何鴻燊博士醫療拓展基金會2018醫學研討會
個人化醫療及多種疾病最新發展
2018 Dr Stanley Ho Medical Development Foundation Symposium
New advances in Personalized Medicine and Various Diseases

何鴻燊博士醫療拓展基金會總部
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Headquarters, Dr. Stanley Ho Medical Development Foundation
9/F., Macau Landmark, 555 Avenida Da Amizade, Macau

二零一八年一月十三日　下午一時至六時
13 January 2018, 1:00pm - 6:00pm

二零一八年一月十四日　上午八時四十五分至下午一時
14 January 2018, 8:45am - 1:00pm

聯合主辦
Jointly organized by

何鴻燊博士醫療拓展基金會
Dr. Stanley Ho Medical Development Foundation

香港中文大學
The Chinese University of Hong Kong

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2018 醫學研討會網上提問
Medical Symposium 2018 Online Q&A

http://ersvp.primemps.com/qna

註：此網上提問系統只在 2018 醫學研討會期間有效
Note: The Q&A system is only available during the Medical Symposium 2018 event period

13 Jan 2018 (Saturday) • 二零一八年一月十三日（星期六）

1:00pm	入席登記 Registration
1:30pm	開幕致詞 Opening address
	Chairpersons: 馬學章醫生 Dr Hok Cheung Ma 郭昌宇醫生 Dr Cheong U Kuok
2:00pm	Professor Simon PL Travis Inflammatory Bowel Diseases – a Western Disease Coming to the East
2:40pm	Professor Simon Leedham Peaks and Troughs in Personalized Cancer Therapy
3:25pm	Professor Peter Donnelly The Genetics of Personalized Medicine: Challenge and Opportunity
4:05 - 4:25pm	休息時間 Tea Break
	Chairpersons: 林偉基教授 Prof Christopher Wai Kei Lam 鄭彥銘教授 Prof Gregory Cheng
4:25 pm	黃曦醫生 Dr Sunny Hei Wong Colorectal Cancer Screening – Who, Why and How?
5:05pm	黃麗虹教授 Professor Grace Lai Hung Wong Management of HBV Infection in Immunosuppressed Patients
6:00pm	Welcome Dinner *(invited guests)*

14 Jan 2018 (Sunday) • 二零一八年一月十四日（星期日）

8:45am	入席登記 Registration
9:00am	Photos and presentation of souvenirs
	Chairpersons: 霍文遜醫生 Dr Manson Fok 謝孟雄教授 Prof Mung Shiung Shieh
9:15am	陳晉興教授 Professor Jin Shing Chen New Advances in Surgery for Early Stage Lung Cancer
9:55am	吳准教授 Professor Zhun Wu Treatment Strategy of Renal Hilar Tumors
10:35am	杜永光教授 Professor Yong Kwang Tu Recent Advances in Cerebrovascular Surgery
11:15-11:35am	休息時間 Tea Break
	Chairpersons: 許樹昌教授 Prof David Shu Cheong Hui 胡錦生教授 Prof Kam Sang Woo
11:35am	胡志遠教授 Professor Justin Che Yuen Wu Functional Gastrointestinal Disorders – Updates in Diagnosis and Management
12:15pm	郭志銳教授 Professor Timothy Chi Yui Kwok Preventive Strategies against Dementia
1:00pm	Closing Remarks by Mr Patrick Wing Ming Huen

Message from The Chairman

2017 has been another fruitful year for our Foundation. We have reached out to more people and done more for the local community. Here are the highlights:

1) Annual Medical Symposium

Our Annual Symposium has become one of the most important platforms for medical practitioners in Macau to learn from and exchange with overseas speakers on the latest technologies and discoveries in various healthcare fields. The 13th symposium held last year recorded an all-time high attendance of over 500 participants. We digitalized the conference logistics by introducing online Q&A and electronic check-in/check-out for the first time and the feedback was very positive.

2) International Brain Bee Competition 2017

The Foundation has been the sole sponsor of the competition for the second year. We have achieved a milestone in promoting e-education in Macau by providing each of the 500 contestants with an iPad for answering questions and results were immediately known minutes after the competition. The Foundation also sponsored the champion student to represent Macau to compete and exchange in Washington DC, USA; as well as another 50 participants to visit CUHK campus and the Brain and Mind Institute (BMI) in Hong Kong.

3) BMI Symposium 2017

The BMI Symposium this year focused on early language learning and brain development, and explored the interdependence of brain and language experience from neonates to early childhood. We brought world renowned researchers to Macau to share their latest achievements and experiences in children language learning, language disorders treatment and early interventions. With the adoption of online registration, we attracted 200 local professionals to come to listen to these overseas experts.

4) Web-based digital platform

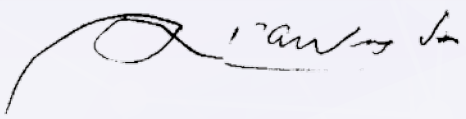
In order to further achieve our objective to elevate the healthcare standard of Macau and the Pearl River Delta, we have been working closely with global IT experts in Hong Kong and the US to build up a web-based digital platform which aims to provide medical practitioners and the general public in Macau with access points for knowledge and resources on medical related areas worldwide.

5) A meeting place and platform for knowledge exchange in Macau

The Foundation's office in Macau continues to serve as a venue for conferences, meetings and trainings organized by local medical and professional organizations with an aim to enhance the Foundation's relationship and goodwill with the local community.

In addition to the events and activities above, the centers and projects sponsored by the Foundation have also achieved significant results during last year. Their reports at the end of this booklet will give you a glimpse of what we have done for Macau by now.

We would like to take this opportunity to thank you all in making these events possible. On behalf of our Foundation, I wish you and your family a happy and peaceful year 2018.



Dr. Stanley Ho
Chairman
Dr. Stanley Ho Medical Development Foundation

主席的話

2017 年基金會，碩果累累，除開展了諸多服務澳門廣大民眾的活動，亦繼續資助多項對社會極具裨益的醫療研究項目。

1) 醫學研討會 2017

2017 年標誌著醫學研討會已成功舉辦了十三屆，成為澳門醫護界同仁與海外學者交流最新醫療技術和研究成果的重要平台。這屆研討會主題內容豐富，首次採用數字化登記報名及現場問答，獲公眾熱烈響應，參加人數再創新高，盛況空前。

2) 國際腦神經科學大賽 2017

基金會第二年主辦此項腦神經科學國際大賽的澳門區選拔賽並首次應用電子化考試，即場揭曉成績及頒獎，進一步促進澳門電子化教育與考試的新思路。此次系列活動還包括資助澳門區選拔賽冠軍代表澳門參加美國華盛頓舉行的國際大賽及交流活動，安排澳門中學生前往香港參觀中文大學校園以及大腦與認知研究所。

3) 大腦認知研討會 2017

基金會資助香港中文大學成立的大腦與認知研究所，每年均在澳門及香港舉行相關主題研討會。今年以早期語言學習與大腦發育為主題，探討從出生到幼兒大腦與語言發展的相輔相成；來自世界著名學府的五位專家學者應邀前來澳門，與澳門有關專業團體、專業人士就兒童語言學習、語言障礙、早期干預與合作等方面展開充分的交流。此外，基金會更首次採用了網上註冊、報名登記及現場問答等現代科技，將基金會的服務更加電子化。

4) 全方位醫療資訊平台

朝著「提升澳門和珠江三角洲醫療水平」這個使命向前邁進，基金會開始探討借助微軟及 IBM 等技術供應商構建一個全方位的資訊平台，讓醫護人員及市民大眾能分享取用來自世界各地最新、最有用及最可靠的醫療資訊。

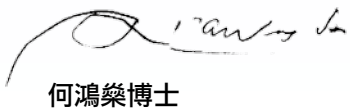
5) 醫學交流及專業培訓的平台

基金會的澳門區辦事處擁有設備完善的多功能會議廳及資訊中心，為澳門醫療及教育機構免費提供醫學講座、學術交流及專業培訓的場地，並鼓勵醫療、衛生及教育領域的業界人士共同建立資訊交流平台，從而深化基金會與本地醫療機構的合作和友好關係。

除此以外，基金會歷年資助的研究中心和項目亦取得重大進展，有關的工作簡報請參閱本場刊的附錄。

我們在此再一次感謝所有給予幫助的同仁，全賴您們的無私幫助，基金會才得以逐步實現提昇澳門健康與教育水平的宗旨。期望今後繼續得到您們的支持與協助，讓我們可以做更多事情來回饋澳門與回贈社會。

衷心祝願您及您的家人 2018 年幸福安康，新年進步！



何鴻燊博士
主席
何鴻燊博士醫療拓展基金會

香港中文大學
The Chinese University of Hong Kong

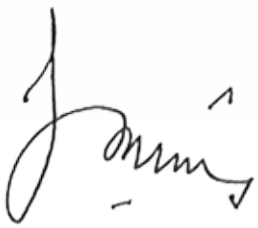
MESSAGE

The Dr Stanley Ho Medical Development Foundation was established in January 2005. Its objective is to provide a platform for medical practitioners in Macao to acquire advanced professional knowledge. To achieve this objective, the Foundation has in the past years organized a series of activities including healthcare courses, collaborative research projects, the Outstanding Achievement Awards scheme for healthcare workers, the establishment of Healthland and other arrangement for health exhibition, and the foundation of Macau Alzheimer's Disease Association. The annual medical symposium is the highlight of this series. All these activities have attracted tremendous interest and support from medical practitioners and other healthcare workers in Macao, Hong Kong and the Chinese Mainland. The enthusiastic participation of the young healthcare professionals has been particularly overwhelming.

Through the strong support of scholars and experts from the University of Oxford, the theme of this year's Symposium is "New Advances in Personalized Medicine and Various Diseases". As in the past years, the programme of today's Symposium is rich and covers personalized medicine and a wide variety of medical advances: genetics and personalized medicine in inflammatory bowel diseases and cancer therapy, functional gastrointestinal disorder, colorectal cancer screening, HBV infection in immunosuppressed patients, management of dementia, and cutting-edge technologies in early stage lung cancer, renal hilar tumor and cerebrovascular disease. We are very fortunate to have many distinguished speakers to share their precious experience with us. Their support of the Symposium is most appreciated.

We are very grateful to the Dr Stanley Ho Medical Development Foundation for its staunch support of life-long continuing medical education. The Chinese University of Hong Kong is very fortunate and proud to be associated with the Foundation in promoting this great initiative. I would also like to take this opportunity to express my appreciation and gratitude to members of the Organizing Committee for their time and effort in putting together today's programme. I wish you all a very enjoyable and fruitful symposium.

I would like to extend my warmest welcome to all participants in this conference.



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炎性腸道疾病的東西相會
Inflammatory Bowel Diseases - a Western Disease Coming to the East

Professor Simon PL Travis

牛津大學臨床腸胃學講座教授

Professor of Clinical Gastroenterology Group Head, Consultant Physician, Translational Gastroenterology Unit, Nuffield Department of Experimental Medicine, University of Oxford

There is a veritable tsunami of IBD arriving in East Asia. The question is how to translate evidence into practice for individuals, to personalise care. To achieve this we need to move away from classifying disease by conventional clinical phenotype, placing diagnoses into buckets called ulcerative colitis or Crohn's disease, with the implication that one size fits all. In 2018 personalised disease management starts with stratification at diagnosis, using predictive indices in clinical practice and looking for signposts for change in therapy using biomarkers of information. In 2020 real time data collection by patients will (I hope!) have become the norm, so that the patterns of disease in individual patients can be collated, characterised and used to personalise care. New data from the Oxford TrueColours initiative will be presented and opportunities for developing this in East Asia discussed is attracting interest from Industry. The key to making a difference at an individual level is to measure outcomes rather than the process of care. Outcomes appropriate to IBD have been agreed internationally between patients, their associations and multidisciplinary specialists, including representatives from East Asia (www.ichom.org). Documenting those outcomes can start now. In the future, however, the classification of IBD needs to become molecular, by exploring the 'interactome' that combines the microbiome, genome, metabolome and exposome to identify patterns of disease behaviour. That requires disciplined data and sample collection, with consistent follow up. The answer to causation of IBD is likely to come from areas of the world where the disease is evolving.

個人化的抗癌治療
Peaks and Troughs in Personalized Cancer Therapy

Prof Simon Leedham

牛津大學腸胃學副教授

Associate Professor of Gastroenterology, Cancer Research UK Advanced Clinician Scientist Director, Oxford Centre for Personalised Medicine, Wellcome Trust Centre for Human Genetics, University of Oxford

It will introduce the concept of personalised cancer medicine and the impact of the introduction of genomic technology in cancer patient management over the last 20 years. I will review the historical highs and lows of targeted therapy in cancer medicine, give a frank appraisal of the current state-of-the art in cancer precision medicine and outline the hope and expectations for the future.

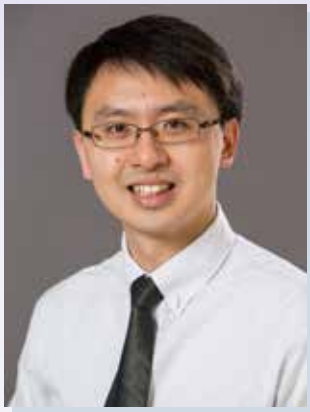
個人化基因醫學的挑戰與機遇
The Genetics of Personalized Medicine: Challenge and Opportunity

Professor Peter Donnelly

牛津大學惠康基金會人類遺傳學中心總管、統計學教授

Director, Wellcome Trust Centre for Human Genetics, Professor of Statistical Science, Nuffield Department of Medicine, University of Oxford

The idea behind personalised medicine is both simple and powerful: delivering the right treatment to the right patient at the right time. Doing this well requires an improved understanding of human biology, in both health and disease, than is currently the case. There are two related aspects. The first is to understand the typical response to a specific treatment. The second is to understand individual variability in response, and the factors that affect it. Genetic data, when coupled with data on molecular and disease outcomes, offers a potentially powerful tool to improve our understanding in both these areas. The lecture will illustrate this in the context of several examples, and assess likely future potential.



結直腸癌的篩查
Colorectal Cancer Screening – Who, Why and How?

黃曦醫生 Dr Sunny Hei Wong

香港中文大學內科及藥物治療學系腸胃及肝臟科助理教授
Assistant Professor, Division of Gastroenterology and Hepatology, Department of Medicine and Therapeutics, The Chinese University of Hong Kong

Colorectal cancer is now the most common cancer by incidence in Hong Kong. Colorectal cancer screening can reduce cancer mortality by identifying adenomas or early cancers which are highly treatable. Recently, the Hong Kong SAR Government has proposed to work on a pilot colorectal cancer screening programme. Nevertheless, the best approach for screening is not determined in part due to limitations of the current tests. Conventional colonoscopy is limited by its procedural risks, and requires significant health care resources as a universal test. Flexible sigmoidoscopy is not routinely practiced in Hong Kong and is unable to examine the proximal colon. Stool based tests, including the fecal occult blood test (FOBT) and fecal immunochemical test (FIT) also have other limitations. In this session I will share on the evidence of colorectal cancer screening, and discuss the latest development in identifying novel screening methods for the cancer.

免疫力損害病人乙肝病毒感染的處理
Management of HBV Infection in Immunosuppressed Patients

黃麗虹教授 Professor Grace Lai Hung Wong

香港中文大學內科及藥物治療學系腸胃及肝臟科教授
Professor, Division of Gastroenterology and Hepatology,
Department of Medicine and Therapeutics, The Chinese University of Hong Kong

Reactivation of HBV replication with decompensation has been reported in 20%- 50% of patients infected with hepatitis B virus (HBV) who received cancer chemotherapy or immunosuppressive therapy (e.g., high-dose steroid, biological agents). [1] High viral load at baseline is the most important risk factor for HBV reactivation; prophylactic antiviral agents with nucleos(t)ide analogues (e.g., lamivudine, entecavir) has been consistently found effective to prevent HBV reactivation in such conditions. [2] The international treatment guidelines, as well as the guideline recently issued by Hospital Authority Head Office on 12 May 2017[3] will be discussed in this presentation.

Reference

1. Shouval et al. Semin Liver Dis 2013;33:167-77.
2. Yeo W, Chan HL. J Gastroenterol Hepatol 2013; 28:31-7.
3. Hospital Authority Head Office. The Guideline on Pre-emptive Use of Nucleos(t)ide Analogues in Patients with Hepatitis B Infection Receiving Immunosuppressive Therapy. Issued on 12 May 2017.

早期肺癌手術新進展
New Advances in Surgery for Early Stage Lung Cancer

陳晉興教授 Professor Jin Shing Chen

台灣大學醫學系外科教授，台大醫院胸腔外科主任，台大醫院醫療事務室主任

Professor, Department of Surgery, National Taiwan University;Director, Department of Medical Affairs, National Taiwan University Hospital; Chief, Division of Thoracic Surgery, Department of Surgery, National Taiwan University Hospital

The broad application of low-dose computed tomography screening has resulted in the detection of many more cases of early lung cancer than ever before in modern history. Recent advances in the management of early-stage non-small cell lung cancer have focused on making therapy less traumatic, enhancing recovery, and preserving lung function. In this speech, I will discuss several new modalities associated with minimally invasive surgery for early lung cancer. Firstly, less lung parenchyma resection via sublobar resection (segmentectomy or wedge resection) has become an acceptable alternative to lobectomy in patients with tumors less than 2 cm in size or with poor cardiopulmonary reserve. Secondly, thoracoscopic surgery using a single-portal approach to decrease chest wall trauma is becoming common practice. Thirdly, less invasive anesthesia, using nonintubated techniques, is feasible and safe and is associated with fewer intubation- and ventilator- associated complications. Fourthly, preoperative or intraoperative image-guided localization is an effective modality for identifying small and deep nodules during thoracoscopic surgery. In summary, combination of preoperative CT localization, minimal invasive incision, less pulmonary resection, and optimal anesthesia will definitely make lung cancer surgery safer and more tolerable even in vulnerable patients.

中央型腎門部腎癌的治療策略
Treatment Strategy of Renal Hilar Tumors

吳准教授 Professor Zhun Wu

廈門大學附屬第一醫院泌尿外科副主任；廈門大學醫學院副教授

Deputy Chief, Department of Urology, First Affiliated Hospital, Xiamen University; Associate Professor, School of Medicine, Xiamen University

Recently, several investigators reported the prognostic significance of tumor locations in renal cell carcinoma (RCC) that tumors which invades the urinary collecting system or renal sinus fat exhibit higher stages and grades. Here we investigate prognostic significance of tumor location at the renal hilum near the sinus structure on the recurrence in T1 renal cell carcinoma (RCC). Patients with hilar tumors showed a poorer 5-year nephrectomy (RFS) compared with nonhilar tumors T1 RCCs. Among patients who underwent radical nephrectomy (RN) and partial nephrectomy (PN), hilar tumors were associated with lower 5-year RFS for PN. In T1a hilar tumor, PN was associated with poorer 5-year RFS than RN. A hilar location remained as an independent predictor of recurrence in both T1a and T1b tumors. Recurrence of RCC after RN or PN occurs through lymphatic and/or hematogenous channels without a predictable pattern of predilection related to clinical or pathologic characteristics. This PPT aimed to investigate the prognostic significance of hilar tumor location compared with nonhilar location and compare oncologic outcome according to surgical method to examine tumor location determined preoperatively as a potential predictor of RCC prognosis.

最近腦血管手術之發展
Recent Advances in Cerebrovascular Surgery

杜永光教授 Professor Yong Kwang Tu

前世界腦神經外科學會聯合會主席，台灣大學醫學院 神經外科系榮譽教授，
台北醫科大學神經科學研究所院長
Past President, World Federation of Neurosurgical Societies;Professor Emeritus,
Department of Neurosurgery, College of Medicine and Hospitals, National Taiwan University;
President, Taipei Neuroscience Institute, Taipei Medical University

Cerebrovascular diseases (CVDs) include ischemic CVDs and hemorrhagic CVDs. Most ischemic CVDs are treated by medication. However, in some selective situations surgery will be beneficial for the prevention of further occurrence of stroke. On the contrary, hemorrhagic CVDs are mostly treated by surgical means. Since the advent of endovascular treatment in recent two decades, interventional treatments have progressively replaced some roles of cerebrovascular surgery.

Carotid endarterctomy for high grade carotid stenosis was proven to have a better efficacy then medical treatment in stroke prevention. Data from recent studies revealed that carotid stenting has a similar efficacy as carotid endarterectomy. Previous international cooperative study on patients with intracranial stenosis and cerebral hypoperfusion failed to demonstrate a superiority of bypass surgery to medical treatment. Recent study with more sophisticate hemodynamic evaluation for patient selection again failed to demonstrate the benefit of bypass surgery in this group of patients. However, revascularization procedures protect patients with moyamoya disease from further stroke events is well documented in many recent publications. Another important trend in treating patients with acute ischemia is the application of mechanical thrombectomy. Combination of intravenous thrombolytic therapy and mechanical thrombectomy showed a much better efficacy than thrombolytic therapy alone.

Both microsurgical clipping and endovascular coiling are employed for the treatment of intracranial aneurysm. The risks of these two treatment modalities are similar. However, obliteration rate is much higher in patients treated with clipping. The recurrence rate of giant aneurysm treated with endovascular treatment is much higher than usual, therefore, coiling is not recommended for this group of aneurysm. We used high flow bypass surgery and trapping of the segment of artery harboring aneurysm to treat giant and complex aneurysms to achieve quite satisfactory therapeutic results.

Intracranial arteriovenous malformations (AVMs) can be treated by microsurgical resection, embolization, radiosurgery or the combinations of these treatment modalities. Currently, a grading system of AVM which include criteria such as size and location of the AVM as well as the type of venous drainage is used for selection of patients for treatment. A recent publication indicates that treatment results of these interventions to unruptured AVMs are worse than the result of medical treatment only. Additional determinants such as patient's age, history of previous hemorrhage and compactness of the AVM were included to form a supplementary grading system for treatment selection.

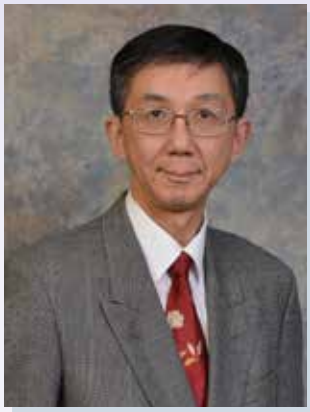
功能性腸胃病診治的進展
Functional Gastrointestinal Disorders – Updates in Diagnosis and Management

胡志遠教授 Professor Justin Che Yuen Wu

香港中文大學內科及藥物治療學系腸胃及肝臟科教授，何善衡腸胃健康中心主任
Professor, Division of Gastroenterology and Hepatology, Department of Medicine and Therapeutics; Director, S.H. Ho Centre for Digestive Health, The Chinese University of Hong Kong

Functional gastrointestinal disorder (FGID) is the commonest digestive disorder, which accounts for up to 90% of workload of gastroenterologist's practice. It refers to the group of digestive disorders which is characterized by various gastrointestinal symptoms with negative investigations. Common functional digestive disorders include functional dyspepsia, irritable bowel syndrome and functional heartburn. The Rome Criteria classify and diagnose FGIDs based on symptomatology and have been evolving in the past 2 decades. Selective investigations are recommended to rule out differential diagnoses for patients with alarm features.

A biopsychosocial model has been proposed for the pathophysiology of FGID. The model involves an interplay of various mechanisms that include visceral hypersensitivity, motility dysfunction, genetics, early life adversity, diet, psychological stress, immune activation and dysbiosis. Because of the complexity of the pathophysiology, the management paradigm has gradually evolved from empirical symptom-based medical therapy to multimodal management. The management principles include lifestyle and dietary modification, stress management, early detection and intervention of psychological disorders. Several new classes of medical treatments have been developed in recent years, which target on various pathophysiological mechanisms of FGID.



失智症的預防策略
Preventive Strategies against Dementia

郭志鋭教授 Professor Timothy Chi Yui Kwok

香港中文大學內科及藥物治療學系老人科教授，賽馬會骨質疏鬆預防及治療中心主任，賽馬會公共衛生及基層醫療學院何善衡老年學及老年研究病學中心副主任

Professor, Division of Geriatrics, Department of Medicine and Therapeutics; Director, CUHK Jockey Club Centre for Osteoporosis Care and Control; Deputy Director, The Jockey Club School of Public Health and Primary Care, S.H. Ho Centre for Gerontology and Geriatrics, The Chinese University of Hong Kong

Dementia is the major cause of dependency in old age. Unfortunately, no effective treatment for dementia. However there is good evidence that dementia can be prevented or delayed. Mid-life obesity and its related metabolic diseases, sedentary lifestyle and smoking are important modifiable factors. Cognitive stimulating activities are protective, and more specifically cognitive training can improve cognitive function in at risk older people. The combination of physical exercise, healthy diet and cognitive training has been shown to improve cognitive function in older people in a randomized controlled trial. Homocysteine lowering by B vitamins has been shown to slow brain atrophy in older people with pre-clinical Alzheimer disease. A novel nutrition supplement which provides a combination of neuroprotective nutrients has been shown to improve cognitive function in older people with amnesic mild cognitive impairment and in early Alzheimer disease. The chronic disease management programme may be helpful to promote brain preservation lifestyle changes in older people with memory problems. All in all, dementia is a preventable disease. Public health measures and specific interventions focusing on physical exercise, healthy diet and cognitive training in at risk older people can significantly lower the societal burden of dementia.

醫學研討會歷年概述及健康教育活動（2005-2017）
A Report on Dr Stanley Ho Medical Development Foundation Symposium and Health Education Programmes (2005-2017)

Foundation Symposium

Since the establishment of Dr Stanley Ho Medical Development Foundation Trust in 2005, we have scheduled the first foundation symposium on 8th January 2005, and thereafter in January of each year in past 12 years (Table 1). Various specialties and subspecialties of medicine were covered in the symposium lectures, including internal medicine and medical subspecialties, surgery and surgical subspecialties, orthopaedic surgery, obstetrics and gynaecology, paediatrics, pathology, psychiatry, clinical oncology, radiology and interventions, community medicine, public health and traditional Chinese medicine. Speakers invited were scholars or experts from Macau hospitals, The Chinese University of Hong Kong, Xiamen University, and Institutes in Beijing and Taiwan. The attendants were overwhelming, with 250 to over 500 registered medical and paramedical professionals each year from Macau, Hong Kong and Pearl River Delta territories. Apart from updating the advances and providing CME of various medical fields, the symposium has provided a precious opportunity for academic exchange between professionals in Macau, Hong Kong, mainland China and Taiwan, and has become one of the biggest scientific events in academic contents and advances, as well as in attendance in Macau.

Table 1: Foundation Symposium 2005-2017

Year	Registered Attendants	Symposium Duration	Lectures	Speaker invited	Remarks
2005		1 day	6	Hong Kong, Macau	Inauguration of Foundation
2006		1 day	6	Hong Kong	
2007		2 days	10	Hong Kong	4 CME lectures
2008		1 day	6	Hong Kong	
2009	446	1 day	6	Hong Kong	
2010	515	1 day	8	Hong Kong	Inauguration of Healthland, & Healthland exhibition
2011	433	1 day	7	Hong Kong	Inauguration of MADA First MADA satellite scientific meeting
2012	261	1 day	11	Hong Kong, Xiamen, Beijing, Taiwan	
2013	300	2 days	9	Hong Kong, Xiamen, Beijing, Taiwan	
2014	387	2 days	16	Hong Kong, Xiamen, Taiwan	
2015	403	2 days	15	Hong Kong, Xiamen, Taiwan	
2016	410	2 days	12	Hong Kong, Xiamen, Taiwan	
2017	574	2 days	10	Hong Kong, Xiamen, Taiwan	Digitalized check-in, check-out and Q&A

MADA: Macau Alzheimer's Disease Association; CME: Continued Medical Education

Exhibition of Foundation-sponsored Projects

Posters were exhibited at the symposia for 3 research projects sponsored by the Foundation, including passive smoking, environmental smoke pollution and atherogenesis, HIV infection and genetic mutations in lung cancer in 2006, 2007 and 2012 respectively. Important findings and their implications were presented and shared.

Health Education Programmes

a) Health Exhibition

The Foundation co-sponsored, together with the Medical Society of The Chinese University of Hong Kong, health exhibition on cardiovascular, respiratory, eye and digestive diseases in 2010, 2014, 2015 and 2016 respectively. The responses from the general public and medical students were very positive.

b) Neuroscience knowledge education in Secondary students

The Foundation first took up the International Brain Bee Competition in Macau in 2016 as sole sponsor in order to encourage more secondary school students to join in and inspire them to pursue careers in neuroscience and other related medical fields. Following the competition, we have also invited a professor from the Brain and Mind Institute (BMI) to deliver a lecture at the prize presentation ceremony and organize a visit to the BMI for Macau secondary school students. The Foundation will continues to sponsor and organize this public education event in 2018.

c) Symposium on Brain and Mind

The Foundation sponsored the Brain and Mind Institute (BMI) to organize the first "BMI International Symposium on Cognitive and Development Neuroscience: From Molecule to Behavior" in 2015. International Symposium on Early Language and the Brain in Macau on 22 April 2017, and The 2017 Macau Brain Bee competition on 28 May 2017. The responses of attendants were overwhelming.

d) Public Health Lecture

Public lectures on hypertension, cardiovascular diseases, breast cancer, hostel care in the elderly, and air pollution were scheduled in 2009, 2010 and 2015 respectively with overwhelming responses.

Prof Woo Kam Sang
Symposium Coordinator

Prof David Hui
Symposium Coordinator

醫學研討會歷屆講者名單及其簡歷
List of past speakers of Dr Stanley Ho Medical Development Foundation Symposium and their updated profiles

Listed in alphabetical order of surname. Only major positions held by the speakers are listed.
依姓氏字母順序排列，當中只列出講者主要職銜。

Videos and slides of past talks can be accessed by scanning the QR code on the right or from the URL below:
歷屆醫學研討會的視頻及部分講義已上載到基金會網站的醫學研討會專頁，市民可透過掃描二維條碼或登錄以下網址瀏覽：

http://drhomed.org.mo/MedicalSymposium

Professor Chan Ka Leung Francis 陳家亮教授

Dean of Faculty of Medicine;
Choh-ming Li Professor of Medicine and Therapeutics;
Professor, Division of Gastroenterology & Hepatology,
Department of Medicine and Therapeutics,
The Chinese University of Hong Kong
fklchan@cuhk.edu.hk

2006	The Use of NSAIDs in a COX-2 Restricted

Professor Chan is a specialist in Gastroenterology & Hepatology. He specializes in the research of peptic ulcer bleeding, Helicobacter pylori, endoscopic therapy and colorectal cancer. He has published more than 430 full scientific articles in high impact factor international journals such as New England Journal of Medicine, Lancet and Gastroenterology.

Professor Chan Kai Ming 陳啟明教授

Emeritus Professor of Orthopaedics and Traumatology,
The Chinese University of Hong Kong
kaimingchan@cuhk.edu.hk

2009	Management and Prevention of Sports Injuries - New Technology and New Concept 運動創傷的防治 - 新科技及新思維

Prof Chan's specialized in sports Medicine, Arthroscopic Surgery of the Knee and Shoulder, Tendinopathies and Rehabilitation of Sporting Injuries

Professor Chan Lam Stephen 陳林教授

Associate (Clinical) Professor in Department of Clinical Oncology, The Chinese University of Hong Kong
l_chan@clo.cuhk.edu.hk

2015	Personalized Medicine - Oncology as a model 以腫瘤學科模式看個人化醫學

Clinical and traditional researches for gastrointestinal cancers, especially hepatobiliary and pancreatic cancers.
Dr. Chan is the associate editor of Asia-Pacific journal of Clinical Oncology and serving the editorial board of Liver International. He is the key investigator in multiple international clinical trials on novel drugs for liver cancers. He is currently international member of the NCI Hepatobiliary Task Force of the Gastrointestinal Steering Committee in United States. Since 2016, he has also been the Chairman of Hand-in-hand Cancer Foundation, which is a charity serving the cancer patients in the community. He published more than 100 peer-reviewed papers in international journals including the Journal of Clinical Oncology and the Lancet.

Professor Chan Lik Yuen Henry 陳力元教授

Assistant Dean (External Affairs), Faculty of Medicine;
Professor, Department of Medicine and Therapeutics;
Head, Division of Gastroenterology and Hepatology;
Director, Institute of Digestive Disease;
Director, Centre for Liver Health, The Chinese University of Hong Kong
hlychan@cuhk.edu.hk

2007	Non-alcoholic Fatty Liver Disease in Chinese 華人非酒精性脂肪肝的情況
2013	Debrief of Asia-Pacific Guideline for Hepatitis B 亞太乙肝指南解讀

Professor Chan specializes in Gastroenterology and Hepatology. His research interests include Viral hepatitis, liver fibrosis, liver cancer, anti-viral therapy, fatty liver disease.

Doctor Chan Yin Yan Anne 陳然欣醫生

Associate Consultant, Honorary Clinical Tutor, Division of Neurology, Department of Medicine & Therapeutics, The Chinese University of Hong Kong
b109379@mailserv.cuhk.edu.hk

2015	Advanced in Management of Parkinson's Disease, a Holistic Approach 綜合診治柏金森症的進展

Professor Chao Hsiao Ming 趙效明教授

Associate Professor, Institute of Pharmacology, School of Medicine, National Yang-Ming University, Taipei, Taiwan;
Section Chief & Retina Specialist, Ophthalmology, Cheng Hsin General Hospital, Taipei, Taiwan
hsiaoming.chao@gmail.com

2016	Retinal Ischemia & its Relevance to Brain Ischemia: Bench to Clinical, Steroid, Anti-VEGF, Neuroprotectant, Retinal Chip & Stem Cell 視網膜缺血及腦缺血相關性：從基礎到臨床 ，類固醇，血管內皮細胞生長因子抗體，神經保護劑，電子眼及幹細胞

研究範疇：細胞治療、神經保護劑、中草藥新藥之研發；網膜病變：老年黃斑病變、網膜缺血病變、網膜鐵毒病變、糖尿病網膜病變、網膜剝離

Doctor Gregory Cheng 鄭彥銘醫生

Consultant (Internal Medicine, Haematology)
University Hospital,
Macau University of Science and Technology
ggcheng@must.edu.mo

2006	Mini-management of Common Hematological Disease 常見血液科疾病的「微型基本」處理

Professor Chen Chao Long 陳肇隆教授

Superintendent Emeritus, Chang Gung Memorial Hospital
Academician, Chinese Academy of Engineering
clchen@cgmh.org.tw

2017	Saving lives, Spreading hope, Taiwan and Beyong 深耕台灣，立足國際，醫援海外

Professor Chao Long Chen is a pioneer liver transplant surgeon who performed the first successful liver transplantation in Asia in 1984, and by 2016, has accomplished 1500 more.

Professor Chen Jian 陳健教授

Medical Doctor, Professor, Medical Officer in Geriatrics, Zhongshan Hospital Xiamen University
chenjian5@medmail.com.cn

2014	Uses of Vitamin D supplementation for the elderly 老年人補充維生素 D 的應用

Professor Cheng CY Jack 鄭振耀教授

Professor and Chairman of Orthopaedics and Traumatology, Choh-Ming Li Professor of Orthopaedics and Traumatology, The Chinese University of Hong Kong
jackcheng@cuhk.edu.hk

2014	Update on the aetio-pathogenesis and management of adolescent idiopathic scoliosis 青少年特發性脊柱側凸病因學研究及治療的新進展

Professor Cheng is currently Chairman and Choh-Ming Li Professor of the Department of Orthopaedics and Traumatology in CUHK Faculty of Medicine. Professor Cheng is a paediatric orthopaedics specialist. His research interests includes etiopathogenesis of adolescent idiopathic scoliosis, congenital muscular torticollis, bone mineral research and biomaterial basic science and applied studies. He has published over 400 publications in international journals, contributed to 19 book chapters and serves on the editorial boards of a number of international professional journals. He is a fellow and member of over 20 local and international professional and medical organizations.

Professor Chiu WY Philip 趙偉仁教授

Assistant Dean (External Affairs), Faculty of Medicine
Professor, Division of Upper GI Surgery, Department of Surgery
Director, CUHK Jockey Club Minimally Invasive Surgical Skills Center
Director, Chow Yuk Ho Technology Center for Innovative Medicine,
The Chinese University of Hong Kong, Hong Kong
philipchiu@surgery.cuhk.edu.hk

2014	Advances in the management of gastroesophageal reflux disease 胃食道反流治療的新進展

Professor Chong Kam Lung Kelvin 莊金隆教授

Assistant Professor, Department of Ophthalmology & Visual Science, The Chinese University of Hong Kong
chongkamlung@cuhk.edu.hk

2016	Recent Advances in Ophthalmology 眼科新進展

Professor Chow Chun Chung Francis 周振中教授

Consultant Physician & Clinical Associate Professor (honorary), Division Head of Endocrinology & Diabetes; Chief of Service, Department of Medicine & Therapeutics, The Chinese University of Hong Kong
ccf193chow@cuhk.edu.hk

2010	Strategies in Combating Obesity in the Twenty-first Century 肥胖症 - 21 世紀新挑戰

Specialist in Endocrinology, Diabetes & Metabolism Dr Francis CC Chow is currently the President of the Hong Kong Association for the Study of Obesity.
He has been the national principal investigator of more than 35 multi-national, multi-centre phase II and III clinical trials since 1998, including NAVIGATOR, CAROLINA, EXAMINE, BEGIN, BOOST, HARMONY, SCALE and SUSTAIN. Over the years, he has published extensively, and is the leading author and co-author of over 190 publications of original research and reviews in peer-reviewed international journals. His research interests include epidemiology and treatment modalities in diabetes, obesity, thyroid disorders and pituitary disease.

Professor Chung Kwok Hung Tony 鍾國衡教授

Associate Dean (General Affairs), Faculty of Medicine; Professor of Obstetrics & Gynaecology, The Chinese University of Hong Kong
tonychung@cuhk.edu.hk

2010	Advances in Management of Common Gynaecological Disease 一般婦科疾病處理的新進展

Doctor Dai Lok Kwan David 戴樂群醫生

Chairman, Hong Kong Alzheimer's Disease Association
daidk@ha.org.hk

2010	Perioperative Management of Hip Fracture: An Orthogeriatric Co-management 老人骨科協作之股骨折斷手術前後的處理

2017	A Unified Concept on Dementia and Cognitive Impairment Towards Management 失智及認知障礙的統一理論及臨床處理

Doctor Ding Li Jun 丁麗君醫生

Chief Psychiatrist, Xiamen Xianyue Hospital
juneding0504@sina.com

2013	Approach to Combat Depressive Illness 戰勝抑鬱的方法

MD, MPH; 1990, Graduated from Hengyang Medical College; Visiting Scholars: 1999 in Japan; 2009 in Canada; 2015 in USA; subspecialty: Anxiety disorders and OCD, CBT/DBT

Professor Fang Shiuh Bin 方旭彬教授

Director/Assistant Professor, Division of Pediatric Gastroenterology & Hepatology, Department of Pediatrics, Shuang Ho Hospital; Department of Pediatrics, School of Medicine,
Taipei Medical University
sbfang@tmu.edu.tw

2015	Evidence-based clinical application of probiotics 益生菌之實證醫學臨床應用

Pediatric gastroenterology, hepatology, and nutrition; Pediatric sonography; Salmonella virulence genes; Probiotics
Dr Shiuh-Bin Fang was promoted as Director of the Department of Pediatrics in Taiwan Adventist Hospital from 2005 to 2006.
His current research involves study of Salmonella virulence genes, attenuated Salmonella strains as oral vaccine vectors, regulation of non-typhoidal Salmonella on host innate immunity, the effects/mechanisms of probiotics/health foods, and pathogen-host interactions using human intestinal in vitro organ culture and in vitro M cell models, showing his great interest in translational medicine bridging basic and clinical science.

Professor Fok Tai Fai 霍泰輝教授

Pro-Vice-Chancellor / Vice-President, Choh-Ming Li Professor of Paediatrics, The Chinese University of Hong Kong
taifaifok@cuhk.edu.hk

2006	Preterm Infants - Controversies in Management

Professor Tai-fai Fok graduated in Medicine from The University of Hong Kong and received his MD at The Chinese University of Hong Kong. His research interest is in newborn care, especially the prevention and management of respiratory conditions, newborn infection and newborn growth. He has published over 380 refereed articles. Professor Fok is dedicated to the development of medical education and research. He has extensive experience in committee and advisory board services for the Government and non-governmental organizations.

Professor Andrew Van Hasselt 尹懷信教授

Professor of Surgery (Otor), Department of Otorhinolaryngology, Head and Neck Surgery, The Chinese University of Hong Kong
andrewvan@ent.cuhk.edu.hk

2007	Cochlear Implantation and Nasopharyngeal Carcinoma in Southern China 耳蝸植入和華南鼻咽癌

Professor Ho (Chan) Suzanne 何 (陳) 雪鸝教授

Emeritus Professor of Public Health and Primary Care in the Jockey Club School of Public Health and Primary Care, The Chinese University of Hong Kong
suzanneho@cuhk.edu.hk

2010	Strategies for Active Longevity 活力晚年全攻略

Suzanne C Ho is Founding Director of the Centre of Research and Promotion of Wome's Health of the Medical Faculty of the Chinese University of Hong Kong. Former Head of Epidemiology Division, Professor Ho is also the Founding Director of the Postgraduate Programmes in Women's Health Studies, and Epidemiology and Biostatistics.
Professor Ho's major research interests are in aging, nutritional epidemiology, women's health, particularly cardiovascular disease risks, osteoporosis, and breast cancer; nutritional epidemiology (focus on dietary soy intake and women's health). She has obtained many competitive grants from the government as well as international research funds for studies in the above-mentioned areas. Her publications have totaled 21 books/book chapters, and over 250 scientific publications in refereed journals. Professor Ho was elected by South China Morning Post the 2012 Women of Our Time.

Professor Hon Kam Lun Ellis 韓錦倫教授

Professor, Department of Paediatrics, The Chinese University of Hong Kong
ehon@hotmail.com

2012	Myths and fallacies 兒童濕疹神話與謬誤

Professor Hui Shu Cheong David 許樹昌教授

Stanley Ho Professor of Respiratory Medicine; Chairman, Department of Medicine and Therapeutics; Director, Stanley Ho Centre for Emerging Infectious Diseases; Director, SH Ho Sleep Apnoea Management Center, The Chinese University of Hong Kong
dschui@cuhk.edu.hk

2005	慢性阻塞性肺病及阻塞性睡眠呼吸窒息綜合症的最新發展
2008	Obstructive Sleep Apnea Syndrome - Update on Management & Cardiovascular Complications 阻塞性睡眠呼吸窒息綜合症的治療進展及相關心血管併發症
2012	An update on treatment of obstructive sleep apnea 治療睡眠呼吸氣道阻塞綜合症的最新進展
2014	H7N9 & the Middle East Respiratory Syndrome H7N9 及中東急性呼吸病症候

Prof Hui has been working as an academic clinician since 1998 at the Prince of Wales Hospital, HK where a major outbreak of SARS occurred in 2003. Since 2004, he has frequently served as an advisor to the WHO on the clinical management of emerging severe acute respiratory infections (SARI) including avian influenza, pandemic influenza and MERS. Prof Hui has published well over 260 peer-reviewed journal articles and 23 book chapters. His research interests include the clinical management of SARI, safety of respiratory therapy and hospital infection control in the post SARS era.

Professor Hung Leung Kim 熊良儉教授

Professor, Department of Orthopaedics & Traumatology, Faculty of Medicine,
The Chinese University of Hong Kong
leungkimhung@cuhk.edu.hk

2012	Musculoskeletal problems among geriatric patients 高齡病人的骨關節疾患

Professor Ip Hing Lung Vincent 葉慶龍教授

Associate Consultant & Hon. Assistant Professor, Division of Neurology, Department of Medicine & Therapeutics, The Chinese University of Hong Kong
vincentip@cuhk.edu.hk

2016	Management of Cranio-cervical Arterial Stenosis 頭頸動脈血管狹窄的處理

Prof Ip's research focus on ischemic stroke and cranial stenosis

Professor Kong Pik Shan Alice 江碧珊教授

Associate Professor, Department of Medicine & Therapeutics; Honorary Associate Consultant, Prince of Wales Hospital, The Chinese University of Hong Kong
alicekong@cuhk.edu.hk

2009	New Advances in Diabetes Management 治療糖尿病的最新進展

Professor Kwok Chi Yui Timothy 郭志鋭教授

Professor, Department of Medicine & Therapeutics and School of Public Health,
Director, Jockey Club Centre of Positive Ageing,
Director, CUHK Jockey Club Centre for Osteoporosis Care and Control, Faculty of Medicine, The Chinese University of Hong Kong
tkwok@cuhk.edu.hk

2009	An Integrative Approach in Management of Geriatric Diseases 治療老人科疾病的綜合處理
2013	Advances in Diagnosis and Treatment of Alzheimer Disease 阿爾茨海默氏症的治療與展望
2016	Prevention of Dementia 預防腦退化

Professor Lai Bo San Paul 賴寶山教授

Professor and Head of Hepato-Billary and Pancreatic Surgery, Department of Surgery, The Chinese University of Hong Kong
paullai@surgery.cuhk.edu.hk

2015	Quality improvement in Surgery 提升外科手術質素

Professor Lam Chiu Wa, Linda 林翠華教授

Assistant Dean (General Affairs), Faculty of Medicine;
Professor and Chairman, Department of Psychiatry;
Director, Dementia Research Unit;
Director, Chen Wai Wai Vivien Foundation Therapeutic Physical Mental Exercise Centre, The Chinese University of Hong Kong
cwlam@cuhk.edu.hk

2014	Pharmacological and non-pharmacological Treatment for Dementia 認知障礙症（痴呆症）治療方案

Professor Lam is Fellow of the Hong Kong College of Psychiatrists and the Royal College of Psychiatrists (United Kingdom). At present, she is the Immediate Past President of the Hong Kong College of Psychiatrists. She is also the past Chief Editor of the East Asian Archives of Psychiatry, and the founding President of the Chinese Dementia Research Association in 2009.

Professor Lam's main research interests have been the assessment of neurocognitive disorders, identification of risk factors and early intervention for cognitive decline in late life. She has recently completed the first territory wide epidemiological survey of mental disorders in Hong Kong, and pioneered structured lifestyle cognitive and physical activity interventions for Chinese older adults with neurocognitive disorders. Professor Lam has over 150 peer review publications in related areas.

Doctor Lam Tsze Ho Philip 林子顥醫生

Department of Ophthalmology and Visual Sciences, The Chinese University of Hong Kong
philiplam@cuhk.edu.hk

2008	Cataract and Refractive Lens Surgery 白內障及晶體矯視手術

Professor Lao Tzu Hsi Terence 勞子僖教授

Professor of Department of Obstetrics & Gynaecology, The Chinese University of Hong Kong
lao-tt@cuhk.edu.hk

2013	Overview on Management of Obstetric Emergencies 產科緊急情況處理的概觀

Undergraduate study in the University of Hong Kong. MRCOG 1982. Training in Obstetric Medicine in Queen Charlotte's Maternity Hospital, London 1983-4. Fellowship in Maternal-fetal Medicine in Toronto 1989-1993. Worked in the Department of Obstetrics & Gynaecology at Queen Mary Hospital in 1993-2008 as Associate Professor and then Professor. Worked in Department of Obstetrics & Gynaecology of the Prince of Wales Hospital from 2008.

Special interest in maternal medicine, perinatology, and high risk pregnancy. Published >250 papers in peer reviewed international journals. Reviewer of 20+ journals, and serving on the editorial board. Provided expert medical opinion on >120 cases.

Doctor Lau Tze Kin 劉子建醫生

Doctor, Specialist in Obstetrics & Gynaecology, Private Practice
drtklau@hkparamount.com

2006	Recent Advances in Prenatal Diagnosis and Therapy

Professor Lau Yun Wong James 劉潤皇教授

Chairman & Yao Ling Sun Professor of Surgery
Chief, Division of Vascular Surgery
Department of Surgery, Faculty of Medicine, The Chinese University of Hong Kong
laujyw@surgery.cuhk.edu.hk

2008	Endovascular Stent Grafting for Aortic Conditions 動脈病變及血管內支架移植術

Professor Lee Albert 李大拔教授

Clinical Professor of School of Public Health and Primary Care, The Chinese University of Hong Kong
alee@cuhk.edu.hk

2006	Aspects on Current Practice of Family Medicine
2007	Important Role of Primary Care Physicians in Preventive Medicine 全科醫生於預防醫學所擔當的重要角色
2007	How to Handle Adolescent Health Problems in Primary Health Care 於基層醫療體系內處理青少年的健康問題

Professor Lee Chyi Long 李奇龍教授

Professor, Vice Superintendent,
Kee Lung Chang Gung Memorial Hospital, Taiwan
leechyilong@gmail.com

2013	Aspects of Minimally Invasive Surgeries: A Global Trend 婦科微創手術治療之新趨勢

Robotic Surgery for Gynecologic Oncology, Reproductive Endocrinology, Endometriosis, Laparoscopy, Hysteroscopy, Menopause and Cancer Therapy.
Prof. Lee graduated from the Taipei Medical University and received his Ph.D. in the Kyorin University, Japan. Prof. Lee specializes not only in reproductive surgery but also in laparoscopic oncologic surgery. He has creativity in many endoscopic surgeries. There are many new techniques developed by him such as Lee-Huang point, as the first trocar insertion site, he is also the pioneer of laparoscopic radical trachelectomy and laparoscopic radical surgery for stamp cancer.

Doctor Lee Kit Fai 李傑輝醫生

Consultant Surgeon, Department of Surgery,
Prince of Wales Hospital
leekf@surgery.cuhk.edu.hk

2011	Advances in Liver Surgery 肝臟手術新進展

Professor Lee Lai Shun Nelson 李禮舜教授

Professor and Head of Infectious Diseases, Department of Medicine and Therapeutics, The Chinese University of Hong Kong
leelsn@cuhk.edu.hk

2012	Severe influenza infections 嚴重感冒病毒感染

Professor Lee Pui Wai Alex 李沛威教授

Assistant Professor in Cardiology and Cardiac Imaging, Department of Medicine & Therapeutics, CUHK
alexpwlee@cuhk.edu.hk

2017	Recent Advances in Cardiac Imaging 心臟成像技術的最新進展

Professor Lee Shui Shan 李瑞山教授

Deputy Director, Stanley Ho Centre for Emerging Infectious Diseases,
Professor, Stanley Ho Centre for Emerging Infectious Diseases and Department of Microbiology, The Chinese University of Hong Kong
sslee@cuhk.edu.hk

2015	New perspectives of HIV treatment 治療愛滋病毒感染的新觀點

Prof Lee is a clinician and specialist in internal medicine, immunopathology and public health. Between 1991 and 2005, Dr Lee headed the Government's AIDS programme, during which he directed Hong Kong's HIV prevention, control and treatment services. He is now Deputy Director of The Chinese University's Stanley Ho Centre for Emerging Infectious Diseases and a staff member of Department of Microbiology. He has, on various occasions, served as consultant to national and international organizations in the assessment of HIV situations, programme evaluations, and harm reduction development. His major areas of research interest include HIV treatment, infectious disease epidemiology, spatio-temporal and network dimensions of infection transmission. He has authored over 190 peer-reviewed articles, about 40 book chapters, and is the editor of the HIV Manual in Hong Kong.

Professor Lee Shun Wah Jenny 李舜華教授

Professor, Department of Medicine and Therapeutics, The Chinese University of Hong Kong
medt@cuhk.edu.hk

2015	Prescribing for the different stages of dementia 不同階段失智症的處方

Professor Lei Ieng Kit, Kenny 李英傑教授

Consultant & Hon Associate Professor, Department of Clinical Oncology, The Chinese University of Hong Kong
kennylei@cuhk.edu.hk

2016	Advances in the Management of blood cancer: New Drugs, New Approach 血癌治療之最新進展

Dr. Kenny Lei is a Consultant and Honorary Associate Professor at the Department of Clinical Oncology. He is a specialist in medical oncology and haematology/haematologic oncology. Dr. Lei received his medical degree in 1990 and the Doctorate Degree in Medicine in 2002 from the Chinese University of Hong Kong. He also served as Medical Fellow in Hematology/Oncology at the University of Minnesota in 1995 and completed the Clinical Exchange Program at the University of Texas MD Anderson Cancer Center in 1996. Dr. Lei served as Director of the Ambulatory Cancer Care Center at Prince of Wales Hospital from year 2006-2011. He has also conducted clinical and translational research in haematologic malignancies, leading to publications in peer review journals. His research focus has been on lymphoma, circulating tumor markers in extranodal lymphomas and blood cancer. He has received several honors and awards for his clinic work and research, including the Pan-Pacific Cure For Lymphoma Conference Award in 1997 and The 318 Award For Contribution & Support to Patients with Chronic Illness.

Professor Leu Hsin Bang 呂信邦教授

Assistant Professor, Division of Cardiology, Department of Medicine,
Taipei Veterans General Hospital, Taipei, Taiwan
hbleu@vghtpe.gov.tw

2016	The Management and Prevention of Ischemic Heart Disease 缺血性心臟病之治療與預防

Prof Leu specialized in Hypertension, Coronary Artery Disease, Cardiac Catheterization, and PTCA + stent.

Professor Leung Kwok Sui 梁國穗教授

Emeritus Professor of Department of Orthopaedics & Traumatology, The Chinese University of Hong Kong
ksleng@cuhk.edu.hk

2006	Fluoro-navigation in Orthopaedic Trauman Surgery
2010	Prevention of Fall and Fragility Fractures in the Elderly – From Hospital to Community 老年跌倒和脆性骨折的預防 – 從醫院到社區的一體化計劃

Orthopaedic Trauma and Fracture Fixation, research in aging of musculoskeletal tissue and application of automation and computer aided, Orthopaedic surgery, Fall and fracture prevention

Professor Leung devotes in trauma field in the past and is a key inventor of Gamma nail Asia Pacific. He actively contributes to fall and fracture prevention in the community in recent decades. He is a foundation member of international society for fracture repare, founding president of Asian Association for Dynamic Osteosynthesis, vice-Chairman of Chinese Society for computer assisted surgery and an active member of orthopaedic research society. He has published more than 220 peer-reviewed international articles, 4 books, 38 book chapters and more than 500 conference abstracts. He contributes as editor of 16 books and 5 professional journals. He was awarded with Chief Executive's Commendation for Government/Public Service in 2009 and holds 15 patents.

Doctor Leung Sing Fai 梁承暉醫生

Consultant, Department of Clinical Oncology,
Prince of Wales Hospital

2011	Common Questions about Present-day Cancer Treatment 現今癌症治療之常見疑問

Professor Leung Tak Yeung 梁德楊教授

Chairman and Professor of Obstetrics and Gynaecology,
The Chinese University of Hong Kong
tyleung@cuhk.edu.hk

2014	Antenatal screening model in the 21st century 21 世紀的產前檢查模式

Professor Leung is the Chairman of the Department of Obstetrics and Gynaecology of The Chinese University of Hong Kong, as well as the Director of the Maternal Fetal Medicine of the same unit.
His special interest is in prenatal screening, diagnosis and therapy of fetal abnormalities, twin pregnancy, preterm delivery, fetal growth restriction, and external cephalic version. He and his unit have successfully launched in Hong Kong the first trimester Down screening, maternal carrier screening for Fragile X disease, newborn expanded metabolic screening, array comparative genomic hybirdisation for prenatal diagnosis, fetoscopic laser therapy for twin-twin transfusion, and radiofrequency for fetal reduction. He also participated in the research and clinical application of maternal circulating cell-free fetal DNA for non-invasive prenatal diagnosis.

Professor Leung Ting Fan 梁廷勳教授

Chairman and Professor of Department of Paediatrics,
The Chinese University of Hong Kong
tfleung@cuhk.edu.hk

2015	What's new on childhood food allergy? 兒童食物敏感症的新認知

Paediatric Allergy, Immunology and Infectious Diseases
Professor Leung graduated from The Chinese University of Hong Kong in 1992, and received subspecialty training on Immunology and Allergy in the Hospital for Sick Children in Toronto, Canada in 1997-1998. He was awarded Doctor of Medicine degree in 2004 for his research works on immunogenetics of childhood asthma. He was elected as an International Fellow of the American Academy of Allergy, Asthma and Immunology in 2011 and a First Fellow in Paediatric Immunology and Infectious Diseases subspecialty of the Hong Kong College of Paediatricians in 2012. Professor Leung is Secretary-General of the Asia Pacific Association of Pediatric Allergy, Respirology and Immunology, Vice President of the Hong Kong Society for Paediatric Immunology, Allergy and Infectious Diseases and fellows or members of over 10 other regional and international subspecialty organizations. He published more than 300 refereed journal articles, supervised 24 postgraduate students, and serves as editor, editorial board member or reviewer for over 60 international journals in the fields of allergy, immunology, infectious diseases, pulmonology, dermatology and genetics.

Professor Leung WH Thomas 梁慧康教授

Lee Quo Wei Associate Professor of Neurology, Department of Medicine & Therapeutics
Director, Acute Stroke Unit,
Director, Kwok Tak Seng Centre for Stroke Research and Intervention, Faculty of Medicine, The Chinese University of Hong Kong
drtleung@cuhk.edu.hk

2008	Neuroendovascular Therapy for Ischemic Stroke 缺血性中風的微創介入治療

Professor Li Man Chim Albert Martin 李民瞻教授

Professor, Department of Paediatrics, The Chinese University of Hong Kong
albertmli@cuhk.edu.hk

2007	Indeced Sputum - Its Application in Childhood Asthm 誘導痰分析在兒童哮喘的臨床應用

Professor Liao Shih Cheng 廖士程教授

Clinical assistant professor, Department of Psychiatry,
College of Medicine, National Taiwan University
scliao@ntu.edu.tw

2014	Update on Treatment of Psychoneurotic and Manic-depressive Disorders: A Focus on Major Depression 精神官能疾患以及情感性精神病之治療新進展：以重度憂鬱症為例

Doctor Liu Kin Wah 廖建華醫生

Doctor, Specialist in Geriatrics, Private Practice

2011	Alzheimer's and Non-alzheimer's Dementia: A Clinical Approach 阿氏與非阿氏痴呆症之實用臨床診斷

Doctor Liu Ta Li David 劉大立醫生

Doctor, Director of Dr. David Liu & Partners Eye Center
dliu@gleaneye.com

2013	Advances in Management of Macular Degeneration and Cataract in the Elderly 老年黃斑病變及白內障的最新治療

Professor Lo Yuk Ming Dennis 盧煜明教授

Associate Dean (Research), Faculty of Medicine
Director of the Li Ka Shing Institute of Health Sciences
Li Ka Shing Professor of Medicine
Professor of Chemical Pathology
Associate Director, State Key Laboratory in Oncology in South China, The Chinese University of Hong Kong
loym@cuhk.edu.hk

2011	Non-invasive Prenatal Diagnosis: from Dream to Reality 非侵入性產前診斷：從夢想到現實

Professor Lo specializes in Molecular diagnostics, non-invasive prenatal testing. His main research interest is the study of cell-free DNA and RNA molecules which exist in the plasma of human subjects. He discovered in 1997 that an unborn fetus will release its DNA into the plasma of a pregnant woman. This finding has opened up a new approach for non-invasive prenatal diagnosis. He has also applied a similar strategy to the detection of cancers which are common in Hong Kong, including nasopharyngeal cancer and liver cancer.

Doctor Lo Wing Kit Keith 盧永傑醫生

Doctor, Specialist in Obstetrics and Gynaecology, Private Practice

2008	The End of Cervical Cancer – Not a Dream Anymore 子宮頸癌的終結 – 不再是夢想

Professor Ma CW Ronald 馬青雲教授

Professor, Division of Endocrinology, Department of Medicine & Therapeutics,
The Chinese University of Hong Kong
rcwma@cuhk.edu.hk

2014	Advances in the Management of Type 2 Diabetes 2 型糖尿病管理的新發展

Professor Mok SK Tony 莫樹錦教授

Chairman, Department of Clinical Oncology,
Li Shu Fan Professor of Clinical Oncology, The Chinese University of Hong Kong
mok206551@cuhk.edu.hk

2007	A molecular Era in Oncology 分子醫藥年代的腫瘤病學

Professor Mok's main research interest focuses on biomarker and molecular targeted therapy in lung cancer

Professor Ng Chi Fai Anthony 吳志輝教授

Professor of Division of Urology, Department of Surgery,
The Chinese University of Hong Kong
ngcf@surgery.cuhk.edu.hk

2014	Recent Advances in the Management of Benign Prostatic Hyperplasia 前列腺增生治療的新發展

Professor Ng is the director and Professor of Ho Shin Hang in urology. He is also the director of robotics surgery training course at the Hong Kong Jockey Club, CUHK. He has a wide range of clinical interests, especially in prostate disease, urinary tract stones, and promotion men health. He was awarded the outstanding young college of physicians in the Department of Urology in Asia in 2010, also received an international visiting scholar at the American College of surgery in 2012 in recognition of his work in the field of urinary tract. In addition to clinical and scientific research, Professor Ng also actively involved in education. At present, he is a member of the Institute of surgery and Department of Urology branch committee. He is also a member of the Education Committee of the Department of Urology, Hong Kong. In addition, he has been awarded the best teacher award at the Chinese University Hong Kong (2008- 2009, 2011- 2012).

Doctor Ng Kin Wah Bobby 吳健華醫生

Consultant surgeon and chief of service in the department of Orthopaedics and Traumatology at the Prince of Wales Hospital.
bobng@ort.cuhk.edu.hk

2017	Recent Advances in Paediatric Orthopaedics Surgery 小兒骨科的最新發展

Dr. Ng specializes in Paediatric Orthopaedics. His research interests include scoliosis, limb deformity correction and lengthening, trauma, neuromuscular and Paediatric hip disorders. He dedicates to provide the best quality care to his patients through attention to the patient needs and improving treatment methods. He has been awarded the

most appreciated doctor by the Hospital for many years. He has developed many innovative treatment methods such as new close reduction method for treatment of supracondylar facture of humerus, home traction for developmental dysplasia of the hip, Arthrodiastais for Perthes disease, Modified Ponseti Club foot treatment, Navigation guided Pelvic osteotomy, Anterior approach to spine for scoliosis anterior instrumentaton, Video-Assisted –Thoracoscopic –Surgery in scoliosis, Navigation guided spine instrumentation, Fixator on fixator for limb deformity correction surgery, dynamisaion device for circular fixator in the treatment of limb lengthening.

Professor Ng Pak Cheung 伍百祥教授

Professor, Department of Paediatrics,
The Chinese University of Hong Kong
pakcheungng@cuhk.edu.hk

2010	Treatment of Systemic Hypotension in Newborns 新生兒低血壓的治療

Professor Ng Siew Chien 黃秀娟教授

Associate Professor, Division of Gastroenterology & Hepatology, Department of Medicine and Therapeutics,
The Chinese University of Hong Kong
siewchienng@cuhk.edu.hk

2015	Colorectal cancer screening 大直腸癌的篩查

Professor Ng Siu Kwan 吳少君教授

Consultant & Hon. Clinical Associate Professor, Department of Otorhinolaryngology, Head and Neck Surgery, The Chinese University of Hong Kong
ngskaw@netvigator.com

2014	Diagnostic and therapeutic endoscopy of salivary glands 內窺鏡診斷及治療涎腺疾病的應用

Professor Ng Siu Man Simon 吳兆文教授

Assistant Dean (Learning Experience), Faculty of Medicine; Professor, Division of Colorectal Surgery, Department of Surgery, The Chinese University of Hong Kong
simonng@surgery.cuhk.edu.hk

2014	An update on robotic colorectal surgery 機器人結直腸手術的最新進展

Prof Ng's main clinical and research interests are minimally invasive/robotic surgery and advanced endoscopic therapy for colorectal diseases, multimodality treatment for colorectal cancer, colorectal cancer screening, integrative medicine, and molecular biomarkers discovery. He has published over 160 articles in peer-reviewed journals, including first-authored publications in top-notched journals such as Lancet, Gastroenterology, and Annals of Surgery. His research work in colorectal surgery has earned him a number of international and national awards, including the Northern California Society of Colon and Rectal Surgeons Award of the ASCRS (2008), the International Guest Scholarship of the American College of Surgeons (2010), the British Journal of Surgery Prize of the European Society of Coloproctology (2011 and 2014), the Royal College of Surgeons of Edinburgh China Medal (2014 and 2016), the Ministry of Education Higher Education Outstanding Scientific Research Output Award – First-class Award in Natural Sciences (2014), and the State Natural Science Award – Second-class Award (2016).

Professor Jenny Ngai 倪珍莉教授

Associate Consultant & Hon. Clinical Assistant Professor, Division of Respiratory Medicine, Department of Medicine & Therapeutics,
The Chinese University of Hong Kong

2016	Interventional Pulmonology 介入性肺部手術

Professor Peng Fang Ku 彭芳谷教授

台北榮民總醫院特約醫師，國立陽明大學兼任外科教授

2012	Reminiscences of a veteran surgeon-retired but never tired 一位老外科醫師之回顧

Professor Poon Wai Sang 潘偉生教授

Chair Professor and Chief, Division of Neurosurgery, Department of Surgery,
Prince of Wales Hospital,
The Chinese University of Hong Kong
wpoon@cuhk.edu.hk

2009	Updates on Neurosurgery 腦外科手術的進展

Professor Qi Zhong Quan 齊忠權教授

哈爾濱醫科大學附屬第一醫院副院長；廈門大學附屬福州二院副院長
zqqi@xmu.edu.cn

2012	Prevention of kidney disease and kidney transplantation 腎臟疾病的預防及腎臟移植

Professor Ren Jian Lin 任建林教授

Medical Officer, Department of Gastroenterology,
Zhongshan Hospital Xiamen University
renjianl@xmu.edu.cn

2015	Microbiological Profile and Human Health 微生態與人類健康

Professor Su Tung Ping 蘇東平教授

台北榮民總醫院 副院長；國立陽明大學 醫學系精神學科教授
tpsu@vghtpe.gov.tw

2012	Depression in Taiwan: From past, present to future 台灣憂鬱症之發展：過去、現在、未來

Professor Sung Jao Yiu Joseph 沈祖堯教授

Vice-Chancellor and President, Mok Hing Yiu Professor of Medicine,
The Chinese University of Hong Kong
joesung@cuhk.edu.hk

2008	阿士匹靈所引起的潰瘍疾病問題

Professor Szeto Cheuk Chun 司徒卓俊

Professor, Division of Nephrology, Department of Medicine & Therapeutics,
The Chinese University of Hong Kong
ccszeto@cuhk.edu.hk

2014	Update on Screening and Treatment of Chronic Renal Failure 慢性腎功能衰竭的普查和治療

Dr. CC Szeto is currently a Professor of Department of Medicine & Therapeutics, The Chinese University of Hong Kong, and a Honorary Consultant Physician of Prince of Wales Hospital, Hong Kong Hospital Authority. His research interests include peritoneal dialysis related infections, vascular disease of renal failure, circulating bacterial fragment, urinary biomarkers, and glomerular diseases.

Professor Tam Lai Shan 譚麗珊教授

Honorary Consultant, Prince of Wales Hospital;
Professor, Department of Medicine & Therapeutics
The Chinese University of Hong Kong
lstam@cuhk.edu.hk

2013	Early Diagnosis and Management of Inflammatory Arthritis - A Key to Remission 及早診斷和治療關節炎以達到緩解

Professor Teoh Yuen Bun, Anthony 張源斌教授

Associate Professor, Department of Surgery,
The Chinese University of Hong Kong
anthonyteoh@surgery.cuhk.edu.hk

2016	Recent Advances in Endoscopic Procedures 內窺鏡手術的最新進展

Professor Anthony Yuen Bun, TEOH is currently the Deputy Director of Endoscopy and Associate Professor in The Chinese University of Hong Kong. His research interests are multifold and these include advanced interventional endoscopic ultrasonography (EUS) and endoscopic retrograde cholangiography (ERCP), minimally invasive surgery, single site access surgery and robotics surgery. He currently serves as a Visiting Professor to the Fujian University Medical Hospital, Consultant for Hepatopancreatobiliary Minimally Invasive Surgery Institute of Central South University, steering committee member for the Asian EUS group, member of upper GI committee of the World Endoscopy Organization, founding member of the Hong Kong EUS society and council member of Hong Kong Hernia society. He is also on the editorial board for several internationally renowned journals including Clinical gastroenterology and hepatology, VideoGIE, Endoscopic ultrasound, World journal of Gastrointestinal endoscopy and World Journal of Gastroenterology. He has published over 80 journal papers and written 7 book chapters.

Professor Tham Chee Yung Clement 譚智勇教授

S.H. Ho Professor of Ophthalmology & Visual Sciences,
The Chinese University of Hong Kong (CUHK)
Chairman, Department of Ophthalmology and Visual Sciences, The Chinese University of Hong Kong (CUHK)
Honorary Chief-of-Service, Hong Kong Eye Hospital
Director, CUHK Eye Centre
Deputy Director, Joint Shantou International Eye Center
Honorary Secretary and Fellowship Examiner, The College of Ophthalmologists of Hong Kong (COHK)
Secretary General & CEO, Asia-Pacific Academy of Ophthalmology (APAO)
Vice President (International Relations), Asia-Pacific Glaucoma Society (APGS)
clemtham@cuhk.edu.hk

2017	Recent Advances in Ophthalmology 眼科的最新發展

Professor Tong Chi Fai Michael 唐志輝教授

Professor & Chairman, Department of Otorhinolaryngology, Head & Neck Surgery, The Chinese University of Hong Kong

2016	Recent Advances in ENT 耳鼻喉的最新進展

Ear, Nose and Throat Surgery
Otology; Neurotology; Skull base surgery; Hearing Implantation; Communication barrier; Epidemiology and public health education especially in elderly health; Development of new techniques of minimally invasive surgery.

Professor Tsang Wing Hang Janice 曾詠恒教授

Honorary Clin Assistant Professor at Li Ka Shing Faculty of Medicine, The University of Hong Kong
jwhtsang@hkucc.hku.hk

2017	Making Cancer History 讓癌症成為歷史

Doctor Tsoh Mei Yuek Joshua 左美約醫生

Associate Clinical Professor,
The Chinese University of Hong Kong
tsohmy@ha.org.hk

2009	Early Recognition and Management of Dementia 痴呆症的及早確診和治療

Professor Tzeng Chii Ruey 曾　瑞教授

台北醫學大學醫學院院長、北醫附設醫院生殖醫學中心主任
tzengcr@tmu.edu.tw

2011	Translational Research in Reproductive Medicine 生殖醫學的轉譯研究

Doctor Wan Yuk Pui Innes 溫郁培醫生

Consultant & Hon. Clinical Associate Professor, Department of Surgery,
The Chinese University of Hong Kong
innesw@surgery.cuhk.edu.hk

2015	Update on Thoracic Surgery 胸肺科手術的最新進展

Professor Wang Kuo Hsien 王國憲教授

Associate Professor in Department of Dermatology, Taipei Medical University Hospital, Taiwan
khwang@tmu.edu.tw

2014	Recent Advances in the Management of Psoriasis: A major chronic dermatological disease 乾癬（銀屑病）的最新治療進展

Dermatopathology, psoriasis, cosmetic dermatology
Dr. Wang has been trained as a pathologist before being a dermatologist. He is specialized in dermatopathology and psoriasis. Dr. Wang is currently on the editorial board of Dermatologica Sinica and has been an invited reviewer of over 15 different peer-reviewed journals.

Professor Wang Wei 王嵬教授

Dean/Professor/Director in School of Medical and Health Sciences,
Edith Cowan University, Perth, Australia
wei.wang@ecu.edu.au

2012	Mechanism of suboptimal health: genomics meets glycomics 亞健康的分子機制：基因組學與糖基組學
2013	Emerging Issues in Public Health: Perspective on China's Healthcare System 中國公共衛生面臨的挑戰

Professor Wang is the Professor of Postgraduate Medicine in the School of Medical and Health Sciences.
Professor Wang holds the following professional memberships: Fellow of Public Health, Royal College of Physicians, United Kingdom (FFPH), Executive Member of the International Society of Translational Medicine (ISTM), Member of the Standing Committee of the International Association of the Anthrophysiology (IAAP), World Health Organization Expert Panel: Grand Challenges in Genomics for Public Health in Developing Countries (WHO).

Professor Wang Yan Hui 王彥暉教授

Associate Dean, Medical college,
Xiamen University
2076110@126.com

2012	Traditional Chinese medicine in treatment and prevention of cancers 癌症的中醫藥防治
2013	TCM Treatment in Relieving Tension and Curing Insomni 失眠的中醫藥調治
2014	Treatment strategies and efficacy of traditional Chinese medicines in depression disorders 傳統中藥對治療抑鬱症的策略和療效
2015	Diagnosis of Treatment of Subclinical Health in TC 亞健康的中醫診治
2016	Chinese Medicine Treatment of Heel Pain 中醫藥治療足跟痛
2017	The Seed and Soil Theory in the Prevention and Treatment of Cancer 種子土壤説與癌症的防治

Professor Wang is President of specialty committee of Tongue Manifestation Research of WFCMS (World Federation of Chinese Medicine Societies). He is majored in Traditional Chinese medicine.

Professor Wei Fu Chan 魏福全教授

Distinguished Chair Professor,
Chang Gung University, Medical College
fuchanwei@gmail.com

2015	Working Through Operative Microscope, the Worlds Unite Small and Big 手術顯微鏡下的小世界與大世界

Reconstructive microsurgery, vascularized composite all transplantation

Dr. Wei became Chairman of the Department of Plastic and Reconstructive Surgery in 1994, vice superintendent in 1997 at Chang Gung Memorial Hospital, and Chancellor of the College of Medicine in 2003 at Chang Gung University. During his tenure as the Chief of the Department of Plastic and Reconstructive Surgery, through his efforts in leading and coordination, his institution developed into a world leading microsurgical center renowned for extensive cases with an unattested level of quality in head and neck reconstruction, facial palsy, brachial plexus, upper and lower extremity, and breast reconstructions.

Dr. Wei developed many ground-breaking concepts, techniques, and innovations which have revolutionized cancer and trauma patient care, and laid the scientific foundation for this medical discipline with major contributions in toe-to-hand transplantation for traumatic digital amputations, fibula osteosepto-cutaneous flaps for long bone and mandibular reconstruction, and perforator flaps and free style flaps for coverage reconstruction of various defects around the body.

Professor Wei was selected as one of the 20 most significant innovators in plastic surgery's 400 years of history by the American Society of Plastic Surgery with the citation: his "accomplishments have left an indeniable impact on the specialty" and this "legend's work serves patients for generations". Professor Wei has trained 115 fellows and mentored 1675 visiting surgeons from 79 countries, many of whom have returned to their respective countries to hold leadership positions.

Professor Wing Yun Kwok 榮潤國教授

Associate Dean (Student Affairs), Faculty of Medicine;
Professor, Department of Psychiatry;
Director of Sleep Assessment Unit, Chief of Service in the Department of Psychiatry at Shatin Hospital and Prince of Wales Hospital, The Chinese University of Hong Kong
ykwing@cuhk.edu.hk

2010	Update on Management of Sleep Disorders 治療睡眠問題的新發展
2012	Sleep, obesity and diabetes mellitus 睡眠、肥胖與糖尿病的關係

Professor Wong KS Lawrence 黃家星教授

Mok Hing Yiu Professor of Medicine
Head, Division of Neurology, Department of Medicine & Therapeutics
Convener of BRAIN, Lui Che Woo Institute of Innovative Medicine
Director, SH Ho Centre for Cardiovascular Disease & Stroke, Faculty of Medicine, The Chinese University of Hong Kong
ks-wong@cuhk.edu.hk

2007	Advances in Management of Stroke Patients 治療中風的進展
2011	Strategies for Primary and Secondary Prevention of Stroke 一級和次級預防腦卒中的最新策略

Professor Wong Kwok Chu George 黃國柱教授

Professor of Division of Neurosurgery, Department of Surgery, The Chinese University of Hong Kong
georgewong@surgery.cuhk.edu.hk

2007	Advances in Limb Salvage Surgery of Primary Bone Sarcoma 原發性骨癌保留肢體手術之最新發展
2014	Recent Advance in the Management of Intracranial Aneurysms 顱內動脈瘤的治療最新進展

George Wong is a medical graduate of the Chinese University of Hong Kong and is currently a Professor in the Department of Surgery, the Chinese University of Hong Kong. He is a senior member and currently council member of Hong Kong Society of Interventional and Therapeutic Neuroradiology and was a council member of the Hong Kong Neurosurgical Society. He is also currently board member of the Trauma Advisory Board of the NTEC. He is one of pioneers in applying the techniques of Onyx and PHIL embolization of Cerebral Arteriovenous Malformation and Hypofractionated Radiosurgery as well as Minimally Invasive Neurological Therapy (Flow Diverter & Low Profile Stent & ICG Intraoperative Videoangiography) for Intracranial Aneurysm in Hong Kong. He was one of the leading investigators of the recently completed Asian-Australasian multi-centre IMASH trial and the multi-centre study on high dose Simvastatin for aneurysmal subarachnoid haemorrhage, and was site co-investigators of CONSCIOUS2 and CONSCIOUS3. He has authored or co-authored over 150 articles. He is actively involved in subarachnoid hemorrhage research.

Doctor Wong Ching Han Priscilla 王靜嫻醫生

Specialist in Rheumatology, Prince of Wales Hospital

2017	Update on Gout 痛風治療新進展

Professor Wong Lai Hung Grace 黃麗虹教授

Professor, Department of Medicine & Therapeutics
Consultant Hepatologist, Center for Liver Health
Faculty of Medicine, The Chinese University of Hong Kong
Honorary Consultant, Prince of Wales Hospital, Hospital Authority
wonglaihung@cuhk.edu.hk

2017	Recent advances in antiviral therapy for viral hepatitis 病毒性肝炎治療最新進展

Doctor Wong Kin Hung Simon 黃健鴻醫生

Consultant in Upper GI Surgery
Metabolic & Bariatric Surgery, Diabetes, Upper Gastrointestinal Surgery Endoscopy
sukiyu@surgery.cuhk.edu.hk

2017	Update on Metabolic & Bariatric Surgery 代謝與減重手術的最新進展

Professor Wong Wai Sun Vincent 黃煒燊教授

Professor, Division of Gastroenterology & Hepatology, Department of Medicine & Therapeutics,
The Chinese University of Hong Kong
wongv@cuhk.edu.hk

2016	Non-alcoholic fatty liver disease 非酒精性脂肪肝的診治

Professor Wong WK Gary 黃永堅教授

Professor, Department of Paediatrics and School of Public Health
The Chinese University of Hong Kong
wingkinwong@cuhk.edu.hk

2011	Advances in the Management of Paediatric Asthma 治療兒童哮喘的新方向

Professor Woo Kam Sang 胡錦生教授

Adjunct Professor, Institute of Future CIties
The Chinese University of Hong Kong
kamsangwoo@cuhk.edu.hk

2005	在診斷及治療心血管疾病上的重大突破
2007	Update on Hypertension Treatment: Sense and Non-sense 高血壓治療的最近進展和謬誤
2007	Advances in Investigation of Cardiovascular Diseases: A Realistic and Cost- effective Perspective 從實際效益觀點去評估檢測心腦血管的最新進展

Professor Wu Yeung Ching Eugene 鄔揚正教授

Specialist in Cardiology Founding Director of HKSTENT & Director of APCTO Club
ebwu@netvigator.com

2014	Interventional Cardiology 介入性心臟手術

Professor Yan Ping Yen Bryan 甄秉言教授

Associate Professor, Division of Cardiology, Department of Medicine & Therapeutics,
The Chinese University of Hong Kong
bryan.yan@cuhk.edu.hk

2014	Advances in Endovascular Intervention for Critical Limb Ischemia 血管內介入治療嚴重下肢缺血新發展

Doctor Chiu Wen Ta 邱文達醫師

曾任中華民國衛生福利部部長

2011	Translational Medicine of Traumatic Brain Injury in Taiwan 台灣腦創傷醫學的進展

Professor Winnie Yeo 楊明明教授

Professor, Department of Clinical Oncology,
The Chinese University of Hong Kong
winnie@clo.cuhk.edu.hk

2015	Targeted Therapy in Breast Cancer- Anti-HER2 HER-2 抗原及乳癌標靶治療

Professor Yew Wing Wai 姚榮衛教授

Honorary Clinical Professor, Division of Infectious Diseases, Stanley Ho Centre for Emerging Infectious Diseases and Department of Microbiology, Faculty of Medicine,
The Chinese University of Hong Kong
yewww@cuhk.edu.hk

2015	New Strategies in the Treatment of Tuberculosis: Promise and Limitation? 治療結核病新策略的展望與局限

Doctor Yim Ping Chuen Anthony 嚴秉泉醫生

Doctor, Private Practice

2006	Bronchoscopic Lung Volume Reduction

Professor Yin Zhen Yu 尹震宇教授

Professor and Vice President, Zhongshan Hospital, Xiamen University
yinzy@xmu.edu.cn

2012	Three-dimensional liver imaging system development and its application in precise liver tumor resection 肝臟三維成像系統的開發與精準肝臟腫瘤切除術

Doctor Yip Kam Hung Sidney 葉錦洪教授

Doctor, Specialist in Urology, Private Practice

2010	Prostate disease: Cancer Screening, New Treatment Modalities and Chemoprevention 前列腺疾病：癌症普查，新治療模式與癌病預防

Professor Yu CH Simon 余俊豪教授

Chairman & Professor of Imaging and Interventional Radiology, The Chinese University of Hong Kong
simonyu@cuhk.edu.hk

2009	Advances in Interventional Radiological Procedures 介入性放射手術的最新進展

Professor Yu Tak Sun Ignatius 余德新教授

Honorary Professor in Jockey Club School of Public Health and Primary Care;
Honorary President in Hong Kong Occupational and Environmental Health Academy
iyu@hoeha.org.hk

2015	Air pollution and health 空氣污染與健康

Professor Yu is majored in Public health, Occupational and Environmental Health.
He was former Head of Division of Occupational and Environmental Health, School of Public Health and Primary Care, the Chinese University of Hong Kong, and is currently an Honorary Clinical Professor. He is a fellow of many professional colleges in occupational and environmental health and a medical specialist in Occupational and Environmental Medicine in Hong Kong. He has more than 230 papers published in medical journals and have conducted many research studies related to the health effects of indoor air pollution, including cooking fumes, SARS and influenza viruses, environmental tobacco

smoke, incense burning, radon, formaldehyde, household cleaning agents, etc. He is currently Editor-in-Chief of the Hong Kong Medical Journal published jointly by the Hong Kong Academy of Medicine and the Hong Kong Medical Association.

Professor Yung Shu Hang Patrick 容樹恆教授

Consultant & Hon. Clinical Professor, Department of Orthopaedics & Traumatology,
Head of Sports Medicine Team,
Director of Hong Kong Centre for Sports Medicine and Sports Sciences,
Director of Jockey Club Sports Medicine and Health Sciences Centre, The Chinese University of Hong Kong
patrick@ort.cuhk.edu.hk

2016	Application of Cutting-Edge Technologies in Managing Orthopaedics Problems 現代尖端科技於骨科治療的應用

Professor Zhong Hong Xiu 鍾紅秀教授

Associate Dean, Xiamen Maternal and Child Health Care Hospital, Xiamen
18905921866@189.cn

2016	Prevention and Treatment Strategy of Women Cervical Cancer and Breast Cancer 婦女子宮頸癌及乳癌的防治策略

基金會 2017 年主要活動
Main Events of the Foundation in 2017

1) 2017 年醫學研討會 Medical Symposium 2017

2017 年為何鴻燊博士醫療拓展基金會與香港中文大學主辦的第十三屆醫學研討會，共邀請了香港、台灣及內地共十位資深醫學專家，就肝臟、心臟、代謝外科、癌症以及失智症等熱門主題進行公開演講。

為加強基金會的服務素質和效率，今年基金會首次引入了 Microsoft 及 IBM 等先進的資訊科技來提升研討會的工作效能，觀眾入場及離場登記、現場答問、問卷調查以及視頻分享等皆以電子化操作，讓基金會成為科技與醫學資訊融合交流的重要平台，從而針對性提高澳門整體的醫療水平。研討會反應熱烈，報名人次超過七百人，人數再創新高。此外，基金會邀請了香港中文大學何鴻燊海量數據決策分析研究中心研究團隊，向市民演示如何使用數碼檢索系統搜索醫學研討會歷年的演講視頻，以及協助語言障礙人士溝通的流動應用程序。

基金會每年的醫學研討會已成為澳門最為重要的專業醫學交流平台之一，不斷地引入世界先進資訊科技等手段，進一步彰顯基金會“澳門市民健康為本、全球醫療科技為用”的宗旨。

研討會講者與嘉賓合影

基金會行政委員會主席禤永明先生致開幕辭

研討會現場座無虛席

香港中文大學蒙美玲教授團隊在研討會現場展示協助語言障礙溝通的電子書

山頂醫院郭昌宇院長、衛生局李展潤局長、禤永明主席與鏡湖醫院馬學章院長合照

2) Brain Bee 腦神經科學大賽 Brain Bee Neuroscience Competition

Brain Bee 國際腦神經科學大賽旨在激發青少年對腦神經科學的興趣，培養青年學生學習能力以及競賽技巧。基金會今年繼續全資贊助澳門區選拔賽，旨在鼓勵澳門所有中學參與，並逐步將此比賽拓展成為澳門所有中學生學習、競賽以及交流的重要平台。今年首次採取全電子化比賽方式，是澳門探索電子化學習及無紙化考試進行的首次嘗試，亦為 Brain Bee 國際大賽創下世界先河。

今年的比賽假澳門培正中學舉行，500 餘名學生同時採用 iPad 進行現場電子化考試，比賽結束之後即時揭曉結果，共有 51 名成績優異同學分別獲得一、二、三等獎以及優異獎。賽後立即舉行頒獎典禮，場面盛況空前。選拔賽冠軍是來自粵華中學的李熙哲同學，獲得基金會資助代表澳門前往美國華盛頓參加國際大賽，與世界各地的學生代表交流。

此外，獲獎同學及指導老師亦獲基金會贊助，前往香港中文大學校園參觀及到大腦與認知研究所訪問體驗，進一步增加他們對大腦及其相關學科的認識，並方便他們日後繼續聯繫，共同打造這個學習交流平台。

選拔賽現場

冠軍獲得者李熙哲同學接受記者採訪

現場派發 iPad 及考前技術指導

3) 大腦認知研討會 2017 Brain and Mind Symposium 2017

基金會資助的香港中文大學大腦與認知研究所自 2016 年起每年舉行國際研討會，今年以早期語言學習與大腦發展為主題，特別邀請了來自加拿大英屬哥倫比亞大學、荷蘭烏特勒支大學、美國西北大學以及台灣中央研究院語言學研究所大腦與語言實驗室多位海外知名學者，一同探討嬰兒至幼兒時期，腦部和語言之間的關係。內容包括新生兒的腦部如何開展語言發展、早期語言發展如何影響神經的處理過程、預測語言發展的神經標記物，以及如何透過早期介入來提高語言能力等。會後特設交流會，讓澳門相關團體、專業人士除與講者進一步探討，更與其他業界人士及學者建立了聯繫網絡，分享發展前景及共商合作機會。此次以網上電子化報名以及參會登記，兩百多名從事醫療、教育及社會服務界人士參加了研討會，促進澳門的教育工作者、社工、醫護人員及相關人士，對幼兒大腦與語言發展的關係有了更深入的認識。

同時，大腦認知研究所所長、中大何鴻燊認知神經科學教授黃俊文就何鴻燊縱向發展研究進行詳細講解：探索嬰兒至幼童成長有關語言、學習及認知方面發展和障礙的因素，並盡早預防及治療。此研究期望招募 300 名香港初生嬰兒進行五年的追蹤，剖析他們從出生到 5 歲的認知及語言發展，以識別影響兒童學習、認知及語言發展及障礙的因子，有助及早干預及治療。中大將透過其腦電波測量，了解孩子對音樂、字詞和音頻的敏感度，同時對照其家庭背景、飲食習慣、照顧互動等情況，為人類認知發展建構科學化指標，並作為言語治療、讀寫障礙等問題的參考。

研討會講者與嘉賓合影

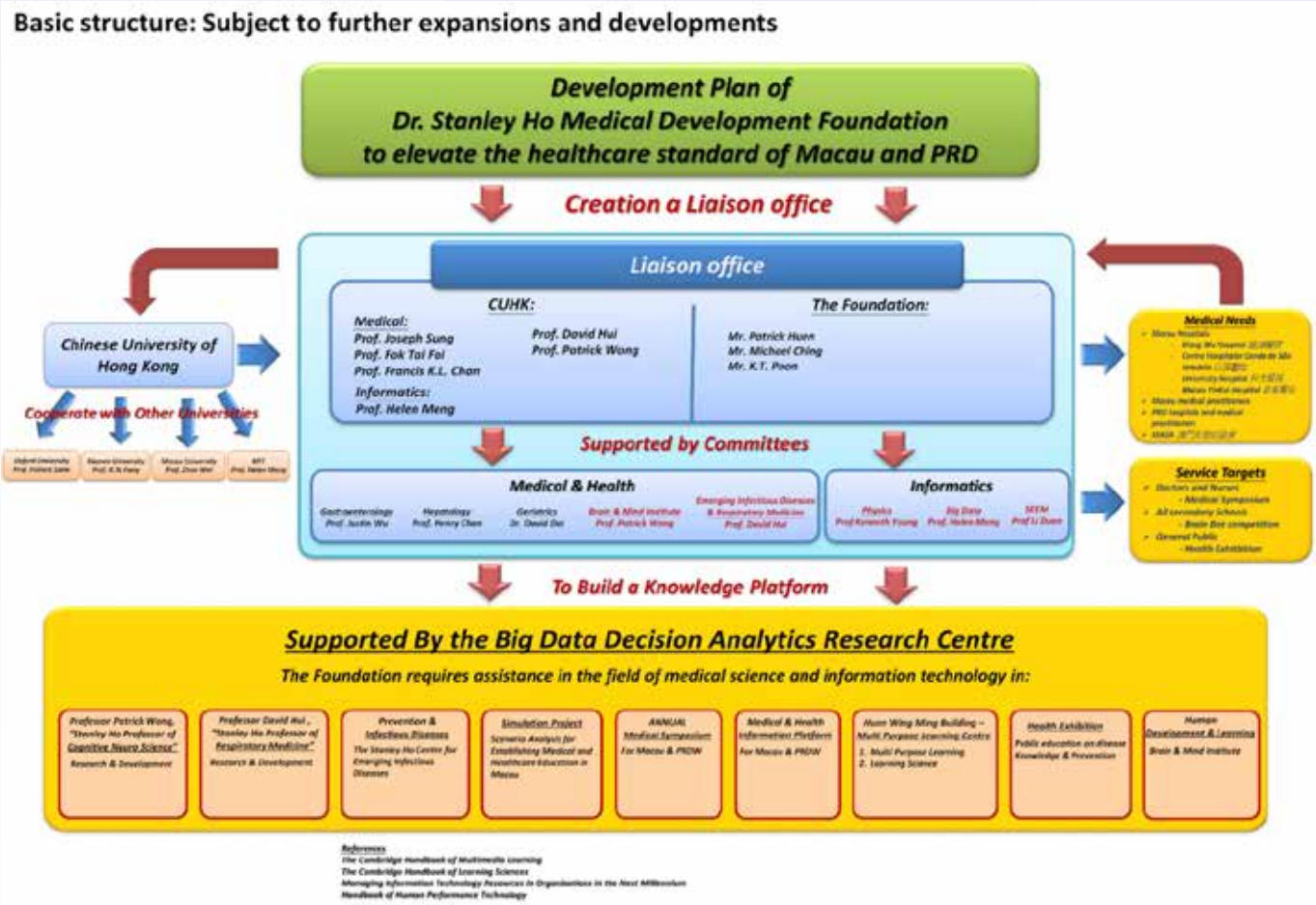
禤永明先生致開幕辭

研討會座無虛席

研討會同聲傳譯會場

研討會電子化登記現場

基金會發展藍圖
Development Plan to Elevate the Healthcare Standard of Macau and the Pearl River Delta



In order to proceed further towards achieving the mission of the Foundation to elevate the healthcare standard of Macau and the PRD , we have devised a development plan aiming to create a 'liaison office' to link up the medical practitioners and the general public in Macau with worldwide access points (MIT, Oxford, CUHK et al) for knowledge and resources on related areas.

We envision that the concept of creating this 'liaison office' would best be realized through a web-based digital platform. We are working closely with worldwide technological experts who will guide us through the process of selecting and building the most suitable data warehouse for medical practitioners and general public to get access to most updated information they need efficiently.

為朝著基金會提升澳門和珠江三角洲醫療水平的使命向前邁進，我們建構了一個以此為目標的發展方略。我們期望透過建立一個聯絡樞紐，把來自世界各地相關的知識和資源，轉介給澳門的醫護人員及市民大眾。

要實現這個概念，我們認為最佳的方法是建立一個網上數碼平台。目前，我們正與全球頂尖的科技專家共同相討，從而挑選和構建最合適的數據庫，使澳門的醫護人員及市民大眾能快捷地獲取他們所需要的醫療資訊。

基金會資助的研究中心及項目報告（資料由受資助機構提供）
Updates of projects / centres sponsored by Dr Stanley Ho Medical Development Foundation (Information provided by respective organizations/centers)

何鴻燊防治傳染病研究中心
Stanley Ho Centre for Emerging Infectious Diseases

機構：香港中文大學 The Chinese University of Hong Kong
項目負責人：許樹昌教授 Stanley Ho Prof. HUI Shu Cheong David
聯絡方法　：ceid@med.cuhk.edu.hk

INTRODUCTION 簡介

Initially established by Professor Joseph Sung after the outbreak of SARS in 2003, Stanley Ho Centre for Emerging Infectious Diseases (CEID) was officially inaugurated on 16 November 2006. Physically located within the Prince of Wales Hospital compound, CEID is the key academic centre of the Chinese University of Hong Kong (CUHK) devoted to infectious disease research. It aims at generating new knowledge and supporting strategy development in the prevention and control of emerging infections, in Hong Kong and beyond. CEID is equipped with facilities and provided at its own core laboratory, lending support to research conducted by the Centre's academics and their research teams.

何鴻燊防治傳染病研究中心（CEID）於 2006 年 11 月 16 日正式成立，中心設於威爾斯親王醫院內。CEID 是香港中文大學唯一專注傳染病研究的學術中心。成立目的是在香港境內外透過研究創造新知識，並為新發傳染病探討預防和控制策略。 CEID 的核心實驗室配備了研究所需的設施，為中心的學者及其研究團隊的工作提供支援。

RESEARCH AND COLLABORATIONS 研究和合作

Currently, the main themes of CEID's research are: coronavirus infections – SARS and MERS (Middle East Respiratory Syndrome), HIV/AIDS and related infections, tuberculosis (TB), vector-borne infections, enteric infections and infectious disease epidemiology. The areas of expertise include clinical management, infection control, epidemiology and molecular analyses.

The Centre has established research collaborations with local, Mainland China and overseas institutions, with activities including academic exchange, joint grant applications, training and joint research projects. Locally, a series of studies have been developed with other public hospitals, NGO and professional institutions in medicine, nursing, public health. Ever since the Centre's establishment, collaborative projects have been developed with other universities and CDC in China on the following infections – EV71, HIV and influenza. In Feb 2017, CEID Scholars visited Liuzhou CDC for discussing collaborative research on HIV population viral load and syphilis transmissions. In Mar, a meeting with researchers from Institut Pasteur Shanghai, Chinese Academy of Sciences was conducted to discuss research collaboration on arbovirus infections. Since late 2014, researchers of CEID have been collaborating with investigators of Macao University in the use of a zebrafish model for studying drug interactions in HIV treatment and the mechanism of drug resistance in TB treatment. This is an ongoing initiative, which has led to presentations at international scientific conferences, and a manuscript has been prepared and being considered for publication in medical journal.

現時 CEID 研究的主題有：冠狀病毒感染 — SARS 和 MERS（中東呼吸綜合症），愛滋病毒感染和相關疾病，結核病，腸道感染，病媒傳染病以及傳染病流行病學。專業領域包括臨床治理，流行病學和分子分析。中心與香港本地，中國內地及海外機構合作，進行學術交流，共同申請科研撥款，提供培訓及聯合發展研究項目等。自成立以來，中心聯同中國內地的大學和疾病預防控制中心，合作開展了有關 EV71，HIV 和流感等研究計劃。在香港，中心與公立醫院，非政府組織和各醫學、護理、公共衛生專業機構開展一系列研究項目。2017 年 2 月，中心學者訪問柳州疾病預防控制中心，討論愛滋病病毒載量和梅毒傳播的研究。3 月，中心學者與中國科學院上海巴斯德研究所的研究員會面，討論了有關蟲媒病毒感染的研究合作。自 2014 年底以來，CEID 的研究人員與澳門大學合作，使用斑馬魚模型研究 HIV 治療所涉藥物相互作用以及抗結核病治療的耐藥性機制。研究項目仍在進行中，研究組曾於國際科學會議上發表初步結果，並準備出版論文。

ACADEMIC ACHIEVEMENTS 學術成果

Over the years, researchers of CEID have been awarded research grants, including competitive grants of Research Grant Council, Health and Medical Research Fund, AIDS Trust Fund in Hong Kong, and also as commissioned by the Hong Kong Government.

Publication of research results findings in prestigious scientific journals is one important means of delivering academic outputs in the scientific community. So far, researchers of CEID have published 560 manuscripts, 50 scholarly books/chapters or monographs, and made over 110 conference presentations to share their new knowledge with other specialists and scholars.

Some important outputs in terms of new research findings are:

- Characterization of the clinical outcomes of influenza virus diseases
- New understanding of droplet dispersion and its implications in designing infection control practice in hospital wards
- Discovery of antiviral effects of interferons for EV71 infection
- Novel network analyses for describing HIV epidemiology
- High potential of sexual transmission of hepatitis C virus in the HIV population

多年來，CEID 的研究人員成功獲得了不同的研究撥款，資金主要來自香港的研究資助局，醫療衞生研究基金，愛滋病信託基金會等競爭性撥款，以及接受香港政府委託項目的撥款。

在重要的科學期刊上發表研究報告是展示學術成果的重要渠道。到目前為止，CEID 研究人員已經發表了 560 份文章，50 份學術書籍 / 專著，並發表了 110 多次會議演講，與其他專家和學者分享他們的新知識。

以下是部份重要的研究結果：

- 流感疾病的臨床特徵
- 了解液滴分散對設計醫院病房的影響和控制感染的成效
- 干擾素對 EV71 感染的抗病毒作用
- 用於描述愛滋病毒流行病學的新型網絡分析
- 愛滋病毒感染人群中出現丙型肝炎病毒的高危傳播

MAJOR EVENTS 主要活動

A major highlight of the activities of the Centre is the Annual Scientific Symposium, which is a platform for health professionals and academics to update on knowledge and skills in infectious diseases prevention, treatment options and control. Held on 21 Sep, the 2017 symposium attracted over 300 participants from Hong Kong, Macau, Mainland China, as well as overseas. Two Post-Symposium Workshops on (a) Geographic Information System & Public Health and (b) Infectious Disease Modelling. A Postgraduate Student Exchange Session was scheduled on the day preceding the meeting, providing a forum for postgraduate students from Hong Kong and collaborating institutions overseas to present and discuss their research.

In Jan 2017, the 9th PulseNet Asia Pacific Meeting was hosted by CEID to address the use of whole genome sequencing (WGS) in a public health laboratory setting, especially in investigations of suspected in – or cross – country foodborne outbreaks. It was participated by delegates from 6 countries.

年度科學研討會是中心舉辦的一個主要活動，透過此平台讓專業人員和學者更新對預防傳染病的知識，並且提升疾病控制和治療的能力。 2017 年的研討會吸引了來自香港，澳門，中國大陸和海外的 300 多名參會者。研討會之後舉辦了兩次地理信息系統與公共衛生與傳染病模型工作坊。在研討會前一天，大會安排研究生參與交流會，為年青學者提供討論平台。

2017 年 1 月，中心主辦了第九屆食源性疾病亞太會議，旨在解決 WGS 在公共衛生實驗室中的應用，特別是調查國內或跨國傳播的食源性疾病的爆發。與會者來自 6 個國家。

9th PulseNet Asia Pacific Meeting in Jan 2017
2017 年 1 月第九屆食源性疾病亞太地區會議

CEID Annual Scientific Meeting in Sep 2017
2017 年 9 月的年度科學研討會

In commemoration of the 30th year since anti-HIV medicine (antiretroviral) has become available, CEID co-organized an exhibition with Hong Kong Society for HIV medicine. Titled "Journey of HIV Medicine", the exhibition is scheduled to last from 15 Nov to 14 Dec 2017 at the Hong Kong Museum of Medical Sciences.

為了紀念抗愛滋病毒藥物面世 30 周年，由香港愛滋病醫學會主辦及中心協辦下，於 2017 年 11 月 15 日至 12 月 14 日在香港醫學博物館舉辦了「愛滋病的醫學歷程」展覽。

EDUCATION 教育

As the hub of infectious disease expertise for CUHK, CEID has been delivering teaching to medical undergraduates and research postgraduates. Over the past decade, totally 22 research postgraduate students have graduated with PhD or MPhil under the supervision of CEID's academic staff. In 2007 and 2013, an HIV Manual was published for the reference of medical undergraduates and also clinical doctors. Free Apps in iOS and Android are available for downloads. A total of 6000 installs have been made by readers so far. To offer a textbook for public health students, "Public Health infectious disease" was released by CEID. Parallel Apps versions have become available in mid-2016.

作為中大傳染病專業知識的樞紐，CEID 一直為醫學本科生和研究生提供教學。在過去十年，共有 22 名研究生在 CEID 的學者監督下取得博士或碩士資格。

2016 年，中心一名研究生贏得中文大學公共衛生範圍的最佳博士論文獎。2007 年和 2013 年，中心出版了一本 « 愛滋病手冊 » 供醫科生和臨床醫生參考，手冊有 iOS 和 Android 的免費應用程式可供下載。到目前為止，總共錄得 6000 次安裝。另外，CEID 在 2012 年推出了 « 公共衛生傳染病 » 作為公共衛生學生的教科書，應用程式版本也於 2016 年面世。

PERSPECTIVES 遠景

With the generous support of Dr. Stanley Ho Medical Development Foundation, CEID is planning to expand the scope of its research to the following areas:

- Genomic research and bioinformatics in infectious diseases
- Pilot study on pre-exposure prophylaxis of HIV in people at high risk of infection
- Establishment of a cohort of newly diagnosed HIV infections
- Time-space modelling in infectious disease epidemiology

在何鴻燊博士醫療拓展基金會的大力支持下，CEID 計劃將其研究範圍擴展到以下領域：

- 傳染病基因組和生物信息學研究
- 高危人士事前預防愛滋病毒用藥初步研究
- 建立新診斷愛滋病毒感染者的群組研究
- 探討傳染病流行病學中的時空模式

個體化醫療中心
Centre for Personalised Medicine

機構：英國牛津大學 Wellcome Trust Centre for Human Genetics, University of Oxford, UK
項目負責人：Professor Peter Donnelly and Professor Simon Leedham
聯絡方法　：Head: Peter Donnelly FRS, FMedSci　donnelly@well.ox.ac.uk
Director: Simon Leedham PhD, FRCP　Simon.leedham@well.ox.ac.uk
Programme Administrator: Catherine Lidbetterq　catherine.lidbetter@well.ox.ac.uk
網址　：http://www.well.ox.ac.uk/cpm/home

Mission Statement 宗旨

Harnessing and integrating the power of new technology to tailor healthcare is at the cutting edge of modern clinical medicine. The Centre for Personalised Medicine was formed to engage clinicians, academics and the public with the benefits and challenges of this integration.

在當前高尖端的臨床醫療中，牛津大學個體化醫療中心的成立旨在利用與整合現代新技術使醫療服務更為個人化，並透過臨床醫生、學者以及公眾的參與，令他們受惠於此醫療整合。

Mr Huen communicates with Professors at Oxford

Mr Huen, Principal Helen King and Prof Simon Leedham

Mr. Tim Gardam- Former Principal of St Anne's College

Prof. Simon Leedham delivers lecture

何鴻燊海量數據決策分析研究中心
Stanley Ho Big Data Decision Analytics (BDDA) Research Centre

機構：香港中文大學 The Chinese University of Hong Kong
項目負責人：蒙美玲教授 Professor MENG Helen
聯絡方法　：hmmeng@se.cuhk.edu.hk

INTRODUCTION 引言

The Stanley Ho Big Data Decision Analytics Research Centre was established in 2013 with the generous support from the Dr. Stanley Ho Medical Development Foundation. Our research efforts focus on the use of data analytics in public health, logistics and supply chain management, as well as eLearning, aiming to achieve societal impact and benefit Hong Kong, Macao, the Greater China region and beyond.

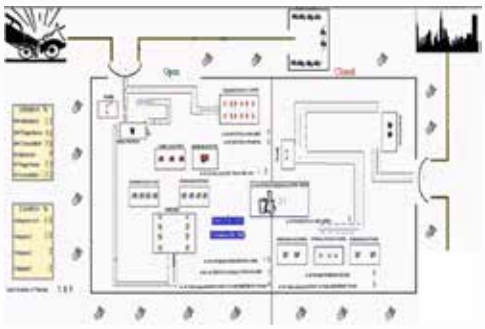
承蒙何鴻燊博士醫療拓展基金會（以下簡稱「基金會」）慷慨捐助，何鴻燊海量數據決策分析研究中心於 2013 年成立。本研究中心致力應用數據分析於公共衛生、物流和供應鏈管理及電子學習的研究，旨在對社會產生影響並惠及香港、澳門、大中華區及以外地區。

RESEARCH & DEVELOPMENT 研究及發展

- ELearning research with MIT Computer Science and Artificial Intelligence Laboratory – with generous support from the Foundation, we have launched a new project that compares the pedagogical effectiveness of online learning and traditional classroom teaching. We have sent one research assistant to MIT to help collect data in November 2017. We have also collected CUHK's own learning data from a freshman elite class in engineering mathematics, where we experimented with various creative strategies in flipped-classroom teaching. We will present our initial research findings in Macau in January 2018, at the Eurasian Conference on Educational Innovation, as well as publish our paper entitled "A Systematic and Quantifiable Approach to Teaching Elite Students" in the conference proceedings. With support from CUHK, we have also recruited 2 PhD students (one in engineering and the other in education) to participate in this interdisciplinary project.
  在基金會的慷慨支持下，本研究中心與美國麻省理工學院計算機科學和人工智能實驗室一起合作，針對電子學習研究開展了一項「比較在線學習和傳統課堂學習的教學效果」研究項目。于 2017 年 11 月，我們派出一名助理研究員到麻省理工學院協助收集學習數據。同時，本研究中心也為中文大學的一年級本科生開設一門工程數學精英課程，用以收集學習數據。在該課程中，我們嘗試了多種具創意的翻轉課堂教學策略。我們會在 2018 年 1 月於澳門舉行的歐亞教育創新會議（the Eurasian Conference on Educational Innovation）發表本項研究的初步結果，并在會議論文集中發表題為“A Systematic and Quantifiable Approach to Teaching Elite Students” 的學術論文。在中文大學的支持下，該跨學科研究項目招收了兩名博士生，分別來自工程學院及教育學院。

Eurasian Conference on Educational Innovation 2018

- Optimizing emergency department operations – we have applied data science techniques, simulation and optimization to improve emergency department operations. The simulation model (illustrated below), models the patient flow of an emergency department in Hong Kong. This project has been awarded an HMRF grant (elaborated in Section 5).
  優化急症室運作 – 我們運用數據科學技術和模擬及優化技術以改善急症室運作。該模擬模型模擬了一間香港的急症室的病人流動情況，本研究項目得到香港醫療衛生研究基金的資助（詳情請參閱第五項）。



Simulation Model of Emergency Department Operations

- Age-related chronic diseases – we have been focusing on age-related chronic diseases and cognitive functioning issues by bring together the engineering and medical fields. One example is the relationship between high blood pressure variation and the likelihood of serious adverse effects upon aggressive hypertensive treatment. Our research findings on hypertension has been well publicized (as detailed in Section 6).
  年齡相關的慢性疾病研究 – 我們透過結合工程和醫學的研究人材， 致力於研究和年齡相關的慢性疾病及認知功能問題。 其中一個例子是血壓起伏大和接受進取型高血壓治療而導致嚴重副作用之間的關係。此項研究的結果受到廣泛報導（詳情請參閱第六項）。

- We have been conducting research in dysarthric speech analysis. Dysarthria is a speech disorder that may have resulted from stroke, traumatic brain injuries, Alzheimer's and other causes. We have created and collected one of the first Cantonese dysarthric speech corpus and developed neural networks for automated analysis. The aim is to facilitate the work of professional speech therapists in helping more dysarthric speakers.
  我們正在進行一項針對有構音障礙人士的言語分析研究。構音障礙是言語障礙的一種， 常見原因有中風、創傷性腦損傷、阿茲海默症或其他原因。我們創建了第一個有構音障礙人士的廣東話語言資料庫，並開發了用於自動分析的神經網絡。本研究項目旨在協助言語治療師治療更多有構音障礙的人士。

- Professor Yong-Hong Kuo analyzed the medical appointment scheduling problem faced by a hospital in Macau, and presented and published his work on "Appointment Overbooking and Scheduling: Tradeoffs between Schedule Efficiency and Timely Access to Service" at the International Conference on Health Care Systems Engineering 2017.
  郭永鴻教授針對一間澳門醫院面對的病人預約問題進行分析研究。他在 2017 年國際保健系統工程會議（International Conference on Health Care Systems Engineering 2017）上演講其研究成果並發表了相關論文－題為 “Appointment Overbooking and Scheduling: Tradeoffs between Schedule Efficiency and Timely Access to Service” 。

Professor Yong Hong Kuo presenting at the International Conference on Healthcare Systems Engineering 2017.

ACTIVITES IN MACAO 參與澳門的學術活動

- Professor Helen Meng demonstrate the "E-Commu-Book", which is a cloud-based assistive tool that supports augmentative and alternative communication (AAC) for patients with communication disorders, at the Dr Stanley Ho Medical Development Foundation Symposium 2017. The "E-Commu-Book" is supported by the HKSAR Government Innovation and Technology Fund Public Sector Trial Scheme. It can support multiple languages, including Cantonese, English and Portuguese.
  蒙美玲教授在何鴻燊博士醫療拓展基金會醫學研討會 2017 中演示了“E-Commu-Book” 。“E-Commu-Book”為基於雲端技術的擴大性及替代性溝通工具，旨在幫助有溝通障礙的病人與他人溝通。開發“E-Commu-Book”獲得香港特別行政區創新及科技基金公營機構試用計劃資助。“E-Commu-Book”支援多種語言， 包括廣東話、英文及葡萄牙文。

- Our team also showcased the BDDAx system – "An eLearning Platform with Multimedia Search Capability", which holds the repository of over a decade of Symposium talks, at the Dr. Stanley Ho Medical Development Foundation Symposium 2017.
  此外，我們在何鴻燊博士醫療拓展基金會醫學研討會 2017 中展示了 BDDAx 系統－“An eLearning Platform with Multimedia Search Capability” 。該平台儲存過往十多年何鴻燊博士醫療拓展基金會醫學研討會的講座，以供人重温。

Screen capture of BDDAx: a multimedia search system to support eLearning

ACADEMIC EXCHANGE AND STUDENT ACTIVITIES

- Professors Yong Hong Kuo, Helen Meng and Kelvin Tsoi presented their work in the CUHK Academic Symposium on the Theory and Application of Smart City Research, which was jointly organized with National Natural Science Foundation of China in September 2017.

- Professor Kelvin Tsoi was Visiting Fellow of the School of Information Technologies, the University of Sydney, as well as the Leeds Institute for Data Analytics University of Leeds to be a Visiting Research Fellow in June and July 2017 respectively.

- Our Centre supports CUHK student participation in the MIT Innovation Node in Hong Kong in January 2017 and June 2017.

CUHK and National Natural Science Foundation of China, jointly organized the Academic Symposium on the Theory and Application of Smart City Research, where our faculty members were invited speakers

SERVING THE COMMUNITY 回饋社會

- Professor Helen Meng has been appointed Chairman of the HKSAR Government Research Grants Council Assessment Panel for Competitive Research Funding Schemes for the Local Self-financing Degree Sector
- Professor Helen Meng has been appointed Convenor of the Innovation and Technology Training Board, Working Party on the 2018 Manpower Survey of the Innovation and Technology Sector
- Professor Helen Meng serves as Member of the Sir Edward Youde Memorial Fund Council
- Professor Helen Meng has been appointed by the HKSAR Government's OGCIO (Office of the Chief Information Officer) to serve in the Hong Kong/Guangdong ICT Expert Committee (粵港信息化專家委員會), and is the Coordinator (Hong Kong side) of the working group on Big Data Research, Technologies and Applications.
- Professor Helen Meng has been appointed by the HKSAR Government Secretary for Food and Health to serve in the Steering Committee on Electronic Health Record Sharing
- Professor Helen Meng served as advisor to the Hong Kong Science & Technology Parks Corp. on the establishment of the Data Studio
- Professor Yong-Hong Kuo was invited to serve the Journal *PLOS ONE* as Guest Academic Editor.
- Professor Yong-Hong Kuo was invited to serve as Session Chair on Healthcare Analytics at the *21st Conference of the International Federation of Operational Research Societies* (IFORS), Quebec City, Canada.
- Professor Kelvin Tsoi was invited to be the Associate Editor of the Journal BMJ *Innovations*
- Professor Kelvin Tsoi was invited to be a Guest Editor of the *Health Information Science* and Systems
- Professor Kelvin Tsoi was invited to serve as the Minitrack Chair on Big Data on Healthcare Application of the conference Hawaii International Conference on System Sciences, United Status

AWARDS

- Professor Yong-Hong Kuo was awarded the very competitive Health and Medical Research Fund (HMRF) from the HKSAR Government Food and Health Bureau, for applying data science techniques, simulation, and optimization to improve emergency department operations
- Professor Helen Meng received the triennial Outstanding Women Professionals and Entrepreneurs Award 2017 of the Hong Kong Women Professionals & Entrepreneurs Association in recognition of her professional accomplishment

- Professor Kelvin Tsoi received the IBM Honorarium Award for the 50th Hawaii International Conference on System Sciences, Hawaii in January 2017.
- Professor Kelvin Tsoi received the Certificate of Recognition for Scientific Accomplishment, Digestive Disease Week 2017
- Professor Kelvin Tsoi received the Chicago Young Investigator Award of the 25th United European Gastroenterology Week, Barcelona
- Professor Kelvin Tsoi received the President's Prize for Best Paper Presentation, the 2017 Annual scientific Meeting, Hong Kong College of Community Medicine, Hong Kong

OUTREACH 外展活動

- Professor Helen Meng published an article in the Hong Kong Economic Times on 6 January 2017 on big data, entitled “善用大數據 須釋私隱疑慮”.


hket
2017年01月06日 星期五
國是港事
善用大数據 須釋私隱疑慮
在幾乎人人均擁有智能電話、手提裝置的資訊爆炸時代，雲端服務不斷快速增長，圍繞人們生活的各種數據透過這些科技記錄下來，形成一個不斷擴張的數據汪洋。
進入大數據時代，不少學者都紛紛利用大數據進行更廣泛、更深入的研究。中文大學就在2013年成立了全港學界首間海量數據(Big Data)決策分析研究中心，利用大數據為不同研究領域帶來嶄新的研究角度。

- Professor Kelvin Tsoi's work high blood pressure variation and the likelihood of serious adverse effects upon aggressive hypertensive treatment, was published in several major newspapers in February 2017 (more clips at www.bdda.cuhk.edu.hk/press-release)


高血壓「超伏大」


中大首創 大數據分析血壓藥效

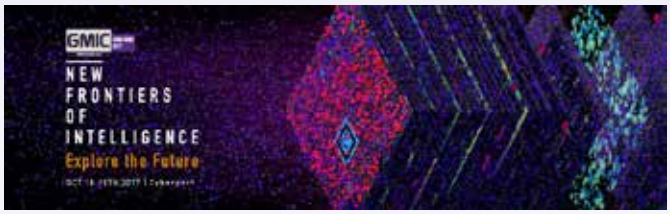
- Professor Meng was Panel Organizer and Closing Speaker of the Hong Kong Internet Economy Summit, Thematic Forum on "Big Data and Artificial Intelligence in Business", organized by the Hong Kong Science & Technology Park Corporation at the Hong Kong Convention & Exhibition Center in April 2017.


Thematic Forum
Big Data and Artificial Intelligence in Business
大數據及人工智能於商業的應用

- Professor Meng gave an invited talk entitled "How can Big Data promote healthy lives and well-being?" to a full house at the Hong Hospital Authority Convention in May 2017.

- Professor Yong-Hong Kuo was invited to serve as Moderator in the panel discussion session at *ACM eEnergy* in June 2017.

- Professor Meng gave the second invited talk keynote at the Global Mobile Internet Conference (GMIC) in October 2017, among other speakers, including the first keynote by Professor Stephen Hawking.



- Professor Meng gave an invited talk at the Hong Kong International Computer Conference 2017, with the theme of "Capitalizing on the Belt and Road Initiative through Digital Innovation", in November 2017.

- Professor Meng publicized about the CUHK BDDA center in an interview in the Hong Kong Economic Times in November 28, 2017.

- Professor Meng has been invited by the HKSAR Government's Central Policy Unit to participate in 中央政策組第十屆「深港合作論壇」深港合作助力粵港澳大灣區發展 in December 2017.


大工程女教授 鼓勵女生隨興趣而行

大腦與認知研究所
Brain and Mind Institute

機構：香港中文大學 The Chinese University of Hong Kong
項目負責人：黃俊文教授 Stanley Ho Professor WONG Chun Man Patrick
聯絡方法　：Ms. Celestina Wai-Yin Pang at wypang@cuhk.edu.hk

It is BMI's vision to become a world-leading research institute that makes discoveries in basic mechanisms of complex neurological conditions with the ultimate goal to enhance treatments of these conditions using molecular, cellular, behavioural, and engineering therapies and solutions in order to optimize human development, enhance learning, and improve quality of life.

Our mission includes:

- Conducting cutting-edge, interdisciplinary research to solve complex research problems concerning language, cognition, learning and their neural and neurogenetic underpinnings from molecule to behaviour.
- Solving these complex neurological research problems with strategic research partners nationally and internationally.
- Translating our laboratory findings into clinical and educational practices with community partners.

Our research teams have been working on the following four strategic projects to focus on BMI's four research themes and are making significant progress towards the project goals.

(i) 'Association between Auditory Neurophysiology and Cognitive and Communication Behaviors in Infants' under the theme Optimizing language learning in early childhood;

(ii) 'Fragile X Mutation/Premutation and Autism Spectrum Disorder' under the theme Defining the broad autism phenotype in Chinese societies;

(iii) 'Phonological vs. Working Memory Training: A Behavioral Pilot Study in Normally Reading Chinese Children' under the theme Enhancing treatments for dyslexia; and

(iv) 'Elucidating the Core Molecular Defects of Autism Spectrum Disorder' under the theme Identifying molecular mechanisms of neurodevelopment and neurodegeneration.

In 2017, the Stanley Ho Developmental Cohort Study was launched officially, aiming to strengthen clinicians' and scientists' ability to predict the trajectory of neurocognitive development from the earliest possible time and to identify developmental disorders before they even surface. From the ability to make developmental predictions, we hope to be in a better position to plan effective educational and clinical interventions.

Furthermore, BMI also takes the role of facilitating knowledge exchange between scholars and professionals and promoting international networking. Over 20 seminars were organised in the past two years. Our speakers include CUHK teaching members and invited speakers from Asia-Pacific, Europe and North America. BMI has been establishing collaborations with regional and international partners. Two joint centers (CUHK-UU Joint Centre for Language, Mind and Brain and CUHK-PKU-UST Joint Research Centre for Language and Human Complexity) were established in the previous years and The University of Cambridge – The Chinese University of Hong Kong Joint Laboratory for Bilingualism was successfully established in 2017. BMI continues to collaborate with Macau. Symposium on Early Language and the Brain was held in Macau to address the Macau public, and clinical and educational professionals in April 2017.

In addition to research, BMI actively takes part in public education. It is an important aspect in our activities as we work to raise awareness of brain health and foster the understanding of neuroscience. We collaborate with elderly centres in the community to deliver messages about healthy living and stroke prevention. Public lectures and social groups delivered to date have reached over 1000 older adults in the community. BMI engages not only our seniors but also our juniors. BMI organized one-day event for high school students in order to enrich their knowledge and strengthen their understanding about neuroscience.

In the future, BMI will continue its research which encompasses from molecule to behaviour and examine the causes and therapeutic strategies for different developmental disorders. We wish to bring the different disciplines and partners together to solve some very difficult problems in order to benefit children, learners, older adults, patients, and their families

International Symposium in Hong Kong/Macau: Early language development and the Brain

大腦與認知研究所 (BMI) 的願景是成為世界領先的研究機構，透過找出複雜神經系統疾病的基本機制，進而運用分子、細胞、行為和工程治療和解決方案來改善這些疾病的治療，以優化人類發展、增強學習，及提高生活質素。

我們的使命包括：

- 進行尖端跨學科研究，從分子到行為各層面去解決與語言、認知和學習相關的神經和神經遺傳學的複雜研究問題。
- 與本地及海外策略研究夥伴合作，攜手解決這些複雜的神經學研究問題。
- 與社區夥伴合作，將研究成果應用於臨床及教育實踐。

我們的研究團隊專注於四個研究主題，一直致力進行以下四個策略項目，並在各項目中取得重大進展。

(一) 「優化兒童早期語言學習」主題下的「嬰兒聽覺神經生理學以及其認知和溝通行為的關係」；

(二) 「定義華人社會中的廣泛自閉症表現型」主題下的「X 染色體易裂症基因突變 / 前突變與自閉症譜系障礙」；

(三) 「改善閱讀障礙治療」主題下的「語音與工作記憶訓練：具正常閱讀能力的中國兒童行為先導研究」；及

(四) 「識別神經發育和神經退化的分子機制」主題下的「闡明自閉症譜系障礙的核心分子缺陷」。

BMI 在 2017 年間正式開展「何鴻燊發展縱向研究」，旨在提升臨床醫生和科學家預測神經認知發展軌跡的能力，務求在發展障礙出現之前，能夠及早發現並作出干預。我們亦希望準確的預測可促使更有效地規劃教育和改善臨床干預措施。

BMI 致力促進學者和專業人員之間的學術及技術交流，並建立國際研究網絡。自 2015 年推出研討會系列，BMI 迄今已舉辦了超過 20 場研討會。我們的演講嘉賓包括香港中文大學的教員及來自亞太地區、歐洲和北美的研究人員。BMI 積極尋求與本地及海外研究所建立合作夥伴關係。除了早年成立的兩間聯合研究中心（CUHK-PKU-UST 語言與人類複雜系統聯合研究中心和 CUHK-UU 語言、認知及大腦聯合研究中心）外，劍橋大學- 香港中文大學雙語研究聯合實驗室亦在 2017 年正式成立。BMI 從不間斷與澳門的合作。2017 年 4 月，BMI 在澳門舉行了「早期語言及大腦」國際研討會，與澳門公眾、臨床專家和教育界人士分享該研究領域最新的研究發展及方向。

除致力科研外，公共教育亦是 BMI 活動中的一個重要範疇。我們積極提高公眾對大腦健康的認識及對神經科學的理解。我們與本地長者中心合作，宣傳健康生活和預防中風的信息。我們不時舉辦公開講座和小組活動，受惠人數超過一千人。另外，BMI 不單關心長者，亦照顧我們的年輕一代。BMI 為高中生舉辦了為期一天的參觀活動，以加深他們對神經科學的理解。

未來，BMI 將繼續涉及不同層面的研究工作，檢驗不同發展障礙的成因和治療方案。我們冀望與不同學科的夥伴合作，解決複雜的難題，令兒童、學生、長者、患者及其家人受惠。

High school students from Macau visit CUHK

澳門失智症協會
Macau Alzheimer's Disease Association

項目負責人：禤永明 會長
聯絡方法　：曾文理事長 zengwen@kwnc.edu.mo

Macau Alzheimer's Disease Association (hereinafter referred to as MADA) was established in 2011 by Mr. Patrick Huen Wing Ming, the Vice Chairman of Dr. Stanley Ho Medical Development Foundation and several professors of Kiang Wu Nursing College of Macau. Other experts who are concerned about the ageing society and geriatric care from medical, nursing, education, social service, law, MICE and elderly home care domains also contributed to the establishment of association.

MADA became an official member of Alzheimer's Disease International in 2013.

The objectives of MADA are:

(1) Cultivate public's accurate understanding and positive attitude about dementia;

(2) Promote early detection which allows dementia patients to have timely care;

(3) Provide related knowledge and care plan to professionals from different sectors.

MADA is now carrying out the following missions:

1. Raising publi's awareness and enhance their understanding about dementia. MADA provides professional and academic support to "Benevolence Lights up my Later Life: A Tailored Meta-programme to Face with Ageing Population in Macau", which is conducted by Kiang Wu Nursing College of Macau. Many of the directors and supervisors serve as keynote speakers in public lectures and tutors for youth ambassadors. In response to the call of Alzheimer's Disease International (ADI) and promoting Dementia Friendly Community, MADA and the Macau SAR Government co-organized a forum of "Healthy Macau Happy Home – Building Macau Dementia Friendly Community". We invited guests from Mainland China, Hong Kong and Macau to share their experience, and engaged 42 non-governmental organizations to become dementia friendly organizations to work together to build Macau Dementia Friendly Community.
2. Promoting early detection which allows dementia patients to have timely care. Kiang Wu Nursing College of Macau founded the Memory Clinic in 2013, in an effort to provide free cognitive assessment for senior citizens and dementia hotline service. These two services had resulted in positive social benefits. Starting from last December, MADA cooperated with Kiang Wu Nursing College of Macau and Dr. Stanley Ho Medical Development Foundation to enhance the Memory Clinic. On top of the existing assessment services, assessors were dispatched to three elderly homes on a weekly basis to provide cognitive competence screening for older persons. Until July 2017, 257 elderly finished screening, 84 of which were fully assessed, and 46 were advised for further diagnosis. Follow-up support were recommended base on the screening results.
3. Inter-professional cooperation which reinforces the cultivation of local professionals. To coordinate with the governmental policy about dementia prevention and treatment, Certified Dementia Care Planner (CDCP) Course was first launched in 2017 in Macau by MADA together with Kiang Wu Nursing College of Macau and Hong Kong Alzheimer's Disease Association, which is a structured and systematic certificate programme specifically designed for dementia care professionals. The teaching contents cover fundamental knowledge about dementia, early screening and assessment, design of rehabilitation training for patient, care management and support to patient's family. A total of 35 participants from different background including doctors, nurses, social workers, physical therapists and occupational therapists have completed the course and were awarded certificate.

澳門失智症協會由何鴻燊博士醫療拓展基金會副主席禤永明先生與澳門鏡湖護理學院幾位教授，聯同一群關注社會老齡化、熱心長者照護工作的醫務界、護理界、教育界、社會服務界、法律界、會展文化界、老人院舍負責人等專家學者，成立「澳門失智症協會」。

本會的宗旨為：

（一）培養公眾對失智症的正確認識和正面態度，積極防治此疾病；

（二）推廣早期檢測，使失智症患者得到適時照顧；

（三）提供有關知識及照顧計劃予各界專業人士。

目前主要工作有：

1. 提高公眾對失智症的認識和了解。協會提供澳門鏡湖護理學院「仁 · 愛晚晴」應對老齡化社會教育系統工程：老人失智症之預防及照顧的專業與學術支援，並擔任公眾講座主講嘉賓及腦力大使 \ 青年大使的指導老師。為響應國際失智症協會的號召及推動澳門失智症友善社區，在 2017 年世界失智症月聯同衛生局和社會工作局舉辦”健康澳門、幸福家園－共建澳門失智症友善社區”論壇，邀請粵港澳的專家學者分享各地經驗，42 個本地社團和機構加盟為失智症友善社團，共建失智症友善社區。
2. 推廣早期檢測，使失智症患者得到適時照顧。澳門鏡湖護護學院於 2013 年建立記憶中心，為本澳居民免費提供長者認知能力評估及失智症電話熱線服務，該兩項服務均取得良好的社會效益。2016 年 12 月起，協會聯合澳門鏡湖護護學院及何鴻燊博士醫療拓展基金會三方共同加強記憶中心的建設。在原有評估的基礎上，每週定期派評估人員到三間老人中心為長者提供認知能力篩查。截至 2017 年 7 月，257 名長者完成認知能力篩查，其中 84 人完成了全面評估，並有 46 人建議到醫療機構進一步診斷。目前正給篩查出的對象提供跟進服務。
3. 多專業跨職系合作，加強本地專業人員的培養。為配合特區政府失智症防治政策，澳門失智症協會于 2017 年與澳門鏡湖護理學院及香港認知障礙症協會在澳門合辦首屆失智症照顧策劃師課程，該課程是專門為失智症照顧護理專業人士設計的結構性、系統性證書課程，內容涵括失智症基本知識、疾病的早期篩查及評估、失智症患者康復訓練的設計、照顧管理及家屬的支援。總共 35 名不同背景的學員，包括醫生、護士、社工、物理治療師及職業治療師等完成課程並獲得證書。

頭頸部腫瘤偵測與治療的生物標誌物研究
Developing biomarkers in head and neck squamous cell carcinoma

機構：香港中文大學 The Chinese University of Hong Kong
項目負責人：陳英權教授 Professor CHAN YK Jason
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Through the support of the Dr. Stanley Ho Medical Development Foundation we have continued develop a comprehensive Head and Neck cancer tumour bank for research purposes that includes patients from Macau that visit our institution for treatment. This has been achieved through the collection of samples from multiple centres throughout Hong Kong, including the Prince of Wales Hospital, Alice Nethersole Ho Miu Ling Hospital, United Christian Hospital and Tsang Kwan O Hospital and the employment of new staff to collect samples and follow-up on patients. Currently, over the course of the past two years we have managed to collect ~100 paired tumour head and neck cancer samples, tumour margins, with oral rinses and plasma pre-treatment and on follow-up. Of note, >90% of patients have follow-up oral rinses and plasma samples collected at 4 weeks, 3 months, 6 months and 12 months after treatment, a feat that puts our sample collection in a unique position for important research into disease surveillance. In addition, we have also collected ~30 normal patient samples.

This year in conjunction with multiple collaborators including the School of Biomedical Sciences, the Department of Microbiology, the Department of Chemical Pathology, the University of Chicago and Johns Hopkins University we have taken further strides into our development of biomarkers useful in the understanding, detection and surveillance of head and neck squamous cell carcinoma.

With the School of Biomedical Sciences, we are analysing whether genomically altered tumours express specific changes in signalling proteins using immunohistochemical staining (IHC) and protein profiling by protein arrays. In addition, we are developing head and neck tumour primary cultures, or new cell lines, or xenografts from our cohort for biomarkers and potential targeted therapy. Recently, we have also worked on precision medicine through the whole exome sequencing of a patient with a rare tongue sarcoma where we were able to identify a lower rate of non-synonymous mutations in this tumour and a de novo germline TP53 mutation that will be important in this patient's treatment.

With the Department of Microbiology, we have been investigating the microbial dynamics associated with Head and Neck Squamous Cell Carcinoma (HNSCC). Our current analysis of samples with next generation sequencing of the 16s rRNA V1-V2 region for bacteria has shown that the bacterial diversity was significantly depressed in tumour tissues when compared with that of normal controls ($p<0.004$) as shown in Figure 1. The overall oral bacterial community was commonly represented by Fusobacterium (mean abundance of 9.6%) and Prevotella (9.2%), with Streptococcus, Haemophilus and Leptotrichia constituting 5.9%, 5.6% and 5.3%, respectively. A linear discriminant analysis (LDA) for effect size (LEfSe) determined 18 "core" bacterial taxa (>1% mean abundance) that were tissue-type discriminative. Among them, Fusobacterium was significantly predominant in tumour tissues when compared with normal controls (mean abundance of 12.9% vs 6.3%, $p<0.001$) as seen in figure 2. Other dominant bacteria in tumour tissues include Peptostreptococcus, Parvimonas, Catonella, Johnsonella, Peptostreptococcaceae (family) and Staphylococcus. In contrast, Streptococcus and another 10 genera were more common in normal tissues. In conclusions, there is a reduced diversity of the microbiota and increased abundance of Fusobacterium in HNSCC. However, the relationship with the pathogenesis of HNSCC still needs to be investigated and these findings may provide further essential information in formulating further preventative or interventional strategies to control HNSCC.

Finally continuing with our collaboration and support of the Department of Chemical Pathology at The Chinese University of Hong Kong, we have continued to analyse Tumour Suppressor Gene (TSG) methylation in our samples. Currently in 55 HNSCC patients, using digital droplet PCR there was significant difference in the methylation density of PAX5 ($P<0.001$), EDNRB ($P<0.001$), DCC ($P<0.001$), MGMT ($P<0.007$), DAPK ($P<0.03$) and P16 ($P = 0.03$) when comparing HNSCC with paired normal tissues. PAX5 ($P<0.001$), EDNRB ($P<0.001$), DCC ($P<0.001$) showed aberrant methylation when compared with control tissues. A further analysis of oral rinses between HNSCC and control patients for PAX5 showed a sensitivity of 89.1% and specificity of 73.1% (PPV: 87.5%, NPV: 76%). EDNRB demonstrated a lower sensitivity of 46.4% and specificity of 92.3% (PPV: 89.7%, NPV: 44.2%) for oral rinses when compared between HNSCC and control patients. We are in the progress of analysing the post treatment oral rinses in patients with recurrences, that we will then follow by analysis of blood samples. In conclusion, using digital methylation PCR may provide a sensitive method for the detection of HNSCC, with the usage of the PAX5 methylation detection in oral rinse setting could provide a relative less invasive method for the detection of HNSCC

Our collaboration with the University of Chicago and Johns Hopkins University has only recent begun but will centre around a multi-institutional study using next generation

tagged amplicon sequencing of oral rinses and plasma for the diagnosis and detection of HNSCC.

Overall, we have taken significant strides over the past year to expand our development of biomarkers in HNSCC through multiple collaborations as demonstrated above. Importantly, none of the above would have been possible to initiate and maintain in the future without the generous support of the Dr Stanley Ho Medical Foundation to improve the management of head and neck cancer patients in the region.

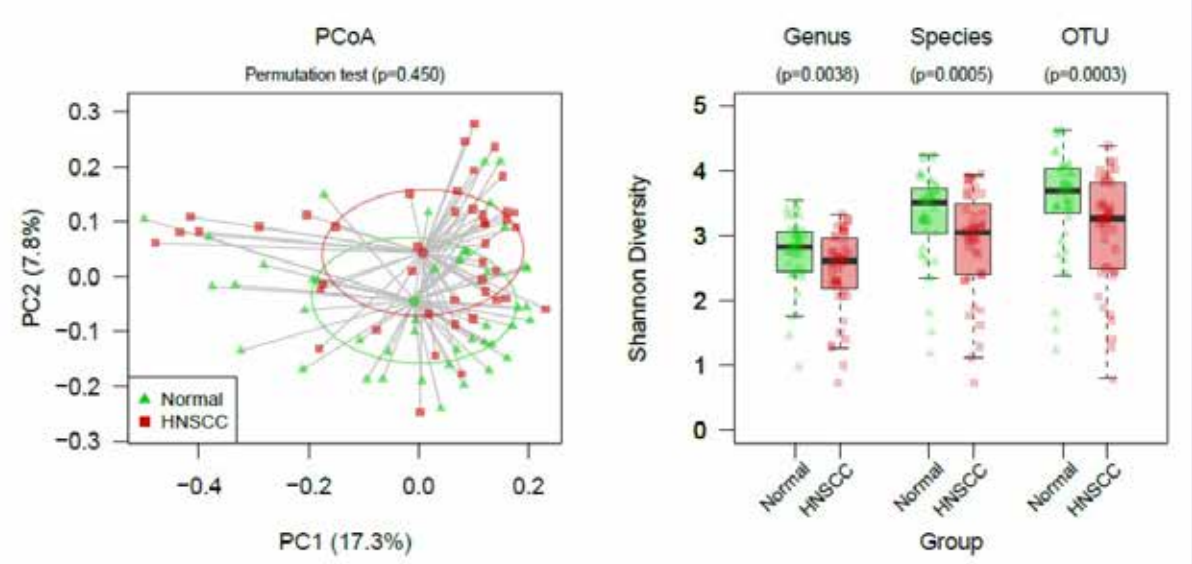

Figure 1. Demonstration of a significant reduction in bacterial diversity in HNSCC samples when compared to paired normal control tissue samples.

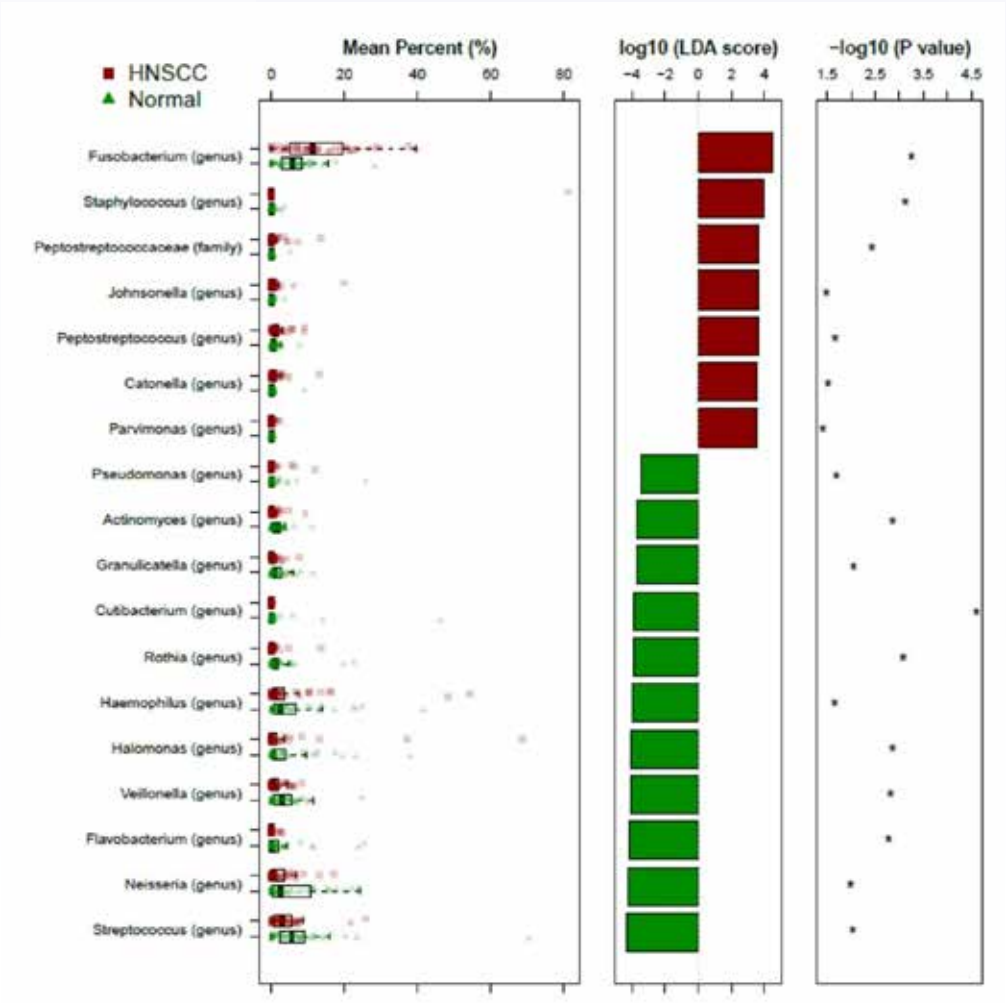

Figure 2. Representation of the overall oral bacterial community in HNSCC and normal controls samples and a linear discriminant analysis for effect sizes.

高端機器人科研計劃 Advanced Robotics Initiatives

機構：香港大學工程學院 Faculty of Engineering, The University of Hong Kong
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Background

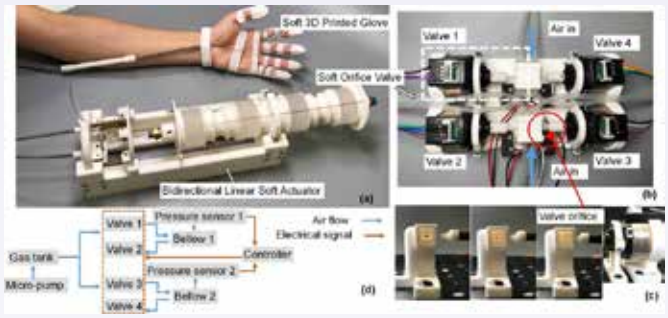
Supported by the Foundation, in the past year there were remarkable achievements in the development of robotic devices for medical and dental applications.

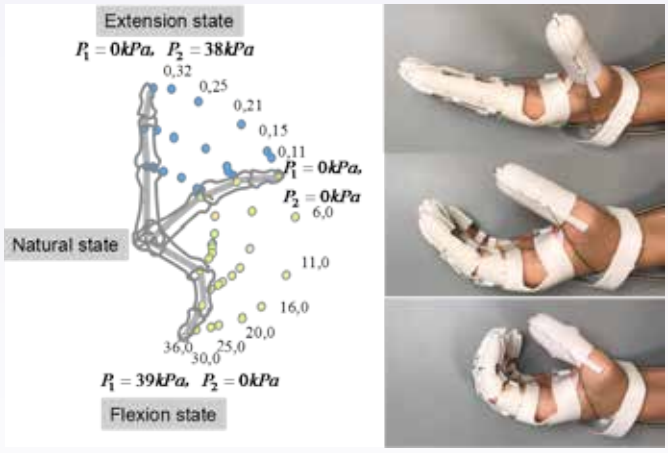
Robotics research and medical applications

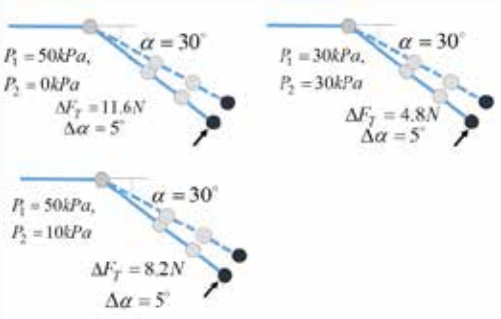
Dr. Ka-Wai Kwok from Department of Mechanical Engineering has formed a research group for Interventional Imaging and Robotic Systems (IRIS) for training young talents on innovative technologies for medical applications. The IRIS group, comprising 1 post-doctoral fellow, 1 research associate, 3 research assistants, 6 PhD and 6 MPhil students, has initiated new lines of studies at HKU including soft robotics, image-guided robotic system, and high-performance intra-operative image processing.

Their research bridges the technical gap between medical imaging and surgical robotic control aiming at enhancing surgical precision, safety and effectiveness. Their new system being developed can provide high-quality visual feedback for robotic instruments to navigate inside the body of a patient. With the support from the Foundation, the IRIS group has gained good laboratory-based experimental results and is now able to work with industrial partners.

Dr. Zheng Wang leads another promising front of robotics in biomimetic and clinical applications. He is currently supervising the Bionics and Control Laboratory (B&C Lab) in the Department of Mechanical Engineering. His group has focused on bionic and soft robotic devices with a primary target application into the medical field.







Patients with hand dysfunctions to move again

The B&C Lab has collaborated with the Department of Orthopedics and Traumatology of HKU in developing a soft robotic glove for use by patients with hand dysfunctions. The robotic glove comprises one left hand unit and one right hand unit, both driven by ten actuators, enabling opening and closing motions on each individual finger. Made by 3D-printed soft material, the gloves impose minimal interference to the wearer's normal daily activities so that they could be worn both in clinic and at home. The actuation mechanisms of the robotic gloves are integrated into a portable box, with the power source, actuation units, as well as the control electronics.

Robotic arm for dental applications

The B&C Lab has also collaborated with the Faculty of Dentistry in developing a surgical robotic manipulator for dental applications. The highly dexterous 7-degrees-of-freedom robotic arm packs human-arm dexterity into a 6mm diameter slim body. It could reach any location and orientation within a space over 50 times of its own volume. The arm is driven by 14 electric motors controlled coordinately by one central motion controller which is also developed in the Lab. The targeted application of this robotic arm is to conduct dental preparation and treatment with a high level of autonomy. In the future, the arm could also be extended for use in general surgical applications, such as laparoscopic surgery, and even endoscopic surgery. Co-operation of two or three arms under more complex control algorithms will enable the robotic system to perform surgical procedures of a higher level of complexity.

Students' experiential learning

The B&C Lab is also developing a bionic robotic fish aiming to achieve faster-than-ever speed records underwater. The motor-driven robotic fish with soft robotic components has been tested in the Stanley Ho Sports Center swimming pool of HKU, and is attempting the Guinness World Record of "Fastest swimming robotic fish" in December 2017. The team is led by a staff member of HKU as coach, HKU research students and undergraduate students from Mechanical and Computer Engineering programmes. The work aims to push the boundary further of how machines could efficiently move underwater following a bionic manner.

Fig 1. Trials conducted in Henry Fok Swimming Pool inside the Stanley Ho Sports Centre, HKU

Fig 2. Assembly of the robotic fish in the Bionics and Control Lab

Research students' work scrutinized in academic community

One of Dr. Kwok's groups comprises 4 postgraduate students. 1 post-doctoral fellow represented HKU to attend the IEEE International Conference on Real-time Computing and Robotics (*IEEE RCAR 2017*) held at Okinawa, Japan in July 2017, which is an annual event bringing researchers worldwide to exchange and present their latest research results. In this year's RCAR, the team showcased their novel design of an FEM-based control framework for hyper-elastic continuum robot, which successfully demonstrated precise and robust manipulation of the robot by rapid compensation of the motion error due to unknown dynamic disturbances. The developed control framework can potentially be adopted in various soft/continuum robotic applications such as endoscopic navigation for minimally invasive surgeries. Out of 110 papers, the team was awarded the *Best Conference Paper* in recognition of their research achievement.

Fig 3. Dr. Kwok's team was awarded the *Best Conference Paper* award at *IEEE RCAR Conference 2017*

Fig 4. Dr. Kwok's team was awarded the *Best Poster Paper (Merit award)* at *IEEE ICRA 2017* Conference.

背景

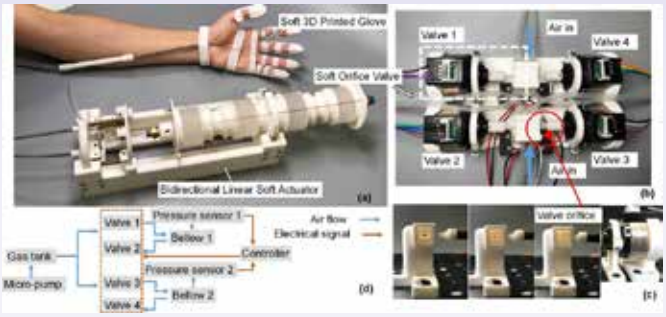
香港大學工程學院在何鴻燊博士醫療拓展基金會的支持下，機械人設備及技術在醫療和牙科應用及發展方面取得顯著的成就。

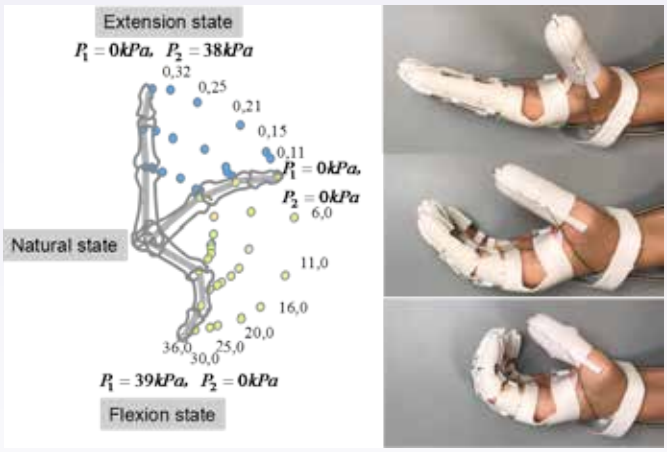
機械人研究與醫學應用

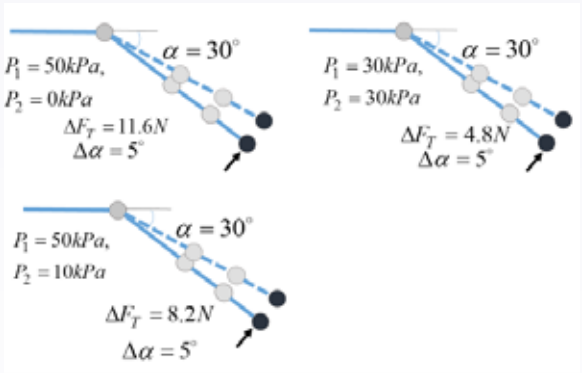
由機械工程學系郭嘉威博士帶領的名為 IRIS 的研究團隊，致力發展醫學用途的新機械人設備及技術，同時亦積極培養科研人才。IRIS 團隊共有 1 位博士後研究員、1 位副研究員、3 位研究助理、6 名哲學博士生及 6 名哲學碩士生。團隊積極開展不同範疇的研究，其中包括軟性機械人、影像導引機械人系統及高效體內影像處理系統。

該項研究彌補了醫學成像與外科手術機械手操控之間的技術差距，大大增加了外科手術的準確度、安全性及有效性。團隊所發展的新設備可以提供高質素的畫面，讓機械儀器清楚及安全地在病人體內移動至預定位置。研究團隊目前已取得一定的實驗數據，並吸引業界的注意，共同開發項目。

另一方面，同樣來自機械工程學系的王 博士亦運用機械人技術，在仿生及臨床應用方面打開了一個新局面。王博士現負責管理機械工程學系的仿生及控制實驗室 (Bionics and Control Laboratory)，其研究團隊專注於發展軟性機械人設備以應用於醫療範疇上。團隊與校內醫學院的矯型及創傷外科學系合作，為手部失去活動能力的病人研製一雙由軟性物料製造的手套。這對手套由 10 個驅動器帶動，令每隻手指均可做出開合動作。手套是用軟性材料經 3D 技術打印製造，藉以減低使用者因戴上該手套後對日常生活帶來的不便，佩戴者亦可於診所或家居使用該對手套。整套設計包含手套、電源、驅動配件及控制電路，可放在一個便攜的容器中。







機械臂與牙科應用

與此同時，仿生及控制實驗室亦與校內的牙醫學院合作，發展一支牙科手術用的操控桿。這支操控桿直徑只有 6mm，極其靈活。它可以到達自己體積 50 倍的空間內的任何位置。這支由團隊研發的操控桿由 1 個具備 14 個電動馬達的中央動作控制器推動及管理。王博士期望該操控桿可提升牙科治療及手術準備方面的應用。展望將來，該操控桿可以進一步應用於其他手術中，例如腹腔鏡及內窺鏡檢查手術。如運用兩至三支機械臂及更精密的控制運算，這項機械裝置更可以用於複雜的外科手術中。

學生體驗式學習

最近，王博士的實驗團隊研發機械魚，以期突破機器在水底移動的最高速度。該機械魚內置馬達及使用軟性物料製造，已經在何鴻燊體育中心的泳池不斷作試驗，目標是於本年底前打破健力士世界紀錄中「游泳最快的機械魚」。這團隊是由 1 位老師、多位機械工程及計算機工程的研究生及本科生組成。是次實驗旨在運用仿生方式推動機器有效地在水底移動。

圖 1：團隊在何鴻燊體育中心的泳池為機械魚作試驗

圖 2：團隊於仿生及控制實驗室內組裝機械魚

參與國際會議

郭嘉威博士的團隊包括 4 名研究生，1 名博士後研究員代表香港大學參加於 2017 年 7 月於日本沖繩舉辦的 2017 年度電機電子工程師學會實時計算和機械人國際會議 (IEEE RCAR 2017)。這個會議每年均聚集世界各地研究團隊交流及分享最創新的研究成果。在是次會議中，郭嘉威博士的團隊展示了創新的機械控制系統，該系統能在運行期間快速修正由外界干擾所造成的移動路徑誤差，因此大大提高了用戶的控制性及儀器的精確度，將會有潛力應用在微創手術中的內窺鏡導航之類的手術。團隊最後在多達 110 支研究隊伍中脫穎而出，獲得「最佳會議論文獎」。

此外，郭博士另一個團隊中的 3 名哲學博士、2 名哲學碩士及 3 名研究員出席了 2017 年 6 月於新加坡金沙會議展覽中心舉辦的 2017 年度電機電子工程師學會機械與自動化國際會議 (IEEE ICRA 2017)。該會議是在機械研究領域中重要的國際會議。在本屆會議中，有來自世界各地著名大學的研究團隊，包括哈佛大學、史丹福大學、范德堡大學、新加坡國立大學及明尼蘇達大學等，各隊分別以海報介紹其創新外科機械人系統。其中，郭嘉威博士的團隊介紹了在磁力共振掃描儀內可操作的機械導管，用以治療心律不整的療程，稱為「心腔內電生理干預」。最後團隊在是次會議中獲得「最佳海報論文 (優異獎)」。

圖 3：郭博士的團隊於 2017 年度電機電子工程師學會實時計算和機械人國際會議 (IEEE RCAR 2017) 獲得「最佳會議論文獎」

圖 4：郭博士的團隊於 2017 年度電機電子工程師機械人與自動化國際會議 (IEEE ICRA 2017) 獲得「最佳海報論文 (優異獎)」

對付急性呼吸道病毒感染的研究（澳門 / 香港）
Tackling Acute Respiratory Virus Infection in Macau/Hong Kong

機構：The University of Hong Kong, The Hong Kong Polytechnic University, Macau University of Science and Technology
項目負責人：袁國勇教授 Professor YUEN Kwok Yung
聯絡方法　：Dr. Alvin H. Wong at alvin.wong@dhchenfoundation.com

Charity Objective:

To support Professor KY Yuen and his research and collaboration with Other Universities including Macau University of Science and Technology

Main Investigator:

Professor KY Yuen and his colleagues and Dr. Terence Lau and his colleagues

Universities Involved:

University of Hong Kong, Hong Kong Polytechnic University, Macau University of Science and Technology

Board of Directors:

Antony Leung, Karen Cheung, Paul Cheung, Alex Wai

Members:

Dean Manson Fok (MUST), Karen Cheung

Main Contact: Dr. Alvin H. Wong

Mission:

(A) To develop the appropriate diagnostics for rapid diagnosis for acute respiratory virus infection (e.g. Influenza, swine flu, SARS etc)
(B) To develop the appropriate therapy for these acute respiratory virus infections
(C) To develop vaccines for these viral infections
(D) To develop vaccine adjuvants for these vaccines
(E) To develop other approaches to the control of these acute respiratory virus infections

Benefits to Macau (Health, Medical, and Research Aspects):

Macau, being an international city, has a high risk to acute respiratory virus infection like Hong Kong. Previous experiences have shown that influenza, swine flu, and SARS can impact dense populated cities like Hong Kong and Macau rapidly. This is a charity foundation to develop the appropriate rapid diagnostics and treatment, and vaccine and vaccine adjuvants for the Macau and Hong Kong population. Macau University of Science and Technology (MUST), led by Dean Manson Fok will play an active role in executing this plan to help the population of Macau. MUST will also actively involved in this research project.

Deliverables and Timelines:

(a) Develop the first generation rapid diagnostic machine in 12m months
(b) Testing the rapid diagnostic machine in 12-24 months
(c) Screening for potential new drugs for influenza infection (continuous effort)
(d) Testing for new influenza vaccine adjuvants (within 12-24 months)
(e) Develop new devices to deliver vaccine adjuvants (within 12-24 months)
(f) Exploring new influenza vaccine candidates (continuous effort)

Introduction of Respiratory viral infection research and corresponding translational research in Hong Kong in press conference

Establishment of Respiratory Virus Reseach Foundation

Prof. Yuen Kwok Yung and Dr. Ivan Hung Fan Ngai

何鴻燊博士醫療拓展基金會行政成員名單（2017）
List of administrative staff of the Dr. Stanley Ho Medical Development Foundation (2017)

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會務總監（澳門）Director of Operations (Macau)
程頌康先生 Mr. Michael Ching

會務總監（香港）Director of Operations (Hong Kong)
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NOTES

何鴻燊博士醫療拓展基金會
Dr. Stanley Ho Medical Development Foundation

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