

慶祝20周年

Celebrating 20th Anniversary

聯合主辦
Jointly organized by

協辦
Co-organized by

2025



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



澳門理工大學
Universidade Politécnica de Macau
Macao Polytechnic University

何鴻燊博士醫療拓展基金會 醫學研討會

Dr Stanley Ho Medical Development Foundation Symposium 2025

澳門高美士街澳門理工大學致遠樓禮堂
Auditorium, Chi Un Building, Macao Polytechnic University,
Rua de Luís Gonzaga Gomes, Macao

二零二五年一月十八日(星期六) 上午十時半至下午五時半
18 January 2025 (Saturday) 10:30am – 5:30pm

統籌主任 Co-ordinator:

許樹昌教授

Prof. David Hui Shu-Cheong

香港中文大學 何鴻燊呼吸系統學講座教授

Stanley Ho Professor of Respiratory Medicine

The Chinese University of Hong Kong

贊助單位 Sponsor:

中國工商銀行(澳門)股份有限公司

Industrial and Commercial Bank of China (Macau) Limited

此研討會已獲澳門醫療專業委員會認可成為持續專業發展 (CPD)
培訓活動。

活動認可編號: RE-CPD-505

適用的專業類別: 醫生 (MD)、護士 (N)。

This Symposium has been approved by the Conselho dos Profissionais de Saúde
as a CPD training event (RE-CPD-505).

查詢電話 Enquiry:

6868 6057

派意市場推廣服務有限公司

Prime Marketing and Promotional Services Co., Ltd.



目錄 CONTENTS



- 02 議程 Programme**
- 03 主席的話 Message from The Chairman**
- 05 歡迎辭 Welcome Message**
- 06 組織架構 Organizational Structure**
- 07 人工智能在醫學: 現今應用及未來發展 AI in Medicine: Current Application and Future Development**
趙偉仁教授 *Prof. Philip Chiu*
- 08 醫生在人工智能時代的未來角色 Future Role of Doctors in the Era of Artificial Intelligence**
沈祖堯教授 *Prof. Joseph JY Sung*
- 09 微創治療良性前列腺增生症的新進展 Update in Minimally Invasive Therapy for Benign Prostate Hyperplasia**
吳志輝教授 *Prof. Anthony CF Ng*
- 10 疫苗可預防成人呼吸道感染 Vaccine Preventable Respiratory Infections in Adults**
許樹昌教授 *Prof. David SC Hui*
- 11 急性腦中風的處理 Management of Acute Stroke**
梁慧康教授 *Prof. Thomas WH Leung*
- 12 心臟起搏的近期發展 Recent Advances in Cardiac Pacing**
陳日新醫生 *Dr. Joseph YS Chan*
- 13 耳鼻咽喉頭頸外科在本地區的近期發展 Recent Advances in Otorhinolaryngology, Head and Neck Surgery in Our Region**
陳英權教授 *Prof. Jason YK Chan*
- 14 人工智能與內視鏡 Artificial Intelligence and Endoscopy**
柳浩城教授 *Prof. Louis HS Lau*
- 15 2005 - 2024年歷屆醫學研討會之講者及演講題目 Topics and Speakers of the Medical Symposium from 2005 to 2024**
- 23 基金會2024年度活動概覽 Report of the Foundation's Activities of 2024**
- 32 基金會資助的研究中心及項目報告 Updates of projects/centers sponsored by the Foundation**
- 56 特別鳴謝 Special thanks**

10:00am 與會者登記 Registration

10:30am 開幕致辭 Opening Address

禰永明先生 何鴻燊博士醫療拓展基金會信託委員會暨行政委員會主席
Mr. Patrick WM Huen Chairman, Board of Trustees and Board of Directors, Dr. Stanley Ho Medical Development Foundation

Chairpersons: 郭昌宇院長 李錦滔教授
Dr. Cheong U Kuok Prof. Li Kam Tao Philip

10:45am 主題演講: 人工智能在醫學: 現今應用及未來發展 Keynote: AI in Medicine: Current Application and Future Development

趙偉仁教授 香港中文大學醫學院院長; 信興教育及慈善基金機械人外科教授
Prof. Philip Chiu Dean, Faculty of Medicine; Shun Hing Education and Charity Fund Professor of Robotic Surgery, CUHK

11:20am 主題演講: 醫生在人工智能時代的未來角色 Keynote: Future Role of Doctors in the Era of Artificial Intelligence

沈祖堯教授 新加坡南洋理工大學高級副校長 (健康與生命科學); 李光前醫學院院長
Prof. Joseph JY Sung Senior Vice President (Health and Life Sciences); Dean, Lee Kong Chian School of Medicine, Nanyang Technological University, Singapore

11:55am 微創治療良性前列腺增生症的新進展 Update in Minimally Invasive Therapy for Benign Prostate Hyperplasia

吳志輝教授 香港中文大學何子樑泌尿科教授
Prof. Anthony CF Ng TL Ho Professor of Urology, CUHK

12:30pm 午餐時間(只提供受邀嘉賓) Lunch Break(Invitation only)

Chairpersons: 霍文遜醫生 梁淑敏教授
Dr. Fok Manson Prof. Leong Sok Man

2:15pm 主題演講: 疫苗可預防成人呼吸道感染 Keynote: Vaccine Preventable Respiratory Infections in Adults

許樹昌教授 香港中文大學內科及藥物治療學系系主任; 何鴻燊呼吸系統學講座教授
Prof. David SC Hui Chairman, Department of Medicine & Therapeutics; Stanley Ho Professor of Respiratory Medicine, CUHK

2:50pm 急性腦中風的處理 Management of Acute Stroke

梁慧康教授 香港中文大學醫學院助理院長 (深造教育); 利國偉腦神經學教授
Prof. Thomas WH Leung Assistant Dean (Postgraduate Education), Faculty of Medicine; Lee Quo Wei Professor of Neurology, CUHK

3:25pm 心臟起搏的近期發展 Recent Advances in Cardiac Pacing

陳日新醫生 威爾斯親王醫院心臟科顧問醫生及主管 (臨床服務)
Dr. Joseph YS Chan Consultant & Head of Cardiology (Clinical Service), Prince of Wales Hospital

4:00pm 休息時間 Break

Chairpersons: 胡錦生教授 李鵬斌醫生
Prof. Woo Kam Sang Dr. Li Peng Bin

4:15pm 耳鼻咽喉頭頸外科在本地區的近期發展 Recent Advances in Otorhinolaryngology, Head and Neck Surgery in Our Region

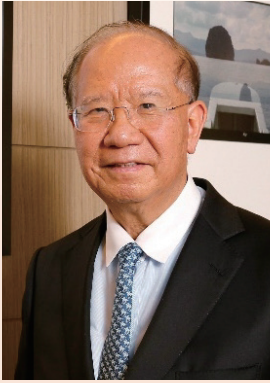
陳英權教授 香港中文大學耳鼻咽喉-頭頸外科學系系主任及教授
Prof. Jason YK Chan Chairman & Professor, Department of Otorhinolaryngology, Head and Neck Surgery, CUHK

4:50pm 人工智能與內視鏡 Artificial Intelligence and Endoscopy

柳浩城教授 香港中文大學內科及藥物治療學系助理教授 (臨床)
Prof. Louis HS Lau Assistant Professor (Clinical), Department of Medicine & Therapeutics, CUHK

5:25pm 閉幕致辭 Closing Remarks

Message from The Chairman



2025 marks the 20th anniversary of Dr. Stanley Ho Medical Development Foundation. Having been disrupted by COVID-19 epidemic from 2020 to early part of 2023, we were back to normal in 2024 including the resumption of our flagship event, the Annual Medical Symposium, and have organized a few other events and activities. The following is a summary of our activities in 2024:

1. 2024 Medical Symposium

The 2024 Medical Symposium was successfully held after suspending for three years from 2021 to 2023. This year we adopted the theme of "Combining the East and the West" by inviting professors in Traditional Chinese Medicine (TCM) from three Hong Kong universities to be our speakers. This symposium was also the first time being accredited as a Continuing Professional Development (CPD) training event for local medical professionals, which has attracted a record number of registration of over a thousand.

2. International Brian Bee Neuroscience Competition

Over 600 students from 20 secondary high schools took part in the 2024 International Brain Bee Macau Qualifying Round in March. The Champion Chen Chi Lok, who represented Macau to compete in the IBB World Championship in September, obtained the best-ever result by ranking 5th in the competition. Our heartfelt congratulations to Chen Chi Lok for bringing such glory to Macau!

3. Artificial Intelligence & Health Sciences Symposium 2024

The Foundation has adopted Artificial Intelligence and Health Sciences to be one of our main themes in 2020. In March, we organized a special symposium, inviting Prof. Joseph JY Sung, Prof. Helen Meng and Dr. Ko Ho to share with the audience the latest development on the application of AI in medical sciences. We endeavor to support the application of AI in Macau as a mean to elevate local healthcare standard.

4. BMI Symposium

The annual BMI Symposium, in which international experts were invited to speak on topics related to brain and mind, resumed offline in 2024 with speakers from Japan, USA and Hong Kong coming over to Macau to share their research with the audience. The theme for this year is "Navigating the First 100 days of Life" and more than 400 registrations were received.

5. Meeting with the Secretary for Social Affairs and Culture

A delegation of our Foundation paid a visit to the Office of the Secretary for Social Affairs and Culture to meet with Secretary Ms. Ao Ieong U, Ms. Ho Ioc San, Dr. Alvis Lo Iek Long and Dr. Wu Wenming. We reported to the Secretary the charity work that we have been doing for the past 20 years as well as our future initiatives aiming to promote the healthcare standard of Macau.

6. University of Macau – Dr. Stanley Ho Medical Development Foundation "Set Sail for New Horizons, Create the Future" Grant

The Foundation supported the University of Macau to kick-start the "Set Sail for New Horizons, Create the Future" Grant in 2021, which aims to encourage researchers at the University of Macau to develop their own scientific research and encourage external exchanges. The third "Distinguished Scholars Forum" was held in November, allowing funded scholars to share their research experience and progress of their work with their peers and the Foundation.

7. Dr. Stanley Ho Memorial Lecture

The Center for Personalized Medicine at the University of Oxford, UK, funded by the Foundation, has been holding the "Dr. Stanley Ho Memorial Lecture" every year starting from 2021. This year, in collaboration with Oxford Martin School, CPM has invited Caroline Wright, Professor of Genomic Medicine at the University of Exeter, as speaker. Same as the past Memorial Lecture, this talk by Professor Wright was also uploaded to CPM's YouTube with Chinese subtitles for a bigger and wider audience.

In addition to the events and activities listed above, the research centers and projects sponsored by the Foundation have also achieved significant results during the past 12 months. Please refer to their reports at the end of this booklet.

On behalf of the Foundation, I would like to once again thank you all for your selfless help which has enabled the Foundation to achieve its mission to improve the medical health and education standards of Macau. We look forward to your continuous support which will be crucial to our success in giving back to the society.

Wishing you and your family happiness, and progress in 2025,

Patrick W.M. Huen

Chairman, Board of Trustees and Board of Directors
Dr. Stanley Ho Medical Development Foundation

主席的話

2025年標誌著基金會踏入第20週年，走出持續了三年多的新冠疫情，我們最終能在2024年復常，包括恢復基金會一年一度的旗艦活動醫學研討會，亦舉行了不少其他講座及交流活動，以下是2024年基金會的活動摘要：

醫學研討會2024

停辦三年的醫學研討會於2024年1月復辦，今年的主題是“中西兼備”，特別邀請了香港三間大學的中醫藥教授為演講嘉賓。基金會首次將醫學研討會申辦為持續專業發展培訓活動，報名參加人數超過一千人，刷新了研討會的紀錄。

國際腦神經科學大賽

來自本澳20間中學超過600名高中學生參加了三月舉行的2024年度國際腦神經科學大賽澳門區選拔賽，冠軍陳子樂同學代表澳門區出戰國際賽，成績驕人勇獲全球第五名，是歷年來澳門代表取得的最高排名，我們衷心恭賀陳同學為澳增光。

“2024人工智能在健康科學領域的應用、教學及發展”講座

我們早於2020年將「人工智能與健康科學」定為基金會其中一個重要主題，3月份基金會舉辦了“2024人工智能在健康科學領域的應用、教學及發展”講座。講座邀得沈祖堯教授、蒙美玲教授及高浩醫生擔任主講嘉賓，分別向觀眾講解AI在醫學上的應用。基金會致力支持於本澳應用人工智能，作為提升本澳醫療水平之手段。

大腦認知研討會

雲集國際專家的大腦認知研討會在疫情後首次線下復辦，並邀請3位來自日本、美國和香港的專家學者，親自來澳分享他們以「生命最初的1000天、三歲如何定八十」為題的研究心得，講座吸引了超過400人報名參加。

拜訪社會文化司司長

基金會代表拜會了本澳社會文化司，與司長歐陽瑜、辦公室主任何鈺珊、衛生局局長羅奕龍及離島醫療綜合體北京協和醫院澳門醫學中心院長吳文銘會面，我們向歐陽瑜司長匯報了基金會在過去20年所做的工作，及未來以提升本澳醫療水平為目標之倡議。

澳門大學 - 何鴻燊博士醫療拓展基金會“揚帆追夢、創啟未來”資助計劃

於2021年啟動的“揚帆追夢、創啟未來”資助計劃旨在鼓勵澳門大學的科研人員開拓科學研究及對外交流，第三屆「傑出學者論壇」於十一月舉行，讓受資助學者分享他們的研究進展及成果。

何鴻燊博士紀念講座

由基金會資助的英國牛津大學個人化醫學中心自2021年起每年舉辦「何鴻燊博士紀念講座」，去年中心與牛津馬丁學院合辦，邀請到艾希特大學基因組醫學教授Caroline Wright教授作主講嘉賓。跟過往講座一樣，Wright教授的演講也已上載到YouTube，並配以中文字幕以方便本地觀眾。

除此以外，基金會資助的研究中心和項目在過去十二個月繼續取得不少進展，有關的工作簡報，請參閱本場刊的附錄。

我代表基金會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。期望今後繼續得到大家的支持與協助，讓我們可以更好地回饋澳門。

衷心祝願您及您的家人2025年幸福安康，新年進步！

禰永明

主席

何鴻燊博士醫療拓展基金會



歡迎辭

Welcome Message



On behalf of the Faculty of Medicine of The Chinese University of Hong Kong, I am honored to extend a heartfelt welcome to all of you to the 2025 Dr. Stanley Ho Medical Development Foundation Symposium.

This year commemorates the 20th anniversary of the Dr. Stanley Ho Medical Development Foundation. As the highlight of a series of activities sponsored by the Foundation, this annual health symposium stands as a testament to the unwavering dedication to excellence in medical education and practice. This year, through the collaborative endeavors of the Foundation, The Chinese University of Hong Kong and the Macao Polytechnic University, a meticulously crafted programme has been developed to explore a spectrum of critical medical topics, including recent advancements and future developments in the realm of artificial intelligence.

The Chinese University of Hong Kong is deeply privileged to collaborate with the Foundation in championing this laudable initiative. We steadfastly uphold the commitment to pioneering innovative research and formulating strategies to address pressing healthcare challenges. As co-organizers of this Symposium, our aim is to foster a conducive environment for the interchange of knowledge, innovation, and collaboration. By convening experts and practitioners from diverse backgrounds, we aspire to elevate discussions on medical advancements and best practices that can catalyze a positive transformation in healthcare delivery in both Macau and Hong Kong.

Throughout this Symposium, we look forward to engaging in enlightening dialogues, sharing cutting-edge research, and establishing connections that will shape the future of medicine.

I wish to express my profound gratitude to each of you for your tireless efforts and invaluable contributions towards the success of this event. Let us embrace this unique opportunity to connect with peers in the healthcare sector, inspiring, learning, and innovating for the betterment of healthcare for all.

Professor Philip W. Y. Chiu

Dean, Faculty of Medicine

Shun Hing Education and Charity Fund Professor of Robotic Surgery

The Chinese University of Hong Kong



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

(排名按英文姓氏字母排序)

信託委員會 BOARD OF TRUSTEES

主席 CHAIRMAN

禰永明先生 MR HUEN WING MING PATRICK

委員 MEMBER

陳家亮教授
PROF CHAN KA LEUNG FRANCIS

陳惟蒨醫生
DR CHAN WAI SIN

張麗瑪醫生
DR CHEONG LAI MA

戴樂群醫生
DR DAI LOK KWAN DAVID

霍文遜醫生
DR FOK MANSON

霍泰輝教授
PROF FOK TAI FAI

禰駿遠先生
MR HUEN CHUNG YUEN IAN

許樹昌教授
PROF HUI SHU CHEONG DAVID

許敬文教授
PROF HUI KING MAN MICHAEL

李沛基醫生
DR LI PUI KI LAWRENCE

李錦滔教授
PROF LI KAM TAO PHILIP

盧德華女士
MS. LOU I WA EVA

蒙美玲教授
PROF MENG MEI LING HELEN

沈祖堯教授
PROF SUNG JAO YIU JOSEPH

曾詠恆教授
PROF TSANG WING HANG JANICE

黃如楷先生
MR WONG EDDIE YUE KAI

黃家星教授
PROF WONG KA SING LAWRENCE

胡錦生教授
PROF WOO KAM SANG

胡志遠教授
PROF WU CHE YUEN JUSTIN

行政委員會 BOARD OF DIRECTORS

主席 CHAIRMAN

禰永明先生 MR HUEN WING MING PATRICK

委員 MEMBER

鄭彥銘教授
PROF CHENG GREGORY

傅銘欣先生
MR FU MING YAN

沈祖堯教授
PROF SUNG JAO YIU JOSEPH

胡錦生教授
PROF WOO KAM SANG

監事會 BOARD OF SUPERVISORS

主席 CHAIRMAN

崔世昌先生 MR CHUI SAI CHEONG

委員 MEMBER

陳鎮榮先生
MR CHAN CHUN WING TERENCE

黃顯輝大律師
MR VONG HIN FAI

首席科學顧問 CHIEF SCIENTIFIC ADVISOR

沈祖堯教授 PROF SUNG JAO YIU JOSEPH

顧問 ADVISORS

林堅先生
MR LAM KIN LIONEL

李俊耀博士
DR LEI CHON LO WILFRED

范禮保博士
DR FRANCISCO L. M. NABO

沙雁期大律師
DR HENRIQUE SALDANHA



主題演講: 人工智能在醫學: 現今應用及未來發展

Keynote: AI in Medicine: Current Application and Future Development

趙偉仁教授 Professor CHIU Wai Yan Philip

香港中文大學醫學院院長; 信興教育及慈善基金機械人外科教授

Dean, Faculty of Medicine; Shun Hing Education and Charity Fund Professor of Robotic Surgery; Shun Hing Education and Charity Fund Professor of Robotic Surgery, CUHK



主題演講: 醫生在人工智能時代的未來角色 Keynote: Future Role of Doctors in the Era of Artificial Intelligence

沈祖堯教授 Prof. SUNG Jao Yiu Joseph

新加坡南洋理工大學高級副校長 (健康與生命科學); 李光前醫學院院長
Senior Vice President (Health and Life Sciences); Dean, Lee Kong Chian School of Medicine, Nanyang Technological University, Singapore

While AI and Robotics are expanding their power and penetrates every aspect of healthcare service, this is a critical moment for healthcare providers to rethink their role in future. Human brain and Artificial Intelligence work quite differently and therefore each of them has different strengths and weaknesses. Their capability should compensate for each other, instead of competing and crowding out each other. As Amara's Law said, "We tend to overestimate the effect of a technology in the short run and underestimate the effect in the long run." Like every powerful technology, AI is a two-edged sword. Therefore, this is critical time for doctors and nurses to rethink their role in the care of patient... how to maintain the humanity of medicine and gain the trust of patients; how to co-pilot medical care and make human and machine co-evolve for the better outcome of patients. This lecture is exploring into some of these issues and meant to stimulate our thinking in this moment of truth.



微創治療良性前列腺增生症的新進展

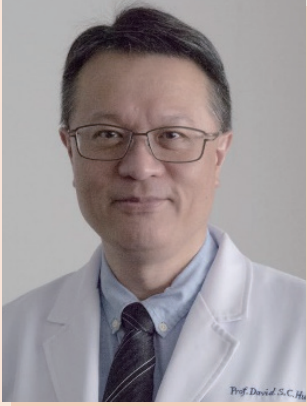
Update in Minimally Invasive Therapy for Benign Prostate Hyperplasia

吳志輝教授 Professor NG Chi Fai Anthony

香港中文大學何子樑泌尿科教授
TL Ho Professor of Urology, CUHK

With the increase in the ageing population, more and more male patients suffer from benign prostatic hyperplasia. Medical therapy can effectively relax the smooth muscle of the prostate and also decrease the size of the prostate. While this can improve patients' symptoms, the uroflow improvement is minimal. In the past, patients with suboptimal symptom control or developed complications they may need to proceed to transurethral resection (TURP). Unfortunately, TURP and its related procedure require general or spinal anaesthesia and also have some complications. Together with the increase in patients' age and comorbidities, there is a pressing need for newer, less invasive therapies to provide better treatment for our patients.

Currently, several new modalities are available, including transurethral water vapour therapy, urethral lifting procedures, temporary prostatic remodelling devices, etc. All these procedures can be performed under light sedation or local analgesics as a day-care procedure with low surgical risk. These procedures might be a good alternative for TURP or even replacing the role of medication in patient management.



主題演講: 疫苗可預防成人呼吸道感染 Keynote: Vaccine Preventable Respiratory Infections in Adults

許樹昌教授 Prof. HUI Shu Cheong David

香港中文大學內科及藥物治療學系系主任; 何鴻燊呼吸系統學講座教授
Chairman, Department of Medicine & Therapeutics; Stanley Ho Professor of Respiratory Medicine, CUHK

- Community acquired pneumonia: Prevention of invasive pneumococcal infection with vaccines is better than cure for the high risk populations. Systemic steroid may have a role for severe CAP esp in ICU setting. PCV15 has replaced PCV13 in the Center for Health Protection vaccination programme (PCV15 relatively more immunogenic than PCV13 or PCV20).
- COVID-19: Omicron subvariants show more immune evasion towards older generation vaccines but higher antibody levels in vaccinated individuals during breakthrough infection. Both BNT and CoronaVac vaccines significantly induced CD4 and CD8 T response to the original wild type and Omicron BA.1. A third dose of either BNT162b2 or CoronaVac boosted waning T cell responses. High risk groups should receive an updated booster 6 months after the last infection or vaccination.
- RSV: RSV is a significant cause of mortality and morbidity in older adults especially problematic in those with comorbidities. Direct effect of respiratory infection and indirect effects on cardiac failure, cardiovascular disease. Significant cause of loss of independence in vulnerable elderly. All the RSV vaccines have excellent efficacy at Y1 with protection up to Y3 with NO safety signal of concern.
- Seasonal influenza is another vaccine preventable disease. Elderly still derive protection despite immuno-senescence with lower antibody and T cell response vs those who are younger and immunocompetent.



急性腦中風的處理 Management of Acute Stroke

梁慧康教授 Professor LEUNG Wai Hong Thomas

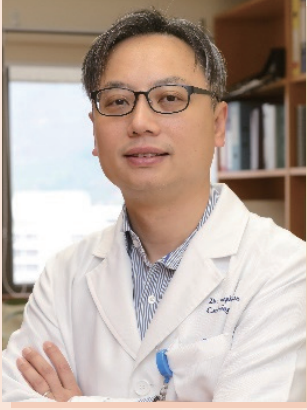
香港中文大學醫學院助理院長 (深造教育); 利國偉腦神經學教授
Assistant Dean (Postgraduate Education), Faculty of Medicine; Lee Quo Wei Professor of Neurology, CUHK

Stroke is a leading cause of death and long-term physical disability worldwide, requiring prompt and effective management to improve patients' outcomes. This lecture will discuss key aspects of acute stroke care and the importance of rapid diagnosis and treatment, including the role of a new acute stroke evaluation concept – "Emergency Stroke Unit", and the latest advances in endovascular thrombectomy and intravenous thrombolysis for maximizing reperfusion and recovery in acute ischemic stroke.

Notably, up to 80% of strokes are preventable through dietary and lifestyle modifications. The speaker will also underscore the critical role of prevention, highlighting the importance of addressing risk factors such as hypertension, diabetes, and obesity that can substantially reduce the global stroke burden.

中風是導致全球人口死亡和永久傷殘的主要原因之一。對急性中風患者而言，及時且有效的治療對改善預後尤為重要。是次演講將探討急性中風治療的關鍵要素，以及快速診斷和治療的重要性，當中包括介紹嶄新的一站式緊急中風診治概念 – 「一站式緊急中風診治」(Emergency Stroke Unit) 模式。此外，演講亦會涵蓋動脈內取栓術和靜脈溶栓治療在急性缺血性中風治療方面的最新進展。

高達 80% 的中風可以透過健康生活方式來預防。是次演講亦會強調預防中風的重要性，特別是積極管理高血壓、糖尿病和肥胖等可逆轉的風險因素，均能顯著減少全球中風的負擔。



心臟起搏的近期發展 Recent Advances in Cardiac Pacing

陳日新醫生 Dr. CHAN Yat Sun Joseph

威爾斯親王醫院心臟科顧問醫生及主管 (臨床服務)

Consultant & Head of Cardiology (Clinical Service), Prince of Wales Hospital

In the past few decades, pacing therapy has undergone revolutionary changes including the miniaturizing of the pacemaker generator and transvenous system to the size of a vitamin pill so the entire system can be housed inside cardiac chambers. Another breakthrough is extending pacing therapy from correction of bradyarrhythmia to resynchronization of mechanical contraction in a subset of heart failure patients with intraventricular conduction delay and proven to improve not only morbidity but mortality through biventricular pacing and with the latest development conduction system pacing.



耳鼻喉頭頸外科在本地區的近期發展

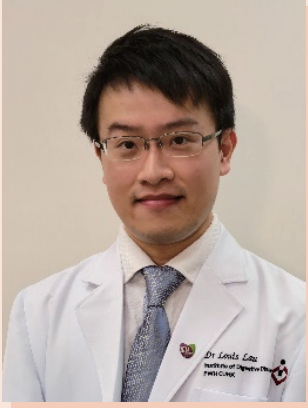
Recent Advances in Otorhinolaryngology, Head and Neck Surgery in Our Region

陳英權教授 Professor CHAN Ying Kuen Jason

香港中文大學耳鼻喉-頭頸外科學系系主任及教授

Chairman & Professor, Department of Otorhinolaryngology, Head and Neck Surgery, CUHK

Over the recent 5 years there have been significant advances in the management of patients with pathologies within our specialty of Otorhinolaryngology, Head and Neck Surgery. In rhinology there have been significant advances in the management of chronic rhinosinusitis with polyps with the management of biologics. In sleep disorders the rise of the hypoglossal stimulator has been prominent in the management of Obstructive sleep apnea. Finally, in head and neck surgery the advances in robotic surgery now leading in Macau and also the developments of immunotherapy combined with surgery will significantly improve our patient outcomes in the future. Through this lecture we will explore and understand these recent advances in our field.



人工智能與內視鏡 Artificial Intelligence and Endoscopy

柳浩城教授 Professor LAU Ho Shing Louis

香港中文大學內科及藥物治療學系助理教授 (臨床)

Assistant Professor (Clinical), Department of Medicine & Therapeutics, CUHK

隨著科技的不斷進步，內視鏡微創手術逐漸成為一種廣泛應用於治療消化道疾病的方法。通過消化道內的細小切口，一些早期癌症可以被切除及根治。相比傳統手術，患者恢復時間更短，併發症風險更低，為患者提供了更為舒適和安全的治療方式。

近年來，人工智能的發展迅速，徹底改變了整個醫療領域。人工智能技術已被廣泛應用於消化道內視鏡中，提升檢查的精確度和效率，減低人為錯誤的機會。透過深度學習演算法，人工智能輔助內視鏡可以更準確地識別病變，並提示醫生進行詳細檢測。最新的醫學研究結果發現，透過使用電腦輔助息肉檢測系統(CADe)，可以大大降低遺漏大腸瘻肉或腫瘤的機會。

未來，隨著技術的進一步完善和不斷創新，相信內視鏡微創手術及人工智能的應用將會扮演越來越重要的角色，為廣大市民帶來更精準、更安全的治療效果。



2005 - 2024年歷屆醫學研討會之講者及演講題目

Topics and Speakers of the Medical Symposium from 2005 to 2024

Listed by the number of appearance of the specialty that the topics belongs
依講題所屬之專科出現次數排列

Videos and slides of past talks can be accessed at <https://drhomed.org.mo/bddaxmacau>

歷屆醫學研討會之視頻及部份講義已上載到基金會網站之醫學研討會專頁: <https://drhomed.org.mo/bddaxmacau>

肝膽腸胃科 Gastroenterology and Hepatology

- 2006** Prof. Chan Francis Ka Leung 陳家亮
The Use of NSAIDs in a COX-2 Restricted Environment
在規範使用COX-2藥物環境下如何應用 NSAIDs
- 2007** Prof. Chan Henry Lik Yuen 陳力元
Non-alcoholic Fatty Liver Disease in Chinese
華人非酒精性脂肪肝的情況
- 2008** Prof. Sung Joseph Jao Yiu 沈祖堯
Peptic Ulcer Disease Associated with Aspirin
阿士匹靈所引起的潰瘍疾病問題
- 2013** Prof. Chan Lik Yuen 陳力元
Debrief of Asia-Pacific Guideline for Hepatitis B
亞太乙肝指南解讀
- 2015** Prof. Ng Siew Chien 黃秀娟
Colorectal Cancer Screening
大直腸癌的篩查
Prof. Ren Jian Lin 任建林
Microbiological Profile and Human Health
微生物態與人類健康
- 2016** Prof. Wong Vincent Wai Sun 黃煒燦
Non-alcoholic Fatty Liver Disease
非酒精性脂肪肝的診治
- 2017** Prof. Wong Grace Lai Hung 黃麗虹
Recent Advances in Antiviral Therapy for Viral Hepatitis
帶毒性肝炎治療最新進展
- 2018** Prof. Wong Grace Lai Hung 黃麗虹
Management of HBV Infection in Immunosuppressed Patients
免疫力損害病人乙肝病毒感染的處理
Prof. Wong Sunny Hei 黃曦
Colorectal Cancer Screening - Who, Why and How?
結腸癌的篩查
Prof. Wu Justin Che Yuen 胡志遠
Functional Gastrointestinal Disorders - Updates in Diagnosis and Management
功能性腸胃病診治的進展

- 2020** Prof. Sung Joseph Jao Yiu 沈祖堯
Artificial Intelligence: Are We Prepared for the Future of Medicine
人工智能和醫療的未來發展
- 2024** Prof. Chan Francis Ka Leung 陳家亮
Clinical Applications of Gut Micro-biome
腸道微生物態的臨床應用
Prof. Wong Grace Lai Hung 黃麗虹
Artificial Intelligence for Hepatocellular Carcinoma Risk Prediction by Leveraging in Hospital Authority Data in Hong Kong
從香港醫管局人工智能大數據尋找肝細胞癌病的預景

老人科 Geriatrics

- 2009** Prof. Kwok Timothy Chi Yui 郭志銳
An Integrative Approach in Management of Geriatric Diseases
治療老人科疾病的綜合處理
- 2010** Dr. Dai David Lok Kwan 戴樂群
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
- 2011** Dr. Liu Kin Wah 廖建華
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
- 2013** Prof. Kwok Timothy Chi Yui 郭志銳
Advances in Diagnosis and Treatment of Alzheimer Disease (Joint Lecture with MADA)
阿爾茨海默氏症的治療與展望 (與澳門失智症協會協辦講座)
- 2014** Prof. Chen Jian 陳健
Uses of Vitamin D Supplementation for the Elderly
老年人補充維生素D的應用
- 2015** Prof. Lee Jenny Shun Wah 李舜華
Prescribing for the Different Stages of Dementia
不同階段失智症的處方

- 2016 Prof. Kwok Timothy Chi Yui 郭志銳
Prevention of Dementia
預防腦退化
- 2017 Dr. Dai David Lok Kwan 戴樂群
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
- 2018 Prof. Kwok Timothy Chi Yui 郭志銳
Preventive Strategies against Dementia
失智症的預防策略
- 2019 Dr. Dai David Lok Kwan 戴樂群
Building a Dementia Friendly Community: the Hong Kong-Macao Connection
在港澳建立與包容腦退化症的友善社區
- 2024 Prof. Kwok Timothy Chi Yui 郭志銳
New Diagnostics and Therapy for Alzheimer's Disease
認知障礙的最新診治進展

婦產科 Obstetrics and Gynecology

- 2006 Prof. Lau Tze Kin 劉子建
Recent Advances in Prenatal Diagnosis and Therapy
產前診斷和治療的最新發展
- 2008 Prof. Lo Keith Wing Kit 盧永傑
The End of Cervical Cancer - Not a Dream Anymore
子宮頸癌的終結 - 不再是夢想
- 2010 Prof. Chung Tony Kwok Hung 鍾國衡
Advances in Management of Common Gynaecological Disease
一般婦科疾病處理的新進展
- 2011 Prof. Tzeng Chii Ruey 曾啟瑞
Translational Research in Reproductive Medicine
生殖醫學的轉譯研究
- 2013 Prof. Lao Tzu Hsi, Terence 勞子僖
Overview on Management of Obstetric Emergencies
產科緊急情況處理的概觀
- Prof. Lee Chyi-Long 李奇龍
Aspects of Minimally Invasive Surgeries: A Global Trend
婦科微創手術治療之新趨勢
- 2014 Prof. Leung Tak Yeung 梁德楊
Antenatal Screening Model in the 21st Century
21世紀的產前檢查模式

- 2016 Prof. Zhong Hong Xiu 鍾紅秀
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
- 2019 Dr. Chen Fu Min 陳福民
Advances in Management of Emergency Disorders in Obstetrics and Gynecology
婦產科急症的管理進展
- 2020 Dr. Cheung Rachel Yau Kar 張優嘉
Treatment of Pelvic Organ Prolapse
盆腔器官垂脫的治療

中醫學 Chinese Medicine

- 2012 Prof. Wang Yan Hui 王彥暉
Traditional Chinese Medicine in Treatment and Prevention of Cancers
癌症的中醫藥防治
- 2013 Prof. Wang Yan Hui 王彥暉
TCM Treatment in Relieving Tension and Curing Insomnia
失眠的中醫藥調治
- 2014 Prof. Wang Yan Hui 王彥暉
Treatment Strategies and Efficacy of Traditional Chinese Medicines in Depression Disorders
傳統中藥對治療抑鬱的策略和療效
- 2015 Prof. Wang Yan Hui 王彥暉
Diagnosis of Treatment of Subclinical Health in TCM
亞健康的中醫診治
- 2016 Prof. Wang Yan Hui 王彥暉
Chinese Medicine Treatment of Heel Pain
中醫藥治療足跟痛
- 2017 Prof. Wang Yan Hui 王彥暉
The "Seed and Soil" Theory in the Prevention and Treatment of Cancer
種子土壤說與癌症的防治
- 2024 Prof. Li Min 李敏
Preventing and Treatment of Alzheimer's Disease with Traditional Chinese Medicine
老年痴呆症的中醫藥防治
- Prof. Lin Zhi Xiu 林志秀
Traditional Chinese Medicine in Treatment of Eczema
濕疹的中醫藥治理方法
- Prof. Shen Jian Gang 沈劍剛
How does Traditional Chinese Medicine Understand COVID-19 and its Significance in Rehabilitation Strategies
中醫藥如何認識長新冠及其康復策略的意義



腦神經科 Neurology

- 2007 Prof. Wong Lawrence Ka Sing 黃家星
Advances in Management of Stroke Patients
治療中風的進展
- 2008 Prof. Leung Thomas Wai Hong 梁慧康
Neuroendovascular Therapy for Ischemic Stroke
缺血性中風的微創介入治療
- 2011 Prof. Wong Lawrence Ka Sing 黃家星
Strategies for Primary and Secondary Prevention of Stroke
一級和次級預防腦卒中的最新策略
- 2015 Dr. Chan Anne Yin Yan 陳然欣
Advanced in Management of Parkinson's Disease, a Holistic Approach
綜合診治帕金森症的進展
- 2016 Prof. Ip Vincent Hing Lung 葉慶龍
Management of Cranio-cervical Arterial Stenosis
頭頸動脈血管狹窄的處理
- 2019 Prof. Leung Thomas Wai Hong 梁慧康
Stroke & Interventional Neurology
中風和介入神經病學
- 2020 Prof. Mok Vincent Chung Tong 莫仲棠
Diagnosing Early Alzheimer's Disease Using AI
人工智能與早期阿茲海默症的診斷
- 2024 Prof. Fan Florence Sin Ying 樊倩英
Long COVID
長新冠症候病
- Prof. Ip Bonaventure Yiu Ming 葉耀明
Interventional Treatment for Stroke
腦卒中的介入治療

矯形及創傷外科 Orthopaedics and Traumatology

- 2006 Prof. Leung Kwok Sui 梁國穗
Fluoro-navigation in Orthopaedic Trauma Surgery
導航手術在創傷骨科的應用
- 2007 Prof. Wong Kwok Chuen 黃國全
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
- 2009 Prof. Chan Kai Ming 陳啓明
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

- 2010 Prof. Leung Kwok Sui 梁國穗
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
- 2012 Prof. Hung Leung Kim 熊良儉
Musculoskeletal Problems among Geriatric Patients
高齡病人的骨關節疾患
- 2014 Prof. Cheng Jack Chun Yiu 鄭振耀
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
- 2016 Prof. Yung Patrick Shu Hang 容樹恒
Application of Cutting-Edge Technologies in Managing Orthopaedics Problems
現代尖端科技骨科治療的應用
- 2017 Dr. Ng Bobby Kin Wah 吳健華
Recent Advances in Paediatric Orthopaedics Surgery
小兒骨科的最新發展

呼吸系統科 Respiratory Medicine

- 2005 Prof. Hui David Shu Cheong 許樹昌
Recent Advances in Chronic Obstructive Pulmonary Disease and Obstructive Sleep Apnoea Syndrome
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 Prof. Hui David Shu Cheong 許樹昌
Obstructive Sleep Apnoea 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 Prof. Hui David Shu Cheong 許樹昌
An Update on Treatment of Obstructive Sleep Apnoea
治療睡眠呼吸氣道阻塞綜合症的最新進展
- 2014 Prof. Hui David Shu Cheong 許樹昌
H7N9 & the Middle East Respiratory Syndrome
H7N9及中東急性呼吸病症候
- 2016 Prof. Ngai Jenny 倪珍莉
Interventional Pulmonology
介入性肺部手術
- 2020 Prof. Ng Susanna So Shan 吳素珊
Sleep Apnoea and New Treatment for Respiratory Failure
睡眠呼吸阻塞綜合症及呼吸道衰弱最新醫療策略

2024 Prof. Hui David Shu Cheong 許樹昌
Pandemic Risks Beyond the COVID Era
新冠病時代後的全球流行感染的風險

Dr. Ng Joyce Ka Ching 吳家晴
Volunteer Medical Service in Developing Countries
在發展中國家的醫療志願工作經驗

心臟科 Cardiology

2005 Prof. Woo Kam Sang 胡錦生
Major Breakthrough in Diagnosis and Treatment of Cardiovascular Disease
在診斷及治療心血管疾病上的重大突破

2007 Prof. Woo Kam Sang 胡錦生
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

Update on Hypertension Treatment: Sense and Non-sense
高血壓治療的最近進展和謬誤

2014 Prof. Yan Ping Yen 甄秉言
Advances in Endovascular Intervention for Critical Limb Ischemia
血管內介入治療嚴重下肢缺血新發展

2016 Prof. Leu Hsin Bang 呂信邦
The Management and Prevention of Ischemic heart diseases
缺氧性心臟病之治療與預防

Prof. Wu Eugene Yeung Ching 鄔揚正
Interventional Cardiology
介入性心臟手術

2017 Prof. Lee Alex Pui Wai 李沛威
Recent Advances in Cardiac Imaging
心臟成像技術的最新發展

臨床腫瘤科 Clinical Oncology

2007 Prof. Mok Tony Shu Kam 莫樹錦
A Molecular Era in Oncology
份子醫藥年代的腫瘤病學

2011 Dr. Leung Sing Fai 梁承暉
Common Questions about Present-day Cancer Treatment
現今癌症治療之常見疑問

2015 Prof. Chan Stephen Lam 陳林
Personalized Medicine - Oncology as a Model
以腫瘤學科模式看個人化醫學

Prof. Yeo Winnie 楊明明
Targeted Therapy in Breast Cancer- Anti-HER2
HER-2 抗原及乳癌標靶治療

2016 Prof. Lei Kenny Ieng Kit 李英傑
Advances in the Management of blood cancer: New Drugs, New Approach
血癌治療之最新進展

2017 Prof. Tsang Janice Wing Hang 曾詠恆
Making Cancer History
讓癌症成為歷史

2020 Dr. Lam Kwok Chi 林國智
Precision Oncology - Lung Cancer as an Example
以肺癌為例的精密腫瘤學

兒科 Paediatrics

2006 Prof. Fok Tai Fai 霍泰輝
Preterm Infants - Controversies in Management
早產兒 - 在管理上之爭論

2007 Prof. Li Albert 李民瞻
Induced Sputum - Its Application in Childhood Asthma
誘導痰分析在兒童哮喘的臨床應用

2010 Prof. Ng Pak Cheung 伍百祥
Treatment of Systemic Hypotension in Newborns
新生兒低血壓的治療

2011 Prof. Wong Gary Wing Kin 黃永堅
Advances in the Management of Paediatric Asthma
治療兒童哮喘的新方向

2012 Prof. Hon Kam Lum, Ellis 韓錦倫
Childhood Eczema: Myths and Fallacies
兒童濕疹之神話與謬誤

2015 Prof. Fang Shih Bin 方旭彬
Evidence-based Clinical Application of Probiotics
益生菌之實證醫學臨床應用

Prof. Leung Ting Fan 梁廷勳
What's New on Childhood Food Allergy?
兒童食物敏感症的新認知

精神科 Psychiatry

2009 Prof. Tsoh Joshua Mei Yuek 左美約
Early Recognition and Management of Dementia
痴呆症的及早確診和治療



- 2010** Prof. Wing Yun Kwok 榮潤國
Update on Management of Sleep Disorders
治療睡眠問題的新發展
- 2012** Prof. Su Tung Ping 蘇東平
Depression in Taiwan: From Past, Present to Future
台灣憂鬱症之發展: 過去、現在、未來
- Prof. Wing Yun Kwok 榮潤國
Sleep, Obesity and Diabetes Mellitus
睡眠、肥胖與糖尿病的關係
- 2013** Dr. Ding Li Jun 丁麗君
Approach to Combat Depressive Illness
戰勝抑鬱的方法
- 2014** Prof. Lam Linda Chiu Wa 林翠華
Pharmacological and Non-pharmacological Treatment for Dementia
認知障礙症(痴呆症)治療方案
- Prof. Liao Shih Cheng 廖士程
Update on Treatment of Psychoneurotic and Manic-depressive Disorders: A Focus on Major Depression
精神宮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

神經外科 Neurosurgery

- 2009** Prof. Poon Wai Sang 潘偉生
Updates on Neurosurgery
腦外科手術的進展
- 2011** Prof. Chiu Wen Ta 邱文達
Translational Medicine of Traumatic Brain Injury in Taiwan
台灣腦創傷醫學的進展
- 2014** Prof. Wong George Kwok Chu 黃國柱
Recent Advance in the Management of Intracranial Aneurysms
顱內動脈瘤的治療最新進展
- 2018** Prof. Tu Yong Kwang 杜永光
Recent Advances in Cerebrovascular Surgery
最近腦血管手術之發展
- 2020** Dr. Wong Hoi Tung 黃海東
Advances in Minimally Invasive Brain and Spine Surgery
微創腦部和脊骨手術的進展

眼科 Ophthalmology & Visual Science

- 2008** Dr. Lam Philip Tsze Ho 林子顯
Cataract and Refractive Lens Surgery
白內障及晶體矯視手術
- 2013** Prof. Liu Ta Li, David 劉大立
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
- 2016** Prof. Chao Hsiao Ming 趙效明
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
- Prof. Chong Kelvin Kam Lung 莊金隆
Recent Advances in Ophthalmology
眼科新進展
- 2017** Prof. Tham Clement Chee Yung 譚智勇
Recent Advances in Ophthalmology
眼科的最新發展

公共衛生 Public Health

- 2010** Prof. Ho Chan Suzanne Sut Ying 何陳雪鸚
Strategies for Active Longevity
活力晚年全攻略
- 2012** Prof. Wang Wei 王崑
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** Prof. Wang Wei 王崑
Emerging Issues in Public Health: Perspective on China's Healthcare System
中國公共衛生面臨的挑戰
- 2015** Prof. Yu Ignatius Tak Sun 余德新
Air Pollution and Health
空氣污染與健康
- 2024** Prof. Wong Samuel Yeung Shan 黃仰山
Mindfulness and Health
靜觀與健康的關係

外科 Surgery

- 2012 Prof. Peng Fang-Ku 彭芳谷
Reminiscences of a Veteran Surgeon-
Retired but Never Tired
一位老外科醫師之回顧
Prof. Qi Zhong Quan 齊忠權
Prevention of Kidney Disease and Kidney
Transplantation
腎臟疾病的預防及腎臟移植
- 2016 Prof. Teoh Anthony Yuen Bun 張源斌
Recent Advances in Endoscopic Procedures
內窺鏡手術的最新進展
- 2017 Prof. Chen Chao Long 陳肇隆
Saving Lives, Spreading Hope, Taiwan and
Beyond
深耕台灣, 立足國際, 醫援海外
- 2019 Prof. Chen Wen Jer 陳文哲
Treatment of Degenerative Spinal Deformity
退行性脊柱畸形的治療

心胸肺外科 Cardiothoracic Surgery

- 2006 Prof. Yim Anthony Ping Chuen 嚴秉泉
Bronchoscopic Lung Volume Reduction
肺氣腫的最新外科治療
- 2015 Dr. Wan Innes Yuk Pui 溫郁培
Update on Thoracic Surgery
胸肺科手術的最新進展
- 2018 Prof. Chen Jin Shing 陳晉興
New Advances in Surgery for Early Stage
Lung Cancer
早期肺癌手術新進展
- 2019 Prof. Sze Calvin Sze Hang 吳士衡
Role of Hybrid Operating Room in Modern
Thoracic Surgery
混合手術室在現代胸外科的角色

感染及傳染病科 Infectious Diseases

- 2012 Prof. Lee Lai Shun, Nelson 李禮舜
Severe Influenza Infections
嚴重感冒病毒感染
- 2015 Prof. Lee Shui Shan 李瑞山
New Perspectives of HIV Treatment
治療愛滋病毒感染的新觀點
Prof. Yew Wing Wai 姚榮衛
New Strategies in the Treatment of Tubercu-
losis: Promise and Limitation
治療結核病新策略的展望與局限

- 2019 Prof. Lui Grace Chung Yan 雷頌恩
TB and HIV Infection
結核病和愛滋病毒感染

耳鼻咽喉頭頸外科

Otorhinolaryngology, Head & Neck Surgery

- 2007 Prof. Van Hasselt Andrew 尹懷信
Cochlear Implantation and Nasopharyngeal
Carcinoma in Southern China
耳蝸植入和華南鼻咽癌
- 2014 Prof. Ng Siu Kwan 吳少君
Diagnostic and Therapeutic Endoscopy of
Salivary Glands
內窺鏡診斷及治療涎腺疾病的應用
- 2016 Prof. Tong Michael Chi Fai 唐志輝
Recent Advances in ENT
耳鼻喉的最新進展
- 2020 Prof. Tong Michael Chi Fai 唐志輝
Advances in Hearing Research: From Brain
Function to Endoscopic Ear Surgery
從腦功能到微創耳手術的聽覺科研
進展

泌尿外科 Urology

- 2010 Prof. Yip Sidney Kam Hung 葉錦洪
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
- 2014 Prof. Ng Anthony Chi Fai 吳志輝
Recent Advances in the Management of
Benign Prostatic Hyperplasia
前列腺增生治療的新發展
- 2018 Prof. Wu Zhun 吳准
Treatment Strategy of Renal Hilar Tumors
中央型腎門部腎癌的治療策略
- 2019 Prof. Teoh Jeremy Yuen Chun 張源津
Update on the Management of Benign
Prostatic Hyperplasia
良性前列腺增生症治療的最新進展

內分泌及糖尿科 Endocrinology and Diabetes

- 2009 Prof. Kong Alice Pik Shan 江碧珊
New Advances in Diabetes Management
治療糖尿病的最新進展



2010 Dr. Chow Francis Chun Chung 周振中
Strategies in Combating Obesity in the
Twenty-first Century
肥胖症 - 21世紀新挑戰

2014 Prof. Ma Ronald Ching Wan 馬青雲
Advances in the Management of Type 2 Diabetes
2型糖尿病管理的新發展

家庭醫學 Family Medicine

2006 Prof. Lee Albert 李大拔
Aspects on Current Practice of Family Medicine
家庭醫學的目前趨勢

2007 Prof. Lee Albert 李大拔
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

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

肝膽胰外科

Hepato-Biliary and Pancreatic Surgery

2011 Dr. Lee Kit Fai 李傑輝
Advances in Liver Surgery
肝臟手術新進展

2012 Prof. Yin Zhen Yu 尹震宇
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

2015 Prof. Lai Paul Bo San 賴寶山
Quality improvement in Surgery
提升外科手術質素

個人化醫學 Personalized Medicine

2018 Prof. Donnelly Peter Donnelly
The Genetics of Personalized Medicine:
Challenge and Opportunity
個人化基因醫學的挑戰與機遇

Prof. Leedham Simon Leedham
Peaks and Troughs in Personalized Cancer
Therapy
個人化的抗癌治療

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

上消化道與代謝及減重外科

Upper Gastrointestinal & Metabolic Surgery

2014 Prof. Chiu Philip Wai Yan 趙偉仁
Advances in the Management of Gastro-
esophageal Reflux Disease
胃食道反流治療的新進展

2017 Dr. Wong Simon Kin Hung 黃健鴻
Update on Metabolic & Bariatric Surgery
代謝與減重手術的最新發展

2019 Dr. Chan Shannon Melissa 陳詩瓏
From "Doctors with Borders" to "Doctors
without Borders"
無國界醫生服務的經歷

大數據分析 Big Data Analytics

2020 Prof. Meng Helen Mei Ling 蒙美玲
Artificial Intelligence in Extraction and
Identification of Spoken Language Biomark-
ers for Screening and Monitoring of Neuro-
cognitive Disorders
以人工智能提取和鑑定口語生物標
誌物供神經認知障礙篩查和監察的
研究

2024 Prof. Yip Terry Cheuk Fung 葉卓風
Big Data to Optimize Management of
Patients with Liver Diseases
大數據優化處理肝臟疾病的案例

病理科 Pathology

2011 Prof. Lo Dennis Yuk Ming 盧煜明
Non-invasive Prenatal Diagnosis: From
Dream to Reality
非侵入性產前診斷：從夢想到現實

2019 Dr. Lam Jacky Wei Kei 林偉棋
Nasopharyngeal Cancer Screening using
Plasma EBV DNA
EBV DNA 血漿進行鼻咽癌篩查

整形外科 Plastic Surgery

2015 Prof. Wei Fu Chan 魏福全
Working Through Operative Microscope, the
Worlds Unite Small and Big
手術顯微鏡下的小世界與大世界

2020 Dr. Mak Josephine Yan Wah 麥忻華
Voluntary Surgery Mission for Complex Facial
Deformities in Ethiopia
於埃塞俄比亞進行矯形外科手術的
經歷

風濕病科 Rheumatology

2013 Prof. Tam Lai Shan 譚麗珊
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

2017 Prof. Wong Priscilla Ching Han 王靜嫻
Update on Gout
痛風治療新發展

空氣污染 Air Pollution

2020 Prof. Yim Steve Hung Lam 嚴鴻霖
Air, Mosquito and Health: A Study on the Greater Bay Area
大灣區未來空氣對人類和環境健康的啟示

結直腸外科 Colorectal Surgery

2014 Prof. Ng Simon Siu Man 吳兆文
An Update on Robotic Colorectal Surgery
機械人結長腸手術的最新進展

皮膚科 Dermatology

2014 Prof. Wang Kuo Hsien 王國憲
Recent Advances in the Management of Psoriasis: A Major Chronic Dermatological Disease
乾癬(銀屑病)的最新治療進展

血液科 Haematology

2006 Prof. Cheng Gregory 鄭彥銘
Mini-management of Common Hematological Disease
常見血液科疾病的「微型基本」處理

腎病科 Nephrology

2014 Prof. Szeto Cheuk Chun 司徒卓俊
Update on Screening and Treatment of Chronic Renal Failure
慢性腎功能衰竭的普查和治療

放射科 Radiology

2009 Prof. Yu Simon Chun Ho 余俊豪
Advances in Interventional Radiological Procedures
介入性放射手術的最新進展

血管外科 Vascular Surgery

2008 Prof. Lau James Yun Wong 劉潤皇
Endovascular Stent Grafting for Aortic Conditions
動脈病變及血管內支架移植術

基金會2024年度活動概覽

Report of the Foundation's Activities for 2024

2024年醫學研討會

2024 MEDICAL SYMPOSIUM

基金會與香港中文大學合辦的「2024醫學研討會」於2024年1月27及28日一連兩天假澳門置地廣場基金會總部成功舉行。

The 2024 Medical Symposium, co-organized by the Foundation and the Chinese University of Hong Kong, was held on 27 and 28 January 2024 at the headquarters of the Foundation.



▲ 研討會首日開幕式講者與嘉賓合照 / Opening ceremony of the Symposium



▲ 主演講廳座無虛席 / The main auditorium was fully occupied

Traditional Chinese Medicine from three Hong Kong universities to share their clinical experience so as to let audience compare the similarities of as well as the differences between Western and Chinese Medicine when dealing with the same disease. This was also the first time that the Medical Symposium was accredited as a Continuing Professional Development (CPD) training event. There was over a thousand registrations in 2024, which was a record high.

研討會首次“中西兼備”，除邀請香港中文大學的專家介紹西醫醫學的最新發展及技術，更特設中醫藥的介紹，透過澳門大學邀請香港三間大學的中醫藥專家分享經驗，讓參加者比較中西醫學在應對同一疾病時，有何相同或不同之處。今年基金會首次將醫學研討會申辦為持續專業發展培訓活動，報名參加人數超過一千人，刷新了研討會的紀錄。

The Medical Symposium marked another breakthrough this year with the thesis of “Combining the East and the West”. In addition to having experts from CUHK sharing the latest advances in western medicine, we also invited professors in



▲ 陳家亮教授(左)及許樹昌教授(右)發表演講
Prof. Francis Chan and Prof. David Hui giving their presentation

拜會社會文化司

MEETING WITH MS. AO IEONG U, THE SECRETARY FOR SOCIAL AFFAIRS AND CULTURE



▲ 社會文化司司長歐陽瑜會見基金會代表團
Ms Ao Ieong U, Secretary for Social Affairs and Culture meeting with the delegation of our Foundation

4月17日，本澳社會文化司司長歐陽瑜與辦公室主任何鈺珊、衛生局局長羅奕龍、離島醫療綜合體北京協和醫院澳門醫學中心院長吳文銘，一同會見由基金會禰永明主席率領的團隊，雙方就基金會推進的項目、關於促進本澳醫療系統發展等多個議題，作了深入交流及探討。

for Social Affairs and Culture (SSAC) to meet with Secretary Ao Ieong U, Ms. Ho Ioc San (Chief of the Office of SSAC), Dr. Alvis Lo Iek Long (Director of SSM) and Dr. Wu Wenming (Director of Macao Union Hospital). Both parties have an in-depth exchange and discussion on the projects of the Foundation, and other topics including the promoting of the development of local medical system.

國際腦神經科學大賽 INTERNATIONAL BRAIN BEE



▲ 2024年決賽後大合照/
Group photo after the competition in 2024

於3月10日舉行的2024年國際腦神經科學大賽澳門區選拔賽共有二十所本地中學近六百名學生參加，其中有十八名同學成功晉身決賽競逐澳門區冠軍。



The International Brain Bee Macau Qualifying Round has attracted over 600 students from 20 secondary schools. 18 of them entered the final round, competing for the championship on March 10.



陳子樂同學在九月份代表澳門出戰世界錦標賽，最終獲得全球第五的佳績，刷新澳門歷年最高成績。由於躋身全球五強，陳子樂更獲得參加IBB NextGen活動資格，將於明年七月遠赴加拿大多倫多，出席二〇二五阿茲海默症協會國際會議(AAIC)。

Chen Chi Lok represented Macau to compete in the International Brain Bee World Championship in September and ranked fifth, which is the best-ever result for Macau representatives. The top five winners will participate in the 2025 IBB NextGen event at the Alzheimer's Disease International Conference in Toronto, Canada, in July 2025.

基金會榮幸地再邀請到香港中文大學大腦與認知研究所所長黃俊文教授及香港中文大學語言學及現代語言系馮剛毅教授擔任現場答問決賽評判。

We were delighted to have Professor Patrick Wong and Professor Ganyi Feng from the Brain and Mind Institute of CUHK to be the judges of the live Q&A session again.

◀ 黃俊文教授頒獎予2024年度冠軍陳子樂同學
Prof. Patrick Wong presenting prize to 2024 Champion Chen Chi Lok



“2024人工智能在健康科學領域的應用、教學及發展”講座

ARTIFICIAL INTELLIGENCE & HEALTH SCIENCES SYMPOSIUM 2024



▲ 嘉賓台上合照/Group photo on the stage

The Macau Symposium on “Artificial Intelligence and Health Sciences Symposium” was held on 23 March. Professor Joseph JY Sung, Professor Helen Meng and Dr. Ko Ho were invited to share the latest development in the applications of AI in medical and education; and how AI is used to identify patients with Alzheimer’s Disease through their speech and retinal image. These hot topics on AI have attracted over 500 registrations within two days.

基金會於3月23日舉辦了“2024人工智能在健康科學領域的應用、教學及發展”講座。講座邀得沈祖堯教、蒙美玲教授及高浩醫生擔任主講嘉賓，分別向觀眾講解AI在醫學的應用及教學方面有甚麼最新的發展、及如何利用AI分析日常言語或視網膜圖像，以偵測潛在失智症患者。由於AI講題吸引，開放報名不足兩天已吸引超過500人報名參加該研討會。



▲ 衛生局羅奕龍局長於講座與演講嘉賓交流
Dr. Alvis Lo, Director of SSM, sharing his view in the Symposium

大腦與認知研究所研討會

BMI SYMPOSIUM

3月23日下午基金會亦舉辦了一年一度的大腦與認知研究所研討會，今年研討會主題為「生命最初的1000天、三歲如何定八十」，邀請3位來自日本、美國和香港的專家學者，分享他們對新生兒首1000天的母子互動、大腦神經認知與語言發展的研究心得，3歲如何定80。今屆研討會是新冠疫情後首次於線下復辦，吸引超過400人報名參加。

▶ 大腦與認知研究所所長黃俊文教授致開幕辭
Prof. Patrick Wong, Director of BMI, giving opening remarks





▲ 三位講者與出席嘉賓在台上合照
Speakers and the guests having group photo on the stage

The annual BMI Symposium resumed offline for the first time since the outbreak of COVID-19, which was also held on March 23 in the afternoon. The theme for this year is “Navigating the First 1000 Days of Life”. Three speakers from Japan, USA and Hong Kong discussed on how early experiences, including mother-infant interaction and language acquisition, in the first 1000 days shape the developing infant. The symposium has attracted more than 400 registrations.

澳門大學 - 何鴻燊博士醫療拓展基金會 “揚帆追夢、創啟未來” 資助

UNIVERSITY OF MACAU-DR. STANLEY HO MEDICAL DEVELOPMENT FOUNDATION “SET SAIL FOR NEW HORIZONS, CREATE THE FUTURE” GRANT

2021年何鴻燊博士醫療拓展基金承諾向澳門大學在未來十年每年提供100萬澳門元以成立主題為“揚帆追夢、創啟未來”的資助計劃。

Our Medical Foundation has committed to provide an annual donation of one million Macau Patacas for 10 years to the University of Macau to establish a theme-based grant titled University of Macau – Dr. Stanley Ho Medical Development Foundation “Set Sail for New Horizons, Create the Future” Grant in 2021.

這個資助計劃旨在支持年青科研人員追尋夢想，鼓勵他們以達到創新突破為目標，超越界限地開拓科學研究，從而為國家及澳門未來發展作出貢獻。

The donation aims to support young scholars in pursuing their dreams and encouraging them to go beyond limits in scientific research exploration aiming at breakthrough innovation achievement, which serves to contribute to the future development of the country and Macao.

▲ 2024年傑出學者論壇海報
Poster for the 2024 Distinguished Scholars Forum

讓受資助者彙報其資助項目的研究進展和成果的傑出學者論壇已進入第三屆。在11月22日，除了四位受資助者外，今屆主辦單位還邀請到中國科學院深圳先進技術研究院葉克強教授作為演講嘉賓，分享他在有關診斷帕金森症的最新研究成果。

The Distinguished Scholars Forum, which aims for the awardees of the grant to report their research achievement was held for the third year on November 22. Professor Ye Keqiang of the Shenzhen University of Advanced Technology was also invited as guest speaker to share his latest research results in diagnosis of Parkinson's Disease.



▲ 與2024年受資助者合照
Photo with 2024 awardees

何鴻燊博士紀念講座 DR. STANLEY HO MEMORIAL LECTURE

自2021年起，牛津大學個人化醫學中心每年舉辦何鴻燊博士紀念講座，邀請國際頂尖專家主講。

Since 2021, the Centre for Personalised Medicine at the Oxford University has hosted Dr. Stanley Ho Memorial Lectures every year, inviting top-notch experts to be the speakers.

2024何鴻燊博士紀念講座 - Caroline Wright教授 2024 Dr. Stanley Ho Memorial Lecture - Professor Caroline Wright

與牛津馬丁學院合作舉辦，第四屆何鴻燊博士紀念講座於2024年5月29日在牛津大學舉行並同時在線上直播，艾希特大學基因組醫學教授Caroline Wright應邀主講題為「Revisiting Genetic Determinism: Evidence from Large Population Cohorts」，Wright教授主力研究利用全基因組測序以診斷罕見疾病。

In collaboration with Oxford Martin School, the fourth Dr. Stanley Ho Memorial Lecture was held on 29 May 2024, which was also broadcast live online. Caroline Wright, Professor of Genomic Medicine at the University of Exeter, was invited to give a lecture titled "Revisiting Genetic Determinism: Evidence from Large Population Cohorts". Her main research expertise is in the use of genome-wide sequencing technologies for the diagnosis of rare diseases.



這些講座均已被錄影及上載於<https://www.youtube.com/@CPMOxford>，並配以繁體中文及簡體中文字幕，目標是要讓講座傳達至華人社群。

These lectures were video-recorded and uploaded to the YouTube Channel of the Centre for Personalised Medicine (<https://www.youtube.com/@CPMOxford>) and subtitles in Traditional Chinese and Simplified in Chinese are added with an aim to reach the Chinese community.

出訪及來訪

VISITING AND RECEPTION OF GUESTS

5月13日基金會成員與澳門失智症協會代表團拜訪香港博智感知交互研究中心及賽馬會耆智園。

Members of the Foundation and a delegation of Macau Alzheimer's Disease Association (MADA) visited the Centre for Perceptual and Interactive Intelligence (CPII) and Jockey Club Centre for Positive Ageing in Hong Kong on May 13.



▲ 博智感知交互研究中心主任蒙美玲教授接待代表團
Prof. Helen Meng, Director of CPII, welcoming the delegation



▲ 禰永明主席代表基金會及MADA感謝蒙美玲教授及耆智園郭志銳教授之接待
Mr. Huen thanks Prof. Helen Meng and Prof. Timothy Kwok for their warm welcome of the delegation

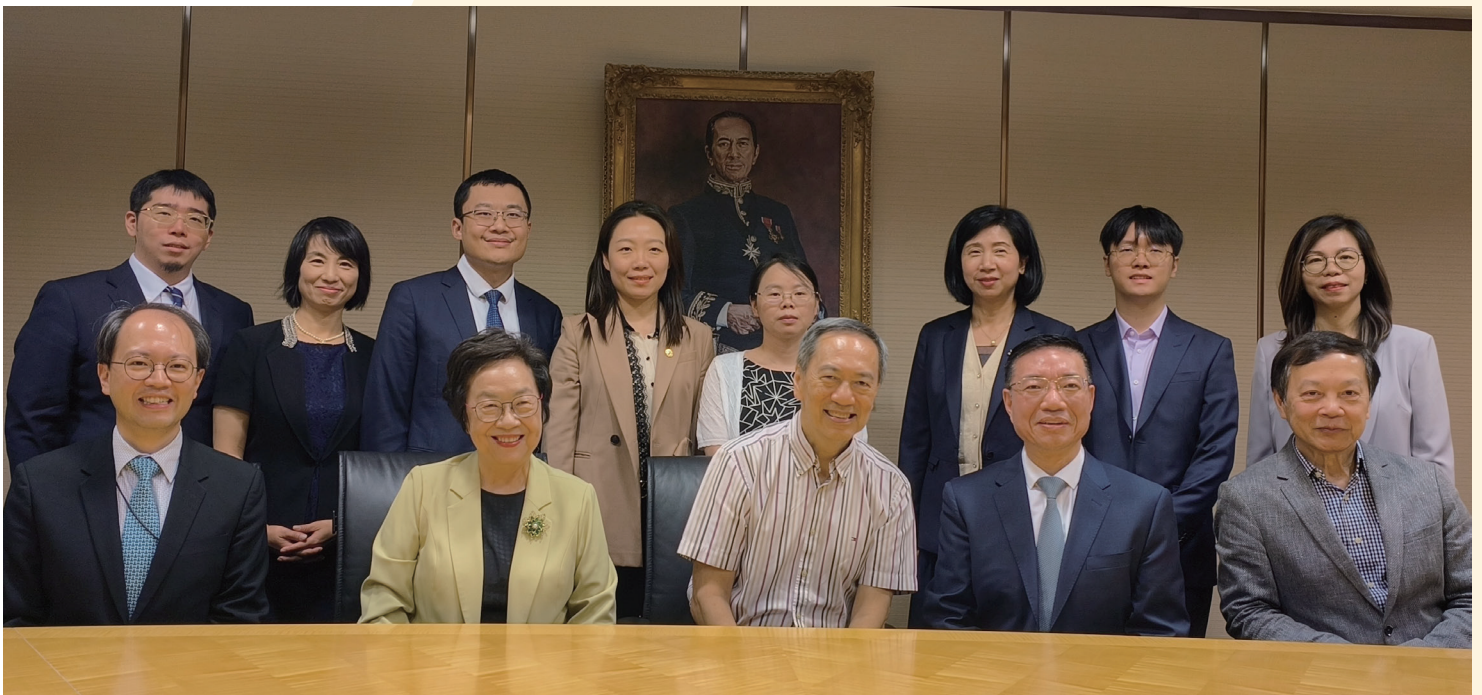
7月18日牛津大學聖安妮學院及個人化醫學中心代表團在香港與基金會代表舉行午餐會議，代表團由院長Helen King女士率領，雙方在會議上討論了彼此未來發展方向。



▲ 基金會成員與聖安妮學院院長Helen King女士及代表團成員合照
Group photo with Ms. Helen King and members of the St. Anne's College delegation

8月9日浙江大學醫學院附屬第一醫院黃河教授率代表團於拜訪基金會，向基金會行政委員會委員鄭彥銘教授等介紹他們團隊目前在做的CAR-T項目。

The delegation of the First Affiliated Hospital (FAH), Zhejiang University School of Medicine visited our headquarters on August 9. Prof. Huang He of FAH introduced their CAR-T project to Prof. Gregory Cheng, member of Board of Directors of the Foundation.



▲ 賀定一女士(前排左二)、鄭彥銘教授(前排中間)及黃河教授(前排右二)等合照
Ms. Ho Teng lat, Prof. Gregory Cheng, Prof. Huang He in a group photo

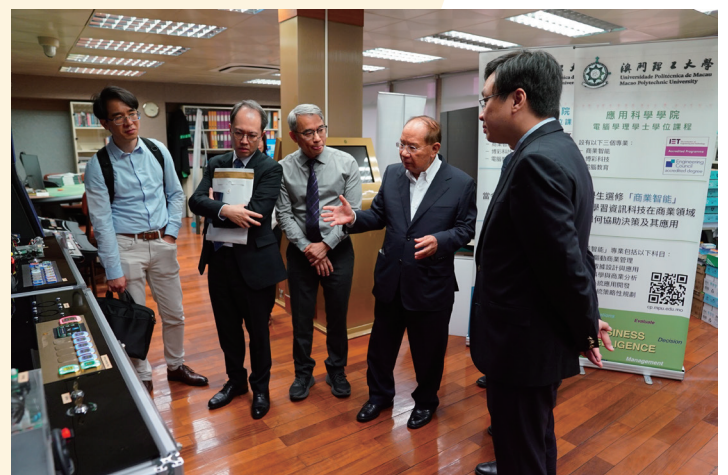
10月23至27日基金會代表與MADA代表團一同出席在西安舉行的“2024國際阿爾茨海默病協會第27屆亞太區域會議暨2024中國老年保健協會阿爾茨海默病分會年會”。

Representative from the Foundation joined MADA to attend the 27th Asia-Pacific Region Conference of Alzheimer's Disease International and the 2024 Annual Conference of Alzheimer's Disease Chinese in Xi'an, China from October 23 to 27.



11月11日基金會成員拜訪澳門理工大學，參觀了校園及了解其研究項目，並與嚴肇基校長及李雁蓮副校長等進行座談。

Members of the Foundation visited the campus of Macau Polytechnic University to learn about its research projects and have an exchange and discussion with Rector Professor Im Sio Kei and Vice-Rector Dr. Lei Ngan Lin.



基金會資助的研究中心及項目報告

Updates of projects/centers sponsored by the Foundation

牛津大學個人化醫學中心

Centre for Personalised Medicine, University of Oxford, UK

項目負責人 Name of PI : Professor Anneke Lucassen

大學/機構 University/Institute : Centre for Human Genetics, University of Oxford, UK and St Anne's College, Oxford, UK

網頁 Website : <https://cpm.ox.ac.uk/>

IMPACTS TO DATE AND RECENT ACHIEVEMENTS

The Centre for Personalised Medicine (CPM) is an interdisciplinary organisation that integrates the generation, dissemination and application of new knowledge to the personalisation of medicine. It asks questions about what needs to happen to enable effective translation of technological advances that have taken place over the past few decades, both in public health approaches (screening and early detection) and health care (diagnosis and treatment). The CPM was launched as a partnership between the Centre for Human Genetics (part of the University of Oxford's Nuffield Department of Medicine) and St Anne's College, Oxford, in 2013 after the first philanthropic donation from the Dr Stanley Ho Medical Development Foundation. A seven-year partnership renewal between the CPM and the Dr Stanley Ho Medical Development Foundation was agreed in February 2023.

We held two high-profile annual lectures in 2024. The first of the year, the CPM Annual Lecture, given by Professor Sir John Burn in March at the Sheldonian Theatre and entitled Genomic medicine: Up close and personal, explored genomic medicine from a cancer prevention perspective. The lecture, which attracted an audience of more than 150 people, was followed by a VIP dinner in the Divinity School, Oxford.

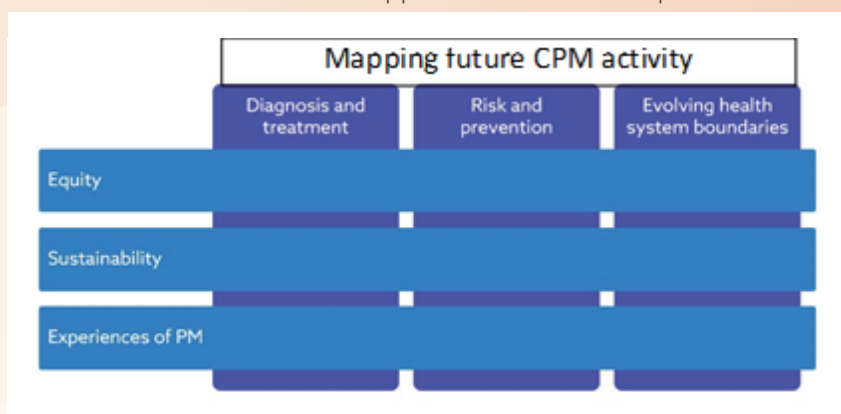


▲ The 2024 CPM annual lecture in the Sheldonian theatre

The second lecture, the Dr Stanley Ho Memorial Lecture, was given in April by Professor Caroline Wright, and was entitled Revisiting genetic determinism: Evidence from large population cohorts. Professor Wright talked about how genetic variants identified in the diagnosis of rare diseases are also present in healthy individuals in cohort studies such as UK Biobank, meaning that they are less predictive in a general population than they are within a family setting. The lecture took place at the Oxford Martin School in the centre of Oxford; it was attended by 120 people and we were delighted that Mr Ian Huen was able to introduce the speaker in a pre-recorded speech. Both lectures are available to watch with Chinese subtitles: <https://cpm.ox.ac.uk/watch-our-lectures-interviews/chinese-captioned-videos/>

We were fortunate to have the support of the Nuffield Department of Medicine at the University of Oxford in a strategic

review of the CPM as it enters its second decade of existence. A detailed report can be found here: <https://cpm.ox.ac.uk/strategy/>. We are mapping our work to one or more of three pillar themes and three cross cutting themes of activity [see image above].





In 2024 we decided to concentrate on several high-impact, one-day, in-person events, focusing on one or more of our themes. For each we invited a specialist audience, and carefully selected our invitees to bring together diverse views before opening up the event to a more general audience. These in-depth events have enabled new collaborations and networks, as well as detailed reports which we hope will inform future funding applications and professional guidance.

An example of this format was a collaboration with the British Society of Genetic Medicine (BSGM) to host Genetics and insurance: Complexities in the genomic era in May at the Wellcome Collection in London. We selected specialists to discuss this issue and then asked for applications outlining interest and expertise before selecting the final audience. The CPM drafted and circulated a briefing paper ahead of the event and summarised the day in a written report <https://cpm.ox.ac.uk/reports/>



The meeting addressed when and how a genetic test result might be used by insurance companies to determine their premiums. Although we focussed on the UK setting and its 'code on genetic testing' much of the discussion was relevant to an international audience. A paper on the issues written by the CPM team was published here: <https://www.cambridge.org/core/journals/health-economics-policy-and-law/article/genomics-and-insurance-in-the-united-kingdom-increasing-complexity-and-emerging-challenges/7A668761B13E16D91CE0A352E589683E>

The CPM held its second schools' art competition for children aged 11 to 14, this time on the theme of newborn screening. We had more than 70 entries, from school around the UK. It was clear that a lot of thought had gone into these entries which were also beautiful pieces of art. Displays around Oxford have showcased the winning entries [see the close-up and full image of the winning entry].

<https://cpm.ox.ac.uk/centre-for-personalised-medicine-art-competition-2023-24/>



▲ Winning entry from schools art competition

This academic year has already seen three diverse CPM events: "Songs of Genomics" explored patient journeys through genetics by means of contemporary song; we held a symposium on genetic factors in inflammatory bowel disease; and a symposium in collaboration with the Oxford Internet Institute explored trustworthiness in Artificial Intelligence.

LOOKING AHEAD

We have a number of exciting events and collaborations taking place throughout 2025, including:

- The CPM Annual Lecture, to be given by Dr Philip Ball, author, journal editor and scientist
- The Dr Stanley Ho Memorial lecture, to be given by Professor Sir Peter Donnelly in Hong Kong or Macau
- A conference exploring what is required to make newborn screening by whole genome sequencing a success
- A conference exploring precision-prevention cancer vaccines
- The CPM Annual Research Showcase, this time looking at personalised prevention
- A podcast series based on the themes identified in our strategy



▲ CPM director, fellows and administration team

The Dr Stanley Ho Medical Development Foundation funding has been instrumental in the CPMs success in 2024 and since our partnership began. We are truly grateful for the continued support and dedication from the Dr Stanley Ho Medical Development Foundation. 2025 is an exciting year for the Dr Stanley Ho Medical Development Foundation as it marks its 20th Anniversary. Everyone at the Centre for Personalised Medicine wants to extend their thanks and best wishes for this fantastic milestone celebration. We look forward to holding our flagship event, the Dr Stanley Ho Memorial Lecture in 2025, as part of the 20th Anniversary celebrations and collaborating with new and existing partners in order to share our work internationally.



何鴻燊海量數據決策分析研究中心

Stanley Ho Big Data Decision Analytics (BDDA) Research Centre

項目負責人 Name of PI : Professor Helen MENG Mei Ling 蒙美玲教授
 大學/機構 University/Institute : The Chinese University of Hong Kong 香港中文大學
 網頁 Website : <https://www.bdda.cuhk.edu.hk/>

1. INTRODUCTION

The Stanley Ho Big Data Decision Analytics Research Centre was established in 2013 with generous support from the Dr Stanley Ho Medical Development Foundation. Big data is a critical resource for supporting machine learning in the development of state-of-the-art artificial intelligence (AI) technologies. Our research focuses on AI and data analytics in learning and health to achieve societal impact and benefit Hong Kong, Macao, the Greater China region and beyond. Our efforts in big data research have expanded to cover AI research, which includes government-awarded funding to establish the CUHK-led InnoCentre on AI named Centre for Perceptual and Interactive Intelligence (CPII), for which Professor Helen Meng also serves as Director.

2. ACADEMIC AND RESEARCH ACTIVITIES

Professor Helen Meng delivered invited presentations in the following events:

- **Panel Moderator, Ageing & Technology Conference,** CUHK, Jan 2024. The theme of the conference was "Age-Friendly Digital Society: Overcoming Challenges in Technology Adoption among Older Adults".
- **Keynote speaker, Hong Kong Society of Clinical Chemistry (HKSCC) 41st Annual Scientific Meeting,** Jan 2024. The title of her talk was "Generative AI and our Future". HKSCC has about 400 members, including medical technologists, scientists and pathologists working in medical laboratory testing in the public and private sectors.



- **Invited talk, Artificial Intelligence and Health Sciences Symposium, March 2024.** The talk title was "AI and Cognitive Health". The event was organized by Dr. Stanley Ho Medical Development Foundation.

- **Panelist, "In the Lead" Forum by Goldman Sachs,** March 2024. During the event, she engaged in a conversation with Ms. Marie Louis Kirk, the Chief Administrative Officer of Asia Pacific and Head of Engineering at Goldman Sachs, discussing various applications of AI, including chatbots and the interpretation of medical images.



- **Host, CPII-MIT-UoM Joint Forum on Design and Fabrication with Enhanced Intelligence and Robotic Perception,** March 2024.



- **Keynote Speaker, The 8th APSCE International Conference on Computational Thinking and STEM Education**, hosted by Beijing Normal University, June 2024.



- **Panelist, Directors' Symposium 2024**, September 2024, on the topic of "Leading with Agility in an Era of Innovation". The event was organized by the Hong Kong Institute of Directors.



- **Invited Speaker, Greater Bay Area Science Forum**, November 2024. The event was organized by CUHK and the Alliance of National and International Science Organizations for Belt and Road. She spoke on the topic of R&D in Artificial Intelligence at CUHK's Centre for Perceptual and Interactive Intelligence.



- **Invited Speaker and Panel Moderator, International Artificial Intelligence and Creativity Conference**, November 2024. The event was co-organized by the CUHK's Shenzhen Research Institute and CGGE. Her talk was titled "Building a Responsible AI Future: Ethics, Safety and Governance in Education and Research", and the panel she organized was titled "Navigating the Opportunities and Risks of AI in Real Applications". Professor Meng also deployed CPII's technologies to provide real-time subtiting and translation between

Chinese and English for the conference.

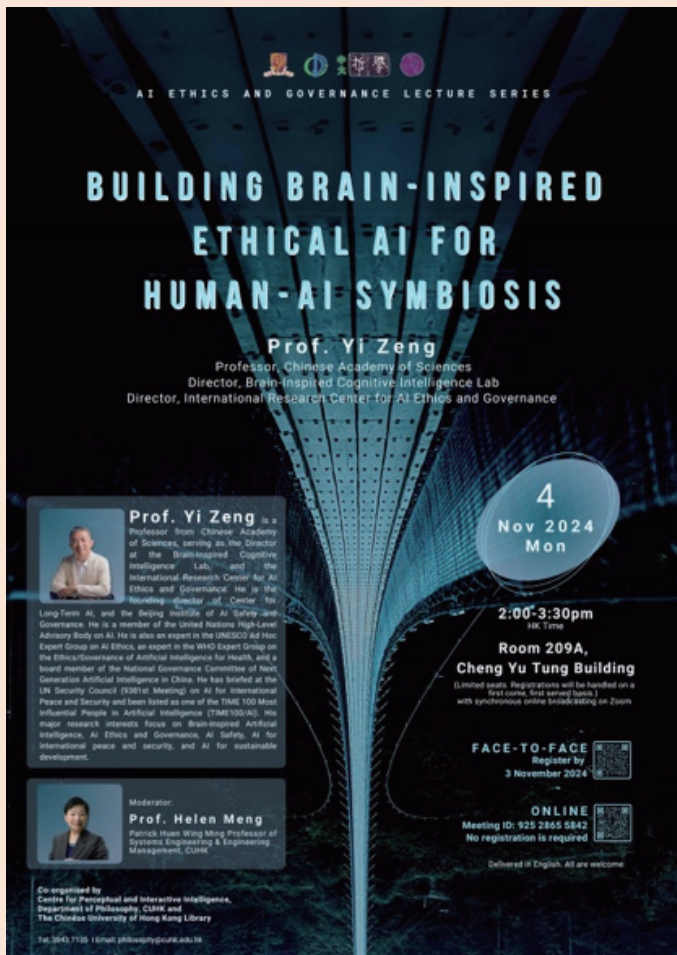


- **Keynote Speaker and Panel Moderator, The Hong Kong International Computer Conference (HKICC) 2024**, organized by the Hong Kong Computer Society in November 2024. The theme of the conference was "From Generative AI (GAI) to Artificial General Intelligence (AGI)". Helen's talk was titled "Building a Responsible AI Future: Ethics, Safety and Governance in Education and Research", and the panel she organized was titled "The Upsides and Undersides of AI".





• **AI Ethics and Governance Lecture Series** Professor Meng organized the invited lecture with the CUHK Department of Philosophy in November 2024. The lecture was titled "Building Brain-inspired Ethical AI for Human-AI Symbiosis", by Professor Yi Zeng of Chinese Academy of Sciences.



• **Invited Speaker, HKSAR Research Grants Council Theme-based Research Scheme Public Symposium 2024, HKUST, December 2024.** Her talk was titled "AI in Extraction and Identification of Spoken Language Biomarkers for Screening and Monitoring of Neurocognitive Disorders."



Dr Xianmin Gong and his co-authors delivered invited presentations in the following events:

• Oral presentation titled "Revisiting gain-loss framing in

the context of advertising: The impact of loss framing on attention and consistency (but not intensity) of purchase intentions," Ageing and Technology Conference, January 2024. The theme of the conference was "Age-Friendly Digital Society: Overcoming Challenges in Technology Adoption among Older Adults".

- Invited seminar titled "The age-related positivity effect and motivational development in late adulthood," The Education University of Hong Kong, March 2024.
- Oral presentation titled "Large language model-based fMRI encoding of language functions for subjects with neurocognitive disorder", work presented by co-author at the 25th Interspeech Conference (Interspeech 2024). Kos Island, Greece, September 2024.
- Oral presentation titled "Naturalistic language-related movie-watching fMRI task for detecting neurocognitive decline and disorder", work presented by co-author at the 2024 IEEE 14th International Symposium on Chinese Spoken Language Processing (ISCSLP). Beijing, China, November 2024.

Professor Kelvin Tsoi organized / delivered invited presentations in the following events:

- Organized the International Society of Digital Health (ISDH) Seminar – Digital Health: An Opportunity for Artificial Intelligence in Healthcare in August 2024. The seminar's theme was "Digital Health: An Opportunity for Artificial Intelligence in Healthcare." The seminar featured multidisciplinary experts including Professor Helen Meng, Professor Owen Johnson, Professor Sil Aarts, and Professor Nicolas Fuggle from the World University Network (WUN), alongside with Professor Simon Poon, Professor Vicky Li and Professor Kendall Ho. Together, they shared valuable insights on the interaction of AI and digital health, discussing the latest advancements and the future potential of AI technologies in the rapid evolving field. The engaging event attracted approximately 80 academic professionals and students, all of whom benefited from the seminar.



- Invited presentation, International Forum on Quality & Safety in Healthcare organized by the British Medical Journal (BMJ), a world-recognized top-ranking medical journal in August 2024 at Hong Kong Convention and Exhibition Centre. His talk was titled "Using Digital Health in Enhancing Primary Healthcare" and was delivered during the session on Shaping Healthcare Innovation. Furthermore, the BMJ Group also invited him to lead two sessions titled "AI Chatbots: Friend or Foe?" and "Conclusive Recommendations for Using AI Chatbots: Interdisciplinary Panel Discussion." He invited the World University Network (WUN) professors from Maastricht University, The University of Leeds and The University of Southampton, alongside with those from The University of Sydney, The University of British Columbia, and the University of Reading, met in Hong Kong and took part in these 2 key events. These sessions provided valuable insights into the evolving role of AI chatbots in healthcare, emphasizing their potential benefits and challenges to around 500 audiences.

Other invited presentations by Professor Kelvin Tsoi took place in the following events:

- European Society of Hypertension in Berlin
- International Conference on AI in Medicine in Singapore
- Asian Federation of Sports Medicine in Malaysia
- Chinese Innovative Pharmaceutical Medicine Conference in Suzhou



- International Society of Hypertension in Cartagena
- HK International Medical Healthcare Fair in Hong Kong
- JSH International Symposium in Japan
- BMJ International Forum on Quality and Safety in Healthcare in London
- Asian Pacific Digestive Week in Bali
- Pulse of Asia in Sydney
- China Hypertension Meeting in Kunming
- Invited research collaboration with Stanford CARE in Stanford University, US

Dr Thomas Lam's AI research on level of acceptance and trust of artificial intelligence among gastroenterology nurses was invited to present in Digestive Disease Week, Washington D.C., United States on 19/5/2024 and Artificial Intelligence in Digestive Endoscopy Conference, Taizhou, Jiangsu, China on 25/5/2024, respectively.



Dr Lam's research on long term effect of colorectal cancer screening by colonoscopy vs fecal immunochemical test in Chinese population, development of an artificial intelligence-assisted voice analytic tool to assess the consciousness level of patients after sedated endoscopy, and systematic review and meta-analysis on real-time use of artificial intelligence in characterization of diminutive polyps during colonoscopy was also invited to present in Digestive Disease Week, Washington D.C., United States on 18, 19 and 21/5/2024, respectively.

Dr Thomas Lam also presented at the following conferences and events:

- Invited lecture titled "Climate change and health research in Hong Kong" at the First Meeting of Consortium of Climate and Health in Southeast Asia, Singapore International Conference on AI in Medicine in Singapore.
- Invited lecture titled "Clinical Research in Gastroenterology and Endoscopy" at the Post-Registration Certificate Course in Gastroenterology and Endoscopy Nursing, Hospital Authority, Hong Kong.
- Invited lecture titled "Level of acceptance and trust of artificial intelligence among gastroenterology nurses" at the Artificial Intelligence in Digestive Endoscopy Conference (消化內鏡人工智能會議), Taizhou, Jiangsu, China.
- Poster presentation titled "Real Time Use of Artificial



Intelligence in Characterization of Diminutive Polyps During Colonoscopy: A Systematic Review and Meta-Analysis" at the Digestive Disease Week, Washington D.C., United States.

- Poster presentation titled "Level of acceptance and trust of artificial intelligence among gastroenterology nurses" at the Digestive Disease Week, Washington D.C., United States.
- Oral presentation titled "Development of an artificial intelligence-assisted voice analytic tool to assess the consciousness level of patients after sedated endoscopy" at the Digestive Disease Week, Washington D.C., United States.
- Oral presentation titled "Long term effect of colorectal cancer screening by colonoscopy vs fecal immunochemical test in Chinese population. A cohort study with 14-year follow-up" at the Digestive Disease Week, Washington D.C., United States.

Dr Xixin Wu delivered invited presentations at the following conferences and events:

- Invited talk titled "Speech foundation models" at the Multi-modal Symposium 2024, Hong Kong.
- Invited talk titled "AI for assistive communication: Disordered speech reconstruction using speech language models" at NCMMSC 2024 (第十九屆全國人機語音通訊學術會議), Urumqi, China.
- Invited talk title "Speech and audio generation" at Huawei Human-machine Interaction Symposium 2024, Xiamen, China.
- Poster presentation titled "Uniaudio: An audio foundation model toward universal audio generation", at the International Conference on Machine Learning 2024, Vienna, Austria.
- Guest lecture titled "Speech foundation models", at Southern University of Science and Technology, Shenzhen, China.

3. OUTREACH AND SERVING THE COMMUNITY

- **Hang Lung Mathematics Awards 20th Anniversary Public Talk Series**, themed Shaping our Future", in collaboration with Asia Society Hong Kong Centre. Professor Meng was invited to moderate the panel discussion "The Good, Bad and Beautiful of Artificial Intelligence in June 2024.




- **Officiating Guest, The 5th Dragon Cup for Inter-Government Secondary Schools Multi-Sided Debating Competition**, May 2024.



- **CUHK WeChat Post**

Professor Helen Meng was featured in a post titled "我們, 不止撐起半邊天" published by the University on the university official WeChat Channel in March 2024. This post celebrated the achievements of women scientists from CUHK who have illuminated the path of innovation and authored extraordinary stories.



蒙美玲教授

蒙美玲教授是港中大福永明系統工程與工程管理学系教授，博智感知交互研究中心 (CPII) 主任。她于多語言及多模態人機交互及語言學習技術等領域作出了重要貢獻。蒙教授于1998年加入香港中文大學，成為系統工程與工程管理学系的首位女教授，并于2012年至2018年担任该系的首位女系主任。

蒙教授所在的CPII除了检查认知障碍，还有各式各样的项目，包括用AI将中风、脑瘫等病人语言障碍的说话还原，让照顾者听得明他们的说话；或是利用人工智能制造最合适的衣服，让患者穿着活动时较舒适等等。蒙教授强调调研不再停留于论文层面，而是有概念验证 (proof of concept)，可以演化成为应用。

- **Interview by the The Hong Kong Federation of Youth Groups**

Professor Helen Meng's interview was featured in an article titled "Getting Ahead of the Curve" by The Hong Kong Federation of Youth Groups – Professorial Publication Unit. In the interview, she shared her insights on how AI technologies are driving inspiration and innovation in learning experiences.



• **Interview by Nature** Professor Helen Meng was featured in an interview published by Nature, in an article titled "Rebuilding Speech with Help from Artificial Intelligence." In the interview, Professor Meng highlighted how advanced AI technology is revolutionizing the lives of individuals with dysarthria by interpreting their unclear speech and converting it into intelligible communication. This groundbreaking innovation not only empowers individuals to express themselves more effectively but also significantly enhances their quality of life.



• **The Hong Kong International Computer Conference (HKICC) 2024**

Professor Helen Meng was invited to be a moderator for the HKICC 2024: From Generative AI (GAI) to Artificial General Intelligence (AGI), organized by the Hong Kong Computer Society on 5 November 2024.



• **May Measurement Month (MMM 2024)**

To enhance public awareness of blood pressure management during the Global May Measurement Month (MMM) in May 2024, Professor Kelvin Tsoi organized a series of impactful campaigns in partnership with the JCSPHPC, as well as the SH BDDA. Notable events included the health talk "全民關注血壓月：專家講座," which drew over 200 participants, and the "五月量血壓挑戰," which engaged around 100 participants. Additionally, the "舊換新血壓計" initiative further fostered education and awareness in the community regarding blood pressure management.



Professor Kelvin Tsoi invited opening guests to the MMM opening ceremony, including Professor Fong Hong, Executive Director and Chief Executive Officer of CUMC; Professor Philip Chiu, Dean of the Faculty of Medicine at CUHK; Professor Samuel Wong, Director of the School of Public Health and Primary Care at CUHK; and Professor Vivian Lee, the regional lead of May Measurement Month (MMM) in Hong Kong; along with the speakers shared invaluable insights and health tips concerning hypertension and cardiovascular disease, greatly enhancing the campaign's objectives.



- **CRHK Program sharing Public Health Management**
Professor Kelvin Tsoi was a guest on the CRHK program "同途有心人," where he discussed the benefits of the Jockey Club Community eHealth Care Project for the elderly. He also shared valuable insights on promoting healthy habits and enhancing community awareness of healthy ageing. This informative episode aired on August 18 on the CRHK1 channel.

- **Golden Age Expo (GAES) & Gerontech and Innovation Expo (GIES)**

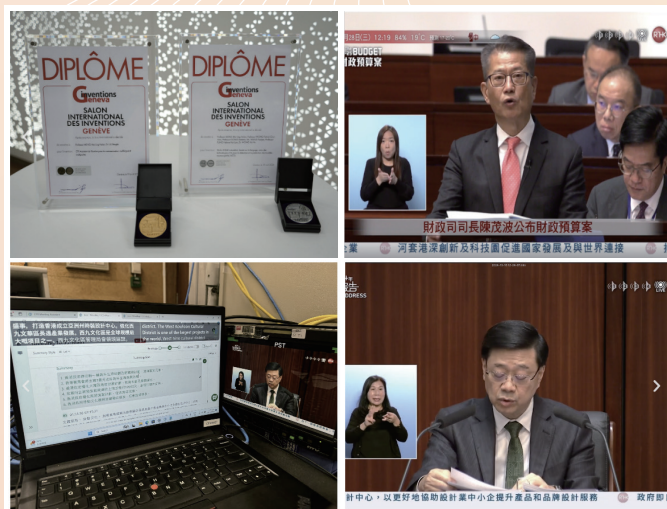
Professor Kelvin Tsoi was invited by ORKTS CUHK to participate in the GAES and GIES, which was held at the Hong Kong Convention & Exhibition Centre in August and November 2024, respectively. It aimed to introduce the most advanced and innovative techniques applied in digital health management to the public, especially the golden age group and the elderly health centres.

4. AWARDS AND GRANTS

- **Gold Medal, 49th International Exhibition of Inventions Geneva 2024**

Professor Helen Meng's project on AI-powered solution for real-time, high-performance speech recognition, advanced machine translation and streamlined content summarization was awarded a gold medal. This advanced technology has empowered Radio Television Hong Kong (RTHK) to enhance its live broadcast of the Chief Executive's 2024 Policy Address and the Financial Secretary's 2024 Budget Speech. By leveraging cutting-edge speech recognition, the system transcribes spoken audio in real-time, while generative AI synthesizes the transcripts

into concise, bullet-point highlights updated every minute. This innovation replaces the traditionally time-intensive processes of manual note-taking and summarization, delivering a streamlined and efficient solution. During live broadcasts on RTHK Channel 32, the AI-generated summaries are displayed as rolling bullet points, providing viewers with instant access to key insights and fostering a deeper understanding of these critical addresses.



- **Silver Medal, 49th International Exhibition of Inventions Geneva 2024**

The project by Professors Helen Meng and Xianming Gong, in collaboration with Professor Patrick Wong of the Brain and Mind Institute, designed a naturalistic, language-based fMRI task with AI technologies for detection and prediction of neurocognitive disorders and was awarded a silver medal.

- **Winner, US National Academy of Medicine Healthy Longevity Global Grand Challenge**

This project is titled "Tales Weaver: An AI-Enhanced System to Foster Social Connectedness" and is a collaboration between Professor Helen Meng and Professor Helene Fung of the CUHK Department of Psychology (<https://healthylongevitychallenge.org/winners/tales-weaver-an-ai-enhanced-system-to-foster-social-connectedness/>)

- **Best Student Paper Award at INTERSPEECH 2024** - Mr. Dongchao Yang, PhD advisee of Professor Helen Meng and Professor Xixin Wu, received the Best Student Paper Award of INTERSPEECH 2024. This is one of only 3 such awards for the entire conference.

- **Area Chair Paper Award at ACL 2024** - Ms. Jincenzi

Wu, PhD advisee of Professor Helen Meng, received the Area Chair Paper Award at ACL 2024. This paper was ranked within the top 1 % of the the entire conference.

- **Distinguished Fellow of the Hong Kong Computer Society** - Professor Helen Meng has been elected Distinguished Fellow of the Hong Kong Computer Society.



- Professor Helen Meng serves as Project Coordinator for the InnoHK Scheme project for the Centre for Perceptual and Interactive Intelligence, which is awarded Phase II funding (2025-2030).
- Dr. Xianmin Gong serves as the Co-Principal Investigator for a project titled "A Comprehensive Approach to Enhance Older Adults' Preparedness for Extreme Heat (COPE)." This project has been awarded funding by the New Frontiers in Research Fund (NFRF) - International Program, under the Canada Research Coordinating Committee.
- Dr Thomas Lam serves as the Principal Investigator for a project titled "Utilization of a theory-driven, culturally tailored, social media-based, interactive telehealth intervention to increase longitudinal adherence to repeat faecal immunochemical test screening. A randomized controlled trial." This project has been awarded funding by the Health and Medical Research Fund (HMRF), Health Bureau.
- Dr Thomas Lam serves as the Principal Investigator for a project titled "Effectiveness of artificial intelligence-assisted recovery assessment after outpatient gastrointestinal endoscopy. A pilot double-blind randomized controlled trial." This project has been awarded funding by the Fund for Evidence-based Practice Improvement Collaborative

Projects, Nethersole Evidence-based Nursing Practice Unit – Nethersole Group Hospitals.

- Dr Xixin Wu serves as the Principal Investigator for a project titled "Large Speech Synthesis Model." This project has been awarded funding from the Tencent AI Lab Rhini-Bird Gift Fund.
- Dr Xixin Wu serves as the Principal Investigator for a project titled "Multimodal Disordered Speech Reconstruction." This project has been awarded funding from the CUHK Direct Grant for Research.

5. FUTURE PLAN

The Stanley Ho Big Data Decision Research Centre will continue to harness data science and artificial intelligence to drive advancements in e-learning, digital health (including healthy aging, disease screening, patient care, and health management), and AI-powered information services, accelerating digital transformation across these domains. Additionally, the Centre will expand its work on AI-enabled virtual assistants to enhance education and healthcare.

6. WELCOMING OUR NEW MEMBER



We also welcome the arrival of our new Research Assistant Professor, Symphony Xing. Her interest is in Cognitive Science, especially in spatial cognition, visual perception and visual control of action, in order to develop AI technologies that can by mimicking these mechanisms. She will also be strengthening our focus in fostering digital literacy among our younger generation.

大腦與認知研究所

Brain and Mind Institute

項目負責人 Name of PI : Professor Patrick WONG Chun Man 黃俊文教授
大學/機構 University/Institute : The Chinese University of Hong Kong 香港中文大學
網頁 Website : <http://bmi.cuhk.edu.hk/>

簡介 INTRODUCTION

大腦與認知研究所 (BMI) 的願景是成為全球領先的研究機構，探索人類心智及其支持的神經機制。我們的目標是創造介入解決方案，以優化人類發展、增強學習及改善生活質量。

It is BMI's vision to become a world-leading research institute that makes discoveries about the human mind and the neural mechanisms that support it. Our goal is to create intervention solutions for optimizing human development, enhancing learning, and improving quality of life.

我們的使命包括

1. 進行尖端的跨學科研究，以解決有關語言、認知、學習及其神經和神經遺傳基礎的複雜研究問題。
2. 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。
3. 與社區夥伴合作，將我們的研究成果應用於臨床及教育實踐上。

Our mission includes:

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

研究活動 RESEARCH ACTIVITIES

基於預測 - 個性化方法增強外語教與學效果 (項目統籌者: 馮剛毅教授)

A Predictive Personalization Approach to Enhance Foreign Language Learning and Teaching (PC: Gangyi Feng)

恭喜馮剛毅教授領導的研究團隊獲得 2023/24 年度協作研究金的新進學者協作研究項目資助。語言學習在當今互聯互通的世界中至關重要，為各個專業、個人和社會領域帶來許多優勢。然而，成年人學習新語言常常面臨重大挑

戰，且其難度和結果各異。許多現代外語培訓課程往往未能考慮到個體學習者的獨特需求和特點，導致學習體驗不佳。

Congratulations to the research team led by Prof. Gangyi Feng for being awarded the 2023/24 Young Collaborative Research Grant (YCRG) under the Collaborative Research Fund (CRF). Language learning is essential in today's interconnected world, providing numerous advantages across professional, personal, and societal domains. However, adult learners often encounter significant challenges, with varying degrees of difficulty and outcomes. Many contemporary foreign language training programs fail to consider individual learners' unique needs and profiles, resulting in suboptimal learning experiences.



為了解決這一問題，馮教授及其團隊旨在開發一種以預測結果為指導的個性化教學方法，以提高外語學習和教學的效果。團隊通過構建和優化預測模型，預測個體學習者未來基於課堂的外語學習表現。根據這些預測，他們將設計定制的語言補習訓練方案，然後評估其有效性，特別是對被模型認定為可能在將來外語學習中遇到困難的學生。

To tackle this issue, Prof. Feng and his team aim to develop a personalized approach to enhance foreign



language learning and teaching, guided by outcome predictions. The team will construct and refine predictive models that forecast individual learners' future performance in classroom settings. Based on these predictions, they will design customized language remediation protocols and evaluate their effectiveness on students identified as potentially struggling in foreign language acquisition.

該研究將從香港和內地收集多合作點縱向外語學習數據，納入多樣化的樣本，以增強和驗證預測模型。通過提高這些模型的準確性和普遍性，他們力求識別可能在外語學習中遇到困難的學習者，並揭示他們語言學習和發展特點，以設計有效的定制化指導。

The study will collect multi-site longitudinal data from Hong Kong and Mainland learners, incorporating diverse samples to enhance and validate the predictive models. By improving the accuracy and generalizability of these models, they aim to identify learners who may face challenges and outline their profiles to facilitate effective personalized instruction.

定制化訓練方法的成功取決於識別個體學習者在不同語言成分和學習過程中的具體困難，並根據他們的認知、動機和語言學習特點提供及時、有效的補習訓練。最終，團隊希望創建一種基於預測的個性化語言訓練方法，以提高語言學習效果，加深對成功驅動因素的理解，指導教育政策的制定，並在課堂中實現實際應用。

The success of this tailored approach relies on accurately pinpointing the specific language components and processes that learners find difficult, enabling timely and effective remediation based on their cognitive, motivational, and language learning profiles. Ultimately, the team aspires to create a prediction-based personalized language training methodology that can improve learning outcomes, enhance our understanding of factors driving success, influence educational policies, and have practical applications in classrooms.

利用神經增益調製和相位進動來進行音樂樂句結構的分段和預測(項目統籌者：滕相斌教授)

Segmenting and Predicting Musical Phrase Structure Exploits Neural Gain Modulation and Phase Precession (PI: Xiangbin Teng)

音樂經常包含需要聽眾理解和預測的複雜結構。它是由音符和節拍組成，進一步形成更大的結構，即所謂的樂句，就像詞語組成句子一樣。雖然心理學家和神經科學家已知我們的大腦可以追蹤個別音符和節拍，但對於我們如何即時識別這些更大的樂句，仍未完全了解。

Music often features complex structures that listeners need to understand and predict. It is composed of notes and beats that form larger structures known as musical phrases, much like how words form sentences in a conversation. While psychologists and neuroscientists are aware that our brains can track individual notes and beats, they do not fully understand how we recognize these larger musical phrases in real-time.

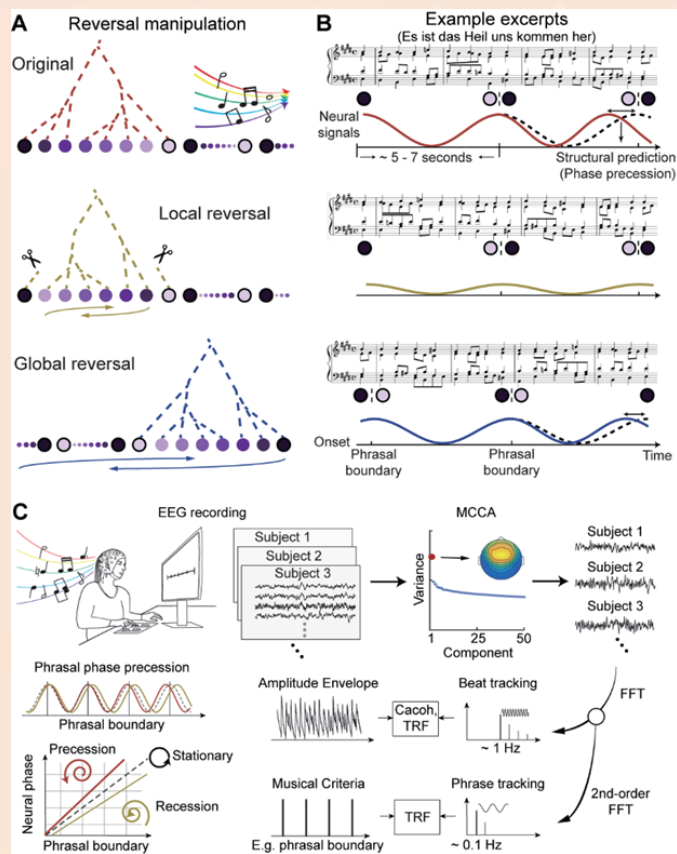
滕教授及其團隊最近在《神經科學雜誌》上發表了一篇文章，詳細介紹了他們的研究。他們播放了巴赫的音樂給29位參與者，同時利用腦電圖(EEG)記錄他們的大腦活動。透過移除了明顯的時間線索，他們要求聽眾依靠和聲來跟隨音樂。此外，他們在某些部分改變了和聲，以觀察這如何影響他們的大腦活動。

Prof. Teng and his team recently published an article in the Journal of Neuroscience detailing their research. They played pieces of Bach's music to 29 participants while recording their brain activity using EEG. By removing obvious timing cues, they required listeners to rely solely on harmony to follow the music. Additionally, they altered the harmony in certain sections to observe its effect on brain activity.

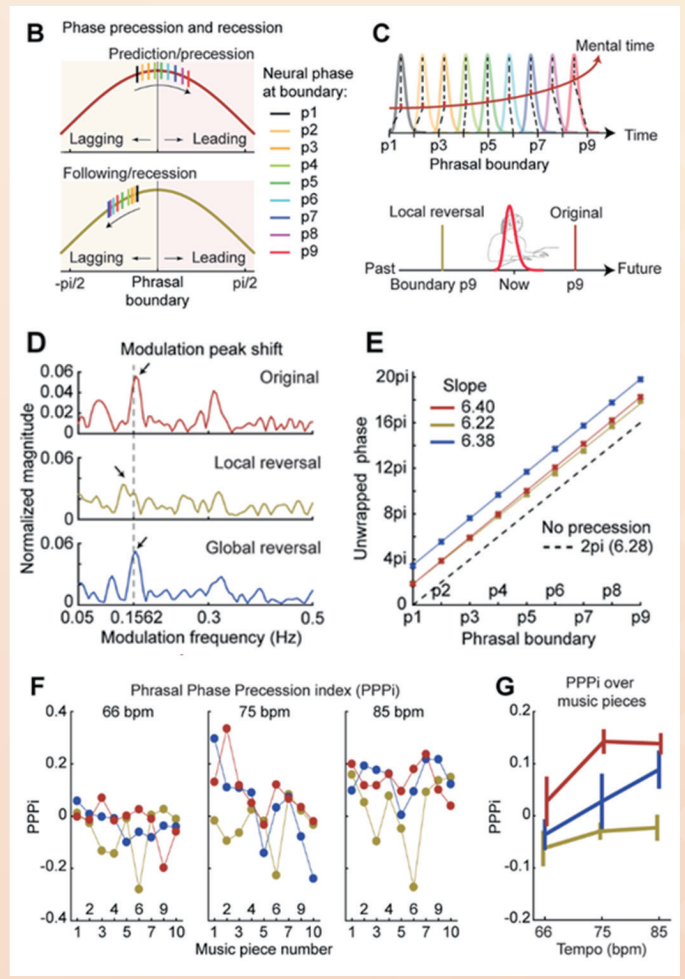
研究結果顯示，具有音樂訓練的人在追蹤音符和節拍方面表現更佳。更重要的是，他們發現了一種特定的大腦活動模式，即使是在更長時間範圍內(超過5秒)它都能與樂句對應。這種模式表明，我們的大腦在聆聽時會主動預測和分段音樂，就像處理語言一樣。研究還揭示，一種非常緩慢的大腦活動模式有助於追蹤樂句，而聽眾會利用持續的聆聽經驗來建立結構性預測並跟隨樂句邊界。這些發現為我們提供了新的方法，使用非侵入性技術(如腦電圖)來研究大腦如何處理音樂的複雜和抽象特徵。

The findings indicate that individuals with musical training are more adept at tracking notes and beats. More importantly, they identified a specific pattern of brain activity that aligns with musical phrases, even over extended durations (more than 5 seconds). This pattern suggests that our brains actively predict and segment

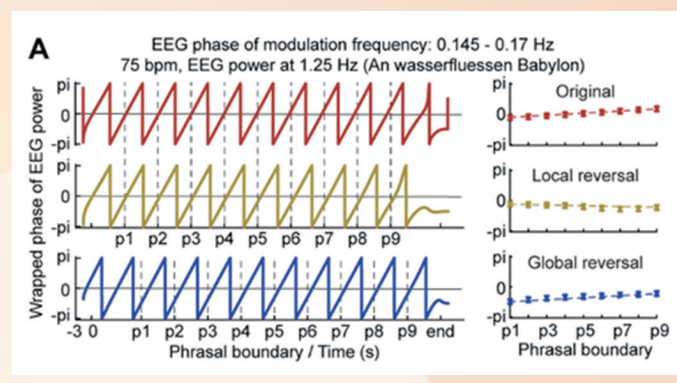
music as we listen, similar to how we process language. The study reveals that a very slow brain activity pattern aids in tracking musical phrases, with listeners using their ongoing experience to build structural predictions and identify phrase boundaries. These insights offer new methods for exploring how our brains process the complex and abstract features of music using non-invasive techniques like EEG.



▲ 圖 1 刺激操控與實驗範式
Fig.1 Stimulus manipulation and experimental paradigm



▲ 圖 2 短語相位進動
Fig.2 Phrasal phase precession



▲ 圖 2 短語相位進動
Fig.2 Phrasal phase precession

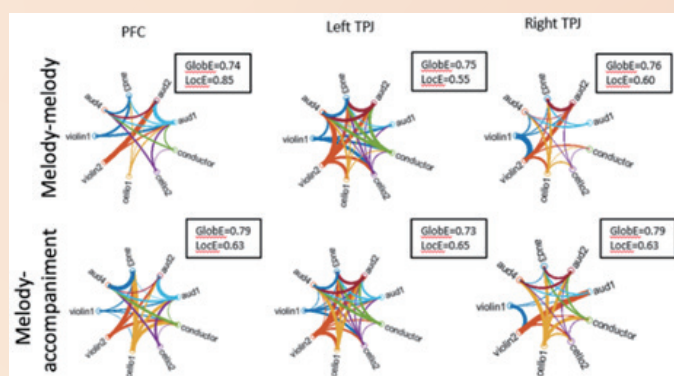
超掃描技術探索群體音樂表演 (項目統籌者: 黃俊文教授)
Hyperscanning to Explore Musical Performance in Group Settings (PI: Patrick Wong)

隨著功能性近紅外光譜成像 (fNIRS) 超級掃描共享設施 (fHSF), 黃教授的團隊透過一個多人且生態有效的音樂合奏, 研究音樂表演和欣賞的複雜腦間機制。這個合奏由九名參與者組成: 一位指揮、兩位小提琴手、兩位大提琴手和四位觀眾, 觀眾在欣賞音樂表演的同時提供即時反饋。With the establishment of functional near-infrared spectroscopy (fNIRS) Hyperscanning Shared Facility (fHSF), Prof. Wong's team investigated the intricate inter-brain mechanism of musical performance and appreciation through a multi-person, ecologically valid music ensemble. This ensemble comprised nine participants: a conductor, two violinists, two cellists, and four audience members who provided real-time feedback on their music appreciation.



來自三個試驗組 (n = 27 名參與者) 的初步結果顯示，人際神經網絡在不同的腦區 (前額葉皮質和雙側顳頂交界處) 和不同的任務 (旋律 - 旋律和旋律 - 伴奏) 中存在差異。據我們所知，這是第一個超掃描研究，檢視弦樂四重奏中音樂表演、指揮和欣賞的人際神經網絡。

Preliminary results from three pilot groups (n=27 participants) indicated that the interpersonal neural network varied across different brain regions (prefrontal cortex and bilateral temporoparietal junction) and across different tasks (melody-melody and melody-accompaniment). To our knowledge, this is the first hyperscanning study examining the interpersonal neural networks that support music composition, conduction, and appreciation in a string quartet.



▲ 圖 3 不同腦區和任務中的人際神經網絡
Fig. 3 Interpersonal neural network across different brain regions and tasks

家庭動態的超掃描研究 (項目統籌者: 伍斐然教授)

Hyperscanning for Studying Family Dynamics (PI: Florrie Ng)

本研究的目標是探討父母與子女之間的腦間一致性是否可以作為正向教養的神經學指標。我們特別關注學術領域中的正向教養，因為在香港，父母與子女之間的互動往往圍繞著學業。我們透過學校招募了四、五年級的兒童及其母親。母親們首先在家中完成了一組問卷，以評估她們的教養方式 (例如，自主支持、控制、接納和拒絕) 以及情感功能 (例如，教養壓力和抑鬱情緒)。隨後，母子被邀請

到我們的實驗室，完成幾個任務和簡短的調查。我們關注的兩個主要任務是地圖任務和講故事任務，旨在模擬孩子們在學校中通常會收到的作業。為了重現日常作業的情境，母親們被告知可以根據自己的意願隨意幫助孩子，無論多或少。在這些任務進行時，我們同時記錄了腦影像掃描數據。到目前為止，已有50對母子 (n=100名參與者) 參加了該研究，而我們也開始分析腦影像的超掃描數據，以揭示父母與子女之間的腦間一致性如何與教養方式相關聯。

The goal of the study is to investigate whether parent-child inter-brain coherence may serve as a neurological marker of positive parenting. We focus specifically on positive parenting within the academic domain, as interactions between parents and children in Hong Kong often revolve around schoolwork. We recruited mothers and their fourth- and fifth-grade children through schools. Mothers first completed a set of questionnaires at home assessing their parenting practices (e.g., autonomy support, control, acceptance, and rejection) and emotional functioning (e.g., parenting stress, depression). Mother-child dyads were then invited to our lab to complete several tasks along with short surveys. The two primary tasks of interest were the map task and the storytelling task, designed to mimic assignments that children typically receive in school. To simulate the daily homework context, mothers were informed that they could assist their children as much or as little as they wished. fNIRS data was recorded during these tasks. So far, 50 mother-child dyads (n=100 participants) have participated in the study, and we are beginning to analyze the fNIRS hyperscanning data to reveal how parent-child inter-brain coherence is related to parenting practices.



外展活動 OUTREACH ACTIVITIES



為了提高人們對早期語言發展以及早期檢測和介入重要性的認識，BMI 一直積極組織由語言治療師主持的講座和親子研討會。透過早期檢測和介入以及這些研討會，我們為父母提供了支持孩子長期發展所需的技能。

In our ongoing efforts to raise awareness about early language development and the importance of early detection and intervention, BMI has been actively organizing talks and parent-child workshops led by speech therapists. Through early detection and intervention, along with these workshops, we empower parents with the skills needed to support their children's long-term development.



為了擴大我們對公眾的影響力並提高我們研究的參與率，我們組織了一系列活動。這些活動包括藝術與手工活動、音樂遊戲小組、產後瑜伽、嬰兒按摩課程以及親子秋季尋寶活動。這些活動成功吸引了許多參與者。

To increase our outreach to the public and enhance the retention rate of our studies, we have organized a series of activities. These include arts & crafts, music playgroups, postnatal yoga, baby massage sessions, and a parent-child autumn treasure hunt. These activities have successfully engaged many participants.

於中國內地的活動 ACTIVITIES IN MAINLAND CHINA 與華南師範大學合作

Collaboration with South China Normal University (SCNU)
馮剛毅教授的研究團隊一直與華南師範大學密切合作，並進行了多項針對語言學習的功能性磁共振成像研究，特別針對新音素、詞彙和文法結構的習得。他們的目標是開發基於學習者神經活動的預測模型，以預測語言學習的成功並識別神經標記，樣本量超過 300 名參與者。

Prof. Gangyi Feng's research team has been closely collaborating with SCNU on several fMRI studies focused on language learning, specifically targeting the acquisition of new phonemes, vocabulary, and grammatical structures. Their objective is to develop predictive models based on learners' neural activity to forecast language learning success and identify neural markers, utilizing a substantial sample size of over 300 participants.

與重慶大學合作

Collaboration with Chongqing University

今年，馮剛毅教授還啟動了與重慶大學的新合作。重慶大學的康鑫教授和馮教授共同合作進行新進學者協作研究項目。康教授的團隊正在協助馮教授的團隊收集外語學習者的行為評估。該項目的目標是創建一個預測模型，根據學習者隨時間的認知和語言概況預測學習成功，以及一個一個可以在不同地點（特別是香港和重慶）進行推廣的模型，這些地點擁有多樣的語言背景。

This year, Prof. Gangyi Feng also initiated a new collaboration with Chongqing University. Prof. Xin Kang from Chongqing University and Prof. Feng are working together on the YCRG project. Prof. Kang's team is assisting Prof. Feng's team in collecting behavioral assessments from foreign language learners. The goal



of this project is to create a predictive model that forecasts learning success based on learners' cognitive and language profiles over time, as well as a model that can be generalized across different sites, specifically Hong Kong and Chongqing, which feature diverse linguistic backgrounds.

四川的研究 - 中國城市與農村的語言與大腦發展

A Study in Sichuan - Language and Brain Development in Urban and Rural Areas in China

BMI 在四川的農村地區啟動了一個新項目，專注於照顧者與孩子之間的互動，題為「中國城市與農村的語言與大腦發展」。通過與陳思教授的團隊合作，我們與蒼溪和達州的幾所當地幼兒園和家庭建立了深厚的聯繫。這一創新項目採用新穎的方法來研究兒童在社交互動環境中的語言和大腦發展。我們的方法使我們能夠在實驗室外的地方，實時觀察孩子與照顧者之間的大腦協調。我們旨在探索照顧者及孩子的互動，相關活動包括包括電影觀賞和共享閱讀等，這些活動受到孩子和照顧者的熱烈歡迎。隨著項目的進展，我們對這一新領域的重大發現充滿期待。

BMI has launched a new project in rural areas of Sichuan focused on the interaction between caregivers and children, titled 'Language and Brain Development in Urban and Rural Areas in China.' Through collaboration with Prof. Si Chen's team, we have established deep connections with several local kindergartens and families in Cangxi and Dazhou. This innovative project employs novel methods to study children's language and brain development within a social interactional context. Our approach allows us to examine brain coordination between a child and a caregiver in real time, conveniently outside the laboratory. Our exploratory caregiver-child events include activities such as movie-watching and shared reading, which are well received by both children and caregivers. We have high expectations for significant findings in this new field as the project progresses.



探索研究合作

Exploring Research Collaboration

為了加強香港研究團隊與內地醫療專業人員之間的交流，我們的研究團隊拜訪了多家醫院和非牟利機構。我們分享了應用腦部技術和神經編碼測試以預測嬰兒語言發展遲緩及神經發展障礙的相關資訊。此外，我們還探討了家長輔導和溝通策略的結合，以促進患者的語言發展，同時探索潛在的合作機會。

To strengthen exchanges between Hong Kong research groups and Mainland medical professionals, our research team has visited various hospitals and non-profit making organizations. We shared information on the application of brain technology and neural encoding tests for predicting language developmental delays and neurodevelopmental disorders in infants. Additionally, we discussed the incorporation of parent coaching on communication strategies to enhance language development among patients while exploring potential collaborations.



▲ 1. 中山陳星海醫院 Zhongshan Chenxinghai Hospital



▲ 2. 深圳新風和陸家醫院 Shenzhen New Frontier United Family Hospital



▲ 3. 深圳愛閱基金會 Shenzhen iREAD Foundation

遠景 PERSPECTIVES

大腦與認知研究所積極參與開創性研究，旨在深入了解人類大腦、認知和神經疾病的複雜性。透過協作努力和創新方法，BMI 在語言、社交互動、音樂和兒童發展領域做出了重要的貢獻。研究所致力於將研究成果轉化為實際應用和社區服務，展現了其改善神經疾病患者及其家庭生活的承諾。

BMI is actively engaged in ground-breaking research aimed at understanding the complexities of the human brain, cognition, and neurological conditions. Through collaborative efforts and innovative approaches, BMI is making significant contributions to the fields of language, social interaction, music, and child development. The institute's commitment to translating research findings into practical applications and community services demonstrates its dedication to improving the lives of individuals and families affected by neurological conditions.



澳門失智症協會

Macau Alzheimer's Disease Association

項目負責人 Name of PI : Ms. LEI Wai In 李衛燕女士

網頁 Website : <http://www.mada.org.mo/>

澳門失智症協會由何鴻燊博士醫療拓展基金會主席禰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，於2010年成立。

Macau Alzheimer's Disease Association (hereinafter referred to as MADA) was established in 2010 by Mr. Patrick Huen Wing Ming, the 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.

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。

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

現階段，協會主要工作有：

MADA is now carrying out the following missions:

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，項目開展以來，受益市民上萬人次。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，協會在世界失智症月恆常舉辦相關宣傳活動，如：記憶步行、失智症友善社區校園推廣活動；近年聯合澳門鏡湖護理學院為前線警務人員提供失智症相關培訓，合計培訓三千人餘人；

2017年起，本會與衛生局及社工局共同推出“澳門特區失智症友善社區約章”計劃，截止2024年，已有近200個機構加入該計劃，成為失智症友善大聯盟。

Raising public'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 have served as keynote speakers in public lectures and tutors for youth ambassadors. And more than 10,000 citizens have benefited from the project. In response to the call of Alzheimer's Disease International (ADI) and promoting Dementia Friendly Community, MADA always hosts a series of activities to raise public awareness of dementia in World Alzheimer's Month, such as memory walk, and promote dementia-friendly community activities among primary and secondary school students. Dementia-related training courses were provided to the frontline police officers by MADA and Kiang Wu Nursing College of Macau (KWNC), and over 3,000 participants have been trained so far. Since 2017, MADA, the Health Bureau and the Social Welfare Bureau have jointly launched the "Macao SAR Dementia-Friendly Community Charter" plan. By 2024, nearly 200 organizations have joined the plan to form a dementia-friendly alliance.

2. 支持失智症患者及照顧者

澳門鏡湖護理學院於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理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，主動與各社區/長者中心合作，在社區開展認知功能篩查服務，累積篩查近千人。開展照顧者支援項目，在學院學術團隊的帶領下，開展[澳門失智症照顧者線上教育支持平台：澳洲和大中華地區合作研究]，並且建構本土化的支援平台，並將該項目成功推廣到廣州和珠海地區，讓更多失智症患者及照顧者受益。

Support people with dementia and their carers

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 have 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, we cooperated with some community/elderly centers to carry out cognitive function screening services in the community, and cumulatively screened nearly 1,000 people. Under the leadership of the academic team of the college, a project named "Macau Online Education Support Platform for Dementia Caregivers: Collaborative Research between Australia and Greater China" was launched and a localized support platform was constructed. The project has been successfully promoted to Guangzhou and Zhuhai in China, benefiting more people living with dementia and their caregivers.

3. 促進專業間合作及區域間交流

配合特區政府失智症防治政策，我們非常重視本地專業人員的成長。除了不定期提供相關培訓，澳門失智症協會於2017年和2019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失智症照顧策劃師課程，70多名不同專業背景的學員修讀並獲得證書，其中包括粵港澳大灣區內地城市的廣州和珠海6名學員；在2022~2023年，協會亦協助澳門鏡湖護理學院開辦 ADI 認證的“失智症照護管理師課程”4期，共培訓學員159人。另外，我們相信對於澳門來說，國際上的先進經驗是難能可貴的，所以我們一直致力推動區域及國際方面的交流合作。協會從2013年起成為國際失智症協會（ADI）的會員，每年派員參加國際失智症協會的國際和亞太地區的會議和研討會，積極宣揚澳門的發展並將國際上最新的政策和資訊帶回本澳。今年10月24日至26日由協會副會長尹一橋及理事長李衛燕帶隊共8名成員赴西安出席了國際失智症協會第27屆亞太區域會議暨學術研討會，本會多位代表在會上演講介紹澳門經驗。

Promote inter-professional cooperation and cross-border collaboration

To coordinate with the governmental policy about

dementia prevention and treatment, we pay great attention to the training of local professionals. We provide relevant training from time to time, and the Certified Dementia Care Planner (CDCP) Course was launched in 2017 and 2019 in Macau by MADA together with Kiang Wu Nursing College of Macau and Hong Kong Alzheimer's Disease Association. More than 70 health care professionals have completed the courses and were awarded certificates, which included 6 students from Guangzhou and Zhuhai of Guangdong-Hong Kong-Macao Greater Bay Area. In 2022 and 2023, MADA also assisted Kiang Wu Nursing College of Macau to provide ADI accredited programme in dementia care organizer, training a total of 159 students. We also believe that international collaboration and experience sharing are very precious for Macao, so we are committed to promote regional and international cooperation. The association has been a member of ADI since 2013. Representatives from MADA participate in the International and Asia-Pacific conferences and seminars every year to actively promote the development of Macao and bring back the latest international information to Macao. From October 24th to 26th this year, a total of 8 members, led by Van Iat Kio, Vice President, and Lei Wai In, Chair, went to Xi'an, China to attend the 27th Asia-Pacific Regional Conference of Alzheimer's Disease International. Several representatives from MADA gave speeches at the meeting to share Macao's experience.

4. 明年將是 MADA 成立十五周年，借此機會，本會需要總結過去的經驗，以便更好地開展未來的工作。重點希望能做到以事情。

MADA will celebrate its 15th anniversary next year. Therefore, we need to summarize past experience in order to better carry out future work. We have the following plans:

4.1 與何鴻燊醫療拓展基金會合作開辦研討會，邀請失智症相關的國際專家參與；及

Cooperate with the Stanley Ho Medical Development Foundation to organize a seminar, inviting international dementia-related experts to participate and deliver speeches, and



4.2 出版十五周年特刊。

Publish a 15th Anniversary Special Issue booklet.

5. 争取社會各界對本會的支持，計劃拜訪相關的部門：如中聯辦、衛生局、社工局等。

MADA will strive for the support of the local community and is planning to meet with officials of concerned government departments and agencies like the Liaison Office of the Central People's Government, Health Bureau and Social Welfare Bureau, etc.

6. 未來方向，推廣教育及國際交流為主軸，具體的活動項目包括但不限於：失智症照顧者教育：專業人士及公眾；記憶步行；參與成為國際失智症協會（ADI）會議；開展照顧者支援；推廣 WHO 線上學習平台工具包，推廣到本澳及大灣區；參與友善社區大聯盟活動，與社工局，衛生局合作展開工作。

In the future, promotion education and international exchanges will be strengthened. Specific activities include but are not limited to dementia education for the public and professionals including memory walks and participation in ADI's conferences; development of care support for researchers to promote the WHO online learning platform toolkit to Macao and the Greater Bay Area; and cooperation with the Social Welfare Bureau and the Health Bureau to promote friendly community alliance activities.



何鴻燊防治傳染病研究中心

Stanley Ho Centre for Emerging Infectious Disease

項目負責人 Name of PI : Professor HUI Shu Cheong David 許樹昌教授
大學/機構 University/Institute : The Chinese University of Hong Kong 香港中文大學
網頁 Website : <http://ceid.med.cuhk.edu.hk/>

簡介 INTRODUCTION

何鴻燊防治傳染病研究中心 (CEID) 於 2006 年 11 月 16 日正式成立，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。

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. It aims at generating new knowledge and supporting strategy development in the prevention and control of emerging infections, in Hong Kong and beyond.

研究和合作 RESEARCH AND COLLABORATIONS

現時 CEID 研究的主題有：冠狀病毒感染 — 包括 SARS (嚴重急性呼吸道症候群)，MERS (中東呼吸綜合症)，COVID-19 (新冠病毒)；愛滋病毒感染和相關疾病；呼吸道傳染病，包括結核病和流感；腸道感染；以及傳染病流行病學研究。專業領域包括臨床治理，流行病學和分子分析。

CEID's research domains are: coronavirus infections – encompassing SARS, MERS (Middle East Respiratory Syndrome), COVID-19; HIV/AIDS and related infections; respiratory infections including tuberculosis (TB); and influenza; enteric infections and infectious disease epidemiology. The areas of expertise include clinical management, infection control, epidemiology and molecular analyses.

CEID 2022/2024 年的研究主題是新冠病毒、愛滋病毒、性傳播感染、結核病和病毒性肝炎。香港政府醫療衛生研究基金撥款超過九百五十萬元委託中心研究新型冠狀病毒 (COVID-19) 在社區的傳播動態，該研究是香港中文大學領導進行中的研究計劃 [COVID1903008 項目 A] 的一部分。這個為期五年的項目標題是“以人群隊列研究評估新冠病毒接觸環境的演變及其社區傳播風險”。另外，由愛滋病信託基金資助的 2 個愛滋病和新冠病毒項目，中心獲了總額超過二百萬港元的撥款。

For the year 2023/2024, the main foci of the Centre's research were COVID-19/SARS-CoV-2, HIV/AIDS, sexually transmitted infections, tuberculosis and viral

hepatitis. A grant of over 9.5M was awarded by the Government's HMRF Commissioned Research on the Novel Coronavirus Disease (COVID-19) scheme, which supported part of an ongoing programme [COVID1903008 Project A] led by the Chinese University of Hong Kong. The title of the 5-year Project was "Population cohort study for evaluating the evolvement of exposure settings for SARS-CoV-2 infection and the risk of community transmission". Separately, 2 projects on HIV and COVID-19 funded by the Council for the AIDS Trust Fund were launched, attracting grants totalling over 2M.

CEID 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，合作開展了有關愛滋病毒、性傳播感染和流感等研究計劃。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。CEID 的研究人員與澳門大學合作，使用斑馬魚模型研究愛滋病毒治療所涉藥物相互作用以及抗結核病治療的耐藥性機制，研究組發表了有關的學術文章，並於國際科學會議上發表結果。

The Centre has established research collaborations with local, Mainland China's and overseas institutions, with activities including academic exchange, joint grant applications, training and joint research projects. Locally, studies have been developed with other public hospitals, non-governmental organisations (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 – HIV, sexually transmitted infections and influenza. Researchers of CEID had collaborated with investigators of University of Macau in the use of a zebrafish model for studying drug interactions in HIV treatment and the mechanism of drug resistance in TB treatment. The results have led to publications and presentations at international scientific conferences.



在過去的十年，事前預防用藥（PrEP）在減輕社區愛滋病毒負荷方面的有效性受到了全世界的關注。CEID 的研究人員自 2017 年以來開創了香港的 PrEP 研究項目。在 2020-2024 年間，中心進行新的一項執行研究，以檢驗在現實環境中提供事前預防用藥服務的簡化模式的功效。過去幾年一連串研究將事前預防用藥帶到超過四百位有高危行為人士。

In the last decade, pre-exposure prophylaxis (PrEP) against HIV has received attention around the world because of its effectiveness in reducing HIV burden in the community. CEID's researchers have, since 2017, pioneered Hong Kong's PrEP studies. In 2020-2024, an implementation study was conducted to examine a simplified model of PrEP service delivery in real-world setting. The series of PrEP Projects have reached out to over 400 persons at high risk of HIV transmission in Hong Kong.

CEID負責統籌政府醫療衛生研究基金委托香港中文大學進行的傳染病研究。2020年11月，第四階段（2020-2025）項目正式啟動，這階段獲得二千八百萬港元的資助，新項目涵蓋以下五個領域的研究：愛滋病毒分子研究，性傳播感染流行病學，長者院舍的感染控制，消滅乙型肝炎策略方案和抗菌素耐藥性。

Currently, CEID is the programme lead of the Government's (Health and Medical Research Fund, HMRF) Commissioned Research on the Control of Infectious Diseases at the CUHK. Beginning November 2020, the Phase IV (2020-2025) programme was launched. With a grant of 28M, the new programme covers research in 5 major areas: HIV molecular studies, sexually transmitted infection (STI) epidemiology, infection control in elderly homes, Hepatitis B elimination studies, and antimicrobial resistance.

學術成果 ACADEMIC ACHIEVEMENTS

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，醫療衛生研究基金，愛滋病信託基金會等競爭性撥款，以及接受香港政府委託目的撥款。

Over the years, researchers of CEID have been awarded numerous 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 as commissioned by the Hong Kong Government.

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。多年來，CEID 研究人員已經發表了七百多份學術文章，51份學術書籍/專著，並發表了超過二百次會議演講，與其他專家和學者分享他們的新知識。

Publication of research results findings in prestigious scientific journals is one important means of delivering academic outputs in the scientific community. Over the years, researchers of CEID have published over 700 scientific papers, 51 scholarly books/chapters or monographs, and made over 200 conference presentations to share their new knowledge with other specialists and scholars.

以下是部份重要的研究結果：

- 醫護人員流感疫苗接種率的決定性因素
- 快速測試對防控性病愛滋病的影響香港的乙型肝炎情況及其消除的進度
- 男男性接觸人群中出現丙型肝炎病毒的高危傳播
- 防控注射吸毒者的丙型肝炎傳播的策略
- 『事前預防用藥』有助防止愛滋病毒在香港的高危人群擴散
- 新冠病毒爆發對流感季節的影響
- 接種新冠病毒疫苗對愛滋病毒感染者的影響
- 社區的接觸環境及其對新冠病毒傳播的影響

Some important outputs in terms of new research findings are:

- Determinants of Influenza vaccination coverage in healthcare workers
- The roles of rapid testing and self-testing in HIV/STI prevention and control
- Hepatitis B burden in Hong Kong and the progress of elimination
- High potential of sexual transmission of hepatitis C virus (HCV) in the MSM population
- Test-and-treat strategy for controlling HCV transmission in people who inject drugs
- PrEP as an effective means of HIV prevention in high risk populations in Hong Kong
- Impacts of COVID-19 outbreak on influenza seasonal patterns
- Impacts of COVID-19 vaccination on people living with HIV/AIDS
- Exposure settings and their effects on COVID-19 transmission

主要活動 MAJOR EVENTS

2024年6月27日，第二十屆科學會議活動既有教育意義，也為臨床醫生、研究人員和其他衛生專業人員建立聯繫。內容涵蓋新出現的感染、傳染病和醫療環境及愛滋病毒/性傳播感染等主題。該活動連同展覽吸引了來自香港、中國內地、澳門和其他城市/國家的310多名參會者，其中包括20名來自澳門的醫護人員。

On 24 June 2024, the 20th Annual Scientific Meeting was held for educational purposes and networking with clinicians, research scientists and other health professionals. The function featured state-of-art presentations by 12 renowned local and international speakers covering the subjects of Emerging Infections, Infectious Diseases and Healthcare Setting, Endemic Infections, and HIV/STI. The event, alongside exhibitions, attracted 310 registrants from Hong Kong and other cities/countries including Mainland China and Macau, while 20 healthcare professionals from Macau joined the event.



▲ 第二十屆科學會議 - 澳門的醫護人員
20th Annual Scientific Meeting - Healthcare professionals from Macau

教育 EDUCATION

CEID 一直為醫學本科生和研究生提供教學。在過去十年，共有25名研究生在 CEID 的學者監督下取得博士或碩士資格。

CEID has been delivering teaching to undergraduates in medicine and public health, and research postgraduates. Over the past decade, totally 25 research postgraduate students have graduated with PhD or MPhil under the supervision of CEID's academic staff.

SpatioEpi – 2007年創建網站 www.SpatioEpi.com，不時上傳帶有簡單雙語故事的傳染病地圖，供公眾參考。存檔的故事地圖超過200張，網站吸引了來自118個國家/地區超過29,000人瀏覽。該網站獲香港政府教育局推薦為香港中學生的教育資源。網站會上傳新的地圖，以提高公

眾對香港或亞太地區受關注的感染的認識。

SpatioEpi – a website www.SpatioEpi.com was created in 2007. Maps of infections with simple bilingual stories are uploaded from time to time for the information of members of the public. With about 200 story-maps archived, "SpatioEpi" has attracted over 29,000 visitors from 118 countries/jurisdictions. The website is recommended by the Government's Education Bureau as an education resource for secondary school students in Hong Kong. New maps of interest are uploaded for promoting public awareness of infections of concern to Hong Kong or Asia Pacific.

EcSS2.0 – 針對傳染病的公共衛生監測通常被認為是一項政府的官方活動，然而社區努力對於促進公眾參與亦很重要。自2011起，CEID推行社區形式系統，用於監測人群的流感樣（即流感徵狀）情況。通過電腦或手機，登記的市民被邀請每周報告徵狀，其結果有助補充甚至早於政府衛生防護中心的報告數據作出提前警報。2022年，該系統更新至2.0版本，納入對新冠病毒和社區反應的監測。這是醫療衛生研究基金資助的以人群隊列研究項目的一部分。

EcSS2.0 – While public health surveillance of infection is often considered a government programme, community efforts are important in promoting public participation. Launched in 2011, CEID has been operating a community-level system for monitoring influenza-like illnesses (ILI). Through computers or mobile phones, registered persons are invited to report symptoms weekly the results of which often complement, or even predate, surveillance data reported by the Government's Centre for Health Protection. In 2022, the system was upgraded to EcSS2.0 for incorporating the monitoring of COVID-19 and community responses. This forms part of the HMRF funded population cohort project.

CEID Community Research – 這是一個於2021年推出全新的一站式在線平台，致力於分享CEID在香港進行的所有與傳染病和公共衛生相關的社區研究項目的信息。

CEID Community Research - This platform launched in 2021, which is a one-stop hub devoted to the sharing of information about all CEID's ongoing community research projects related to infectious diseases and public health in Hong Kong.

特別鳴謝

SPECIAL THANKS TO:

贊助單位

Sponsor

中國工商銀行(澳門)股份有限公司
Industrial and Commercial Bank of China (Macau) S.A.

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

澳門友誼大馬路555號澳門置地廣場9樓
9/F., Macau Landmark, 555 Avenida Da Amizade, Macau

電話 Tel:(853)2878 2233 傳真 Fax:(853)2878 1218
電郵 E-mail:info@drhomed.org.mo 網址 Website:http://drhomed.org.mo