中大/CUHK/通訊



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過一年多的宣傳,政府於上月5日正式推出首項公 共年金——香港年金計劃(圖一),年滿六十五歲 的香港永久居民,只要繳付一筆過金額,即可每月 獲發固定年金,直至終老,自製「長糧」,生活無憂云。香港 年金計劃首次發行的額度為一百億元,供市民認購。為增加 年金計劃的吸引力,申請長者生活津貼時,年金面值不計作 資產。

年金計劃實為另類人壽保險,不同之處是後者每月繳付特定金額,累積至一定年期才一次取回;年金則剛好相反,先付整筆金額,再分期取回。年金不是甚麼新事物,在外國早有,政府現在才設公共年金,會不會是姍姍來遲?認購年金又是否划算?

後來或可居上

金融學系**陳偉森**教授是大學教職員公積金(1995)計劃及「丙」類計劃的成員受託人,長期研究退休保障,並參與政府的年金研究,2016年完成了「如何增加香港中年人對年金的需求」研究報告。陳教授説:「就設立時間來説,香港無疑是落後了。從另一角度來看,卻不一定不是好事。像台灣和日本便早早設立公共年金,但面對人口嚴重老化,台灣年金基金瀕臨破產,不得不削減年金金額,社會嘩然,反對和抗爭不絕。在日本,年金入不敷支的問題亦逐漸浮現。香港汲取前人經驗,有助設計更周全的年金計劃。

「政府在2000年推出強積金計劃,累積了相當數額,市民承接了強積金所得,大可用以投資年金,時機是合適的,也算是一個強積金後續。」

疑問與限制

從年金每月發放金額來算,其回報率 是4%,陳教授認為合理。不過,回報 率是取決於本金和環球市場投資環境。他

估計年金計劃汲納的款項將交由外匯基金代為投資,這樣問題來了,當投資失利,年金依然要定期發放,可是本金減少又會影響回報,形成惡性循環。環球金融市場在今年上半年相當波動,香港金融管理局公布第二季錄得七十七億元的虧損。「香港年金公司由政府持有,固然不會破產,但當有嚴重虧損,如何解決?由公帑補貼?政府未有清楚交代。」

市民對年金的認受性,也讓陳教授存疑。以安老按揭為例, 自2011年推出以來,截止今年6月底,成交個案只是二千六 百多宗,未算受歡迎。他說:「我在2005年開始研究時,香 港還未有私營的年金,是近年開始才陸續有保險公司開拓年 金市場。」據保險業監管局的數據顯示,今年首季新造的私 營年金保費近二十五億。「參與年金計劃人數是關鍵因素, 要是認受性低,認購反應不熱烈,本金和回報吸引力會跟着 下降。」

此外,香港年金計劃只供個人認購,陳教授表示:「若一對年齡分別為六十八及六十五的夫妻,有一百萬元可供認購年金,現時的機制下,他們必須分別認購,怎樣分配?在成熟的年金市場設有存活者年金,夫妻合併認購,一方身故後,另一方仍可繼續獲發年金至身故。」

通脹蠶食

替代率是指退休後收入佔退休前的百分比,替代率愈高,退 休後生活也自然較寫意。不計算醫療開支,一般而言,四至 六成已經不俗。陳教授解釋:「以月薪一萬五千元計算,每月 五千餘元的年金只有三成多,着實不足。

「別忘了年金是定額發放,不會隨通脹而增。由1987至2017年間,香港的通脹率約1.2%。長者每月領取的金額不變,購



買力便隨之下降。假設一位六十五歲女士認購一百萬元年金,通脹率分別以1%和2%計算,三十年後,她所領取的五千三百元,購買力分別下降26%及45%,即等於現值三千九百二十二元及二千九百一十五元(圖二)。」換言之,年金計劃年期的確是夠「長」,但「糧」則未必足夠。

專家的建議

總括而言,陳教授認為年金的設立是個好開始,提醒市民及早為退休做好準備。他強調:「不要過於側重年金,以為有了它便可解決所有問題,每人的需求不同,要按期望退休年齡、預期壽命、身體狀況、預期生活方式和水平、醫療開支、收入來源、資產淨值及現金流、理財能力和知識、進取程度、居住地點、通脹率及市場利率波動等一籃子因素來衡量。」正如香港年金公司在宣傳結尾時亦不忘提醒市民,不宜將所有現金投入年金計劃。

陳教授坦言:「要是我已年屆六十五,會認購年金,因為自 付身體健康。然而,這是個人的決定。有意認購者需仔細衡量,或找理財顧問協助。」

討論應對退休方案之餘,擔任大學公積金計劃成員受託人 近七年的陳教授有感而發道:「我發覺好一部分同事見有大 學代為管理,便對自己的公積金置諸不理。可是,退休後始 終也是由自己管理的,故我鼓勵大家不妨多了解基本理財知 識,為自己制訂合適的退休計劃。」

他寄語同事:「規劃退休是越早越好,年輕時大可先定大方向,再作長線投資,每五或十年檢討及修訂。待四十歲後,開始思考要怎樣的退休生活,大可不必作詳細規劃,但絕不忽略規劃的需要,因為選取合適投資和取得回報都需要時間的。」

fter over one year of promotion, the government finally launched its first-ever life annuity scheme—the HKMC Annuity Plan (Figure 1). All citizens aged 65 or above are entitled to lifetime guaranteed monthly annuity payments after paying a single premium. The tranche quota has been set at HK\$10 billion. To make the plan more attractive, the one-off lump-sum premium payment placed with the annuity scheme will not be counted as asset. In other words, subscribing for the plan will have no impact on eligibility for the Old Age Living Allowance.

The Annuity Plan is an alternative life insurance plan, but the major difference between the two lies in the fact that the latter requires monthly payments over an extended period before the policy owner can claim the sum insured, while the former involves payment of a single premium in return for regular payments. Annuity schemes have been implemented in other countries but it is a novelty in Hong Kong. Is it fair to say that the plan should have been implemented earlier? Is it a wise thing to invest in the Annuity Plan?

An Advantageous Late Start

Prof. Chan Wai-sum of the Department of Finance is a Member Trustee for CUHK's Staff Superannuation Scheme (1995) and Terms of Service (C) Staff Terminal Gratuity Scheme (TGS), and one of his research areas is retirement protection. He has been actively involved in annuities research commissioned by the government, being one of the writers of a report titled 'How to Increase the



保證期滿後共取得保費額的105%

Annuitant is guaranteed a total annuity payment of 105% of premium after expiry of guaranteed period



以六十五歲人士,投入一百萬元為例: Example: A 65-year-old annuitant who invests HK\$1 million in the plan





一年後退保取回金額 Surrender value after one year

\$732,748 \$706,488



Demand for Annuities in Hong Kong: A Study of Middle-Aged Adults' completed in 2016. Professor Chan said, 'In terms of the timeframe for setting up an annuity scheme, Hong Kong is evidently lagging behind. From another point of view, that may not be an entirely bad thing. If we examine Taiwan and Japan where annuity schemes were set up long ago, we can see what problems we may run into in future. The ageing problem has almost brought the annuity fund of Taiwan to its knee, making it a necessity to reduce its annuity payout rates. This of course has led to social discontent and protests. In Japan, the financial health of its annuity scheme is also being called into question. Hong Kong can learn from their mistakes and devise better thought-out annuity schemes.

'The government launched the Mandatory Provident Fund (MPF) scheme in 2000, and a considerable sum has accumulated since then. The timing is right for MPF subscribers to build on their returns through investing in the Annuity Plan.'

Questions and Limitations

With a return of 4%, the guaranteed monthly annuity payments of the HKMC Annuity Plan are deemed reasonable by Professor Chan. That said, return rates are determined by the annuity principal and the condition of the global investment market. He assumes that the capital amassed from annuity subscriptions will be transferred to the Exchange Fund for investment. If the fund's investments fail, leading to a reduction of investment capital, then it shall unleash a vicious cycle impacting on the regular payments of annuity income. The global financial market was quite volatile in the first half of the year, and a loss of HK\$7.7 billion was announced by the Hong Kong Monetary Authority. 'The HKMC Annuity Limited, wholly-owned by the Hong Kong government, will of course be spared from bankruptcy. But when major losses hit, what solutions do we have? Should the losses be covered by the public coffers? The government hasn't clarified on the issue yet.'

Professor Chan also has reservation about citizens' acceptance of the Annuity Plan. Take the reverse mortgage programme as an example. From 2011 when the programme was introduced to the end of June 2018, there have only been 2,600-plus cases of transactions, meaning that the programme has not been popular at all. He said, 'When I first embarked on my research in 2005, there was no privately run annuity scheme in Hong Kong. It was only recently that insurance companies started to make a foray into the annuity market.' According to the statistics of the Insurance Authority, the premium invested in privately run annuity schemes reached HK\$2.5 billion in the first quarter. 'The crux is how many people are willing to join the Annuity Plan. If the subscription rate of the plan is low, then the principal capital and return rates will plummet accordingly.

Another issue is the fact that the HKMC Annuity Plan only caters for individual subscriptions. Professor Chan said, 'If a husband and wife, aged 68 and 65, respectively, want to invest HK\$1 million in the plan, they must subscribe separately under the current system. A mature annuity market offers joint and survivor annuities, allowing the surviving annuitant to continue receiving regular payments.'

Erosive Effects of Inflation

The replacement rate refers to one's income after retirement divided by his or her pre-retirement income. The higher the rate, the higher one's standard of living after retirement. Excluding medical expenses, a replacement rate of 40% to 60% can be considered satisfactory. Professor Chan said, 'If you have a pre-retirement income of HK\$15,000, a monthly annuity income of some HK\$5,000 only amounts to a replacement rate of 30% or more, which is far from adequate.

'Don't forget that annuity is a fixed income which does not increase with inflation. From 1987 to 2017, Hong Kong's average inflation rate was about 1.2%. If the monthly income received by annuitants remain unchanged, then its purchasing power will fall. For example, a 65-year-old woman who invests HK\$1 million in the Annuity Plan will get a monthly income of HK\$5,300, but after 30 years, the purchasing power of her income will have declined by 26% (HK\$3,922) if inflation is 1% or 45% (HK\$2,915), if inflation is 2% (Figure 2). In a word, the Annuity Plan offers long-term protection, but that protection may not be enough.

Expert Advice

On the whole, Professor Chan regards as a good start for Hong Kong the setting up of an annuity scheme, which reminds us of the necessity for timely retirement planning. He said, 'We should not only focus on annuity income and assume it can solve all our problems. Everyone's needs are different, and in making a retirement plan, one should take into consideration one's anticipated retirement age, anticipated longevity, condition of health, anticipated way of life and standard of living, medical expenses, income sources, net asset value, cash flow, financial competency, aggressiveness, location of residence, inflation rate and market interest rate fluctuations.' The advertisement of the Annuity Plan also reminds viewers not to put all eggs in one basket.

Professor Chan said, 'If I am over 65 and in good health, then I will invest in the plan. However, this is a personal decision. Potential subscribers should deliberate carefully or talk to their financial consultants.'

On retirement planning, Professor Chan, who has been entrusted to monitor the Staff Superannuation Scheme and TGS for seven years, thinks that employees should take better control of their fund accounts. 'Some colleagues may forget about their accounts completely, assuming that the University is managing the accounts for them. However, those accounts have to be managed by themselves after retirement, and so I would encourage them to understand more about the basics of financial management and chart out the retirement plans suitable for themselves.'

Professor Chan added, 'It is always better to plan your retirement earlier than later. When you are young, you can set a general goal and make long-term investments, reviewing them every five or 10 years. After you have reached 40, you have to start making plans for your retirement. You do not have to go into the details but planning is always a must, because choosing the right tools of investment and reaping the benefits require some time.'

C.F.



營造正向教育環境

Creating a Positive Learning Environment

香港賽馬會慈善信託基金與中大社會科學院攜 手推出「正正得正」教育計劃,冀與本地學校師生 及家長協力營造正向教育的環境,促進大眾心理 健康。計劃以正向教育研究為基礎,中大亦派出 顧問到校提供教學建議,協助校方改善教學法、 課堂活動、評核模式及校園環境,締造正向學習 氛圍。

The Hong Kong Jockey Club Charities Trust and CUHK's Faculty of Social Science have jointly rolled out a positive education project 'Ascend and Radiate' to co-create a positive environment for local students, parents and teachers and promote mental well-being among them. Firmly grounded in positive education research, the CUHK consultants offer advice on teaching practices to help schools redesign their pedagogy, learning activities, assessments and school campus to cultivate a positive atmosphere.



中大學者入選人工智能專家智庫 AI Think-tanker from CUHK

工程學院副院長(外務)黃錦輝教授加入中國人工智能學會智庫,為首批入選「自然語言處理與理解」組別之專家,六十一名入選者當中,黃教授是唯一本港土生土長的學者。黃教

授認為香港在中國人工智能發

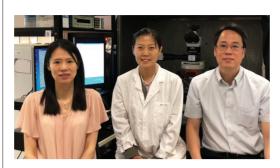


展中擔當重要角色,冀把中大的科研成果推向國際,引領本港發展成為亞洲人工智能研發基地。

Affairs) of the Faculty of Engineering, has been appointed as one of the first batch of 61 national experts by the Chinese Association for Artificial Intelligence under the category of natural language processing and understanding. Among the experts selected, Professor Wong is the only scholar from Hong Kong. With a staunch belief in Hong Kong's unique role in advancing the AI development in China, he hopes that CUHK will shine and stand out as Asia's AI research and innovation hub.

都怪多巴胺作祟

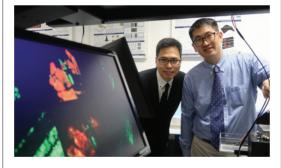
Blame Dopamine for Muddleheadedness



辦公室搬遷過後,偶爾去錯舊樓層並非怪事,但 有些人或需要多一點時間適應,原來是因為缺乏 多巴胺。醫學院的神經科學家容永豪教授(右)及 柯亞教授(左)發現大腦的多巴胺系統失調可致 「認知靈活性」受損。研究可以解釋為甚麼柏金遜 症、強迫症行為等患者較不靈活,經常堅持某種處 事模式,有助專家尋找治療方法。

Many people may have mistakenly gone to the old office once or twice after office relocation, but some may take a longer while to adapt to the change. It is due to the depletion of dopamine, according to the neuroscientists of CUHK's Faculty of Medicine Prof. Yung Wing-ho (right) and Prof. Ke Ya (left). Their study has indicated that dysregulation of dopamine systems in the brain may impair cognitive flexibility. The findings may explain why some patients with brain disorders such as Parkinson's disease and obsessive-compulsive discorder often stick to rigid rules, which help identify therapies for them.

為青光眼治療掀新章 Glaucoma No Longer Nerve-racking



機械與自動化工程學系陳世祈教授(右)及其團隊,成功研發首台「數碼全息雙光子激發」顯微鏡,拍下細胞實時螢光成像和同步多點光學刺激,詳細記錄細胞之間的活動情況,有助研究視覺神經疾病的成因,如常見的青光眼便可藉該顯微鏡掃描視網膜神經節細胞,了解發病機制,研發治療方案。

A team led by Prof. Chen Shih-chi (right) of the Department of Mechanical and Automation Engineering has developed the first digital holography-based (DH) two-photon excitation (TPE) microscope to generate simultaneous videorate fluorescent imaging and multi-point optical stimulation. This allows the tracking of nerve cells activities and helps advance the study of neurological diseases, such as glaucoma, a very common eye disease. By scanning the retinal ganglion cells using the DH-TPE microscope, scientist can understand the molecular mechanisms of optic nerve degeneration in glaucoma and develop therapies for patients.

正視腸病根源

Getting Down to the Gut Issues

中大腸胃病研究團隊發現與肥胖相關的大腸癌趨向年輕化,呼籲大眾關注問題。團隊搜集來自香港、英國、美國和瑞典等六個國家及地區的數據,分析自1988年起各地方的大腸癌發病趨勢,結果顯示香港及美國罹患結腸癌的年輕患者顯著增加。醫學院雷諾信醫生指出肥胖可引致腸道微生物群轉變,增加患大腸癌的風險。



CUHK's gastroenterology team rang the alarm bell of the 'young-shift' in the incidence of colorectal cancer. They analyzed the data of six selected developed countries and regions, including Hong Kong, the UK, the US and Sweden, and looked into their colorectal cancer incidence trends over 20 years since 1988. Results revealed the young generation in Hong Kong and the US diagnosed with colon cancer is on the rise. Dr. Rashid Lui of the Faculty of Medicine opined that growing obesity changes the gut microbiota which may in turn increase the risk of colorectal cancer.

人口遷移研究新里程

Synergy on Migration Research

大學聯同西安交通大學設立人口遷移聯合研究中心,鞏固兩校的策略 夥伴關係,並於6月15日在中大舉行聯合研究中心成立典禮。兩校的團 隊一直走在人口遷移研究領域的前線,將共同研究中國的國際移民、 流動人口、國內遷移等廣泛領域,並會着眼於國際移民、流動人口及回 流人口融入社會的狀況,探討其對中國社會經濟影響,以及粵港澳大 灣區的人才流動等問題。除了為中國的移民政策出謀獻策,聯合研究 中心亦會聯手展開跨學科研究,為各地研究者提供交流平台。

CUHK and Xi'an Jiaotong University (XJTU) have forged a strategic partnership by jointly establishing a research centre on migration. An inauguration ceremony for the joint centre was held on campus on 15 June. CUHK and XJTU research groups have been at the forefront of migration research. The joint research centre will look into extensive topics covering international immigration, floating population and internal migration in China, with foci on the social integration among the international migrants, floating population and the returning migrants, their socio-economic impact, and talent migration in the Greater Bay Area. Besides offering insights to the nation's migration policy, the centre will serve as an interdisciplinary research and exchange platform for international scholars.



中大 (深圳) 夥企業推動人工智能 CUHK (SZ)'s Industry Partnership on AI

中大(深圳)與兩大企業合作,於6月分別成立中大(深圳)-京東集 團人工智能聯合實驗室和中大(深圳)-騰訊 AI Lab機器智能聯合 實驗室:兩者均專注研究計算機視覺、自然語言處理和機器學習等領域,悉力培養博士生。

CUHK (SZ) collaborated with two leading corporations to establish the CUHK (SZ)-JD Joint Al Lab and the CUHK (SZ)-Tencent Al Lab Joint Laboratory of Machine Intelligence in June. Both laboratories focus on computer vision, natural language processing, machine learning and doctoral student training.

智能都市排水系統

Smart Urban Drainage System

現代都市的地下渠道系統錯綜複雜,當中的二氧化硫和沼氣等可能會危害前線人員,沼氣達到一定濃度更會引起爆炸。中大電子工程學系吳克利教授的團隊研發出無線智能排水系統,可實時監測地下渠務管道、沙井內的水位及氣體變化。電波如何穿透14厘米厚的鐵製沙井蓋是一大挑戰,研究團隊將沙井蓋變為無線網絡的一部分,成功藉4G網絡收集氣體濃度和水位的數據。團隊已在九龍灣安裝過百個無線探測裝置,有效監測都市排水系統。



Our complex urban drainage system may impose difficulty and danger on performing onsite inspection and detection of hazardous gases such as sulphur dioxide and methane, and the accumulation of the latter will even cause explosion. A team led by Prof. Wu Keli of the Department of Electronic Engineering has developed a wireless network to provide real-time information on drainage performance, concentration of gases and water level. One of the challenges is to investigate how the wireless signals can penetrate a 14cm-thick iron manhole cover to transmit data through 4G network, but the team has transformed the manhole cover as part of integrated wireless network to detect the gas concentration and water level. The system has been installed and tested in more than a hundred manholes in Kowloon Bay and proven feasible in safeguarding the city's drainage system.

隨心之旅

Self-paced Heart Journey



香港的上班族工時長,壓力大。為提升他們的精神健康,中大 與香港賽馬會慈善信託基金及新生精神康復會攜手合作,推 出賽馬會心導遊計劃及一站式網上自助心理支援平台。用戶 會定期自我評估,而平台會根據用戶的個別需要建議合適的 課程或服務,助人踏上隨心之旅。

Hong Kong's workforce is characterized by long working hours. To enhance the employees' mental health, CUHK joined hands with The Hong Kong Jockey Club Charities Trust and New Life Psychiatric Rehabilitation Association to launch the Jockey Club TourHeart Project and its one-stop online psychological self-help platform. Having processed the

data of online mental health check-up input by its users, the system will recommend appropriate courses or services to them on the go.

復康人士的新希望

New Hope for the Rehabilitees

中風是引致身體殘障的主要病因之一。為改善中風復康訓練,工程學院生物醫學工程學系系主任湯啟宇教授(右)及醫學院外科學系助理教授李崢教授的團隊,結合最新矽膠列印技術,研發出「自訂3D打印軟體復康機械手」。傳統的復康機械設備體積龐大,患者不能每天在家中使用,而軟體復康機械手可度身訂造,且輕巧舒適,讓患者安在家中訓練手部機能,改善復康進度。

Stroke is one of the main causes of disability. To facilitate the stroke patients' rehabilitation, a team led by Prof. Raymond Tong (right) of the Department of Biomedical Engineering and Prof. Zheng Li of the



Department of Surgery has developed the 3D-printed soft robotic hand making use of the latest silicone printing technology. Not heavy as with traditional mechanical rehabilitation devices, patients can bring the light and tailored-made soft robotic hand home to practice some hand functions for better recovery.

肺癌病人的佳音

Heartening News for the Lung Cancer Patients

肺癌是本港頭號癌症殺手,每年的新增個案逾四百宗,超過八成肺癌病人為非小細胞肺癌 (NSCLC) 患者。根據醫學院莫樹錦教授的國際研究,帶有表皮生長因子受體基因變異之晚期NSCLC患者接受第二代標靶治療後,整體存活期較接受常規治療延長了七個月,當中過半患者更存活超過三十個月或以上,反映新治療方案較常規治療更有效。研究成果已發表於醫學期刊Journal of Clinical Oncology。



In Hong Kong, lung cancer is the leading cause of cancer deaths, with over 4,000 new cases per year. Non-small-cell lung cancer (NSCLC) accounts for about 80% of

all lung cancers. A global study led by Prof. Tony Mok of the Faculty of Medicine has revealed that a second generation targeted therapy shows a more than seven-month improvement in the overall survival of advanced NSCLC patients with epidermal growth factor receptor mutation, compared with conventional first-line treatment. Over half of them survived 30 months or even longer. The results were published in the *Journal of Clinical Oncology*.

都市發展的跨文化對話

Intercultural Dialogue on Urban Development



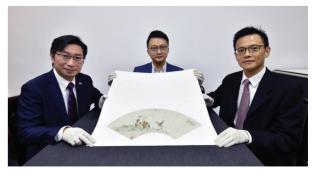
仔、粉嶺及天水圍,親身接觸居民及有關人士,了解規劃社區發展所面對的機遇與難題。 透過課堂所學及考察體驗,學生學會從多角度剖析都市議題,明白如何有效管理地球 資源。

Forty-five bright-minded students from 19 nations gathered at CUHK for intensive learning and idea exchange during the period 1–9 July at the Association of Commonwealth Universities Summer School. The programme gathered students worldwide to explore the topic of 'Designing and Creating Sustainable Communities' in Hong Kong. In addition to attending thematic lectures and workshops hosted by CUHK academics, local practitioners and overseas experts, students also paid visits to Sai Ying Pun, Wanchai, Fanling and Tin Shui Wai and gained exposure to the opportunities and challenges in urban planning faced by residents and stakeholders. They also explored the urban issues from multiple perspectives and sought solutions to better manage the world's resources.

當文物觀賞融入醫學教育

When Museum Meets Medicine

良好的觀察力是行醫的基本條件。中大醫學院與與物館聯手推出新課程,透過讓醫學生鑑賞文物館的豐富館藏,提升他們在視覺分析、觸感及形狀觀察力和觀感及形狀觀察力和顯明,並將觀察所得扼要表達。



Good observation is the prerequisite of doctoring. Drawing on the University's rich art collection, the Faculty of Medicine and the Art Museum of CUHK have launched a museum-based programme to enhance the observational and articulation skills of the medical students. The programme will sharpen their sensitivity to visual details, textures and shapes of objects, as well as their articulation skills for logical deductions.

守護下一代的眼睛健康

Eyeing the Future of Eye Care

眼科及視覺科學學系獲香港賽馬會慈善信託基金慷慨 捐助近七千八百萬港元,開展中大賽馬會瞳心護眼計 劃及中大賽馬會眼科顯微手術培訓計劃,以改善本地 兒童眼睛護理,並為醫生提供眼科顯微手術培訓。

The Department of Ophthalmology and Visual Sciences has received a generous donation of close to



HK\$78 million from the Hong Kong Jockey Club Charities Trust for funding two programmes, namely, CUHK Jockey Club Children's Eye Care Programme and CUHK Jockey Club Ophthalmic Microsurgical Training Programme, to promote local children's eye care and to provide ophthalmic microsurgical training.

首位華人數學家獲馬塞爾·格羅斯曼獎

First Chinese Mathematician Receives Marcel Grossmann Award



中大博文講座教授及數學科學研究所所長丘成桐教授,獲頒「馬塞爾·格羅斯曼獎」,以表揚他成功證明廣義相對論中總質量的正定性、令「准局域質量」的概念更完善、證明了「卡拉比猜想」,以及在黑洞物理研究貢獻良多。

Prof. Yau Shing-tung, Distinguished Professor-at-Large and director of the Institute of Mathematical Sciences at CUHK, has been honoured with the Marcel Grossmann Award in recognition of his achievement for proving the positivity of total mass in the theory of general relativity, perfecting the concept of quasi-local mass, proving the Calabi conjecture, and his continuous inspiring role in the study of black holes physics.

睡一睡,心血管病莫伴隨

Catch Some Z's to Avoid Cardiovascular Disease

醫學院研究團隊為一百四十二名青少年量度「頸動脈內膜一中膜厚度」(簡稱CIMT),並記錄他們的平均睡眠時數,發現近四成參與研究者每日平均睡眠時數少於美國全國睡眠基金會建議的最少八小時,更發現青少年睡得愈少,他們的CIMT便愈厚,意味着他們日後罹患心血管疾病的風險愈高。研究結果已發表於The Journal of Pediatrics。

The researchers of the Faculty of Medicine measured the Carotid Intima-Media Thickness (CIMT) of 142



adolescents and recorded their mean sleep duration. Results showed that almost 40% of participants did not get at least eight hours of sleep as recommended by the National Sleep Foundation. It was also seen that shorter sleep duration is associated with increased CIMT, which implies higher risk of cardiovascular disease in the future. The study results have been published in *The Journal of Pediatrics*.

孕育年輕社會創業家

Young Talent, Big Business

社創領袖獎頒獎典禮2018暨尤努斯社會事業講壇於7月23日在中大舉行·2006年諾貝爾和平獎得主穆罕默德·尤努斯教授(中)於典禮擔任頒獎嘉賓·並於社會事業講壇中分享他對「三零世界」(零貧窮、零失業和零淨碳排放)的盼望。中大社會及公民參與督導委員會聯席主席沈祖堯教授(右二)希望大學可以培育和幫助年輕人創辦社會事業·為有志之士提供訓練及實踐的機會。

The S.I. Leadership Award Ceremony 2018 and Yunus Social Business Seminar were held at CUHK on 23



July. Prof. Muhammad Yunus (centre), Nobel Peace Laureate in 2006, presented the awards at the ceremony and delivered a speech at the seminar. He shared his hopes for the 'world of three zeros' (zero poverty, zero unemployment and zero net carbon emissions). Prof. Joseph J.Y. Sung (2nd right), co-chairman of the Steering Committee for Promoting Personal Development through Social and Civic Engagement of CUHK, hoped the University would be a platform which incubates and assists young people in starting their social enterprises.

人臉識別檢測創新猷

Face Flashing Foray



研究實驗室團隊,研發出嶄新Face Flashing人臉識別動態檢測方案,在掃描人臉時屏幕會隨機發放不同顏色光線,透過分析臉上的光線反射效果,分辨偽造影像,驗證用戶身分。

With rapid AI development, facial recognition technologies have been used for unlocking desktops or mobile devices. Facial information is, however, easy to capture and reproduce, making face authentication systems vulnerable to attack. The System Security Lab led by Prof. Zhang Kehuan (right) of the Department of Information Engineering has designed a new challenge-response protocol for liveness detection, Face Flashing. Light from a display screen will be projected onto a human face and the reflected light will be captured by a camera for analysis, enabling the system to differentiate real human faces from fake ones.

中大 (深圳) 成立世界級運籌科學研究院 CUHK (SZ)'s World-class Institute for Data and Decision Analytics

中大 (深圳)於7月20日宣布成立資料與運籌科學研究院,由世界知名學者戴建崗教授和張寅教授擔任共同院長。研究院將與該校理工學院和經管學院密切合作,專注於運籌學、資訊工程、統計學、運營管理和決策科學等研究領域,以及相關交叉領域的科學研究與人才培養工作。

CUHK (SZ) announced the establishment of the Institute for Data and Decision Analytics on 20 July, with two world-renowned scholars Prof. Jim Dai and Prof. Zhang Yin serving as codirectors. Working closely with the School of Management and Economics, the Institute will focus on scientific research and talent development in research areas such as operations research, information engineering, statistics, operations management and decision science.

文憑試優秀學生加入中大

Outstanding HKDSE Students Admitted

中大今年共取錄二千八百八十六名文憑試考生,99.5%為Band A 考生。繼去年錄取全港成績最佳考生,中大今年再創佳績,共錄取三位考獲七科5**的考生,以及十一位考獲六科5**的考生。考獲七科5**的三人將分別入讀醫學(環球醫學領袖培訓專修)、環球商業學及環球經濟與金融跨學科主修課程。

CUHK has admitted 2,886 HKDSE students, 99.5% of which were Band A students. Building on the success last year in admitting top students with the best HKDSE results, this year CUHK admitted three students with 5** in seven subjects, as well as 11 students with 5** in six subjects. The three students with 5** in seven subjects will enrol in the Medicine (Global Physician-Leadership Stream), Global Business Studies and Global Economics and Finance programmes.

宣布事項/ANNOUNCEMENTS



人事任命 **Appointments**





Prof. Chan Wai-yee











汪正平教授 Prof. Wong Ching-

| 新任 New Appointment | 姓名 Name | 任期/上任日期 Appointment Period/ Start Date |
|---|--------------------------------|--|
| 副校長 Pro-Vice-Chancellor | 陳偉儀教授 Prof. Chan Wai-yee | 1.8.2018-31.7.2021 |
| 文學院暫任院長 Interim Dean of Arts | 賴品超教授 Prof. Lai Pan-chiu | 1.8.2018 |
| 工程學院暫任院長 Interim Dean of Engineering | 任揚教授 Prof. Yam Yeung | 1.8.2018 |
| 理學院暫任院長 Interim Dean of Science | 謝作偉教授 Prof. Xie Zuowei | 1.5.2018 |
| 電子工程學系榮休教授 Emeritus Professor of Electronic Engineering | 汪正平教授 Prof. Wong Ching-ping | 1.8.2018 |

| | 續任 Re-appointment | 姓名 Name | 任期/上任日期 Appointment Period/ Start Date | |
|--|----------------------------|--------------------------------|--|--|
| | 大學校董 Council Member | 郭炳聯博士 Dr. Raymond P.L. Kwok | 24.10.2018 | |
| | 副校長 Pro-Vice-Chancellor | 霍泰輝教授 Prof. Fok Tai-fai | 1.8.2018-31.12.2019 | |

舞台劇《摯愛》環球首演

World Premiere of My Love, a FAA Production

地點 Venue

香港文化中心大劇院 The Grand Theatre, Hong Kong Cultural Centre

日期 Date / 時間 Time

31.8.2018 7:00 pm (首演嘉賓場 Private Premiere) 1.9.2018 7:30 pm

(公開場 Public Performance) 2.9.2018 3:00 pm (公開場 Public Performance)

製作 Production

香港中文大學校友會聯會 The Federation of Alumni Associations of the CUHK (www.alumni.cuhk.edu.hk/faa)

查詢電話 Enquiry Hotline

首演嘉賓場 Private Premiere 3943 1931

公開場 Public Performance 3943 7863

觀看短片 Watch the video





公積金計劃投資回報成績

Investment Returns of Staff Superannuation Scheme

| | 6.2018 | | 1.7.2017 – 30.6.2018 | |
|------------------------------|---------------------|-----------------------------|----------------------|-----------------------------|
| 基金 Fund | 未經審核數據 Unaudited | 指標回報 Benchmark Return | 未經審核數據 Unaudited | 指標回報 Benchmark Return |
| 增長 Growth | -1.94% | -2.00% | 15.50% | 11.94% |
| 平衡 Balanced | -2.13% | -1.45% | 10.12% | 9.72% |
| 穩定 Stable | -1.14% | -0.85% | 3.95% | 5.59% |
| 香港股票 HK Equity | -5.49% | -5.49% | 18.60% | 15.35% |
| 香港指數 HK Index-linked | -4.72% | -4.52% | 15.86% | 16.30% |
| A50中國指數 A50 China Tracker | -8.53% | -8.34% | 5.6% | 6.91% |
| 港元銀行存款 HKD Bank Deposit | 0.13% | 0.06% | 1.12% | 0.33% |
| 美元銀行存款 USD Bank Deposit* | 0.22% | 0.10% | 2.46% | 1.15% |
| 澳元銀行存款 AUD Bank Deposit* | -2.15% | -2.27% | -1.10% | -2.46% |
| 歐元銀行存款 EUR Bank Deposit* | 0.01% | 0.04% | 2.61% | 2.84% |
| 人民幣銀行存款 RMB Bank Deposit* | -3.12% | -3.23% | 6.08% | 4.73% |

強積金數據請參閱: www.cuhk.edu.hk/fno/chi/public/payroll_benefits/mpf.html

For MPF Scheme performance, please refer to: www.cuhk.edu.hk/fno/eng/public/payroll_benefits/mpf.html

實際與指標回報已包括有關期間內之匯率變動 Both actual and benchmark returns include foreign currency exchange difference for the month

選擇轉換大學強積金計劃安排

Election for Change of MPF Scheme

根據大學現有安排,強積金計劃成員可於每年選擇轉換強積金計劃一次(即「富達退休集 成信託計劃」及「安聯強積金計劃」之間轉換),生效日期指定為4月1日或10月1日。成員 可瀏覽大學強積金網頁、富達網頁或安聯網頁,了解兩個強積金計劃的基金資料及投資表 現。如欲選擇於2018年10月1日起轉換計劃,請填妥轉換強積金計劃申請表格及新選擇的 強積金計劃成員登記表格,於2018年8月27日(星期一)或之前遞交至財務處薪津及公積 金組。查詢詳情及下載表格可瀏覽大學強積金網頁www.cuhk.edu.hk/fno/chi/public/ payroll_benefits/mpf/change_of_mpf_scheme.html, 親臨或致電該組(電話:3943 7252/9586) •

Please be reminded that MPF members may switch between the two MPF schemes viz., Fidelity Retirement Master Trust and Allianz Global Investors MPF Plan once a year, on either 1 April or 1 October. Members may visit the University's MPF website or the respective MPF service providers' websites for information about the investment funds and performance of the two MPF service providers. Members who want to switch MPF scheme on 1 October 2018 should complete the Election Form for Change of MPF Scheme and Membership Enrolment Form for the new scheme, and submit to the Payroll & Superannuation Unit, Finance Office on or before 27 August 2018 (Monday). Forms are downloadable on the University's MPF website at www.cuhk.edu.hk/fno/eng/ public/payroll_benefits/mpf/change_of_mpf_scheme.html or obtainable from the unit. (Tel: 3943 7252/9586).



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。



字裏科技/TECH TALKS

器實工善

Tech Tool



中大系統工程與工程管理學系教授,創新科技中心主任黃錦輝認為科技是善工的寶器。

人類在進化史上的生活水平、生產效率不斷提升,當中遇到的難題,多是靠科技解決。

除了認識世界·科學也應改造甚至改善這個世界。後者往往由科技推動·科學家編制算法, 詳細列出解決一系列問題的方向步驟。其中最著名的是「旅行推銷員問題」,即在一定數量 的城市和任何兩個城市之間的距離已知的情況下,如何找出一條以最短時間走遍所有城市 的路徑。

黃教授認為當代最重要的科技突破要算是互聯網,因為它令資訊的傳播無遠弗屆,大大壓縮了時空,為現代生活定奏。互聯網的迅速發展,其實有賴我們熟悉的**高錕**教授在光纖方面的劃時代貢獻。

但科學怪人、原子彈之類也不時提醒我們科技會反過來帶給人類浩劫。黃教授卻視科技為中性,既可載舟,也可覆舟。他不認同末日論者的看法,要以法例或其他方法來管制科技的發展。科技是福是禍,端視乎在人類手裏怎樣應用,就好像互聯網本身只是一個資訊的高速公路,但總有人不守交通規則,橫衝直撞,至會出現網絡欺凌、兩極化言行,或2016年美國總統大選涉嫌受到不當影響等。

最後·黃教授認為學工程的·也須學習科技研究的智慧和操守·俾能發揮科技這寶器來造福社會。

Tech is tool, says **Wong Kam-fai**, professor of the Department of Systems Engineering and Engineering Management and director of the Centre for Innovation and Technology at CUHK.

Tech is scientific knowhow that brings solutions to problems in the pursuit of greater comfort, convenience and fulfilment in life and work by human beings.

In addition to knowing the world, science should change the world and make it a better place. This is technology's province, achieved often by means of algorithms which are detailed specifications of the steps to be taken to solve given problems. The most famous example is the 'travelling salesman problem'. Given a number of cities and the distance between any two, the challenge is to figure out the shortest possible route that covers all the cities.

To Professor Wong, the advent of the worldwide web is the most far-reaching technological breakthrough in the modern times. It has enabled information to travel far and wide, thereby shrinking space and compressing time which has completely recast the face of modern living. For that we have someone close by to thank. Seminal developments in internet technology were made possible by the groundbreaking work on optical fibre of Prof. Charles K. Kao.

Many cite Frankenstein's monster or the atomic bomb as caveat that technology would overstep its bounds with calamitous results. Professor Wong thinks technology is neuter. Unlike the doomsayers, he does not think technological innovations should be subject to censorship or fettered by legislative control. It is how technology is put to use that may invite undesirable consequences. The internet platform is itself value-neutral but inadvertence or malice might give rise to things like online bullying, polarized partisanism or the consequences of the 2016 US presidential election.

Lastly, Professor Wong sees the role of education in general and engineering education in particular to be providing that much needed wisdom and integrity in putting technology to the service of humankind. Responsible educators should show the tech novices how to harness technology to serve the changing needs of society and improve the lives of ordinary people.

藝士匹靈/ARTSPIRIN

文心玲瓏

The Literary Mind

醫生與詩人看似毫不相干,中大生命倫理學中心總監**區結成**醫生卻身兼兩個身分,讀他的《有詩的時候》,恍如隨他走了一趟新詩大觀園,一路上細聽中國新詩和詩人的小故事。

《有詩的時候》既非詩集,亦非詩評,而是一扇讓人穿梭百年新詩世界的時空門。全書分為三部分,首部分講解民國年間的詩作,集中介紹冰心、戴望舒、馮至、穆旦、卞之琳等詩人;第二部分以四十年代興起的九葉詩派和七月詩派為主;第三部分則介紹香港和台灣詩人,包括余光中、也斯和**蔡炎培**。

作者自幼愛讀詩、寫作,在學時曾投稿青年文學獎徵文比賽,獲新詩優異獎,平日以筆名「區聞海」為《信報》及《明報》撰寫專欄。他在公營醫療系統行醫三十多年,退休前任醫管局質素及安全總監,其間舉辦過三場「午間詩語」講座,暢談新詩及背後的小故事,當時他已着手籌劃此書。

馮至是作者喜歡的詩人,他糅合中西詩藝,既承傳了中國詩歌的憂懷,也從歌德、西方現代派表現技巧和存在主義哲學豐富了詩的表現方式,曾被魯迅讚譽為「中國最傑出的抒情詩人」。作者認為其《十四行集》更超越了「抒情」,第二首詩〈什麼能從我們身上脱落〉以「蜕化的蟬蛾」表達死亡與新生、有限與超越。

「詩」字蘊藏「寸」,作者認為有「寸心」之意,寫詩能表達心中幽微之處。人生五味紛陳, 不妨放慢步伐,呷一口茶,讀一首新詩,讓生活多一點人文的細膩。

Doctors and poets could be as different as chalk and cheese, but the director of CUHK's Centre for Bioethics Dr. **Derrick Au** has proved himself an exception. Reading the doctor-cum-poet's *In Time with Poetry*, the reader seems to have entered a literary garden and listened to him telling the stories of Chinese modern poetry and poets.

In Time with Poetry is neither an anthology nor a review of poetry, but a trapdoor through which you time travel in the century-long history of modern poetry. The first part of the book covers the poems in China's Republican era by poets like Bing Xin, Dai Wangshu, Feng Zhi, Mu Dan and Bian Zhilin. The second part introduces the Nine Leaves School and the July School that flourished in the 1940s, followed by the part on Hong Kong and Taiwanese poets which include Yu Kwang-chung, Yesi (aka Leung Ping-kwan) and Tsai Yim-pui.

The author has been addicted to reading poems and writing since childhood. During his undergraduate studies, he won a merit award in modern poetry in the Youth Literary Awards competition. In parallel to his medical career, he writes for the *Hong Kong Economic Journal* and *Ming Pao* as a columnist under the pseudonym Au Man-hoi. He has served in the public heathcare system for over three decades. He worked as the director of Quality and Safety before his retirement from the Hospital Authority, during which time he had organized three literary talks on modern poetry and the stories behind. It was during this time that he started to plan for this book.

Feng Zhi, his favourite poet, was equally comfortable in Chinese and western poesy. Feng inherited the sentiment of Chinese poetry, and benefitted from Goethe, the modernist expressionist techniques and existentialism. Lu Xun hailed him as China's most outstanding lyrical poet. Dr. Au found his *Collection of Sonnets* more than 'lyrical'. The second poem in the collection, 'What Might Fall from Our Bodies', uses the metamorphosis of cicadas and moths to meditate on death and rebirth, as well as finitude and transcendence.

Dr. Au thinks that the writing of poetry helps one to reach into the innermost of one's heart and experience life to the full. Reading a poem is like sipping tea. It's an invitation to slow down and savour life.



T.C.



黄文興先生

Mr. Alfred Wong

內部審核處處長 Director of Internal Audit

中大1994年成立內部審核處,是最早成立有關部門的本地院校之一。現任處長黃文 興加入中大前是會計師,與孔子同科。近年內部審核不論在概念還是作業上都出現 巨大轉變,黃處長正耐心及有步驟地把風險管理的新觀念帶到校園。

The Internal Audit Office (IAO) was established in 1994 at CUHK, the first of its kind among local universities. The Director of Internal Audit, Mr. Alfred Wong, had had many years of experience in accounting (a profession he has the honour of sharing with Confucius) before joining CUHK five years ago. In commensuration with the shifting conception and focus of internal audit practice, Mr. Wong has been patiently and programmatically bringing the concept of risk management to the University community.

孔子是會計?誰說的?

孟子説的。《孟子》是最早出現「會計」一詞的古書,〈孟子·萬章〉載:「孔子嘗為委吏矣·曰: 會計,當而已矣。」

内部審核常予人一個稅吏星夜在貨倉審查票據的感覺,事實是否如此?

這個傳統形象的確比較負面,事實上也對受審核的機構的資源、士氣及表現產生了或多或少的影響。近年內部審核業界普遍接受對內部審核的定義是 IA = f(RM, CG, IC)。

請解釋一下。

在這條方程式中·IA代表內部審核·RM、CG、IC則分別代表風險管理、企業管治和內部控制。三者的比重容或有異,但都代表內部審核的有機必然成分,而不是加減乘除、錙銖必較那麼簡單。

内部審核的目的不是把價值量化成錢看嗎?

衡工量值只不過是以財務角度審視企業的表現,以評核其在金錢價值上的優次,這對如中大般的公共機構可能不太適用。譬如説,我們大學的使命、傳統等都不是容易可以量化為金錢價值的。

你會怎樣來形容内部審核?

內部審核在一個機構中應該保持獨立,但卻是其架構及文化不可分割的一部分,它的作用是確保機構運作暢順,而且對外部環境的改變做好準備。它就像人體的淋巴結,可以偵測及預防對人體有害的東西。

内部審核在高等教育扮演甚麼角式?

自2015年教資會公布Newby報告書後·院校透明度及風險管理便顯得更重要。內部審核的任務·便是認清大學運作上可能出現的風險,並提出有效管控機制及措施·更要在透明的管理過程中·作出合規的披露。

中大是如何管理風險的?

如右圖所示,我們協助書院、學院、學系等查找它們前沿運作遇到的風險,有需要會匯報管理層,管理層也會下達關係大學整體的風險評估。大腦與四肢之間經絡暢順,確保大學運作機動及高效率。

這一切對内部審核處的工作有甚麼影響?

我們工作的重點不再是衡工量值和問責,而是以風險為本。我們希望能締造並鞏固一個對風險醒覺的校園文化,我們會不時造訪各個委員會及部門,協助它們認識風險和學習管理風險,審核變成了「手段」,或確切一點是「服務」,而不是「目的」。

内部審核處今後會朝哪個方向發展?

內部審核處部門小,幾乎全是將軍,沒有士卒,但責任所在,我們必須善用有 限資源服務大學。

你辦公室擺設着與父親及子女有關的紀念品。你與家人關係 應該非常要好吧?

是的。不只上一代,我很慶幸能從下一代身上也學到很多 東西。

Confucius was an accountant? Says who?

Says Mencius. The Chinese word for 'accountant' first appears in *Mengzi* which records that 'Confucius was once keeper of stores, and he then said, "My calculations must be all right. That is all I have to care about."'

Internal audit has often evoked the image of a tax officer poring over every invoice and document in an office. How true is it?

This traditional approach is rather adversarial and has few positive impacts on the resources, morale and performance of the organization under audit. In recent years, the profession has generally embraced the equation IA = f(RM, CG, IC) as the definition of internal audit.

Please explain.

It states that internal audit (IA) is a function of three things, namely, risk management (RM), corporate governance (CG) and internal control (IC). It's not just adding things up and scrutinizing the small prints.

Isn't it the aim of internal audit to quantify value into money terms?

This value-for-money approach emphasizes only the financial aspect of performance but is hard to apply to a public institution like CUHK. Our missions and heritage, for example, cannot easily be measured or quantified in terms of monetary value.

How would you liken internal audit?

Internal audit should be independent but interwoven into an organization's structure and culture so as to check how well it is doing or responding to the changes in its environment. It functions like the lymph node in the human body which detects and prevents potential harms to its general well-being.

What role does internal audit play in higher education?

Since the publication of UGC's report on local funded universities in 2015 (the Newby Report), transparency and risk management in tertiary institutions have become more prominent. The internal audit outfit becomes necessary and instrumental in identifying risks pertaining to the operation of a university and managing and controlling them.

How does risk management work at CUHK?

As seen in the diagram, internal audit helps the Colleges, Faculties and Departments identify their frontline risks and report to management. It also helps to convey any institutional risks perceived by management from top down. As such, it is the conduit of communication between the head and the arms, ensuring agility and adaptability of an organic whole.

What changes does that cause to the work of IAO?

Instead of looking at money-for-value-ness and accountability, IAO's work has become more risk-based. Our aim is to promote and uphold a risk-conscious culture on campus. We find ourselves doing more and more outreaching work at committees and other units to help them see the risks and think of how to mitigate them.

How will IAO develop?

We're a very small office but our tasks are important to the University as a whole. Our limited resources require us to be always prudent and cautious in delivering our services.

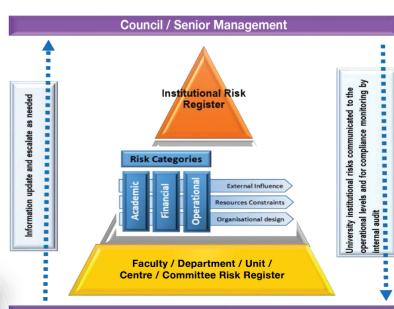




Mementos from your father and children can be seen in your office. You must be close.

Yes. Each generation has a thing or two to learn from the preceding one as well as the next, as I have personally and so gratefully found out.

T.C.



Heads of Colleges / Schools / Faculties / Divisions / Departments