THE HONG KONG POLYTECHNIC UNIVERSITY
香港理工大學

HEALTH NEWS 健訊

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醫療及社會科學院獲醫療衞生研究基金撥款開展針對新冠病毒研究

FHSS Researchers Secure Funding for New Studies on COVID-19

當新冠病毒個案於今年初開始在本港出現時，香港理工大學（理大）醫療及社會科學院的醫療社科團隊，以及校內其他範疇的專才，已迅速地運用自身的專業知識與不同夥伴合作，進行不同研究以協助社會對抗疫情。食物及衞生局醫療衞生研究基金於8月批出第二輪合共5,900萬港元的撥款，以資助本地大學進行23項針對新冠狀病毒的研究；而當中八項由來自理大醫療及社會科學院的團隊負責，共獲撥款1,800萬港元進行為期一至兩年的研究。請細閱今期《健訊》，以了解八項研究項目之詳情！

When COVID-19 cases began popping up around Hong Kong early this year, researchers from The Hong Kong Polytechnic University (PolyU), including its Faculty of Health and Social Sciences (FHSS), were quick to use their expertise and cooperate with partners in the community to conduct studies and invent solutions to combat the spread of the disease. In August, Hong Kong's Food and Health Bureau approved a 2nd round of grants totalling HK$59 million from its Health and Medical Research Fund (HMRF) for 23 research projects to help fight COVID-19 in the city. Of those, 8 PolyU projects, all led by FHSS researchers, received a total of HK$18 million and will last from 1 to 2 years in duration. Read overleaf about how the 8 FHSS projects will help Hong Kong battle against COVID-19!

醫療及社會科學院
Faculty of Health and Social Sciences

目錄 Contents

項目負責人 Principal Applicant：

康復治療科學系教授及副系主任
符少娥教授
Prof Amy FU Siu-ngor,
Professor and Associate Head,
Department of Rehabilitation Sciences

獲撥款金額 Grant Amount：
HK$4,470,546港元

建基於門診或遙距的3R復康治療於COVID-19倖存者的研究

3R rehabilitation management of COVID-19 survivors using centre-based and online-based approaches

符教授與研究團隊將追蹤400位已重返社區的新冠狀病毒康復者，探討其康復後的身體狀況，及心理和健康相關的生活質素。康復者期間將接受不同的門診或遙距網上復康治療。團隊將透過體適能檢查及心理測試，評估他們於「重建體魄」(rebuilding of fitness)，「重拾信心」(regaining of confidence)以及「重獲生活」(resumption of normal life) 三方面的發展。

Prof Fu's research team will explore the temporal relationships between physical fitness, psychosocial functions, and health-related quality of life in 400 discharged COVID-19 patients who will receive either centre-based or online-based cardiopulmonary rehabilitation. The team will examine their physical fitness and psychological conditions over the period of the project to assess changes in the 3R's of their 'rebuilding of fitness', 'regaining of confidence', and 'resumption of normal life'.

項目負責人 Principal Applicant：

醫療科技及資訊學系副教授
蕭傑恒博士
Dr Gilman SIU Kit-hang,
Associate Professor,
Department of Health Technology and Informatics

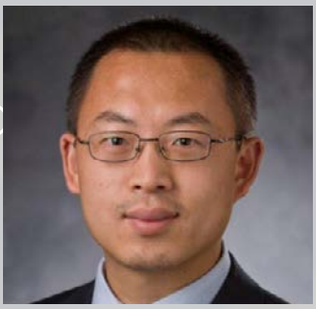
獲撥款金額 Grant Amount：
HK$2,998,100港元

香港COVID-19病例的全基因組測序：建立地理系統發育數據庫並鑑定社區中傳播的SARS-CoV-2變異

Whole-genome sequencing of COVID-19 cases in Hong Kong: development of a geophylogenetic database and characterisation of SARS-CoV-2 variants circulating in the community

蕭博士的團隊將延續早前有關引致新冠狀病毒於本港爆發的SARS-CoV-2病毒株的病毒基因研究，發現病毒的基因特徵(或核糖核酸中最基本的四種鹼基)及病毒基因的相關性(或進化基因的相似性)。團隊旨在建立病毒基因與地理信息系統連接的數據庫，以反映病毒基因組的多樣性及其地區分佈、並根據不同病毒變體分出不同群組，從而推斷病毒在社區當中的傳播鏈。團隊亦會研究基因變異對傳播力的影響。

Dr Siu's research team will build upon their previous study on the characteristics of the genomes (or the whole sets of RNA base pairs) and the phylogenetic relatedness (or evolutionary genetic similarity) of circulating SARS-CoV-2 virus strains in Hong Kong that cause COVID-19. They will develop a new phylogenomic database integrated with a geographic information system to uncover the genomic diversity of strains, transmission chains, and clustering based on phylogenetic proximity across the city. The team will also investigate the clinical and functional impact of the genetic variants through studying their structure-based mechanisms.



項目負責人 Principal Applicant：

醫療科技及資訊學系教授
蔡璟教授
Prof CAI Jing,
Professor,
Department of Health Technology and Informatics

獲撥款金額 Grant Amount：
HK$2,769,000港元

用於新冠肺炎患者管理的人工智能輔助胸部X光及CT定量分析

AI-empowered chest X-ray and CT quantitative analysis for COVID-19 patient management

蔡教授將率領研究團隊開發及評估人工智能技術，以增強和定量分析胸部X光及電腦斷層掃描圖像，從而對新冠狀病毒進行更有效的診斷和患者管理。團隊將收集確診者的醫療圖像及臨床數據，用於訓練及對比認證等，從而開發多種新型人工智能技術，以提升分析胸部X光片和電腦斷層圖像的準確性，同時評估已投入應用的新冠狀病毒臨床人工智能技術的成效。

Prof Cai's research team will develop and evaluate artificial intelligence (AI) techniques for enhancing and quantitatively analysing chest X-ray and computed tomography (CT) images for more effective COVID-19 diagnosis and patient management. They will collect medical imaging and clinical data of COVID-19 patients and divide them into training, validation, and testing cohorts. The training and validation cohorts will be used to develop multiple AI techniques for enhancing and quantitatively analysing chest X-ray and CT images. The testing cohort will be used to evaluate the developed AI techniques in multiple COVID-19 clinical applications.

項目負責人 Principal Applicant：

醫療科技及資訊學系教授及系主任
葉社平教授
Prof YIP Shea-ping,
Professor and Head,
Department of Health Technology and Informatics

獲撥款金額 Grant Amount：
HK$2,716,484港元

用於分散檢測SARS-CoV-2病毒及 COVID-19患者宿主反應的低成本手提儀器之開發和評估

A low-cost handheld device for decentralised detection of SARS-CoV-2 and host response in COVID-19 patients: development and evaluation

葉教授和團隊將開發一部用作檢測SARS-CoV-2病毒的低成本手提檢測儀，適合用於機場、隔離設施及診所等非實驗室環境，對懷疑感染患者進行快速篩查，可在30分鐘內測出樣本陰陽性。團隊希望透過早期檢測估算病人症狀的惡化程度及治療效果，並在感染病例超出醫院負荷時，協助制訂住院或其他檢疫策略。

Prof Yip's research team aims to test and refine its low-cost handheld SARS-CoV-2 virus detection device prototype to rapidly screen suspected cases of COVID-19 in non-laboratory-test environments, such as airports, quarantine centres, and private clinics, with preliminary results ready within 30 minutes. They also aim for the device to be capable of detecting a potentially overwhelming physiological response to COVID-19 in patients early to improve their prognosis, and to assist doctors in deciding which COVID-19 patients could be quarantined instead if hospitalisation capacity becomes insufficient.

項目負責人 Principal Applicant：

醫療科技及資訊學系副教授及
副系主任梁杏媚博士
Dr Polly LEUNG Hang-mei,
Associate Professor and Associate Head,
Department of Health Technology and Informatics

獲撥款金額 Grant Amount：
HK$1,526,600港元

公共屋苑排水通風管釋放的氣溶膠分佈特徵

Characterisation of the distribution of aerosols released from drainage ventilating pipe of public housing buildings

梁博士與研究團隊將根據影響氣溶膠流動的不同因素，例如天氣、風向、管道設計及洗手間的通風情況，分析公共屋苑排水通風管釋放的氣溶膠分佈特徵，以及發展一套感染危機評估模型。研究所得的數據，有助改善排污通風口的設計，及確定如何配置洗手間的通風和排水管道，以減少感染風險。

Dr Leung's research team will investigate the dispersion patterns of aerosols released from drainage ventilation pipes of public housing blocks to develop a risk assessment model based on factors such as weather, airflow, pipe configurations, and washroom ventilation that can influence the spatial distribution of aerosols and its subsequent effects on residents. Using computational fluid dynamics simulations, the model could in future inform the design of ventilation systems and determine the best combination of infrastructure, such as bathroom ventilation and drainage ventilation pipe configuration, to reduce infection risks.

項目負責人 Principal Applicant：

楊曾永儀曾永馨腦神經心理學教授、神經心理學講座教授暨醫療及社會科學院院長岑浩强教授
Prof David SHUM Ho-keung,
Yeung Tsang Wing Yee and Tsang Wing Hing Professor in Neuropsychology;
Chair Professor of Neuropsychology;
Dean, FHSS

獲撥款金額 Grant Amount：
HK$1,408,810港元

新冠肺炎疫情期間的心理創傷和不安全行為：關於人們情緒、認知、態度和行為的混合方法研究

Psychological trauma and unsafe behaviour during the COVID-19 pandemic: a mixed-method study of people's emotion, knowledge, attitude and behaviour

以岑教授為首的研究團隊旨在評估疫情對本港居民帶來的影響，並找出紓緩方法。團隊將深究受訪者目前的心理創傷水平、對新冠狀病毒的認知及態度、防疫行為，以及他們不願採取適當防疫措施的原因。團隊將對3,000名本地成人進行調查，包括240次與高風險群組、選擇遵從或不遵從防疫措施的群組，以及弱勢社群進行深入訪談。

Prof Shum's research team aims to gauge the effects of the COVID-19 pandemic and mitigate its impact on local residents. Specifically, the team will examine people's current level of psychological trauma, level of knowledge about and attitudes to COVID-19, behaviours regarding infection prevention, and reasons why some people are unwilling to adopt the recommended precautionary measures. They will conduct a survey of 3,000 adults and in-depth interviews with 240 individuals primarily from the sample whom are identified as being of a high-risk group, or compliant or non-compliant with precautionary measures, or socially disadvantaged.

項目負責人 Principal Applicant：

護理學院副教授及世界衞生組織社區健康服務合作中心副總監梁綺雯博士
Dr Angela LEUNG Yee-man,
Associate Professor, School of Nursing;
Deputy Director, WHO Collaborating Centre for Community Health Services

獲撥款金額 Grant Amount：
HK$1,212,432港元

以世界衞生組織準則為安老院員工而設的COVID-19混合式遊戲化培訓系統(BGCTS)：一項整群隨機對照試驗

Blended Gaming COVID-19 Training System (BGCTS) with WHO guidelines for staff in residential care

由梁博士帶領的研究團隊將評估有關COVID-19混合式遊戲化培訓系統(BGCTS)在20間安老院的推行成效，並就員工在感染控制培訓、遵從程度及實踐，與現行基本面授方式培訓的效果進行比較。混合式遊戲化培訓系統是以世界衞生組織的《COVID-19風險在保健機構內的溝通準則》內有關預防及控制感染的資料開發而成的培訓系統。

Dr Leung's research team will assess the effect of using the Blended Gaming COVID-19 Training System (BGCTS) compared with prevailing basic training seminars for staff in 20 residential care homes on their subsequent performance in infection control practices, compliance rates, and knowledge of standard precautions. BGCTS is a gamified, mixed-mode of training using content derived from the infection prevention and control information in "The COVID-19 Risk Communication Package for Healthcare Facilities" by the World Health Organization.

項目負責人 Principal Applicant：

應用社會科學系副教授及副系主任甄秋慧博士
Dr Elsie YAN Chau-wai,
Associate Professor and Associate Head, Department of Applied Social Sciences

獲撥款金額 Grant Amount：
HK$1,127,120港元

公眾對為控制2019冠狀病毒所採取的預防疾病和公共衞生措施的遵從情況

Public compliance with disease prevention and public health measures to control COVID-19

甄博士和研究團隊將進行電話調查，訪問1,200名本港成年居民，以了解公眾對自願隔離、保持社交距離及佩戴口罩等防疫措施的遵從情況，以及實踐時遇到的障礙。同時，亦透過分析受訪者的健康狀況、環境和社會因素以及對疫情的危機意識，以理解影響他們遵從防疫措施的意願。調查結果將有助了解公眾對各項防疫措施的實行意願，以協助日後制訂更有效應對傳染病的防疫措施。

Dr Yan's research team will conduct a telephone survey of 1,200 adult residents to understand the degree of public compliance with COVID-19 prevention measures, such as voluntary self-quarantine, social distancing, and face mask wearing, and the barriers to their compliance. They will examine elements that may affect people's compliance, such as their health, contextual and social reasons, and their perceived susceptibility to COVID-19. The results will help to identify modifiable factors to facilitate compliance and inform public health strategies for developing more effective practices to control future infectious disease outbreaks.

研究項目協助家庭建立抗逆能力克服挑戰
Project to Help Families Develop Resilience

新冠狀病毒肆虐全球，持續衝擊本港經濟，加上近年發生的社會事件帶來的社會撕裂，導致家庭面對嚴峻的衝擊。為加強本港家庭的抗逆能力，應用社會科學系副教授梁倩儀博士，與應用社會科學系講座教授、利豐服務領導教育教授暨理大協理副校長(本科生課程)石丹理教授，攜手領導跨學科小組進行一個為期三年的家庭介入研究項目，讓家庭成員能夠以正面積極的態度共同面對逆境。

Families in Hong Kong have become more vulnerable to stress and adversity due to disagreements or even schisms within them arising from the social unrest, and anxieties caused by the COVID-19 outbreak and accompanying economic downturn. To help families to cope better, a multidisciplinary team led by Dr Janet Leung Tsin-yee, Associate Professor at PolyU's Department of Applied Social Sciences (APSS), and Prof Daniel T.L. Shek, Chair Professor of Applied Social Sciences, Li & Fung Professor in Service Leadership Education at APSS, who is also PolyU's Associate Vice President (Undergraduate Programme), will be collaborating with non-governmental organisations to develop a 3-year family-intervention project to promote family resilience.

這個先導計劃獲得香港賽馬會慈善信託基金資助3,882.5萬港元，由香港理工大學聯同香港青少年服務處、香港家庭福利會、救世軍及香港東華三院共同推行(香港理工大學獲資助1,890萬港元)。計劃旨在協助家庭建立正面的家庭信念、互相支持關係及積極面對困難的具體策略，以提升家庭抗逆能力。項目將透過網站、網上家庭活動、網上教育計劃、社區為本的專業介入項目以及為專業人士而設的培訓工作坊作社區推廣，團隊亦會評核各活動的成效。

With generous funding totalling HK$38.825 million from The Hong Kong Jockey Club Charities Trust, of which PolyU has been awarded a grant of HK$18.9 million, the pioneering project aims to enhance family resilience in overcoming external challenges. The project aims to enhance positive coping strategies of families and promote their positive family beliefs system, mutuality and strengths in protecting family members from threats and vulnerabilities. The project's key components include a website, online educational programmes, online family activities, community-based professional intervention programmes, and capacity-building workshops for professionals. Evidence-based evaluation studies will also be conducted to examine the programmes' effectiveness.

研發智能軟件識別鼻咽癌患者進行自適應放射治療
Project to Create Intelligent Software Identifying Nasopharyngeal Cancer Patients for Adaptive Radiotherapy

鼻咽癌普遍生長在上咽喉與鼻腔交接位置，跟西方國家比較，此癌症在中國華南地區更為常見。根據香港衞生處資料顯示，鼻咽癌是2017年於本港最常見的男性和女性癌症中，分別排行第6位及第17位。放射治療是鼻咽癌的主要治療方法，治療計劃會針對每位患者的腫瘤和身體結構而度身訂制。不過，腫瘤的大小和形狀以及患者的體形或會隨著治療過程而轉變；而適應性放射治療就能夠針對此問題，於治療過程期間，因應腫瘤反應及器官形狀變化而作出修改。

Nasopharyngeal cancer is a type of cancer in the upper throat where it meets the nasal cavity. The cancer is more common in southern China than in Western countries and, according to Hong Kong's health authorities, was the 6th most common cancer in males and the 17th in females in the city in 2017. Radiation therapy or radiotherapy is the main treatment for nasopharyngeal cancer, with the treatment plan tailored for each patient's tumour and anatomy. However, over time during a typically long course of radiotherapy, there may be changes in size and shape of the tumour and anatomy. Adaptive radiotherapy could be used, whereby the treatment plan is modified during the course of treatment according to the tumour response and organ deformations.

理大醫療科技及資訊學系蔡璟教授領導的研究團隊，成功獲得政府創新及科技基金的創新及科技支援計劃及研究人才庫資助，撥款近255萬港元進行「用於識別需要適應性放射治療的鼻咽癌患者的分層軟件工具的開發」項目為期18個月的研究。團隊將對鼻咽癌患者的臨床、影像和劑量數據進行全面分析，從而更精準預測腫瘤的組學特徵(或可預測腫瘤對療法的反應的列線圖)，來斷定患者是否需要進行適應性放射治療。蔡教授相信通過該軟件對醫學影像數據進行高通量定量分析，可提高癌症診斷的精確性，並應用到鼻咽癌治療中，定能為患者帶來深遠的益處。

A research team led by Prof Jing Cai from PolyU's Department of Health Technology and Informatics has secured a total grant of almost HK$2.55 million over 18 months from the government's Innovation and Technology Fund through its competitive Innovation and Technology Support Programme and its Research Talent Hub for their project titled "Development of a patient stratification software tool for identifying nasopharyngeal carcinoma patients for adaptive radiation therapy." The team will perform comprehensive analysis of nasopharyngeal cancer patients' clinical, imaging and dosimetric (or 'dosage') data to discover a more accurate and robust predictive signature (or nomogram that can predict tumour response to treatment) to determine the patients' need for adaptive radiotherapy. Prof Cai believes the project could offer profound benefits to patients by becoming the basis of a radiomics-based decision support system that could be integrated into nasopharyngeal cancer management.

醫療及社會科學院科研項目獲外界科研資助
FHSS Projects Win Competitive External Research Grants

由醫療及社會科學院學者及研究人員為主要研究員的項目，繼續獲得多項外界科研資金支持，以下為去年度獲研究資金資助的項目：
Academics and other researchers from FHSS's constituent departments and schools regularly secure funding from different competitive research grant schemes for their projects as Principal Investigators. In the past year, they obtained the following external grants:

優配研究金 (大學教育資助委員會研究資助局)
General Research Fund (Research Grants Council, University Grants Committee, Hong Kong)

Dept	Principal Investigator	Project Title
APSS	Dr Alexander Gray COCKAIN	Deconstructing and reconstructing, or dwelling with and alongside, "normalcy"/"abnormalcy," "ability"/"disability": making dialogue about "difference" in and between Hong Kong and the United Kingdom
APSS	Prof Daniel LAI Wing-leung*	Health differences among South Asian and Chinese older adults in Hong Kong: the role of social capital
APSS	Dr Herman LO Hay-ming	Mindfulness-based intervention for caregivers of frail older Chinese adults: testing a model of intergenerational caregiving
APSS	Prof Sylvia CHEN Xiaohua	Romantic relationships in cross-cultural perspective: the role of dialectical relationship thinking
APSS	Prof Edward CHAN Ko-ling	The effect of family hierarchy on family polyvictimisation in Chinese culture
APSS	Dr Yanto CHANDRA	Legitimacy of social enterprises and customer patronisation
HTI	Dr WONG Chi-ming	Decipher the role of protein tyrosine phosphatase receptor type D (PTPRD) in pathogenesis and progression of non-alcoholic fatty liver disease
HTI	Dr Gilman SIU Kit-hang	Unveiling the pathogenic mechanisms of tuberculous meningitis caused by hypervirulent *Mycobacterium tuberculosis* strains using multiomic analysis coupled with a multiple fluorescent zebrafish infection model
HTI	Prof CAI Jing	Artificial intelligence-assisted pulmonary function mapping for functionally guided lung cancer radiotherapy
RS	Dr Georg KRANZ	The utility of concurrent TBS/fNIRS for antidepressant treatment optimisation
RS	Dr Sonata YAU Suk-yu	Maternal exposure to PM2.5 as a risk factor for developing autism-like behaviour in offspring: the role of impaired hippocampal plasticity
RS	Dr Shirley NGAI Pui-ching	Physiological mechanism of Acu-TENS on airway obstructive disease: a COPD-like animal model
SN	Dr Angela Engle CHAN	Exploring the feasibility of simulation-based education on undergraduate students' palliative care communication: innovating a practice-based theory approach
SN	Dr Doris LEUNG Yin-ping	Effects of a structured, family-supported, and patient-centred advance care planning on end-of-life decision making among palliative patients and their family members: a randomised controlled trial

** This researcher is no longer at PolyU*

傑出青年學者計劃 (大學教育資助委員會研究資助局)
Early Career Scheme (Research Grants Council, University Grants Committee, Hong Kong)

Dept	Principal Investigator	Project Title
APSS	Dr Camilla LO Kin-ming	The impacts of different types of screen time on children's health and mental health, and the mediating roles of individual and relationship factors
APSS	Dr Crystal KWAN	Examining poverty dynamics across the lifespan of elder-headed households
APSS	Dr ZHAN Yang	When rural migrants become urban homeowners in small cities: the endgame for China's "floating population"?
HTI	Dr Franki TSE Kai-hei	Bridging integrator 1 (BIN1) in oligodendrocyte connects myelin degradations to age-related dementia — a story of DNA damage
RS	Dr Frank LAI Ho-yin	An innovative virtual reality-based test for early detection of cognitive impairment in community-dwelling older adults

德國與香港合作研究計劃 (大學教育資助委員會研究資助局)
Germany/Hong Kong Joint Research Scheme (Research Grants Council, University Grants Committee, Hong Kong)

Dept	Principal Investigator	Project Title
RS	Dr Georg KRANZ	Theta burst stimulation for the treatment of major depressive disorder

APSS ： 應用社會科學系 Department of Applied Social Sciences
HTI ： 醫療科技及資訊學系 Department of Health Technology and Informatics
RS ： 康復治療科學系 Department of Rehabilitation Sciences
SN ： 護理學院 School of Nursing
SO ： 眼科視光學院 School of Optometry

醫療及社會科學院的研究員亦有以共同研究員身份參與研究項目。詳情可瀏覽：
FHSS staff members also contribute in other research projects as Co-Investigators. For details, please visit: https://fhss.polyu.edu.hk/ext/research_fund2020

醫療衞生研究基金
Health and Medical Research Fund

Dept	Principal Investigator	Project Title
HTI	Prof CAI Jing	Investigation of a novel deep learning-based pulmonary ventilation imaging method for lung cancer functional avoidance radiotherapy
HTI	Dr Shara LEE Wee-yee	Management of oral mucositis using low-level laser therapy in nasopharyngeal cancer patients receiving chemo-radiotherapy: a randomised controlled trial (MAGNETO)
RS	Prof Margaret MAK Kit-yi	Long-term effects of combined balance and brisk walking training on alleviating motor and non-motor symptoms in people with Parkinson's disease: a randomised controlled trial
RS	Prof Shamay NG Sheung-mei	Randomised controlled trial of upper-limb training with mirror therapy and transcutaneous electrical nerve stimulation to improve upper-limb functions in patients with sub-acute stroke
RS	Dr Priya KANNAN	A novel biofeedback device to improve adherence to pelvic floor muscle training in women with urinary incontinence: a randomised controlled pilot trial

研究影響基金（大學教育資助委員會研究資助局）
Research Impact Fund (Research Grants Council, University Grants Committee, Hong Kong)

Dept	Principal Investigator	Project Title
SO	Dr Allen CHEONG Ming-yan	Improving vision and quality of life in patients with glaucoma using non-invasive brain stimulation and perceptual learning: a randomised clinical trial

禁毒基金
Beat Drugs Fund

Dept	Principal Investigator	Project Title
RS	Dr Andrew SIU Man-hong	The application of repetitive transcranial magnetic stimulation (rTMS) as an adjunct therapy in reduction of craving and consumption of illicit drugs
SN	Dr Eva HO Ka-yan (Representative Co-PI)	Reach out the drug abusers — establishing a community-based network through training anti-drug ambassadors

創科生活基金
Innovation and Technology Fund for Better Living (FBL)

Dept	Principal Investigator	Project Title
APSS	Dr Ada FUNG Wai-tung	Hong Kong - Vigilance and Memory Test (HKVMT) to enhance detection of early cognitive impairments in preclinical phase
RS	Dr Frank LAI Ho-yin	VR & AI-based mobile app in enhancing independence of daily living in older adults and people with early dementia
SN	Dr Rick KWAN Yiu-cho	Virtual reality motor-cognitive training for older people with cognitive frailty
SO	Dr KEE Chea-su	Development of a smart portable corneal topographer for characterising corneal shape in young children

創新及科技基金 – 創新及科技支援計劃及研究人才庫
ITF – Innovation and Technology Support Programme (ITSP) and Research Talent Hub

Dept	Principal Investigator	Project Title
HTI	Prof CAI Jing	Development of a patient stratification software tool for identifying nasopharyngeal carcinoma patients for adaptive radiation therapy

創新及科技基金 – 公營機構試用計劃 (為在香港防控2019冠狀病毒而設的項目特別徵集)
ITF – Public Sector Trial Scheme – Special Call for Projects for the Prevention and Control of Coronavirus Disease 2019 (COVID-19) in Hong Kong (PSTS-COVID-19)

Dept	Principal Investigator	Project Title
HTI	Dr Gilman SIU Kit-hang	Development of nanopore sequencing-based platform for rapid monitoring of COVID-19 transmission in Hong Kong

創新及科技基金 – 夥伴研究計劃
ITF – Partnership Research Programme (PRP)

Dept	Principal Investigator	Project Title
HTI	Dr Gilman SIU Kit-hang	A portable nanopore sequencing-based assay for rapid diagnosis of bloodstream infection

公共政策研究資助計劃（特別輪次）
PICO - Public Policy Research Funding Scheme (Special Round)

Dept	Principal Investigator	Project Title
APSS	Prof Daniel LAI Wing-leung*	Effects of social and political unrests on mental health of older people in Hong Kong
APSS	Dr LIN Li	The influences of social mobility beliefs on social-political attitudes among Hong Kong college students
APSS	Dr Herman LO Hay-ming	A stepped-care, multidisciplinary, evidence-based approach to strengthen adolescence and family well-being after social unrest
APSS	Dr YU Lu	Hong Kong junior secondary school students' attitudes towards and engagement in political activities involving violence and destruction: the associated individual, family, and school factors from a positive youth development perspective

** This researcher is no longer at PolyU*

港人佩戴口罩不當及口罩質素欠佳情況

Improper Wearing and Low Quality of Surgical Masks Common in Hong Kong

香港人煙稠密，新冠狀病毒於本地的傳播及死亡率相對較低，關鍵或因市民普遍一直經常佩戴一次性外科口罩。然而，有理大醫療科技及資訊學系及護理學院的學者近期分別進行的調查及研究發現，不少香港人錯戴或重用口罩，市面上亦有大量質素欠佳的口罩甚至假口罩出售。

Some people have largely attributed the relatively low local COVID-19 transmission and death rates in densely populated Hong Kong to its residents' proactive wearing of mostly disposable surgical masks. However, the picture may not be so clear-cut, at least for the first wave of COVID-19: studies led by scholars from PolyU's Department of Health Technology and Informatics (HTI) and School of Nursing (SN), respectively, found that many Hong Kong people wore disposable surgical masks improperly or reused them and that a significant number of disposable surgical masks did not offer as much protection as labelled or were counterfeit.

醫療科技及資訊學系副教授李泳怡博士的團隊於今年2月進行一項觀察性研究，在本港各區記錄了10,211名市民佩戴口罩的情況，研究成果早前在著名學術期刊《刺針》(The Lancet)旗下的EClinicalMedicine發表。該研究發現，觀察人數中94.8%的市民有佩戴口罩，當中83.7%佩戴一次性外科口罩，但卻有13%佩戴方法不正確，其中35.5%將口罩底面反轉或上下倒轉，而42.5%佩戴位置太低致令口或鼻子外露。此外，團隊今年3月中進行一項網上調查，成功收回2,859名市民的回應，並分析他們對使用口罩的認知和態度。94.1%受訪者認同佩戴口罩有助防止感染病毒及減少疫症於社區傳播，但亦有76.3%受訪者表示會重用口罩，其中以46至65歲及65歲以上人士重用口罩的比例較高。

在非電荷有關的單層過濾測試和研究中，一般以直徑0.3微米的粒子作測試。新冠狀病毒粒子的直徑約0.125微米，惟普遍認為病毒主要透過患者的飛沫或懸浮於空氣中的氣溶膠傳播，兩者粒子的直徑分別為5至10微米及小於5微米。護理學院助理教授林清博士與雪肌蘭國際感染控制中心的研究團隊，檢測了本港160個不同牌子口罩的微粒子過濾效率(PFE)，結果已在期刊《American Journal of Infection Control》刊登。團隊發現有48.8%的檢測口罩樣本品質低劣，平均只有47%能成功過濾直徑0.3微米粒子。團隊亦發現有3.1%的樣本懷疑偽冒國際知名品牌，當中只有38%的冒牌口罩能過濾直徑0.3微米粒子，相比之下99%的真口罩皆具備此過濾效率。研究團隊指，如隨機選擇市面選定品牌口罩達美國材料和試驗協會(ASTM International)第一級防護功能的品牌作測試，即使同一品牌，當中僅有37.5%符合此標準。

In an observational study published in "EClinicalMedicine," a journal by "The Lancet" group, of 10,211 people across the city in February, HTI Associate Professor Dr Shara W.Y. Lee and her research team noted that 94.8% of the people wore face masks, of whom 83.7% donned disposable surgical masks. However, 13% of them wore their surgical masks incorrectly: 35.5% wore their masks inside out or upside down; and 42.5% wore their masks too low, exposing their nostrils or mouth. In the team's then ongoing online survey from mid-March gauging locals' views on face-mask wearing, 94.1% of the 2,859 initial respondents concurred that wearing a face mask could prevent infection on personal and community levels. However, 76.3% of respondents also indicated they reused their disposable masks, with those in the 46-65 and above 65 age groups reporting a higher percentage of reuse.

The most-penetrating particle size adopted for non-electric-charge-related single-layer filtration tests and research is usually 0.3 microns. The virus that causes COVID-19 is about 0.125 microns in size but is believed to be mainly transmitted via respiratory droplets and possibly through airborne aerosols such as fine droplets, which are 5-10 microns and less than 5 microns in size, respectively. SN Assistant Professor Dr Simon Ching Lam and his research team from SN's Squina International Centre for Infection Control measured the particle filtration efficiency (PFE) of 160 brands of surgical masks available in Hong Kong. Their study, published online in the "American Journal of Infection Control" in May, concluded that 48.8% of the surgical masks were low quality, with an average of only 47% successfully filtering 0.3-micron test particles. They found that 3.1% of surgical masks were counterfeits of well-known international brands; only 38% of the fake masks had a 0.3-micron PFE compared with 99% of the genuine masks. The researchers also estimated that only 37.5% of surgical masks from a randomly selected brand labelled as ASTM Level 1 medical-grade standard may potentially meet the standard.

抑制斑馬魚色素可致細胞內結構自行分解 影響人類疾病研究

Inhibiting Pigment-Formation Enzyme In Zebrafish Experiments Induces Intracellular Self-Degradation, Affecting Research on Human Diseases

人類不少基因和血細胞種類都與斑馬魚相似，令斑馬魚成為研究脊椎動物發展、人類疾病以至鑑定和測試醫療新藥物中被廣泛應用的動物模型。不過，醫療科技及資訊學系助理教授馬進恒博士為其團隊的白血病研究準備斑馬魚胚胎時，卻發現一個足以引致該類研究模式轉變的現象。以往利用斑馬魚進行研究時，多會使用化學物苯硫脲(PTU)來抑制斑馬魚胚胎內的黑色素，以方便在顯微鏡下觀察各種生理過程。馬博士和研究團隊發現，苯硫脲同時亦會誘發斑馬魚胚胎進行自噬這種細胞內自行分解的機制。這項發現意味以往利用加入苯硫脲的斑馬魚胚胎進行與自噬相關的研究，其結果或會有所偏差及無效，而研究人員在目前及將來，應避免利用注射了苯硫脲的斑馬魚胚胎進行與自噬相關的研究。此外，馬博士團隊的研究結果，提出了自噬與黑色素的潛在關係，意味自噬機制或會影響黑色素瘤生長及抗藥性。

Many human genes and blood cell types are similar to those in zebrafish, making the small fish a preferred animal model for research studies on vertebrate development, human diseases, and identifying and testing new drugs for medical use. However, an accidental observation by Assistant Professor Dr Alvin Ma Chun-hang of PolyU's Department of Health Technology and Informatics when he was preparing zebrafish embryos for his team's leukaemia study has led to a paradigm shift in research. He and his team discovered that phenylthiourea (PTU), a toxic chemical compound commonly used for decades to suppress the formation of melanin pigment in zebrafish embryos to aid microscopic observation of physiological processes, could also significantly induce autophagy — or intracellular self-degradation — in the embryos. Their finding implies that the results of all autophagy-related research studies that have or are using the chemical compound on zebrafish embryos may be skewed and invalid, and that the chemical compound should not be used in current and future autophagy-related research using zebrafish embryos. Furthermore, their finding indicates a direct link between autophagy and melanin formation, implying the potential role of autophagy in the development of melanoma, the most aggressive type of human skin cancer.

自噬是細胞的一種基本機制，過程中細胞內的異常和多餘物質及結構會被分解。自噬與細胞發育、增殖和細胞死亡有關，而自噬活動的活躍程度，可能會為人類的健康、預防衰老以及抑制疾病的狀況帶來正面或負面影響。自噬在細胞抗藥性方面亦同樣擔當重要角色，例如醫治癌症的化療，過度活躍的自噬活動或會干擾藥物的成效。

不同的化學物及基因技術皆可抑制斑馬魚胚胎的黑色素生長，而最普遍的方法是利用苯硫脲溶液壓抑製造黑色素的主要酵素酪氨酸酶。馬博士和團隊亦發現從基因層面針對酪氨酸酶抑制斑馬魚胚胎產生黑色素時，自噬水平顯著提高。他們的發現和對有關研究的影響早前在業界最具影響力的學術期刊《自噬》刊登，而馬博士更獲邀共同制定以斑馬魚胚胎進行的自噬相關研究的最新國際指引。

Autophagy is a fundamental mechanism inside cells whereby abnormal and unnecessary substances and structures within cells are broken down and recycled for either cell 'housekeeping' or animal survival purposes. Autophagy is involved in cell development, proliferation and death, with different activation levels of autophagy likely to positively or negatively affect a person's health, ageing, and physiological responses to diseases. Autophagy also plays a role in cells' developing resistance to drugs used for treating diseases, such as chemotherapy for cancer, with overactivation of autophagy possibly involved in making them less effective over time for the patients.

Different chemical and genetic methods can be used to suppress the development of melanin in zebrafish embryos. The most common is to use PTU in solution to inhibit the action of the enzyme tyrosinase, which acts as a key catalyst in melanin formation. Dr Ma and his team also discovered that genetically targeting tyrosinase to suppress melanin formation in zebrafish embryos significantly induced autophagy too. Their findings and implications for research were recently published in "Autophagy," the highest impact journal in the field, which has also invited Dr Ma to co-author new guidelines for autophagy-related research using zebrafish embryos.

攜手緩解虐老問題
Project to Develop Evidence-Based Protocol to Tackle Elder Abuse

「家有一老，如有一寶」是中國傳統的敬老觀念；然而，隨著人口老化及社會風氣轉變，近年虐老問題日趨嚴重。為應對這趨勢，理大獲利希慎基金慷慨支持，開展一項為期四年的跨學科研究，建立本港首套實證為本的工作規程以助識別、跟進及預防虐老情況。

當長者受到任何傷害或其安全受到威脅，例如被遺棄，均屬虐老行為。該研究項目將由應用社會科學系副教授及副系主任甄秋慧博士與護理學院教授及醫療及社會科學院副院長黃金月教授主導，聯同學院內其他學者共同合作。

團隊將開發一套識別工具、實務手冊及培訓程序，以應對及處理虐老個案。項目初步將為社區1,500名長者進行受虐評估，並為400個高危及確認受虐個案提供跟進服務。團隊亦將為2,000名長者及其照顧者，以及600名專業人員和學生開辦培訓及意識提升課程，增進他們的相關知識，從而及早識別虐老情況。

Hong Kong's ageing population and diminished observance of Confucian filial piety are contributing to the increasing rate of elder abuse in the city. To tackle the trend, PolyU received a generous donation from Lee Hysan Foundation for a 4-year interdisciplinary research project to create Hong Kong's first evidence-based practice protocol to prevent, detect, and intervene in elder abuse cases.

Any harm of or threat to the safety of an elderly person is elder abuse, including desertion or financial control. The project involves input from all of FHSS's departments and schools, and is led by Co-Principal Investigators Dr Elsie Yan Chau-wai, Associate Professor and Associate Head of our Department of Applied Social Sciences, and FHSS Associate Dean Prof Frances Wong Kam-yuet of our School of Nursing.

The research team will develop a set of screening tools, a practice manual, and training procedures for handling and managing elder abuse cases. Elder abuse screening will be offered initially to 1,500 elderly persons in the community, and intervention conducted for 400 at-risk and confirmed cases. A training and awareness programme will also be run for 2,000 elderly people and their caregivers and 600 professionals and students to impart them with the knowledge to detect elder abuse.

新一輪護眼計劃 幫助基層兒童
New Round of Eye Care Project to Help Underprivileged Children

理大眼科視光學院與信和集團旗下香港創新基金(基金)攜手合作，在2019年8月開展為期兩年的「香港理工大學–香港創新基金兒童護眼計劃」，為200名來自基層家庭的兒童檢驗眼睛並幫助他們控制近視加深速度。鑑於計劃反應十分熱烈，眼科視光學院與基金再次推出新一輪為期兩年的計劃，為另外200名基層兒童提供眼睛保健服務，預計於年底開始推行。

眼科視光學院將繼續透過新一輪計劃，為符合資格的6至12歲兒童進行全面的眼科視光檢查及評估。患有300度或以上近視的兒童，將獲驗配學院得獎發明「多區正向光學離焦」鏡片的眼鏡，以減慢近視加深速度。計劃亦將會安排所有受助兒童參與創新及科技相關的活動，以擴闊他們在這方面的視野。

In issue 26 of "Health News," we reported that PolyU's School of Optometry (SO) partnered with the Hong Kong Innovation Foundation (HKIF), a Sino Group charitable organisation, to set up a 2-year "PolyU–HKIF Children Eye Care Programme" in August 2019. The ongoing programme aims to detect and control the development of shortsightedness or myopia in 200 underprivileged schoolchildren over the 2-year period. In view of the overwhelming response to the programme, SO is delighted to collaborate with the foundation to launch a new round of the programme scheduled to commence later this year to benefit another 200 disadvantaged children for 2 years.

Like the current programme, SO will provide vision screening and eye assessments for participating children aged 6 to 12 years old who meet the eligibility criteria. Those found with myopia of -3.00 dioptres or above will be given prescription eyeglasses containing SO's award-winning Defocus Incorporated Multiple Segments (DIMS) spectacle lens to help control their myopia progression. The foundation also plans to offer innovation and technology-related activities for all of the children.

新任命
Senior Appointment

應用社會科學系暫任系主任履新
Appointment of Interim Head, Department of Applied Social Sciences

應用社會科學系副系主任陳高凌教授於2020年8月7日起，出任學系暫任系主任。

Prof Edward CHAN Ko-ling, Professor and a then Associate Head of the Department of Applied Social Sciences, was appointed as the department's Interim Head from 7 August 2020.

榮升教授
Congratulations on Promotions to Professor!

陳涓教授
Prof CHEN Juan

應用社會科學系
Department of Applied Social Sciences

研究興趣 Research interests

移民與城市化、精神健康、求助與服務使用、社區治理、貧困與福利改革
Migration and urbanisation; health and mental health; help-seeking and service use; community governance; poverty and welfare reform

應天祥教授
Prof Michael YING Tin-cheung

醫療科技及資訊學系
Department of Health Technology and Informatics

研究興趣 Research interests

以超聲波影像診斷及監察甲狀腺癌、惡性頸部淋巴結及頸動脈粥樣硬化
Ultrasound imaging diagnosis and monitoring of thyroid cancer, malignant neck lymph nodes, and carotid atherosclerosis

符少娥教授
Prof Amy FU Siu-ngor

康復治療科學系
Department of Rehabilitation Sciences

研究興趣 Research interests

健全人士及個別群組(如老年人或運動員)之運動控制、運動損傷的預防和康復

Motor control in healthy and special groups, e.g., elderly, and athletes; sports injury prevention and rehabilitation

蔡璟教授
Prof CAI Jing

醫療科技及資訊學系
Department of Health Technology and Informatics

研究興趣 Research interests

磁力共振影像導航放射治療、四維影像與放射治療、軀體立體定位放射治療、影像組學、近距放射治療
MRI-guided radiation therapy; 4D imaging and radiation therapy; stereotactic body radiation therapy; radiomics; brachytherapy

方乃權教授
Prof Kenneth N.K. FONG

康復治療科學系
Department of Rehabilitation Sciences

研究興趣 Research interests

人類認知及活動能力、探索中風或腦損傷人士的神經康復、影響傷殘人士的環境因素及輔助技術
Mechanisms of human performance, particularly the integration of cognitive and motor performances; neurorehabilitation for clients with stroke, brain injury, or dementia; environmental issues and assistive technology for people with disabilities

教與學資助計劃
Teaching and Learning Grants

理大致力推動優質教學，透過校內不同資助計劃，提升教職員的教學質素，為學生提供最完善的教育。

PolyU attaches great importance to delivering high-quality education to its students, and provides internal funding to its teachers to enhance pedagogical methods and the learning experience of students.

教學發展基金 Teaching Development Grants

此基金旨在支持各項加強教與學的計劃
PolyU's Teaching Development Grants support initiatives to enhance learning and teaching.

Dept	Awardee	Project Title
APSS	Dr Rodney CHU Wai-chi	Promoting peer learning in multidisciplinary subjects on virtual learning spaces
APSS	Dr Jessica LI Chi-mei	Examining the effectiveness of the learning to learn training package on university teaching and learning
SN	Dr Justina LIU Yat-wa	Virtual reality (VR)-assisted experiential learning: to see, feel, and create an age-friendly society

大型協作項目(資助上限為50萬港元)
Large-scale collaborative projects (HK$500,000 max. funding limit for each project)

Dept	Awardee	Project Title
APSS	Dr Herman LO Hay-ming	Foundations of connecting and changing people: enhancement of one-to-one helping skills of using short videos and interactive pedagogies
APSS	Dr TING Tin-yuet	Multimedia storytelling and collaborative gaming: transmedia pedagogies for active and collaborative learning
HTI	Dr WONG Chi-ming	Use CUREs model to enhance research interest of health professional students
RS	Prof Kenneth N.K. FONG	Application of problem-based learning (PBL) for senior year students in occupational therapy undergraduate curriculum
RS	Dr Sharon TSANG	Blended learning programme for nurturing clinical reasoning competency
RS	Mr Alexander WOO	Enhancement of clinical reasoning (CR) skills with bilingual interactive virtual patients (IVP) in musculoskeletal physiotherapy (MP)
SN	Dr Daniel Thomas BRESSINGTON	Learning to learn reflectively: using individual serial concept maps to enhance reflective thinking, reduce the theory-practice gap and improve learning self-efficacy, academic-related stress and academic achievement in mental health nursing students

小型項目(資助上限為20萬港元)
Smaller-scale projects (HK$200,000 max. funding limit for each project)

電子及混合式學習發展基金 eLearning and Blended Learning Development Grants

此基金旨在支持開發電子學習模式的相關課程
PolyU's eLearning and Blended Learning Development Grants support the development of representative eLearning subjects.

Dept	Awardee	Project Title
SN	Dr John YUEN Wai-man	Converting existing MOOC subject "Interprofessional Stroke Care" into professional certificate programme

APSS：應用社會科學系 Department of Applied Social Sciences
HTI：醫療科技及資訊學系 Department of Health Technology and Informatics
RS：康復治療科學系 Department of Rehabilitation Sciences
SN：護理學院 School of Nursing

醫療及社會科學院 2018/19及2019/20學院特設傑出表現 / 成就獎
FHSS Faculty Awards/Prizes for Outstanding Performance/Achievement For 2018/19 and 2019/20

香港過去一年面對重重挑戰，也無阻醫療及社會科學院的教職員，於教學、科研和社會服務等範疇的卓越表現。理大每年均設獎項計劃，表揚出色的教職員，而醫療及社會科學院於今年初及近期分別公布2018/19年度及2019/20年度學院特設傑出表現/成就獎得主。2018/19年度獎項得主的專訪已在今期《健訊》率先登場，而2019/20得獎者的訪問，請留意下期《健訊》。

Hong Kong has experienced an extraordinarily challenging year but that has not stopped FHSS staff members from excelling in what they do best: teaching, researching, and serving the community. As part of PolyU's annual awards scheme to give official recognition to staff who have performed remarkably over the past academic year, FHSS announced the winners of its Faculty Awards/Prizes for Outstanding Performance/Achievement for 2018/19 earlier this year and for 2019/20 recently. Read our interviews with the winners of the Faculty Awards 2018/19 on the following pages and with the recipients of the Faculty Awards 2019/20 in our next issue of "Health News"!

學院特設傑出教學表現 / 成就獎 Faculty Awards in Teaching

組別 Category	2018/19 得獎者 Awardee for 2018/19	2019/20 得獎者 Awardee for 2019/20
個人 Individual	醫療科技及資訊學系副教授蕭傑恒博士 Dr Gilman SIU Kit-hang, Associate Professor, Department of Health Technology and Informatics	眼科視光學院副教授暨副學院主任紀家樹博士 Dr KEE Chea-su, Associate Professor and Associate Head, School of Optometry
團隊 Team	「環境安全與輔助科技」教學團隊 康復治療科學系方乃權教授(團隊領導)、臨床導師許業權先生及技術員吳其鏘先生 Teaching team for subjects related to "environmental issues and assistive technology": Prof Kenneth N.K. FONG, Professor (Team Leader), Mr Eddie HAI, Clinical Associate, Mr Philip NG, Technical Officer, Department of Rehabilitation Sciences	「大型開放式網絡課程」教學團隊 護理學院副教授袁偉文博士(團隊領導)、高級專任導師陳玉儀博士、助理教授關耀祖博士及副教授雷逸華博士 Teaching team of MOOCs: Dr John YUEN Wai-man, Associate Professor (Team Leader), Dr Kitty CHAN, Senior Teaching Fellow, Dr Rick KWAN Yiu-cho, Assistant Professor, Dr Justina LIU Yat-wa, Associate Professor, School of Nursing

學院優秀教學獎 Faculty Prizes in Teaching

組別 Category	2018/19 得獎者 Awardee for 2018/19	2019/20 得獎者 Awardee for 2019/20
個人 Individual	應用社會科學系助理教授丁天悅博士 Dr TING Tin-yuet, Assistant Professor, Department of Applied Social Sciences	醫療科技及資訊學系副教授羅嘉慧博士 Dr Helen LAW Ka-wai, Associate Professor, Department of Health Technology and Informatics
	醫療科技及資訊學系助理教授王志明博士 Dr WONG Chi-ming, Assistant Professor, Department of Health Technology and Informatics	醫療科技及資訊學系副教授梁杏媚博士 Dr Polly LEUNG Hang-mei, Associate Professor, Department of Health Technology and Informatics

學院特設傑出研究表現 / 成就獎 Faculty Awards in Research and Scholarly Activities

組別 Category	2018/19 得獎者 Awardee for 2018/19	2019/20 得獎者 Awardee for 2019/20
個人 Individual	醫療科技及資訊學系蔡璟教授 Prof CAI Jing, Professor, Department of Health Technology and Informatics	護理學院副教授楊琳博士 Dr YANG Lin, Associate Professor, School of Nursing
團隊 Team	「改善近視治療及減慢近視加深」研究團隊 眼科視光學院副教授謝欣然博士(團隊領導)、講座教授暨學院主任杜嗣河教授及林小燕教授 Research team for improving treatment and delaying progression of myopia: Dr Dennis TSE Yan-yin, Associate Professor (Team Leader), Prof TO Chi-ho, Chair Professor and Head, Prof Carly LAM, Professor, School of Optometry	

學院特設傑出服務表現 / 成就獎 Faculty Awards in Services

組別 Category	2018/19 得獎者 Awardee for 2018/19	2019/20 得獎者 Awardee for 2019/20
團隊 Team	「看見愛流動護眼計劃」服務團隊 眼科視光學院副教授陳浩龍博士(團隊領導)、副教授杜志偉博士(團隊領導)、眼科視光師朱展鴻博士及眼科視光師黃浩然先生 Service team of "Vision of Love Mobile Eye Care Project" Dr Henry CHAN, Associate Professor (Team Leader), Dr DO Chi-wai, Associate Professor (Team Leader), Dr Geoffrey CHU, Optometrist, Mr Horace WONG, Optometrist, School of Optometry	「雪肌蘭國際感染控制中心」服務團隊 護理學院副教授孫桂萍博士(團隊領導)、副教授唐瑪芝博士、助理教授林清博士、副教授楊琳博士、副教授張健博士、臨床導師何淑琪女士、臨床導師何美芝女士、臨床導師黎錦雄先生及導師高嘉恩女士 Service team from Squina International Centre for Infection Control, School of Nursing: Dr Lorna SUEN Kwai-ping, Associate Professor (Team Leader), Dr Margaret O'DONOGHUE, Associate Professor, Dr Simon LAM Ching, Assistant Professor, Dr YANG Lin, Associate Professor, Dr CHEUNG Kin, Associate Professor, Ms Suki HO, Clinical Associate, Ms Jacqueline M.C. HO, Clinical Associate, Mr Timothy LAI Kam-hung, Clinical Associate, Ms KO Ka-yan, Clinical Instructor, School of Nursing

專訪醫療科技及資訊學系蕭傑恒博士

Interview with Dr Gilman Siu Department of Health Technology and Informatics

醫療科技及資訊學系副教授蕭傑恒博士，憑著研發傳染病快速測試技術的出色科研成就，曾獲醫療及社會科學院頒發2017/18學院特設傑出研究表現/成就獎；蕭博士再下一城，以優秀的教學表現，再獲2018/19學院特設傑出教學表現/成就個人獎。

For his exceptional research performance in the development of novel rapid diagnostic tests for infectious diseases, Associate Professor Dr Gilman Siu Kit-hang of PolyU's Department of Health Technology and Informatics was bestowed with FHSS's Faculty Award for Outstanding Performance/Achievement in Research and Scholarly Activities (Individual) for 2017/18. Now, his teaching prowess has also earned him FHSS's Faculty Award for Outstanding Performance/ Achievement in Teaching (Individual) for 2018/2019.

蕭博士在研究方面的熱忱和熱情，在他的教學上同樣切實可見。他花上大量時間構思創新方式以豐富學生的學習體驗，因他深信激發學生的好奇心和學習興趣，比填鴨式地向他們灌輸資料來得更有效。他說：「我覺得現今的學生較我們那一代更加聰明能幹；普遍而言，他們思維清晰，也能夠慎思明辨而且學習迅速。作為老師，應該給學生更多機會證明自己，我們也不應忽略他們的才華，要耐心地與學生溝通並鼓勵他們。」

蕭博士明白學生難於短時間內學習大量各微生物的特性，故他特意參考電視遊戲節目《百萬富翁》，而設計出一個有關微生物學的遊戲，於每節課堂結束前與學生互動。蕭博士解釋說：「我希望透過遊戲，學生可在相對輕鬆的氣氛下學習。我將當日課堂重點以問答遊戲方式呈現，加上全班同學一起參與，過程及氣氛可讓他們有效地掌握相關知識和加深印象。贏出的學生，會獲贈一本有關微生物學的參考書作為獎勵。」

蕭博士亦會善用真實的臨床個案作教學，這能夠展示由不同微生物而引發的傳染病機制及其症狀，也可啟發學生的好奇心和培養解決問題的能力。此外，不同個案會被分派給學生進行小組討論，於蕭博士的從旁指導下，藉此增強他們在臨床應用方面的能力及自信心。

此外，新冠狀病毒對蕭博士的教學亦有所影響，他說：「由於疫情關係，網上教學相信還會持續，而我已有數個適合網上教學的構思。」

他續道：「我亦希望藉此機會向梁杏媚博士及Maureen Boost博士致謝，感謝他倆啟發了我在教學方面的想法；同時我亦向葉珍妮女士和李愛珍小姐的支持致以衷心謝意。」

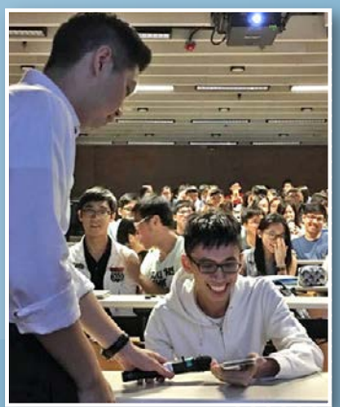
The enthusiasm and passion Dr Siu shows in research are equally tangible in his teaching. He spends a substantial amount of time innovating ways to enrich his students' learning experiences because he believes it is more effective to ignite his students' curiosity and interest to learn than to spoon-feed them information. "Also, students nowadays are smarter than my generation was. In general, they think clearly and critically and learn quickly. They deserve the opportunity to prove themselves. We as teachers should always appreciate their talents — we should encourage, be patient, and communicate with them," he said.

Knowing that students find it difficult to learn the identities of a myriad of microbial agents, Dr Siu has created a microbiology computer quiz based on the TV game show "Who Wants to Be a Millionaire?" for the end of each of his lectures. "I want students to learn more easily in a relatively relaxing atmosphere. The quiz is not only interactive but also an effective summarising approach for highlighting the key points after a lengthy lecture. I reward the winner with a medical microbiology reference book," Dr Siu explained.

He also makes use of clinical cases to not only show the mechanisms and symptoms of infections caused by specific microorganisms but to inspire his students to develop an inquisitive mind and problem-solving skills. To build their confidence once they gain some experience in looking at clinical cases, Dr Siu delegates the assigning of teaching and learning activities in further clinical cases to his students while he carefully guides their discussions and determines which areas they need to enhance their understanding of.

In addition, "because of the COVID-19 pandemic, online teaching will likely not disappear completely. I have several ideas in mind that fit online teaching," said Dr Siu.

"I would also like to take this opportunity to thank Dr Polly Leung and Dr Maureen Boost for inspiring me in my teaching, and Ms Jenny Ip and Ms Jan Lee for their support," he added.



專訪康復治療科學系方乃權教授

Interview with Prof Kenneth Fong, Department of Rehabilitation Sciences

簡單或複雜的輔助科技可協助殘疾人士更容易進行日常生活的各項事務，以及輔助病患者或傷者在康復期間的如常活動。由康復治療科學系方乃權教授為首的教學團隊，成員包括臨床導師許業權先生及技術員吳其鏘先生；於兩個職業治療學的學科中，學生將了解到為使用者研創輔助科技的同時，應考慮到他們的真實需要，出色的教學表現令團隊榮獲醫療及社會科學院2018/19學院特設傑出教學表現/成就團隊獎。

Simple or complex assistive technology can help people with disabilities to live with ease in carrying out their activities of daily living, such as basic self-care and self-feeding, as well as to enable them to cope with their diseases or injuries in their daily functioning, such as using public transport. For their exceptional teaching performance in 2 occupational therapy (OT) subjects on the creation of assistive technology for end-users with consideration of their personal needs and environmental factors, a team from PolyU's Department of Rehabilitation Sciences (RS) comprising team leader Prof Kenneth N.K. Fong, Clinical Associate Mr Eddie Hai, and Technical Officer Mr Philip Ng has been awarded FHSS's Faculty Award for Outstanding Performance/Achievement in Teaching (Team) for 2018/19.

這隊得獎教學團隊，將創新的原型製作技術、互動形式的展示活動、翻轉課堂教學，以及採用虛擬現實的混合式學習融合到教學之中。方教授表示，團隊基於三大原則啟發學生學習，他說：「首先，我們激發學生的興趣，學習如何去學習。其次，我們與校內其他學科的專家合作，鼓勵學生學習新技能和不同的科技，例如三維打印與工業設計概念、開發流動應用程式，以及基本木工和金屬加工，好讓他們能夠在功課上嘗試使用。最後，我們更會提供機會，讓學生將概念構思商品化。在其中一個學科，具備新穎構思而且表現優秀的學生小組，將獲得學系資助參加不同比賽和海外會議。」團隊的努力並沒白費，修讀他們的本科及碩士準入課程的學生，過去在本地和國際比賽中屢獲殊榮。

團隊亦在教學上融合了問題為本學習模式的元素，鼓勵學生獨立思考。在其中一個學科中，學生以小組形式為傷殘人士設計輔助裝置，教師主要從旁指導，而學生則需要負責決定和完成整個構思項目的所有細節。

方教授說：「我們未來的目標之一，是探究如何在職業治療學課程中更廣泛應用問題為本學習模式。假如我們將之結合臨床訓練，學生會因為更能了解、評估及有效解決使用者所需而對日後工作有所裨益。我們的目標是促進學生學習、思考及改變，並在未來成為自發和自主的終生學習者。」

The team incorporates innovative prototype- making, interactive showcases, flipped classroom in contextual learning, and blended learning using interactive virtual reality in their teaching. Prof Fong said the team adopts 3 main strategies to inspire students. "First, we engage students to learn to learn. Second, we collaborate with experts in other disciplines across PolyU to motivate students to learn new skills and different technologies, such as 3D printing and industrial design concepts, writing mobile apps, and basic woodworking and metalworking, so they can try using them in their work. Third, we provide students with opportunities to develop their ideas into marketable products," he explained. "Student groups with excellent performances in the showcases and innovative ideas in the subjects will be sponsored by RS to participate in students' competitions and overseas conferences," he added. The team's efforts have certainly paid off as their undergraduate and entry-level graduate programme students have regularly won awards in local and international competitions in past years, such as i-CREATe.

The team also adopts elements of 'open-ended' problem-based learning (PBL) in their teaching, which encourages students to think independently. In one of the subjects, the teachers mostly provide feedback instead of step-by-step instructions to the students, who work in small groups to design an assistive device for target end-users with disabilities. Thus, the groups are responsible for determining as well as completing all stages of their projects.

"One of our future aims is to explore the wider use of PBL in our OT curricula. If we combine it with clinical training, students may benefit from it in their future career from being able to better understand, assess and solve clients' needs. Our goal is to facilitate students to learn, think and change, and to become self-motivated and self-directed lifelong learners in the future," said Prof Fong.

專訪醫療科技及資訊學系蔡璟教授
Interview with Prof Jing Cai
Department of Health Technology and Informatics

理大醫療科技及資訊學系蔡璟教授，榮獲醫療及社會科學院2018/19年度學院特設傑出研究表現/成就個人獎。蔡教授近年發表多篇研究論文，成績卓越；他在過去數年亦取得超過10項總額接近2,700萬港元的校外研究撥款，實力有目共睹。

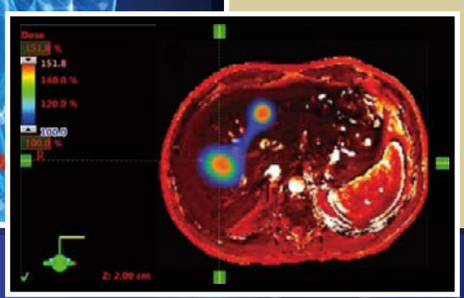
With an impressive research-paper publication record in recent years and his securing of more than 10 competitive external research grants totalling nearly HK$27 million in just the past couple of years, Prof Jing Cai of PolyU's Department of Health Technology and Informatics (HTI) is the worthy winner of FHSS's Faculty Award for Outstanding Performance/Achievement in Research and Scholarly Activities (Individual) for 2018/19.

「我要衷心感謝曾經協助我在理大期間進行科研工作的所有夥伴，包括學系及學院的領導層和同事，以及我的研究團隊和不同的合作單位。如果沒有他們，我也不能夠在加入理大短短的時間內，有此優秀成績。」蔡教授說。

蔡教授在美國維珍尼亞大學取得工程物理學博士學位並完成為期兩年的醫學物理臨床實習，2009年加入美國杜克大學出任助理教授，並於2014年獲擢升為副教授。他在2017年加入理大醫療科技及資訊學系，並於2020年榮升教授一職。

蔡教授的研究方向，主要為癌症診斷和放射治療應用方面，研發及實踐臨床嶄新的醫學影像和資訊科技。癌症放射治療旨在增加治癒的可能性，同時盡量減低治療對周邊健康組織的有害影響。傳統的二維及三維影像和放射療法，往往難以避免損害大量健康組織。不過，近年四維影像技術的發展，可更立體地觀察患者體內即時影像，測知腫瘤所在的準確位置，從而可更準確地調節輻射光束的角度、大小和形狀，對正常組織的影響減至最低。

蔡教授是四維影像及放射治療方面其中一位先驅，早在2009年已專注這個科研領域。他一直致力完善、提升和推動臨床實踐四維影像磁力共振掃描技術。他表示：「我在四維影像磁力共振掃描方面的研究，是我迄今最大的成就之一。對磁力共振和放射治療皆有充分認識的人寥寥可數，故我在這兩方面的專業知識對我大有幫助。我的研究主題往往在臨床上具影響力，技術層面也有一定挑戰；而這些研究在我的能力範圍內相信也是切實可行的。」



"I want to extend my sincere gratitude to all those who have helped me in my research and other activities at PolyU, including my department's and FHSS's leadership, my colleagues and other staff, and my team members and collaborators. Without them, I would not have achieved so much in such a short period of time after I joined PolyU in 2017," said Prof Cai.

Prof Cai received his PhD in engineering physics from the University of Virginia, US, and completed a 2-year clinical residency in medical physics there. He entered the ranks of academia as Assistant Professor at Duke University in 2009, and was promoted to Associate Professor in 2014. He moved to an equivalent position at HTI in 2017, and became Professor in early 2020.

Prof Cai's research interests focus on developing and clinically implementing novel medical imaging and informatics techniques for cancer diagnosis and radiotherapy treatment applications. The goal of radiotherapy cancer treatments is to increase the probability of a cure while minimising the effect of the treatments' toxicity on surrounding healthy tissues. Conventional 2- and 3-dimensional imaging and radiation delivery systems often unavoidably affect a substantial amount of healthy tissues. However, in recent years, the development of 4-dimensional imaging has enabled more precise visualisation of patients' anatomy and tumours and thus more precise adjustment of the angle, size, and shape of the radiation beams to avoid irradiating healthy tissues unnecessarily.

Prof Cai was one of the earliest pioneers of 4-dimensional imaging and radiation therapy since 2009. In particular, he has continually worked to optimise, enhance, and clinically implement 4-dimensional magnetic resonance imaging (4D-MRI). "My research in 4D-MRI is one of my biggest achievements so far," Prof Cai acknowledged. "My background in both MRI and radiation therapy has helped a great deal because not many people in the world have a good understanding of both. The topics I choose to research are usually clinically impactful and technically challenging. Yet, they should also be realistically feasible and within my capability," he explained.

專訪眼科視光學院謝欣然博士
Interview with Dr Dennis Tse School of Optometry

近視不但為患者生活帶來不便，若近視加深，會愈容易患上損害視力如視網膜病變的併發症。理大眼科視光學院副教授謝欣然博士率領的科研團隊，成員包括杜嗣河教授及林小燕教授，榮獲2018/19醫療及社會科學院頒發學院特設傑出研究表現/成就團隊獎，以表揚他們多年來致力研究控制近視加深的重大成果。

Being shortsighted or myopic is not just an inconvenience but can also increase sufferers' risk of developing sight-threatening complications such as retinal degeneration if their myopia becomes severe. To recognise the significance of their research outcomes over the years to control myopic progression, a team from PolyU's School of Optometry (SO) comprising leader Associate Professor Dr Dennis Yan-yin Tse, Prof Chi-ho To, and Prof Carly Lam have been named as the winners of FHSS's Faculty Award for Outstanding Performance/Achievement in Research and Scholarly Activities (Team) for 2018/19.

團隊多次揚威日內瓦國際發明展，於2011年以「光學離焦」軟性隱形眼鏡（DISC），及2018年以針對近視學童研發的「多區正向光學離焦」眼鏡鏡片(DIMS)，勇奪該發明展的多項大獎，成績驕人（詳情請參閱第10期及第23期《健訊》）。DISC軟性隱形眼鏡、DIMS眼鏡片以及其後開發的一日即棄DISC鏡片（詳情請見第25期《健訊》），皆可有效地減慢學童的近視加深速度約五至六成，亦成功商品化，甫推出市場即大受歡迎。

謝博士說：「我們的團隊約在2001年開始進行光學離焦的研究，而不同的專家對近視成因亦有不少假設。然後，一篇探討如何透過視覺體驗來調節動物眼睛生長過程的論文引起了我們的注意。其後，我們以抑制動物眼球過度生長的光學信號為基礎，將相關的光學原理用於眼鏡片中。」

東南亞地區兒童的近視率一向偏高，而家長近年對學童眼睛護理的相關資訊的認知亦普遍較以前豐富；經過多年研發兼具備臨床驗証的DISC鏡片發明，理應獲鏡片製造商垂青爭相進行大量生產，但事實卻事與願違。謝博士表示：「一項對社會有貢獻的研究，我們必須作出更大的努力來實踐。」不少企業不相信近視加深速度可被控制，亦忽視控制近視加深速度的重要性。團隊最後決定於杜嗣河教授的同學梁子文先生的協助下，嘗試自行將發明品商品化推出市場。

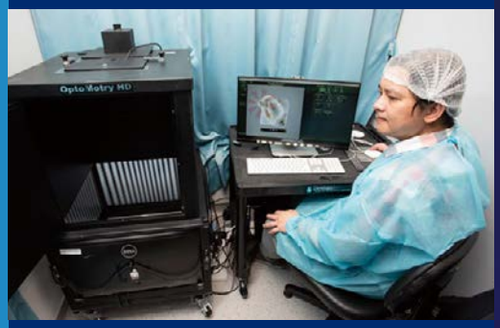
謝博士說：「我們的研究亦幸得同事們的大力協助，藉此特別感謝秦嘉敏博士及鄧永春博士。」

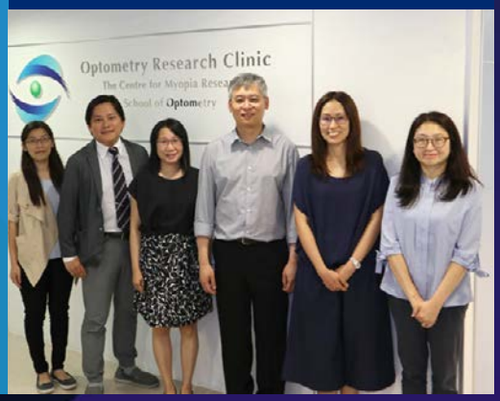
The team's impressive achievements include their winning of the top prizes at the prestigious International Exhibition of Inventions in 2011 for their Defocus Incorporated Soft Contact (DISC) lens and in 2018 for their Defocus Incorporated Multiple Segments (DIMS) spectacle lens for myopic children. (For more details, please see issues 10 and 23 of "Health News.") The DISC lens and DIMS spectacle lens and the team's later DISC-1 Day daily disposable lens (featured in issue 25), which can all slow the progression of myopia in some 50-60% of wearers on average, have gone on to become commercially successful.

"Around 2001, when our team started a line of research in myopic defocus, there existed numerous hypotheses about the cause of myopia. Then a research paper caught our attention, about how the growth of animal eyes could be modulated by visual experience. We then characterised the optical signal that inhibited excessive ocular growth in animal models, and incorporated the related optics into ophthalmic lenses," Dr Tse summarised.

After successful publication of their related research papers and development of the clinically effective DISC lens, one would have thought the invention would have been picked up by manufacturers for mass production, given the high prevalence of myopia in children in East Asia and the increased awareness among parents in the region of the importance of children's eye health. Not so. "To impact society with our research, sometimes we have to go the extra mile to disseminate our science," said Dr Tse. At the time, companies were not convinced that myopic progression could be controlled nor of the importance to control myopic progression. After years of getting nowhere, the team decided to see if they could commercialise the invention themselves with the help of Mr Jackson Leung Tze-man, a former optometry classmate of Prof To's, and PolyU.

"We also received a lot of help from many current and past colleagues. In particular, we would like to thank Dr Rachel Ka-man Chun [SO Research Assistant Professor] and Dr Wing-chun Tang [SO Optometrist]," said Dr Tse.





專訪眼科視光學院陳浩龍博士及杜志偉博士

Interview with Dr Henry Chan and Dr Do Chi-wai School of Optometry

理大眼科視光學院開設社區「眼睛及視覺護理」服務學習計劃多年，培訓不少理大本科生和義工隊成員，為香港、中國內地及海外有需要人士，提供視力篩查服務。為延續這項服務，理大大學院士暨理大基金管治委員會成員鄺美雲小姐在2017年成立「看見愛基金」，以支持眼科視光學院推行「看見愛流動護眼計劃」。計劃置有配備眼科視光檢查儀器的七人車，方便拓展護眼外展服務至全港各區。為表揚「看見愛流動護眼計劃」的服務成就，由眼科視光學院副教授陳浩龍博士及杜志偉博士主導，與眼科視光師朱展鴻博士及黃浩然先生組成的團隊，獲醫療及社會科學院頒授2018/19學院特設傑出服務表現/成就團隊獎。

PolyU's School of Optometry (SO) has been offering the service-learning subject "Learning Through Providing Eye Care and Vision Health to the Community" for many years to train PolyU undergraduates and the PolyU Volunteers to perform vision screening under supervision for the underprivileged in Hong Kong, mainland China, and overseas. To enhance this meaningful endeavour, Miss Cally Kwong, PolyU University Fellow and a member of the PolyU Foundation's Governing Committee, founded the Vision of Love Fund in 2017 to support SO's establishment of the "Vision of Love Mobile Eye Care Project" (VOL). With its vehicle for moving optometric equipment, VOL has boosted the accessibility of vision screening around Hong Kong, benefitting thousands of people. In recognition of VOL's significant service contributions, SO's VOL team, comprising Associate Professors Dr Henry Chan and Dr Do Chi-wai and Optometrists Dr Geoffrey Chu and Mr Horace Wong, has been bestowed with FHSS's Faculty Award for Outstanding Performance/Achievement in Services (Team) for 2018/19.

這項服務學習科目，將大學教學及學生反思的思考能力融合於社區服務當中。在學院的眼科視光師監督下，眼科視光學院的學生與來自不同學系的學生一起籌備和展開視力篩查服務項目。陳浩龍博士說：「非眼科視光學院的學生會在課堂上，學習有關眼睛結構和功能、驗眼技巧以及眼疾的知識。我們亦為所有修讀此科目的學生安排實習環節，協助他們為活動作好準備，而學生必須通過臨床能力評估，才能為公眾人士進行視力篩查服務。」經篩查後發現有眼睛或視力問題的人士，將獲安排到理大進行更全面的綜合眼科視光檢查來評估其視力及眼睛健康情況。

新冠狀病毒令社區的視力篩查服務暫停，但無阻「看見愛流動護眼計劃」繼續為有需人士服務。杜志偉博士說：「我們聯繫了多間眼科鏡片公司，並獲得贊助以製造預防新冠狀病毒的防護眼鏡。我們利用由『看見愛流動護眼計劃』眼鏡回收活動收集得來的眼鏡框，生產了1,000副防護眼鏡並捐贈予長者及他們的照顧者。」鑑於社交距離措施正在實施，團隊現正研究新方式為社區提供護眼資訊及服務。

團隊對鄺美雲小姐及「看見愛基金」各位善長的鼎力支持和鼓勵，致以深切謝意。

The subject integrates community service with structured academic study and critical reflection. Under the supervision of SO optometrists, SO and non-SO students organise and implement a vision screening project together. Dr Chan, one of the Subject Leaders, said, "Non-optometry students attend lectures and tutorials to learn about eye structures and functions, eye examination techniques, and eye diseases. Hands-on lab sessions are arranged for all students to help them prepare for the vision screening activities, and they have to pass a clinical competency assessment before they are allowed to carry out vision screening on the public." People who are screened and found to have an eye or vision problem are offered a comprehensive eye examination and optometric treatment at PolyU.

The COVID-19 pandemic has put a temporary halt to vision screening in the community, but it has not stopped VOL from serving the disadvantaged. "We have liaised with some ophthalmic lens companies and received donations from them to manufacture safety eyeglasses as a precautionary measure against COVID-19. Using collected spectacle frames from VOL's eyeglass recycling programme, our team has produced 1,000 pairs of protective eyeglasses and donated them to the elderly and their caregivers since the elderly have a higher risk of developing COVID-19 complications," said Dr Do, the other Subject Leader. The team is exploring new ways to disseminate eye care information and services to the community while social distancing measures are in place.

The team would like to thank Miss Kwong and the other Vision of Love Fund donors for their continued support and encouragement.

理大教授擔任頂尖學術期刊編委成員
PolyU Scholar Joins Editorial Board of Leading Occupational Therapy Journal

鄺美雲社會心理健康教授、康復治療科學講座教授及康復治療科學系系主任曾永康教授，獲著名的英國職業治療學期刊 (British Journal of Occupational Therapy，簡稱「 BJOT」)委任為編輯委員會成員。BJOT由英國皇家職業治療師學會出版，為國際頂尖的同儕評審學術期刊。

Prof Hector W.H. Tsang, who is Cally Kwong Mei Wan Professor in Psychosocial Health, Chair Professor of Rehabilitation Sciences, and Head of PolyU's Department of Rehabilitation Sciences, has been appointed as a member of the editorial board of the "British Journal of Occupational Therapy" (BJOT). BJOT is a leading international peer-reviewed journal owned by the UK's Royal College of Occupational Therapists.

物理治療學學者獲頒國家級教學獎項
Physiotherapy Academic Presented with National Teaching Achievement Award 2018

康復治療科學系副教授及物理治療學(榮譽)理學士課程主任魏佩菁博士，榮獲國家教育部頒發2018年國家級教學成果獎二等獎(高等教育)。魏博士在2020年7月3日舉行的行政長官卓越教學獎的頒獎禮上，獲頒發這項殊榮。

As we reported in issue 25 of "Health News," Dr Shirley Ngai, Associate Professor at PolyU's Department of Rehabilitation Sciences and Programme Leader of its BSc(Hons) programme in physiotherapy, won a 2nd class prize in the Higher Education category of the National Teaching Achievement Awards 2018 from China's Ministry of Education. Dr Ngai received her accolade in Hong Kong at the Award Presentation Ceremony of the Chief Executive's Award for Teaching Excellence on 3 July 2020.

醫療及社會科學院協助開展普及社區檢測計劃
FHSS Health Professionals and Students Help Out in COVID-19 Universal Community Testing Programme

來自醫療及社會科學院多個學系及學院的教職員、學生及校友，在2020年9月1日至14日期間推行的「普及社區檢測計劃」，協助採集鼻腔和咽喉拭子樣本。來自護理學院的團隊，負責運作港島區四個社區檢測中心。政務司司長張建宗先生在9月7日到訪了由護理學院管理的其中一所檢測中心，而食物及衞生局局長陳肇始教授，則在9月12日親臨護理學院負責運作的另一所檢測中心探訪。

Staff, students, and alumni from FHSS's health-related departments and schools were among the thousands of personnel who manned the nasal-and-throat-swab sampling stations across Hong Kong during the government's COVID-19 Universal Community Testing Programme from 1-14 September. A large team from FHSS's School of Nursing (SN) operated 4 community testing centres on Hong Kong Island. Mr Matthew Cheung Kin-chung, Hong Kong's Chief Secretary for Administration, visited one of the SN-run centres on 7 September, and Prof Sophia Chan Siu-chee, Hong Kong's Secretary for Food and Health, made a visit to another SN-run centre on 12 September.

理大研究生獲頒香港博士研究生獎學金
Hong Kong PhD Fellowships 2020 Awardees at FHSS

由香港研究資助局（研資局）設立的「香港博士研究生獎學金計劃」，旨在吸引世界各地的優秀學生來港研讀博士課程。今年秋季將有三名學生獲此獎學金入讀醫療及社會科學院，研資局將提供為期三年的每月津貼，以及參與會議和研究活動的年度交通津貼。此外，理大將保證他們兩年學生宿舍住宿，並豁免三年常規修讀年期的學費；如他們需要更長時間修畢博士課程，理大或會提供第四年的每月津貼及交通津貼。

來自埃塞俄比亞的 Lealem Gedefaw Bimerew先生與來自印度的Shama Shama小姐，將入讀醫療科技及資訊學系。前者將研究非編碼核糖核酸調控網路在骨髓增殖性腫瘤作特性分析，後者則會探究腸道細菌在第二型糖尿病的角色。另一位來自埃塞俄比亞的Dagim Dawir Gonsamo先生將入讀應用社會科學系，深究現有的社區為本的兒童保護機制如何應對生活於埃塞俄比亞的孤兒及弱勢兒童的心理社會問題。

The Research Grants Council's (RGC) Hong Kong PhD Fellowship Scheme aims to draw the best students from Hong Kong and around the world to undertake their doctoral studies in the city. Three international students joining FHSS this fall have been awarded the prestigious fellowships, which will entitle them to receive a monthly stipend and an annual conference- and research-related travel allowance from RGC for the duration of their normal 3-year study period. In addition, PolyU will guarantee them student hall accommodation for 2 years, waive their tuition fees for the 3 years, and, if necessary, provide a 4th year of stipends and travel allowance if they require more time to complete their PhD programmes.

Two awardees will be based at our Department of Health Technology and Informatics: Mr Lealem Gedefaw Bimerew from Ethiopia will be investigating the involvement of non-coding RNA in a type of blood cancer, while Miss Shama Shama from India will be exploring the role of gut bacteria in the synthesis of secondary bile acid and the role of molecular signalling by secondary bile acid in type 2 diabetes. Mr Dagim Dawir Gonsamo from Ethiopia will be based at our Department of Applied Social Sciences to study the role of community-based integrated child protection mechanisms in addressing psychosocial problems of orphans and vulnerable children in Ethiopia.

2020/21學年一帶一路獎學金
Belt and Road Scholarship (Research Postgraduate) 2020/21 Awardee at FHSS

為加強香港與「一帶一路」沿線國家在教育方面的合作，特區政府設立「一帶一路獎學金」，提供來自「一帶一路」沿線國家並在學業上表現卓越的國際學生申請。其中「一帶一路獎學金——研究院研究課程」，將授予修讀由政府資助院校提供的全日制第一年研究院研究課程的學生，在他們所修讀課程的正常修業期內資助全額學費；如學生的學術表現理想，可每年續領獎學金。來自新加坡的獎學金得獎者卓鳳美小姐，將入讀康復治療科學系，研究遠距康復治療及腕戴式裝置在上肢中風後的康復治療的應用情況。

To strengthen educational collaboration with Belt and Road countries, the Hong Kong government offers highly competitive Belt and Road Scholarships to talented international students from Belt and Road countries. Among them is the Belt and Road Scholarship (Research Postgraduate) for first-year-intake full-time publicly funded research postgraduate programmes in Hong Kong. The scholarship covers full tuition fees and is tenable for the normal study period of the programme concerned, with renewal each year subject to satisfactory academic performance. One of the awardees for intake in the 2020/21 academic year is Miss Toh Fong Mei from Singapore, who has joined FHSS's Department of Rehabilitation Sciences to study for a PhD. She will be investigating the application of telerehabilitation and a wrist wearable device in post-stroke rehabilitation for the upper limb.

尤德爵士紀念基金殘疾學生研究生獎學金
PhD Student Wins Sir Edward Youde Memorial Fellowship

醫療及社會科學院應用社會科學系博士生馮康泓先生，是2019/20年度尤德爵士紀念基金殘疾學生研究生獎學金的唯一得主。此獎學金旨在協助就讀於政府資助院校的研究生課程並有特殊教育或精神健康需要的優秀學生，表彰他們在學術成績、領袖潛能、語言能力及研究成就的傑出表現。得獎者將獲得50,000港元的獎學金資助。

馮康泓患有先天性重症肌無力症，儘管健康情況欠佳，但學業表現一貫優異。他現於應用社會科學系攻讀博士課程，研究如何利用網絡為本的心理教育課程幫助病理性的解離患者。

Mr Andy Fung Hong-wang, a PhD student at FHSS's Department of Applied Social Sciences, is the only recipient of the competitive Sir Edward Youde Memorial Fellowship for Disabled Students in 2019/20. The fellowship is awarded to outstanding students with special educational needs or mental health needs who are enrolled on a publicly funded research postgraduate programme in Hong Kong and who demonstrate academic excellence, leadership potential, language proficiency, and achievement in research. The fellowship comes with a grant of HK$50,000.

Mr Fung has excelled in his studies despite having congenital myasthenia gravis since he was a child. For his PhD, he is researching how a web-based psychoeducational programme can benefit people with pathological dissociation.

2020年度創新科技獎學金計劃
FHSS Undergraduates Secure Innovation and Technology Scholarships 2020

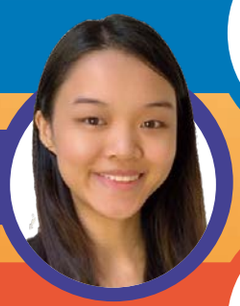
香港青年協會自2011年起，舉辦每年一度的創新科技獎學金計劃，以表彰修讀科學、工程、醫學或醫療相關學科的優秀本科生。今年共有四名理大學生躋身25位得獎學生之列，當中三名為醫療及社會科學院的同學。

計劃獲得香港特區政府創新科技署及香港上海匯豐銀行全力支持及贊助，旨在鼓勵學生培育對科學及嶄新科技的興趣，並拓展國際視野。每位得獎同學均獲得15萬港元獎學金，以資助他們前往國內或海外頂尖大學暫讀、跟隨相關專家學習，並鼓勵他們參與社區服務活動及本地實習。

Since 2011, the Hong Kong Federation of Youth Groups has organised the annual Innovation and Technology Scholarship Award Scheme to recognise outstanding non-final-year local undergraduates studying science, engineering, medicine or health-related disciplines. Among the 25 awardees this year were 4 PolyU students, of whom 3 are from FHSS.

The scheme, which is jointly supported and sponsored by Hong Kong's Innovation and Technology Commission and the Hongkong and Shanghai Banking Corp Ltd, aims to nurture the winners' talent in innovation and technology and their international outlook. Each awardee was given a scholarship worth up to HK$150,000 to cover his or her expenses from taking part in the scheme's training programmes: an attachment at a renowned mainland Chinese or overseas university, mentoring by a relevant expert, and participation in community-based service projects and an optional local internship.

得獎學生 **Awardee**	**醫療及社會科學院學系／學院（本科課程）** **FHSS Department / School (Undergraduate Programme)**
程智楓同學 Mr Ching Chi-fung	醫療科技及資訊學系放射學（榮譽）理學士學位二年級 Department of Health Technology and Informatics (Radiography, Year 2)
周旨菁小姐 Miss Erina Chow Tsz-ching	康復治療科學系職業治療學（榮譽）理學士學位二年級 Department of Rehabilitation Sciences (Occupational Therapy, Year 2)
謝樂容小姐 Miss Alison Tse Lok-yung	康復治療科學系物理治療學（榮譽）理學士學位三年級 Department of Rehabilitation Sciences (Physiotherapy, Year 3)



理大為中學生舉辦連串網上活動
PolyU Reaches Out to Prospective Students

自去年開始，理大校園雖未能開放給中學生參觀，但仍無阻理大教務處積極透過網上方式，如10月10日於網上舉行的理大教育資訊日，向各中學及有意報讀理大的中學生提供最新的校園資訊。

Although prospective students have not been able to visit PolyU's main campus since the latter part of last year, PolyU's Academic Registry (AR) has continued to reach out to secondary schools and their pupils through online means to enable them to learn about studying at the university, including through its PolyU Education Info Day 2020 on 10 October.

理大教務處在4月和5月分別舉辦了「理大與您：網上專題講座系列」，讓理大教職員為中學生及公眾人士講解各自專門領域的有趣主題，包括4月27日由康復治療科學系臨床導師盧偉明先生主講的「『物理』治療師101」，錄影短片可於此連結重溫: https://youtu.be/upPscAevAag

教務處在5月30日舉行網上「2020理大聯招課程諮詢日：入學攻略」，讓大學聯招申請人查詢及獲取理大2020/21學年最新的入讀及課程資訊。醫療及社會科學院各學系及學院，就各自的本科課程及相關專業安排了互動網上課程講座。

此外，教務處亦在7月和8月為本港中學生舉辦了網上「理大暑期活動」，當中醫療及社會科學院各學系及學院籌備了多個網上講課、示範、分享環節及實驗室參觀，吸引了數百位中三至中五同學參加。

醫療及社會科學院與環球事務處攜手，在5月27日為有意報讀理大的馬來西亞學生舉辦了網上講座。醫療及社會科學院院長岑浩强教授及眼科視光學院副教授及副學院主任紀家樹博士，代表學院向學生簡介香港的醫療護理系統，以及眼科視光學的本科課程。

此外，環球事務處在6月16日至18日亦舉辦了「理大虛擬開放日」，讓本港及海外高中老師進一步認識理大。開放日當天，醫療及社會科學院院長岑浩强教授介紹了學院的獨有特色及所開辦的本科課程。

環球事務處同時也為中國內地的高中學生，籌辦了「八大學院在線學堂」介紹理大不同領域的先進科研，眼科視光學院曹黃惠華教授在7月3日及11日作主講，簡述了她有關控制兒童近視加深的研究。

AR also organised the PolyU & You: Online Lecture Series in April and May whereby PolyU teachers introduced interesting topics in their fields for secondary school students and the general public. They included "Physics 101 for Physiotherapist" on 27 April by Mr Raymond Lo, Clinical Associate at FHSS's Department of Rehabilitation Sciences. You can watch the video recording of his 48-mins lecture at https://youtu.be/upPscAevAag.

On 30 May, AR also organised the PolyU Online JUPAS Consultation Day 2020: Admissions Strategies to enable JUPAS applicants to acquire and ask about the latest updates on PolyU's entrance requirements and programme details for admission in the 2020/21 academic year. FHSS's constituent departments and schools arranged interactive webinars on their respective undergraduate degree programmes and associated professions.

AR also ran its annual PolyU Summer Programme in July and August online for secondary school students in Hong Kong. Hundreds of pupils in Forms 3, 4 and 5 flocked to sign up for the online mini-lectures, demonstrations, sharing sessions, and lab tours offered by FHSS's departments and schools.

On 27 May, FHSS teamed up with PolyU's Global Engagement Office (GEO) to host a webinar for prospective students in Malaysia. FHSS Dean Prof David H.K. Shum and School of Optometry Associate Head and Associate Professor Dr Kee Chea-su briefly outlined Hong Kong's health care system. Dr Kee also introduced the school and its bachelor's degree programme in optometry to the online audience.

Prof Shum also shared the uniqueness of FHSS and its undergraduate degree programmes at GEO's PolyU Virtual Open House on 16-18 June for local and overseas high school counsellors to learn more about the university.

To reach out to prospective students in mainland China, GEO hosted an online mini-lecture series to showcase PolyU's cutting-edge research. They included lectures on 3 and 11 July by Prof Pauline Cho of FHSS's School of Optometry, who introduced her research on controlling the progression of myopia or shortsightedness in adolescents.

新一屆醫療及社會科學院會
Inceptrust Inspiring Trust and Friendship Among Students

第27屆醫療及社會科學院會命名為「Inceptrust」，由一群來自學院的不同學科並充滿幹勁的本科生組成幹事會。他們希望代表醫療及社會科學院所有同學爭取應有的福利和權益，並透過各項多姿多采的活動及不同支援，建立院內同學尤其新生之間的友誼，盡情地體驗大學生活，凝聚歸屬感。

對於內閣名字的由來，來自應用社會科學系社會政策及社會創業二年級學生吳俊廷會長說：「『Inceptrust』有數個獨特的含義。名字的首兩個發音與粵語的『2』和『7』相近，代表我們是第27屆醫療及社會科學院會的幹事。另外，名字包含『inception』的意思，我們希望融合有關醫療及社會科學的最新資訊於活動中，藉此增進及加深同學對公共服務的關注及專業知識。我們亦希望藉著名字傳達『accept』之意，意味我們願意聆聽同學的需要從而更有效地為他們服務。此外，內閣的名字包含『trust』一字，代表我們將竭盡所能透過溝通，團結院內同學之間的信任。」

有關活動詳情及最新動態，請留意「Inceptrust」的Facebook專頁facebook.com/INCEPTRUST或Instagram帳戶@hkpusu_27hss！

"Inceptrust" is the name of the 27th FHSS Students' Association (FHSSSA) cabinet formed by a team of young, energetic undergraduates studying different disciplines at FHSS. They aim to represent the interests of all FHSS students and enrich their university life and beyond by fostering friendship among them, especially freshmen, through different social activities and provision of support.

"Our name 'Inceptrust' combines several words. The first two syllables of the name sound like saying "2,7" in Cantonese, signifying that we are the 27th FHSSSA," said Mr Clarence Ng Chun-ting, its President and a Year 2 student of social policy and social entrepreneurship at the Department of Applied Social Sciences. "Next, we allude to the word 'inception' because we will include the latest health and applied social science news in our activities to enhance FHSS students' knowledge of the health and human services sectors. We also want to convey the word 'accept', as we are willing to listen to them to serve them better. 'Trust' is the other word in our name, because we are committed to nurturing unity and trust among our faculty mates," he explained.

Check out Inceptrust's Facebook page at facebook.com/INCEPTRUST or Instagram account @hkpusu_27hss for regular updates on their activities!

何文田校園擴建計劃正式展開
Campus Expansion in Ho Man Tin to Commence

行政長官在2018年《施政報告》中，概述了增加香港醫療服務、基礎設施及人手的新措施，以回應本港人口老化引致公共醫療服務需求上升的問題。當中的措施包括增加護理學、物理治療學和眼科視光學(以及醫學和牙醫學)的大學資助學士學位課程的學額，以及改善並擴建包括理大在內有關該等學科的大學教學設施。理大在今年6月取得通過政府的撥款建議，開展在何文田斜坡(何文田港鐵站B2出口附近) 的校園擴建工程。

這項校園擴建計劃，包括興建一座樓高11層的全新教學大樓，當中大樓更會專為康復治療科學系和眼科視光學院的學生提供額外教研設施；項目還包括新建一座可提供1,200多個宿位的新學生宿舍。校園擴建工程預計將於2026年竣工。

Owing to a rise in demand for public health care in Hong Kong due to the city's ageing population, the Chief Executive's 2018 Policy Address outlined new measures to boost the city's health care services, infrastructure, and manpower. These included increasing the number of publicly funded first-year degree intake places for nursing, physiotherapy, and optometry (as well as medicine and dentistry), and upgrading and expanding the educational facilities for those professions in universities, including PolyU's. This June, PolyU received the go-ahead to commence construction of its campus expansion on the Ho Man Tin Slope (near Ho Man Tin MTR exit B2).

The campus expansion consists of a new 11-storey building housing additional teaching and research facilities for the Department of Rehabilitation Sciences and the School of Optometry, and a new student hostel with more than 1,200 places for PolyU students. The target completion date for the campus expansion is 2026.

頂尖學生入讀醫療及社會科學院
Top HKDSE Students Join FHSS as Freshers

醫療及社會科學院的本科課程新生平均入學成績，一向位列理大眾多課程中的前茅。面對新冠病毒疫情，除了前線醫護人員日以繼夜抗疫外，一班專職醫療人員的後勤支援亦同樣重要。在香港中學文憑考試取得佳績的李斯穎同學，儘管身邊親友曾勸喻她改選醫科等學科，但她忠於自己，堅持選讀醫療化驗科學學士學位課程；而同樣考獲優異成績的楊子建同學，於中學時認識放射學後便立志修讀這學科，最終順利獲心儀的放射學學士學位課程取錄。另外，陳恩臨同學和潘鋒樺同學以最高分成績，分別入讀職業治療學學士學位課程及物理治療學學士學位課程，兩人皆希望能夠學以致用，運用專業知識服務有需要人士並貢獻社會。

In this and past years, the average HKDSE admission scores for many FHSS undergraduate degree programmes have been among the very highest at PolyU. While frontline doctors and nurses may be the public face of health care, support from allied health professionals is also vital for patients' recovery. Despite social pressure to study medicine or another field typically expected of high achievers, top DSE scorer Miss Swing Li followed her heart to enrol on the BSc(Hons) programme in medical laboratory science at our Department of Health Technology and Informatics (HTI) this academic year. Another top DSE scorer at HTI is Mr Justin Yang, who is now a freshman on its BSc(Hons) programme in radiography. He was determined to study the subject ever since he first came across it back in junior high. Mr Yanni Chan and Mr Tobias Poon are the top DSE scorers admitted to our Department of Rehabilitation Sciences' BSc(Hons) programmes in occupational therapy and physiotherapy, respectively. They hope to gain and apply their professional knowledge to serve the disadvantaged and contribute to society.

2020 年度新生平均入學成績 Average HKDSE Scores for FHSS Programmes in 2020

學士學位課程 Degree Programme	入學成績計算方法 Admission Score Calculation Mechanism	最低分數 Minimum Score	最高分數 Maximum Score	平均入學成績 Average HKDSE Score Point Total
應用社會科學系 Department of Applied Social Sciences				
社會政策及社會創業 Social Policy and Social Entrepreneurship	4 Core + Best 2 Elective Subjects	24	27.5	24.9
社會工作 Social Work	4 Core + Best 2 Elective Subjects	28	33	29.3
醫療科技及資訊學系 Department of Health Technology and Informatics				
醫療化驗科學 Medical Laboratory Science	Any Best 6 Subjects	33	43.5	37
放射學 Radiography	Any Best 6 Subjects	33	43.5	36.7
康復治療科學系 Department of Rehabilitation Sciences				
職業治療學 Occupational Therapy	Any Best 6 Subjects	34.5	46.5	37.8
物理治療學 Physiotherapy	Any Best 6 Subjects	36	48	39.6
護理學院 School of Nursing				
精神健康護理學 Mental Health Nursing	4 Core + Best 2 Elective Subjects	26	36	27.5
護理學 Nursing	4 Core + Best 2 Elective Subjects	27	34.5	29.4
眼科視光學院 School of Optometry				
眼科視光學 Optometry	Any Best 6 Subjects	31.5	43.5	35.4

以上分數不包括非學術表現計劃之收生成績，只供參考之用。
The above scores exclude Non-Academic Achievement Scheme offers, and are for reference only.

香港文憑考試分數計算 Calculation of HKDSE Scores

5** – 8.5 分points	5* – 7 分points	5 – 5.5 分points	4 – 4 分points
3 – 3 分points	2 – 2 分points	1 – 1分point	Unclassified – 0分points

查詢香港中學文憑考試學生的入學成績計算方法，請瀏覽
For admission-score calculations for HKDSE applicants, please visit
http://www.polyu.edu.hk/study