



School of Life Sciences 生命科學學院
The Chinese University of Hong Kong

Jointly organized by
New Asia College, CUHK
School of Life Sciences, CUHK



第八屆 新亞書院 合辦
生命科學學院

任國榮先生 生命科學講座

Yen Kwo Yung Lecture in Life Sciences

由任國榮先生紀念基金永久贊助
Endowed by The Mr. Yen Kwo Yung Memorial Fund

主講
Speaker

袁國勇教授
Professor YUEN Kwok Yung

霍英東基金教授 (傳染病學)
香港大學醫學院微生物學系講座教授

Henry Fok Professor in Infectious Diseases
Chair of Infectious Diseases, Department of Microbiology
The University of Hong Kong

香港中文大學 新亞書院 合辦
生命科學學院



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第八屆

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主講 袁國勇教授

Speaker



網上報名及詳情
Online registration & details

霍英東基金教授 (傳染病學)
香港大學醫學院微生物學系講座教授

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第一講
1st Lecture

英語主講 / in English

為下次疫情做好準備： 1997 年以來的經驗教訓

Preparation for the next pandemic:
lessons since 1997

主持/ 香港中文大學新亞書院院長陳新安教授

日期/ 2024年4月5日 (星期五)

時間/ 早上11時30分至下午1時正

地點/ 香港中文大學邵逸夫堂

Moderator/ Professor CHAN Sun On
Head, New Asia College, CUHK

Date/ 5 April 2024 (Friday)

Time/ 11:30 a.m. - 1:00 p.m.

Venue/ Sir Run Run Shaw Hall, CUHK

第二講
2nd Lecture

粵語主講 / in Cantonese

一位醫生科學家的個人旅程

Personal journey of a clinician-scientist

主持/ 香港中文大學生命科學學院院長黃錦波教授

日期/ 2024年4月20日 (星期六)

時間/ 下午2時30分至下午4時正

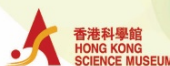
地點/ 香港科學館演講廳

Moderator/ Professor WONG Kam Bo
Director, School of Life Sciences, CUHK

Date/ 20 April 2024 (Saturday)

Time/ 2:30 p.m. - 4:00 p.m.

Venue/ Lecture Hall, Hong Kong Science Museum



本講座與香港科學館合辦
This talk is jointly organized with Hong Kong Science Museum

以上講座以實體及網上形式進行，座位有限，先到先得。
All lectures will be conducted in person and online. Seats are limited

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Biography of Professor Yuen Kwok Yung

Professor Yuen Kwok Yung is the Chair in the Department of Microbiology and Henry Fok Professor of Infectious Diseases at the University of Hong Kong, and the co-director of the State Key Laboratory of Emerging Infectious Diseases since 2005. He is a physician and microbiologist, and holds an MBBS and MD from the University of Hong Kong.

Professor Yuen has discovered over 100 novel species of virus, bacteria, fungi and parasites from patients and animals. Several of these novel animal viruses or their close relatives cause emerging infectious diseases by jumping from animals to human. In 2003, he led his team in the discovery of human SARS coronavirus, then the bat SARS related coronavirus and subsequently the 2019 human SARS coronavirus 2 (SARS-CoV-2) which was the cause of COVID-19 pandemic. Professor Yuen has published extensively in the areas of coronaviruses, influenza and other emerging virus infections, and was named by Clarivate, in its list of Highly Cited Researchers, among the top 1% of scholars worldwide, for three consecutive years from 2020 to 2022.

During the COVID-19 outbreak, Professor Yuen was the first in the world to provide evidence that SARS-CoV-2 could be easily transmitted from person-to-person in a family cluster presenting to the hospital, and that patients could be re-infected with the virus. His discoveries and expertise have been referenced by governments and healthcare policy makers internationally as they responded to the spread of the global pandemic.

Professor Yuen is a qualified specialist in clinical microbiology, internal medicine and surgery in the Hong Kong SAR and the United Kingdom. He is also academician of the Chinese Academy of Engineering (Basic Medicine) and the American Academy of Microbiology. He was awarded the Future Science Prize in 2021. The HKSAR government has awarded him a Silver and Gold Bauhinia Star for his work on microbial hunting and emerging infections.

袁國勇教授

袁國勇教授是卓越的微生物學家和內科醫生，他於香港大學修畢內外全科醫學士與醫學博士學位，現擔任香港大學微生物學系傳染病學講座教授及霍英東基金教授（傳染病學），自 2005 年起出任新發傳染性疾病國家重點實驗室之共同主任。

袁教授致力病原研究工作，多年來從病患和動物身上識別出逾百種新病毒、細菌、真菌和寄生蟲，當中數種動物攜帶病毒或其近親可傳播至人類，繼而導致新興傳染病。2003 年，袁教授帶領團隊識別出嚴重急性呼吸系統綜合症（沙士）的人類和蝙蝠冠狀病毒；新冠疫情中，他亦成功發現致病原 SARS-CoV-2。袁教授就冠狀病毒、流感和其他新興病毒感染所發表之論文數量可觀，在學術界中極具影響力，2020 至 2022 連續三年入選科睿唯安「最廣獲徵引研究人員」名單，位列全球首 1% 研究人員。

在新冠一疫，袁教授乃全球首位證實新型冠狀病毒 SARS-CoV-2 可人傳人且在家庭群組中具高傳播率，以及患者可受二次感染的專家，其相關發現和專業灼見廣為世界各地政府和衛生政策制定者參考，以應對全球大流行的傳播。

袁教授的臨床微生物學、內科和外科專業廣獲香港和英國多家醫學機構認可並授予院士銜。他亦是中國工程院醫藥衛生學部和美國微生物科學院院士。袁教授因其出色的病原追溯和新興傳染病相關工作獲香港特區政府頒授銀紫荊星章和金紫荊星章，並於 2021 年榮獲未來科學大獎。

Abstract of the Lectures

First Lecture:

Preparation for the next pandemic: lessons since 1997

Moderator: Professor Chan Sun On, Head, New Asia College, CUHK

Animal surveillance in Hong Kong SAR between 1997 to 2019 has identified many animal influenza viruses and over 30 novel coronaviruses (CoV). Some of these viruses or their close relatives have subsequently jump into humans several years later. This is best exemplified by the bat SARS related CoV found in 2005 which turns out to be the ancestral virus of 2003 SARS-CoV-1 and 2019 SARS-CoV-2. The bat CoV -HKU4 and -HKU5 are closely related to the human and camel MERS-CoV of the 2012 outbreak in Middle East. The relative of porcine DeltaCoV-HKU15 found in 2012 was reported to infect Haitian children in 2021. However, often only the full genome sequences of these 30 novel animal CoVs are available because the majority of them cannot be cultured in vitro. Since most of these animal CoVs are found in enteric specimens while human CoVs are more often found in respiratory specimens, we use adult stem cells harvested from bat intestinal tissue and human lung tissue for setting up three dimensional (3D) organoids for the isolation and characterization of some CoVs known to have health or public health significance. Multiplexed rapid diagnostic assay, broad spectrum antiviral, versatile vaccine platform, and reusable personal protective equipment are also important in preparedness against future pandemics.

Second Lecture:

Personal journey of a clinician-scientist

Moderator: Professor Wong Kam Bo, Director, School of Life Sciences, CUHK

William Osler, an infectious diseases specialist, observed that “Humanity has but three great enemies: fever, famine, and war; of these by far the greatest, by far the most terrible, is fever.” This quote caught the attention of Professor Yuen Kwok Yung during his student days in the medical school, and the subject of infectious disease became his lifelong interest. During the large-scale outbreaks of infectious disease in Hong Kong, such as the H5N1 avian influenza in 1997, the Severe Acute Respiratory Syndrome (SARS) in 2003, and the Coronavirus Disease 2019 (COVID-19) in 2019, Professor Yuen and his team have been committing to pathogen research, making preparations for novel infectious diseases, and have discovered over 100 novel species of virus, bacteria, fungi and parasites from patients and animals. Several of these novel animal viruses or their close relatives cause emerging infectious diseases by jumping from animals to humans.

As a clinician-scientist, Professor Yuen believes that infrastructure builds from the basics, curiosity breeds innovation, logic sets pathways, and perseverance brings fruition, but only love endures.

講座大綱

第一講

為下次疫情做好準備：1997 年以來的經驗教訓

主持: 香港中文大學新亞書院院長陳新安教授

1997 年至 2019 年期間的動物監測顯示，香港特別行政區已發現多種動物攜帶流感病毒和超過 30 種新型冠狀病毒 (CoV)。當中有些病毒或其近親在幾年後可傳播至人類。2005 年於蝙蝠身上發現 SARS 相關冠狀病毒就是最好的例子，它是 2003 年 SARS-CoV-1 和 2019 年 SARS-CoV-2 的祖先病毒。蝙蝠冠狀病毒-HKU4 和-HKU5 和在 2012 年中東爆發的人類和駱駝 MERS-CoV 密切相關。根據報道，2012 年發現的豬冠狀病毒 DeltaCoV-HKU15 的近親病毒於 2021 年在海地兒童中傳播。然而，由於大部分新型動物冠狀病毒都無法在體外培養，因此當中只有 30 種新型動物冠狀病毒的完整基因被組序列。由於大多數動物冠狀病毒常存在於腸道標本中，而人類冠狀病毒更常見於呼吸道標本中，我們使用從蝙蝠腸道組織和人類肺組織中採集的成體幹細胞來建立三維 (3D) 類器官，用於研究一些具有健康或公共衛生意義的冠狀病毒的生長和表特徵。多重快速診斷檢測、廣譜抗病毒、多功能疫苗平台和可重複使用的個人防護裝備對於防範未來的流行病也很重要。

第二講

一位醫生科學家的個人旅程

主持: 香港中文大學生命科學學院院長黃錦波教授

病理學家威廉·奧斯勒(William Osler)觀察到「人類只有三大敵人：發燒、飢荒和戰爭，當中最為嚴重和可怕的是發燒。」這句說話吸引了當時仍然是醫科生的袁國勇教授注意，傳染病學從此成為袁教授的興趣。傳染病在香港大規模爆發期間，如 1997 年 H5N1 禽流感、2003 年嚴重急性呼吸系統綜合症 (沙士) 和 2019 年新型冠狀病毒病 (新冠)，袁國勇教授及其團隊一直致力病原研究工作，及為應對新傳染病做準備，多年來從病患和動物身上識別出逾百種新病毒、細菌、真菌和寄生蟲，當中數種動物攜帶病毒或其近親可傳播至人類，繼而導致新興傳染病。

作為一位醫生科學家，袁教授認為建設從基礎開始，好奇心孕育創新，邏輯開闢道路，堅持不懈會帶來成果，但只有愛才能長久。

新亞書院簡介

Introduction of New Asia College

新亞書院創立於1949年，由已故國學大師錢穆先生及一群來自內地之學者，在極艱難窮困的環境中創辦，其宗旨是保存及發揚中國文化，為社會培育優秀人才。

作為中國文化理想的荷負者，新亞書院多年來積極推動各項學術文化活動，讓中國文化得以承傳。每年舉辦之文化講座、研修班及培訓班概列如下：

- **學術文化講座**

1. 錢賓四先生學術文化講座

創立於1978年，旨在發揚學術風氣及培養文化風格。此講座獲海內外學術界重視，先後蒞臨之講者共二十多位，包括創辦人錢賓四先生、英國劍橋大學李約瑟教授、美國哈佛大學歷史及哲學講座教授杜維明教授等。

2. 余英時先生歷史講座

由新亞書院及崇基學院於2007年創立，中大歷史系為協辦單位，旨在促進學術文化交流及推動歷史研究。

3. 新亞當代中國講座

創立於2012年，旨在激發本院師生及社會人士對當代中國國情的認識，以至對當前面對之挑戰作深入探討。

4. 新亞儒學講座

創立於2013年，目的在於弘揚儒學，同時探討儒家思想對個人、社會以至中國未來發展的意義。

5. 任國榮先生生命科學講座

創立於2015年，由新亞書院及生命科學學院合辦，旨在令社會大眾及學生加深對生命科學的認識、意義，以及生命科學在現今社會的價值及應用。

6. 新亞書院文化講座

創立於1950年，由多位書院老師擔任講者，當中包括錢穆、唐君毅與張丕介等從內地來的著名學者，以鼓勵大眾認識中國文化與世界學術，以及關心人類前途。新亞書院與新亞校友會於2014年正式復辦此講座，每年舉辦三至四場講座。

• 研修班 / 培訓班

1. 中華傳統文化研修班

自2000年起，新亞書院與中華傳統文化研修會、中國教育學會高中教育專業委員會及台灣素書樓文教基金每年於暑假期間舉辦，旨在促進兩岸四地中學老師對中華傳統文化的認識，並冀學員在參與培訓班後，回到自己所屬的教學單位，把所見所學推廣給同儕及學生。

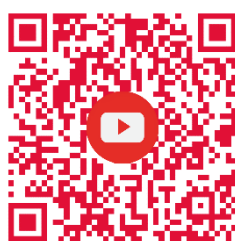
2. 中華美德教育行動師資培訓班

為弘揚中華美德，提升青少年道德素養，新亞書院與北京東方道德研究所於2002年起合辦此培訓班。參加的學員來自內地各個省市學校的校長及老師。

除了期盼學生能認識國家歷史文化、掌握當代中國發展情況，我們同時希望學生具備國際視野，以肩負起弘揚中國文化的使命。因此，書院致力為學生提供多元化的學習機會，包括舉辦「新亞青年學人計劃」、「湖南大學暑期交流計劃」及「暑期北京普通話課程」等，致力培育他們成為學德俱備、關心國家及勇於承擔的優秀人才。

另一方面，新亞學生團體積極推廣中國文化，如歷史悠久的「新亞國樂會」及「新亞國術會」便一直致力發揚中國音樂及弘揚國術；本院學生亦透過成立及參與社會服務團，積極投入社會服務，以服務社會為職志，當中包括「新亞書院扶輪青年服務團」等。此外，我們以資助及獎學金的形式鼓勵及支持學生探求中國文化，讓新亞精神能夠薪火相傳下去。

如您想了解更多我們在中國文化推廣方面的工作，請瀏覽新亞書院的網頁 www.na.cuhk.edu.hk。若您希望定時收到我們的最新消息及活動預告，歡迎將聯絡資料電郵至 nac@cuhk.edu.hk。



Introduction of School of Life Sciences

The School of Life Sciences was established in 2010 under the Faculty of Science by merging the Departments of Biochemistry and Biology, which are among the oldest departments in CUHK. Our School offers five major programmes: Biochemistry, Biology, Cell & Molecular Biology, Food & Nutritional Science, and Molecular Biotechnology, which have trained over 8500 alumni over the years. Our curriculum is designed to meet the diverse interests of life science students. The students will receive training in fundamental knowledge in life sciences in their junior years, before they specialize into one of the five programmes in their senior years.

In addition to quality teaching, we also strive for excellence in research. For example, three research projects “Plant and Agricultural Biotechnology”, “Centre for Organelle Biogenesis and Function” and “Center for Genomic Studies on Plant-Environment Interaction for Sustainable Agriculture and Food Security” led by our school have been selected by the University Grants Committee as one of the Areas-of-Excellence in Hong Kong. We believe that the best way to train future generation of scientists is to inspire the students and give them the opportunities to take part in cutting-edge research themselves. To this end, we have the SMART (Young Scientist Mentorship And Research Training) and DREAM (Dedicated Research Exchange And Mentorship) programs to allow motivated students to engage in research in local and overseas laboratories. To equip our students with a global perspective and enhance their learning experience in a world-renowned university, we have introduced a Berkeley Biosciences Study Abroad (BBSA) Programme, which enables our students to spend a semester in UC Berkeley.

Research Centres/Units under the School of Life Sciences:

UGC-AoE Centre for Plant and Agricultural Biotechnology

RGC-AoE Centre for Organelle Biogenesis and Function

Centre for Cell and Developmental Biology

Centre for Novel Biomaterials

Centre for Protein Science and Crystallography

Food Research Centre

Shiu-Ying Hu Herbarium

Simon F S Li Marine Science Laboratory

Notes

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生命科學學院