobs I have done so far align with my interests.

How do you view the state of language today?

Language mirrors our thoughts and attitudes. Modern life proceeds at such a breakneck speed, leaving very little time for the *belles lettres*. Though far from being erudite in any sense, I am considered old-school by many. Now or in the past, I love to keep things simple and spot on—there is no point in rambling on hysterically.

Any word of advice to the young writers?

What a flattering question. Well, respect words. Every word or phrase counts. Don't just lump things together thoughtlessly. With Chinese, it helps to read more classical texts. Good to start with *Guwen Guanzhi*.

We know you have very wide interests. Mind sharing one or two with us?

I have joined the chorus for more than half a century. I was eight when a church tutor taught me and my sister to sing in a duet. Our two lines seemed to twine into a shimmering harmony. I was profoundly moved. What I practise is Western *bel canto*, but I am also fond of all genres of Chinese opera. Cooking is another passion of mine. You can follow the recipe to the letter, or you can improvise. To prepare food in the still of the night is therapeutic.

# Any plans for life after retirement?

To take stock, and part with the nonessentials. To follow my heart, and do good.

Amy L.