# 中大/CUHK/通訊 NEWSLETTER/通訊









年香港公立醫院的醫生流失率達5.9%, 創歷年新高, 放射科和病理科皆為重災區。據IBM推測, 九成醫學數據都是醫學影像, 可見醫學影像對臨床斷症日益重要, 若負責相關專業的放射科和病理科醫生人手短缺, 影響匪淺。中大計算機科學與工程學系**王平安**教授及其團隊成功研發的人工智能醫學影像識別技術, 可減輕醫生的工作量, 提升斷症的準確度。

深度學習屬人工智能的分支,以卷積神經網絡(CNN)作影像運算,能夠「看」到影像細節,加以分析。王教授説:「人工智能平台會按醫護人員或工程師的指示分析和解讀數據,過程猶如大腦從眼睛接收視覺刺激,繼而建構有意義的資訊。這系統就像會下圍棋的人工智能程式AlphaGo,只要給它足夠的數據作運算訓練,便能運籌決勝。」

當醫護界廣泛採用這個自動化檢測與分析系統,醫生便會多了一位永不怠倦的小助手,能快捷有效地找出病灶,輔助醫生提供及時、適切的療程。王教授的團隊近年針對肺癌及乳癌(香港兩大常見危疾)個案驗證其人工智能平台成效,準確率分別高達91%及99%,王教授說:「癌症的確診個案與日俱增,對醫療系統造成一定壓力。不過,以往醫生要花十五分鐘去解讀的醫學影像,已可以通過智能平台快速識別病灶,讓病人更快接受合適的治療,影響深遠。」

#### 醫生的得力助手

早期肺癌多以肺結節的形式出現,醫生會在肺部CT影像發現細小的陰影。單靠肉眼判斷一幅CT影像需時約五分鐘,準確度或會因為放射科醫生的經驗與專注力而有差異。研究團隊採用三維CNN深度學習技術,能辨別胸腔CT圖像的結構特徵,於三十秒內找出有問題的肺結節。王教授的博士生實琪說:「掃瞄立體的CT和MRI影像難度較高,我們的團隊率先提出以三維CNN技術識別立體影像的特徵,這項技術在國際賽事屢獲佳績。」

乳癌是香港女性最常見的癌症,要準確斷症,醫生須抽取活組織樣本仔細化驗,但一幅數碼活組織全切片圖像的解像度非常高,檔案大小可達1GB,相當於一部九十分鐘高清電影,除了需要一個穩定的系統處理高像素的數據,檢測過程也十分費時費力,憑肉眼判斷一幅影像耗時十五至三十分鐘。王教授的團隊研發出一個CNN模型,可於五至十分鐘內自動識別癌細胞,較其他先進的系統快六十倍,準確度比資深病理科醫生的判斷高2%。

肺癌的假陽性表徵與肺結節十分相似,要識別肺結節難度極高。王教授說:「我們於是設計一個網上篩檢系統,找出懷疑有問題的樣本去訓練人工智能系統,以提升篩檢的準確度,再以一個深度學習模型定位,並挑選出有問題的肺結節。」去年,團隊的深度學習技術於MICCAI(醫學影像計算與計算機輔助介入國際會議)贏得醫學影像分析最佳論文獎。

團隊於2013年着手研究醫學影像分析項目,分析了逾五千個來自不同國家的病例。竇琪說:「為尊重病人私隱,我們會在

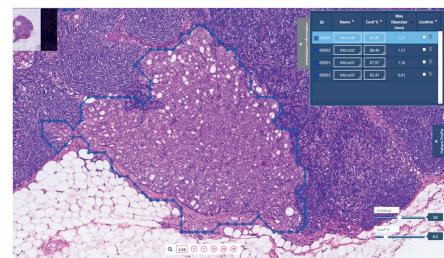
分析數據前移除他們的個人資料。」 自動化醫學影像分析於醫護界漸得 好評,王教授冀望業界數年內可廣泛 應用其深度學習系統,他說:「我們 會把系統應用於更多常見的危疾,例 如子宮頸癌和鼻咽癌,現時團隊與 中山大學腫瘤防治中心合作,研究以 人工智能勾劃鼻咽癌放射治療範圍, 勾劃過程少於一分鐘。」

#### 大學與業界夥伴合作

人工智能技術能有效紓解醫護人手不足,提升服務質素。截至2017年 2月,全球已有一百零六家人工智能 醫療初創企業,視見科技是其中之 一·由中大虛擬現實可視化與圖像研究中心「孵化」而成, 王平安教授是該中心主任,也是視見科技的聯合創辦人和首 席科學家。

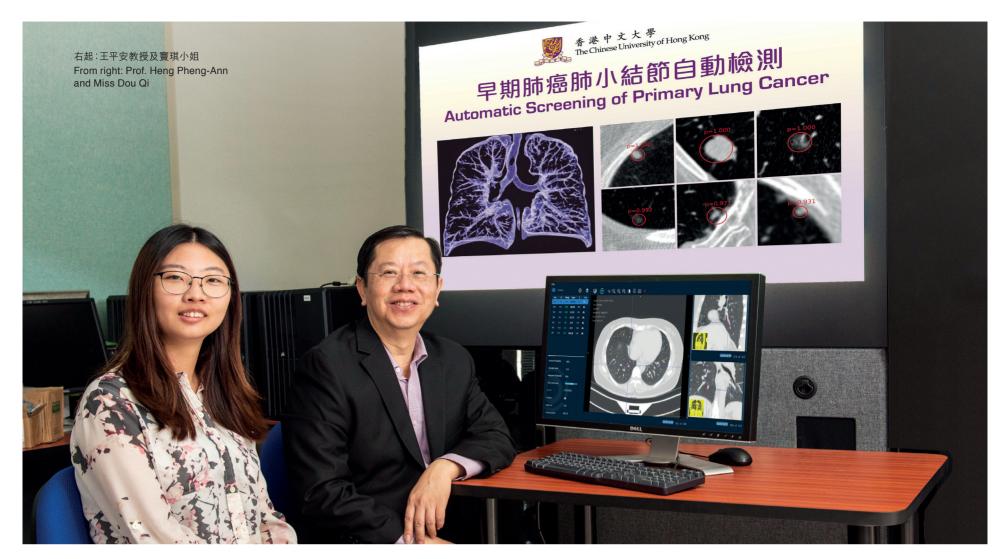
視見科技鋭意研發醫學影像分析軟件及可擴展的影像自動識別平台,獲得投資者青睞。本年3月底深創投領投視見科技,完成人民幣六千萬元的A輪融資。公司於上年創立初期獲香港創新科技署撥款支持,並得到聯想創投集團注資人民幣二千萬元。中國醫學影像市場平均每年增長三成,但放射科醫生每年只增加4.1%,科技產業化有助應對市場龐大的需求。

本年2月,視見科技與中大深圳研究院簽訂研究與產品開發的合作協議,王教授説:「大學會專注於科研和培育科技人才,而公司會致力與業界夥伴建立戰略合作關係,開發更多產品。大數據現正轉化醫療發展,大家都見證到自動化數據分析如何輔助醫生診斷,我們會繼續與醫護界合作,盡心為病人謀福。」



▲ 系統自動識別乳癌細胞 (藍線圈畫部分)
Automatic detection of breast cancer cells (outlined in blue)

# / CUHK NEWSLETTER / 中大通訊 /



record-high number of physicians left Hong Kong's public hospitals last year with a turnover rate of 5.9%. Radiology and pathology are two of the worst-hit departments. With medical images playing an increasingly critical role in diagnoses (IBM estimated that medical images account for 90% of all medical data), the workload of those responsible for the interpretation of the images will only get heavier. To relieve their workload and to enhance diagnostic accuracy, the research team led by Prof. Heng Pheng-Ann has developed an artificial intelligence (AI) platform for automated medical image analysis.

Deep learning is a subset of AI, which uses convolutional neural network (CNN) algorithms for image computing to identify patterns in data. 'It mimics how our brains receive visual stimuli from the eyes to construct meaningful output. The AI platform will analyse and interpret the data collected, following the instructions of the clinicians or the platform engineers,' explains Professor Heng of CUHK's Department of Computer Science and Engineering. 'It's like the *Go*-playing programme AlphaGo which develops winning strategies itself, having been exposed to enough data for algorithm training.'

When the automated screening and analysis system is adopted by the medical sector, it may act as the doctor's tireless assistant to efficiently and accurately identify the source of an illness, enabling a timely and appropriate treatment. The AI platform developed by Professor Heng's team has been validated on lung cancer and breast cancer, two of Hong Kong's most prevalent cancers, achieving accuracies of 91% and 99%, respectively. 'An increasing number of new cancer cases are diagnosed in recent years. A process that used to take 15 minutes or more can now be dramatically reduced for timely and accurate treatment, which could be life-changing for many,' says Professor Heng.

#### Physicians' Unerring Assistant

Early stage lung cancer exists in the form of pulmonary nodules, which appear as small shades on CT slices. Going through each CT slice by the naked eye takes about five minutes, and its accuracy lies on the radiologist's experience and attentiveness. The team designed a 3D CNN that incorporates the structural characteristics of thoracic CT slices and is able to locate any suspicious nodule in 30 seconds. '3D CNN overcomes the challenges of analysing volumetric medical images such as CT and MRI images. Our team is the pioneer in 3D CNN and the results have been recognized in some international challenges,' says **Dou Qi**, a PhD student of Professor Heng.

The only accurate way to diagnose breast cancer, the most prevalent cancer among local women, is to perform a biopsy to closely examine the cells collected. However, a digital histology is often up to one GB in file size—equivalent to a 90-minute high resolution movie. Examining the image requires a reliable system, and is both time and energy consuming. The CNN model developed by the team enables automatic detection of the cancer cell in five to 10 minutes, compared to the duration of 15 to 30 minutes by naked eye. The system is 60 times faster than the state-of-the-art method and outperforms an experienced pathologist by 2%.

Identifying false positives among the pulmonary nodules is one of the biggest challenges, as many false positives look similar to the nodules. 'We therefore constructed an online sample filtering scheme to select the suspected samples to train the AI platform and enhance its screening capability. We also applied a deep learning model to annotate and locate the exact pulmonary nodules,' Professor Heng elaborates. Their paper presenting the deep learning technique won the Medical Image Analysis Best Paper Award in the International Conference on Medical Image Computing and Computer Assisted Intervention 2017.

The team started the medical image analysis project in 2013, with samples collected from over 5,000 patients of various nationalities. 'We pay due respect to the patients' privacy. Their names and personal information had been removed before the data were analysed,' Dou Qi says. With positive feedback from the medical sector, Professor Heng expects

the deep learning system to be widely adopted in the next couple of years. 'We will work on more prevalent cancers such as cervical cancer and nasopharyngeal carcinoma (NPC). We're working, for instance, with Sun Yat-sen University Cancer Center on Al-assisted delineation of the targeted area for NPC radiotherapy. The system can finish the delineation in less than a minute.'

#### University-Industry Collaboration

The AI technology translates into a much-needed boost to quality health care. As of February 2017, there were 106 AI startups in health care globally, including ImSight Medical Technology. The startup was incubated by CUHK's Virtual Reality, Visualization and Imaging Research Centre, headed by Professor Heng. He is the co-founder and principal scientist of the startup.

ImSight Medical Technology's endeavour on developing medical image analysis software and scalable platforms for automated processing of medical images has drawn investors' attention. Shenzhen Capital Group led a RMB60 million round A investment in ImSight Medical in late March this year. In its initial operation period in 2017, the startup received funding from the Hong Kong Innovation and Technology Commission and RMB20 million investment from Lenovo Capital and Incubator Group. China's medical imaging market is growing at 30% per year, but the number of trained radiologist is growing at only 4.1% per year. The commercialization of technology can narrow the gap between supply and demand.

In February 2018, ImSight Medical Technology entered into partnership with CUHK's Shenzhen Research Institute for research and development. 'The University can focus on research development and grooming technology experts, while the company can build strategic collaborations with industry partners and develop more products,' Professor Heng says. 'Big data is transforming medicine. We're in the new era seeing how the medical diagnoses are optimized by data-driven insights. Together with the healthcare professionals, we're producing the best outcomes for patients.'

J. Lau



技日新月異,但面對大自然災難,人類卻依舊束手無策。地震的可怕之處是防不勝防,2008年四川汶川、2011年日本福島,以至2月初台灣花蓮的地震,都沒有半點先兆。古今科學家鍥而不捨鑽研這種自然災害,從而減輕地震和海嘯所帶來的損失。地球系統科學課程的**楊宏峰**教授是地震學家,一直致力研究地震,期望從科學實驗中得到啟示,預警天災。最近,他便遠征印度洋。



▲ 楊宏峰教授(左)在印度洋莫克蘭海溝投放海底地震儀,勘察海床地勢 Professor Yang (left) surveyed the seafloor structure in the Makran trench with Ocean Bottom Seismographs

1月10日至2月3日,楊教授搭乘「實驗3號」科學考察船,與中國及巴基斯坦研究人員前往印度洋莫克蘭海溝進行考察。這次考察由中國科學院南海海洋研究所與巴基斯坦國家海洋研究所合作,也是兩國首次在印度洋進行的聯合考察,重點研究莫克蘭海溝的地質,從而評估該區發生強大地震及海嘯的可能性。

莫克蘭海溝是阿拉伯板塊、印度板塊和歐亞板塊的交匯點,而阿拉伯板塊緩慢地下滑至歐亞板塊之下,形成俯衝帶,如果板塊之間有窒礙的地方,能量會不斷累積,最後便會以地震的方式來釋放能量,若海床上升,便會引發海嘯。最強的地震都在俯衝帶淺層地域發生。1945年,莫克蘭海溝發生8.1級大地震,引發海嘯衝擊伊朗、巴基斯坦、阿曼和印度,奪去近四千人性命。去年該區曾發生6.3級地震。

考察期間,中國和巴基斯坦科學家投放了二十一台海底地震儀,並勘察海床地勢和深度,從而推斷地殼結構。楊教授認為,莫克蘭海溝有值得研究之處:「莫克蘭海溝的一大特點,是具有大量結構鬆散的沉積物。傳統觀點認為沉積物較鬆散,不會引發地震,但事實並非如此,因此這次海底地震實驗取得的沉積物及對地殼結構的分析,將拓展科學家對俯衝帶地震機理的認識;即使沒有發生地震,若鬆散的沉積物產生海底滑坡,同樣會觸發海嘯。」

本次考察的掃瞄影像清晰顯示沉積物分布情況·對科學家評估該地區未來發生海嘯的風險至關重要。此外·海底地震儀在區內錄得多次輕微地震·這些數據會用來描繪發震斷層。

楊教授是考察隊中唯一來自香港地區的科學家,他表示很榮幸能參與是次研究,又指出現時針對該區進行的考察研究甚少。楊教授特別提及:「位處該區的瓜達爾港臨近中東產油區,也是一帶一路計劃中巴經濟走廊上的重要據點。因此,是次考察極具學術和戰略意義。」

espite technological advancement, humans are often powerless in the face of natural disasters. Earthquakes often come unpredicted and are still a threat in modern world, as the Sichuan quake in 2008, the Northeast Japan quake in 2011, and Taiwan's Hualien quake in February well attested. Some scientists spend their lifetime researching into the natural disasters in the hope of finding ways to reduce the loss from earthquakes and tsunamis. Prof. Yang Hongfeng from CUHK's Earth System Science Programme is one of them. An earthquake seismologist, he has been trying to read the signs of earthquakes from scientific investigations. Recently, he participated in an expedition to the Indian Ocean.

From 10 January to 3 February, Professor Yang participated in the first China-Pakistan Joint Indian Ocean Expedition on the *Shiyan 3* research vessel. The Chinese and Pakistani scientists carried out in-depth investigation on the possibility of future megathrust earthquakes and tsunamis in the Makran trench. The expedition was led by the South China Sea Institute of Oceanology of the Chinese Academy of Sciences and the Pakistan National Institute of Oceanography.

The Makran trench is the meeting point of the Arabian Plate, the Indian Plate and the Eurasian Plate. A subduction zone is formed when the Arabian Plate descends beneath the Eurasian Plate. Energy is accumulated when the tectonic plates are stuck. When the energy accumulates to a certain point, it would be released in the form of earthquake, which may cause significant seafloor uplift and trigger devastating tsunamis. In fact, some of the biggest earthquakes occurred on the shallow portions of the subduction zones.

In 1945, a magnitude 8.1 quake happening in the Makran trench triggered tsunamis which battered

▶ 研究人員在莫克蘭海溝抽 取沉積物樣本 (橙點),並 每隔十一公里投放海底地 震儀 (白線上的黑點) Scientists took sediment samples (orange dots) and deployed OBSs every 11 km (black dots on white line) in the Makran trench Iran, Pakistan, Oman and India. The catastrophe claimed around 4,000 lives. Last year, a magnitude 6.3 earthquake shook the area.

During the expedition, the scientists deployed 21 Ocean Bottom Seismographs (OBSs), state-of-the-art instruments that sink to the seafloor, to survey the seafloor surface and depth for the structure of the Earth's crust. Professor Yang saw great value in the study: 'The trench is unique in that it has a thick deposit of soft sediment. It used to be thought that soft sediment is not conducive to quakes but this is not true. The sample of sediment obtained and the analysis of the Earth's crust could broaden scientists' understanding of the quake mechanism in subduction zones. Even if no earthquake takes place, the presence of soft sediment can still trigger off tsunamis by marine landslide.'

The scanned images gave a clear picture of the distribution of sediment and should be a big help to scientists in evaluating the risks of tsunamis in that region in the future. Besides, data from the numerous small quakes in the region recorded by the OBSs will be used to delineate faults along which future earthquakes might occur.

Professor Yang, the only Hong Kong scientist on board, said he felt honoured to be part of the expedition team. Very few similar studies had been carried out in the region. 'The study has great academic and strategic significance as Gwadar, a deep-water port situated near the oil production zones in the Middle East, is an important strategic and economic base on the China-Pakistan

Economic Corridor under the Belt and Road Initiative,' Professor Yang said.

## ── 校園消息/ CAMPUS NEWS

#### 新療法治中期肝癌效果佳

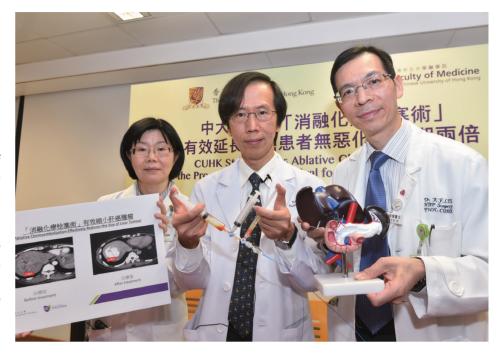
# New Treatment Doubles the Progression-Free Survival for Liver Cancer Patients

醫學院的跨專科團隊研究證實,新一代經血管治療「消融化療栓塞術(ACE)」較傳統的經血管治療技術,更能有效消滅中期肝癌病人體內的癌細胞,亦能延長無惡化存活期近兩倍,部分患者在腫瘤縮小和肝臟狀況許可下,能夠進行手術切除腫瘤。相關研究結果已在醫學期刊Radiology發表。

肝癌在本港常見癌症中排行第五,亦是第三號癌症殺手。一般來說,早期肝癌患者可透過手術切除腫瘤、接受局部消融療法或肝臟移植,但對病情已屆中期或手術風險較大的病人則要改以經血管療法。現時較常用的「碘化療栓塞(cTACE)」,透過導管將化療藥物帶到癌細胞及造成肝臟微小血管栓塞;另外兩種較新的經血管治療是「帶藥微球栓塞」及「放射栓塞」。不過,影像及介入放射學系系主任余俊豪教授(中)指出,上述三種療法仍有改善空間。

由腫瘤科、外科和影像及介入放射科組成的 團隊發現,消融化療栓塞術可以大幅提升化 療藥物在肝癌組織內的濃度,配合乙醇造成 的消融效果,以及切斷肝癌組織的血液供養, 使肝癌組織缺血壞死,提升整體治療效果。 A study conducted by a multidisciplinary team of the Faculty of Medicine has proved that a new transarterial treatment named 'Ablative Chemoembolization (ACE)' could prolong the progression-free survival of liver cancer patients at the intermediate stage by twice the length of time, compared with 'conventional transarterial chemoembolization (cTACE)'. The new treatment is more effective in killing tumour cells of liver cancer patients and hence some of them could have tumours removed by surgery after assessment of their liver conditions. The study results have been published in the medical journal *Radiology*.

Liver cancer is the fifth most common cancer and ranked third in terms of mortality in Hong Kong. In general, liver cancer patients at early stage are treated with liver resection, local ablation or liver transplantation. However, patients at the intermediate stage or with high surgical risk can only undergo transarterial treatment. cTACE produces therapeutic effects by causing vascular embolisation in the liver and delivering chemotherapy drugs to cancer cells through catheter. Another two forms of transarterial treatment are drug-eluting beads (DEB-TACE) and selective internal radiation (SIRT). However,



Prof. Simon Yu (centre), chairman of the Department of Imaging and Interventional Radiology pointed out that the outcomes of the three mentioned transarterial treatments could be much improved.

The multidisciplinary team, formed by experts from the Departments of Oncology, Surgery, and Imaging and Interventional Radiology, found that ACE can significantly increase the concentration of chemotherapeutic drugs in liver cancer tissue. Combined with the effect of ethanol ablation and cutting off the blood supply of liver cancer tissue, it can improve the overall treatment outcome.

#### 段崇智校長榮任美國發明家學會院士

# Vice-Chancellor Inducted into National Academy of Inventors



段崇智校長於4月5日在美國華盛頓舉行的美國發明家學會年度會議中,榮任美國發明家學會院士,以表揚他積極創新的精神,並肯定其多項傑出發明對提升人類生活質素及社會福祉的貢獻。

段校長在骨骼組織工程和再生醫學的成就卓著。他致力研究幹細胞,旨在拆解幹細胞調節再生能力的機制,繼而應用此機制以修復因傷病、先天缺陷或衰老受損的組織,尤其是肌肉骨骼組織和器官。他的實驗室現正採用幹細胞和智能(仿生)生物材料,以及包括三維打印等先進製造技術,研製類似原有組織的生物和機械性質的功能組織,用於促進受損組織再生和修復。段校長表示榮幸獲此殊榮,並感謝研究團隊和合作夥伴。

Vice-Chancellor Prof. Rocky S. Tuan was inducted as a Fellow into the National

Academy of Inventors at the organization's annual conference held in Washington DC on 5 April, in recognition of his spirit of innovation in creating and facilitating outstanding inventions that have bolstered the quality of life and the well-being of society.

Professor Tuan is internationally renowned for his research in stem cell biology, musculoskeletal tissue engineering and regenerative medicine. His research work on stem cells aims to discover the mechanisms that regulate their regenerative ability, which could be applied to repair and restore function to tissues that have been compromised as a result of injury, trauma, disease, birth defects or aging, with emphasis on musculoskeletal tissues and organs. Using stem cells, smart (biomimetic) biomaterials and advanced manufacturing technologies, including 3D printing, his laboratory is developing functional tissues that have similar biological and mechanical properties as the original tissues, and are suitable for regeneration and repair. Professor Tuan said he was humbled to receive this great honour and was grateful to his research team members and collaborators.

#### 田家炳基金會捐款支持兩項目

#### **Tin Ka Ping Foundation Supports Two Projects**



中大獲得田家炳基金會慷慨捐贈三百萬港元,以慶祝基金會創辦人田家炳博士百歲華誕,並支持中大推動「2018香港兒童及青少年體力活動報告卡」研究計劃及博群踐行者計劃。

為表謝意,中大於3月22日舉行「田家炳博士百歲項目」交流會,出席嘉賓包括段崇智校長(右二)、教育學院院長梁湘明教授、社會及公民參與督導委員會聯席主席沈祖堯教授,及基金會董事局主席田慶先先生(左二)。體育運動科學系系主任王香生教授及博群全人發展中心主任伍慧明女士分別向嘉賓介紹獲基金會支持的兩項計劃。

CUHK has received a generous donation of HK\$3 million from Tin Ka Ping Foundation in celebration of the 100th birthday of Dr. Tin Ka-ping, founder of the Foundation. The donation is being used to support the research project titled '2018 Report Card on Physical Activity for Children and Youth' and I•CARE Achievers Programme which provide opportunities for students to experience whole-person development.

In appreciation of the generosity of the Foundation, a sharing session was held on 22 March at CUHK. Prof. Rocky S. Tuan (2nd right), Vice-Chancellor of CUHK, Prof. Alvin Leung, Dean of Education, Prof. Joseph J.Y. Sung, co-chairman of the Steering Committee for Promoting Personal Development through Social and Civic Engagement, and Mr. Tin Hing-sin (2nd left), chairman of the Board of Tin Ka Ping Foundation, attended the session. Prof. Stephen Wong, chairman of Department of Sports Science and Physical Education and Ms. Irene Ng, director of the I•CARE Centre for Wholeperson Development introduced the two projects supported by the donation.

# / CUHK NEWSLETTER / 中大通訊 /



## 自閉兒童的機械人老師 **Autistic Children's Robot Teachers**

逾三百名四至十二歲的自閉兒童透過參與中大機械人教 學計劃,跟隨機械人老師學習以手勢表達情感,提升社交 能力。教學計劃團隊亦因此獲頒2018香港資訊



Over 300 children aged four to 12 with Autism Spectrum Disorders enhanced their communication skills through learning from their robot gesture teachers of the CUHK Robot for Autism Behavioral Intervention, which received the Smart People Merit Award from the Hong Kong ICT Awards 2018.

## 中大教授於網絡編碼研究 貢獻再獲肯定

#### **CUHK Professors Recognized for** Sustained and Significant Impact in **Network Coding**

李碩彥教授及楊偉豪教授奠定網絡編碼概念,其貢獻再 次獲表揚,他們與Rudolf Ahlswede教授及蔡寧教授合 著的論文 'Network Information Flow' 獲頒2018 ACM SIGMOBILE Test-of-Time Paper Award •

Prof. Robert S.Y. Li and Prof. Raymond W.H. Yeung, were honoured once again for their contribution to the fundamental concept of Network Coding. Their paper, 'Network Information Flow', co-authored with Prof. Rudolf Ahlswede and Prof. Ning Cai, was given the 2018 ACM SIGMOBILE Test-of-Time Paper Award.

#### 邁向人文建築

#### **Towards Humane Architecture**



「诱禍設計不同建築物,讓我體會建築應如何以人為 本,並兼具同理心。」普立茲克獎得主日本建築師槙文彥 在建築學院舉辦的2018「木下建築講座」説。這位年屆 八十九歲的著名建築師更以其紐約世貿中心四號大樓和 深圳海上世界文化藝術中心等近作來闡述。

'By designing buildings, I began to understand how architecture should be made for a humanist cause, and with empathy,' said Fumihiko Maki, Pritzker Prizewinning Japanese architect, in the 2018 Kinoshita Lecture in Architecture organized by the School of Architecture. The 89-year-old veteran illustrated his architectural vision with recent projects, including 4 World Trade Center in New York and the Shenzhen Sea World Culture and Arts Center.

#### 婦女節午餐會

#### Women's Day Luncheon

大學主管人員與近六十位教職員包括女教員支援網絡的 顧問及成員,於三八婦女節共進午餐,商討如何建立有 助促進女教職員家庭友善的工作環境。

University management and around 60 colleagues including advisors and advisees of Female Professorial Staff Support Network got together on the International Women's Day luncheon to discuss how unit heads can help promote a family-friendly work environment on campus.

#### 來當一天的大學生

#### **University Student for a Day**

大學的生活是怎樣的?一百二十名中學生獲邀於3月18日 來到中大,獲一支由四十名中大生及二十位長者組成的 義工隊接待,上課聽講,在膳堂進餐,並參觀教學設施, 體驗一天的大學生活。

What life is like at university? One hundred and twenty secondary students were invited to CUHK on 18 March to be 'CUHK students' for a day with the help of a volunteer team comprising 40 CUHK students and 20 elderly people. From attending lectures, having lunch in canteen, visiting special teaching facilities on campus, the 'CUHK students' got a real sense of university life.

# 夏威夷草裙搖曳

#### **Sway It Hula Dancers**



随着熱情奔放的夏威夷草裙舞及毛利族人舞蹈的演出, 加上介紹澳洲、斐濟、關島、夏威夷及新西蘭文化的攤 位,3月19日的文化廣場一時間滿載大洋洲風情,這項活 動為大洋洲文化節系列節目之一,由學生事務處舉辦,其 他活動包括文化工作坊、電影放映會及文化分享會等。

The Cultural Square was filled with Oceania culture on 19 March as Hawaiian hula dances and Maori performances were staged. Cultural booths were also set up to display the cultures of Australia, Fiji, Guam, Hawaii and New Zealand. The event organized by the Office of Student Affairs was a part of the Oceania Festival which also included cultural workshops, movie screening and sharing session.

# ■■■ 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。

# / CUHK NEWSLETTER / 中大通訊 /

# ── 雅 共 賞 / ARTICULATION



# 水墨背後的血肉之軀 A Dialogue of Self and Soul

香港現代水墨運動先驅呂壽琨的作品是文物館的重要館藏之一。呂氏早期臨摹古代大師之作,其後開創他最為著名的禪畫和抽象香港山水,我們可以從中窺見呂氏在新與舊、臨摹與創作、傳統與創新之間的深刻思考。不過,對不熟悉中國藝術的朋友來說,呂氏的古人筆法可能如同隔閡;後期創作抽象玄奧,又不免讓人覺得這位藝術家難以親近。

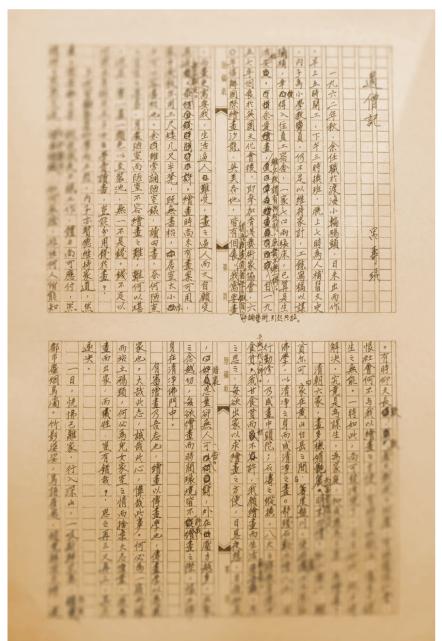
其實藝術家跟你我一樣,也有生活的苦惱和掙扎。雖然學術研究不鼓勵單純透過藝術家生平來闡釋作品,但比起讓不少人望而生畏的畫作,藝術家的人生故事更顯得有血有肉,叫人更容易融入其藝術世界。要更近距離接觸呂壽琨,我們可以翻開《呂壽琨手稿》,在芸芸關於中國藝術的講學記錄之中,有一篇體裁與別不同,是個故事,名為〈遇僧記〉。

〈遇僧記〉彷彿是一篇自傳,主角和呂壽琨年輕時一樣,是渡輪公司職員、支撐七口之家,每 天由清晨五時工作到下午三時,晚上為人補習文史,工餘還要寫稿幫補家計。他愛繪畫,奈何 斗室卻容不下一張書桌,加上工作困身,家庭負擔沉重,未能滿足的創作慾望讓他一直躁動 不安,便有了出家以求清靜、潛心追求畫道的念頭。

然而,滿腔熱情的藝術家有次夢見一名僧人,二人就傳承畫道的責任與家庭責任的輕重、何謂 真誠獻身畫道等議題展開激辯,金句不絕:例如「不在流中何有石之屹立。避其染者非不染 也」,以河中石來比喻塵世中的藝術家,寓意藝術家不可逃避生活、以「忘軀者是為道而忘軀 也,非為忘軀而可得道也」說出未經深思的熱情對追尋畫道毫無助益等。

不過,精彩則精彩矣,〈遇僧記〉以文言文寫成,通篇數千字,令人卻步。為了讓公眾更了解 呂壽琨,從而對他的藝術產生興趣,文物館有幸獲旭日基金贊助、與新聞與傳播學院首度攜 手,邀請香港年輕獨立導演、舞者、音樂家合作把〈遇僧記〉的精選情節製成短片,更邀得 呂壽琨高足、著名設計師**靳埭強**博士演出及擔任顧問,體現傳承之意。影片之前更在中國美術館展覽「自我有乾坤——呂壽琨與早期水墨運動」展出,觀眾反應非常熱烈,內地民眾因而認識到呂壽琨及參與製作的其他香港藝術家。

大家現在可於文物館的官方臉書專頁觀賞〈遇僧記〉影片。



▲《呂壽琨手稿》

# ■無私私語/No Secret



# 邂逅經典<sup>,</sup>終生受用 The Great Books of Yore

眾所周知·經典蘊含歷代 前人智慧·但究竟哪些是 經典?經典有多少部?我們 又為了甚麼要讀經典? 自古埃及的草紙書·直至現代的電

> 不時有院校認為其成員必須接受一些具普 世價值及影響力的著作薰陶,但書單上的經 典則視乎院校、文化,或時代而有所不同。

子書,書籍一直是人類文明的結晶,裝

載着一代一代累積下來的真知灼見。

最著名的可能是《哈佛經典》,由哈佛校長 Charles W. Eliot (1834–1926) 於1909年編 訂,長五十一冊的世界文學選集,選錄主要 是歐洲傳統的名著,卻甚少出自女性或非西 方作者手筆。

著名文評家兼耶魯教授Harold Bloom也選出二十六位文人和思想家,認為他們代表了整個西方文學傳統。

中大的經典清單錄了二十五部作品。自2012年起所有新生都必修的大學通識課程,兩部課材《與自然對話》及《與人文對話》,合共輯錄了二十五部中外文學,哲學、政治學及科學經典的精闢篇章。除常客荷馬及柏拉圖外,也有中國古典《論語》及《莊子》,此外更有《可蘭經》。

我們為甚麼要唸經典?除了是身分學養的象徵外,經典更對我們有益,而且不只是在要應付考試前,而是日後漫長的人生路也受惠無盡。正如 Italo Calvino (1923-1985) 在其〈為何唸經典〉一文中指出:

「唸過的書有助成長,意思是它們會塑造未來的經驗,為個人品味、識見、價值、美感提供楷模——這些一切,在年輕時讀過的書都——忘掉以後,還將繼續發揮作用。」

偉大的書也是好書。

IT IS NO SECRET THAT great minds usually come to us in great books. But what are the Great Books? How many are there? And why should we read them?

Books, from papyrus to Kindle, are the depositories and vessels of knowledge and ideas—the distillations of civilizations—that get passed on from one generation to the next.

From time to time, centres of learning would deem certain writings of classic value and primary influence that they would mandate their members to get familiar with and be conversant in the select texts. The Great Books List may, however, vary with the institutions, the cultures or the times.

The most famous is perhaps the *Harvard Classics*, a 51-volume anthology of world literature compiled in 1909 by Harvard president Charles W. Eliot (1834–1926). This selection is mostly Eurocentric and authored very rarely by feminine or non-western hands.

**Harold Bloom**, prominent literary critic and professor of Yale, identified 26 men and women of letters, from Jane Austen to Virginia Woolf, as standard-bearers of the western canon.

There are 25 books honoured on CUHK's list. *In Dialogue with Nature* and *In Dialogue with Humanity*, the two standard texts for CUHK's general education course which every freshman since 2012 has to take, contain extracts from 25 sources in the Eastern and Western canons of literature, philosophy, political thoughts and scientific treatises. In addition to Homer and Plato, it includes Chinese classics such as *The Analects* and *Zhuangzi*. The *Qu'ran* also makes the list.

Why should we read the Great Books? Apart from a passport to the society of educated citizens, the Books actually do you good, and not just while you are reading them for your exams but throughout your life, as Italo Calvino (1923–1985) puts it in his 'Why Read the Classics?':

Books read then can be ... formative, in the sense that they give a form to future experiences, providing models, terms of comparison, schemes for classification, scales of value, exemplars of beauty—all things that continue to operate even if a book read in one's youth is almost or totally forgotten.

The Great are also the Good.

# 口談實錄/Viva Voce

# 李立峯教授 Prof. Francis Lee

## 新聞與傳播學院院長

Director, The School of Journalism and Communication

上任院長近一年,你認為院長的工作跟教學、研究有甚麼不同?

院長要擔當行政工作,管理部門、幕後計劃,與教學和研究性質不同。研究大多出於個人興趣;教學便是專注於自己任教的科目。院長則要從大局考慮,協調不同科目。以傳媒法為例,傳統是教誹謗、藐視法庭等內容,但現在部分學生想從事廣告、創意媒體等行業,對他們來說,版權的知識可能更重要。十三堂課是否足以包含所有內容?這時可能要在必修科外,開設另一選修科,這些並非老師自己可以決定,院長便要想想如何協調課程來平衡不同同學的需要。

院長的另一項職責是擔任新聞獎評審。過去我便擔任中大、香港報業公會以至世界報業協會的新聞報道獎評審。

#### 可以分享做院長的挑戰和樂事嗎?

世界不停轉變,業界變化很快,大學都要回應這些轉變。很多 人說香港以至全球的傳媒行業式微,其實不然,只是行業正 在急速轉型,一方面有紙媒虧蝕、裁員,但另一方面有網媒、 小眾媒體崛起。現在媒體物色的員工也與以前不同,以前新 聞行業重視語文能力,後來員工要懂得拍片、剪片,現在就要 構思資訊圖像。轉變會一直持續,學院也不能故步自封,要緊 貼世界的趨勢。

大學以外,還有一個龐大的業界,涵蓋新聞、廣告和創意媒體,增添一些複雜性。另外,很多業界的資深從業員都是我們的舊生,對社會有舉足輕重的影響力,所以學院要與他們建立聯繫。學院亦有非常專業的行政人員團隊、老師之間關係良好,使院長的工作更容易順利。

#### 新聞和傳播學院有甚麼發展方向?

現在傳播行業的界線愈來愈模糊,新聞、廣告、公關、創意媒體行業有很多地方重疊,我們規劃課程時,要考慮到這一點。第二,以前記者、編輯寫稿,翌日讀者便可以在報攤和便利店買到報紙,記者和編輯不用涉足發行這一部分,所以院校也不會提供有關訓練。然而,現在新聞從業員要兼顧發行的職責,例如甚麼時候上載、更新新聞,及如何推廣新聞等,我們規劃課程時,也會把發行這個元素加入其中。

你擔任院長,又要做研究、教學、出書,還在報章寫專欄,如何分配時間?

這些工作無可避免要同時進行,但會有優先次序。早前立法 會補選,我就在專欄寫了兩篇文章,但當然是學院的工作優 先。個人喜歡教學,學生反應好,自己就有很大成功感。院長 的工作十分重要,如何分配資源來幫助同事進行研究、如何 設計或改動課程來回應轉變,都會對整個學院以至大學有深 遠影響。

#### 你認為新傳學生應如何裝備自己?

有意投身傳播行業的人應不停嘗試、學習新事物,並勇於接受變化。另外,無論是記者、創意媒體或廣告,都要有好奇心,與世界有更多接觸。觀察更多,思考更多。



You have been in office as director for a year. What's different from your teaching and research before?

A director needs to take up administrative tasks, including management and planning, which are different from teaching and research. As a researcher, I conduct research of my interest in a particular field. As a teacher, I focus on the subject I teach. As a director, I should have a comprehensive view and coordinate different subjects and development plans. Take the media law as an example. The subject traditionally focused on defamation, contempt of court, etc. However, nowadays some students may want to work in advertising or creative media. Copyright seems more relevant to them. If the 13 lectures are not enough to cover all the contents, we may consider offering an elective course in addition to the core one. This is a decision beyond a teacher, but something a director can take to coordinate among subjects and satisfy the needs of different students.

Another duty as director is to adjudicate news awards, such as the Chinese University Journalism Award, the Hong Kong News Awards organized by the Newspaper Society of Hong Kong, and Asia Media Awards by World Association of Newspapers and News Publishers.

What are the challenges and the pleasures as director?

The world is changing rapidly, and the media industry, too. The University has to respond to those changes. It is often said that the media industry in Hong Kong and even other parts of the world has declined. I would rather say that the industry is transforming. While some printed media suffer losses and cut jobs, some online media and niche media are growing. The job requirements are different from the past. The news media used to look at language proficiency first, and later the ability to shoot and edit videos. Now infographics is a required skill. We should keep up with the developing trends instead of sitting in the ivory tower.

The communication industry is a diversified community consisting of news production, advertising and creative media. Such diversity creates complexity. Our School's long history means that many senior practitioners in the industry

are our alumni. They have significant influence on the society. We need to maintain the network with them.

I am grateful that the administrative staff are professional and helpful while the relationship among the teaching staff is harmonious. As a team, we have developed an excellent rapport.

What is the direction of the School's future development?

The communication industry is becoming boundary-less. News reporting, advertising, public relations and creative media share many things in common now. We have to take this into account when making development plans. Second, in traditional practice, after the newspapers were printed, the distributors would deliver them to the newsstands and convenience stores where readers bought them. The reporters and editors were not involved in distribution. However, the newsrooms nowadays are responsible for distribution as well. They need to think about when the news contents should be uploaded and updated, and how the news are promoted. As such, we may include the element of distribution in the curriculum.

You teach and research, carry out director's duties, publish and write columns for the media. How do you allocate your time?

Multi-tasking is inevitable but the tasks could be prioritized. I wrote two column articles on the Legislative Council by-election not long ago. But the School's tasks of course come first. I enjoy teaching as the students' responses and feedback give me satisfaction. The director's tasks are very important, too. The allocation of resources can facilitate our colleagues' research, and designing and modifying the curriculums can help the School respond to changes. All these would have a critical impact on the School or even the University.

How should the students prepare themselves for a career in communication?

Those who want to work in the communication industry should be eager to try out new things, keep learning and be adaptive. Besides, be curious. They should keep themselves informed.