

Professor Kim Hei Man CHOW

3rd CUHK-NAM International Health Policy Fellow (2023-2025)

Kim Hei Man CHOW, PhD, is an Associate Professor in the School of Life Sciences at CUHK. She completed her postgraduate training at the University of Hong Kong, followed by postdoctoral training at Cornell University. She later served as a Research Assistant Professor at the Hong Kong University of Science and Technology under the mentorship of Professor Karl Herrup. Professor Chow has been recognized with numerous prestigious international fellowships, including the National Academy of Medicine International Health Policy Fellowship, the Alzheimer's Association Research Fellowship, the World Economic Forum Global Future Council Fellowship, and the China NSFC Excellent Young Scientist Fund.

Professor Chow heads a fundamental neuroscience research laboratory that investigates how lifestyle-related risk factors influence brain cell ageing and disease. She is particularly interested in the connections between peripheral metabolic status, the endocrine system, and central brain metabolism, with a focus on how dysregulation in these areas heightens the risk of Alzheimer's disease and related dementias.

As a NAM Fellow from CUHK, Professor Chow advanced her research and professional development through diverse academic and international engagements throughout the 2-year fellowship. During her residency at NAM, she contributed to the publication of a consensus study report on Alzheimer's disease and participated in a range of high-level forums and workshops at the National Academies, broadening her expertise in health policy and neuroscience. Internationally, Professor Chow was invited to speak at the A-T Society Clinical Research Conference in the United Kingdom and presented her research at the Alzheimer's Association International Conference in Toronto. Her collaboration with Professor Ted Abel at the Iowa Neuroscience Institute led to the completion of a manuscript and a joint grant proposal focusing on the neurodevelopmental origins of neurodegenerative diseases. Professor Chow also received the United College Research Excellence Award. She remains dedicated to advancing scientific research and promoting ethical, sustainable brain health solutions for the future.

Professor Chow completed her first residency in Washington, D.C. in 2024, followed by her second residency in 2025.

Speaker



Topic

Bridging Basic Research and Public Health Programs to Advance Sustainability in the Prevention of Alzheimer's Disease and Related Dementias

Abstract

Alzheimer's disease and related dementias (AD/ADRD) comprise a group of neurodegenerative disorders that present significant public health challenges. Despite considerable advancements in understanding these conditions, critical gaps persist in the development and implementation of effective prevention strategies for AD/ADRD.

This presentation explores the potential of an interdisciplinary framework that integrates basic research with public health initiatives to mitigate the burden of AD/ADRD. By addressing barriers to the adoption of risk reduction strategies, promoting early diagnosis, and enhancing education for both the general public and healthcare professionals, this integrative approach aims to strengthen the sustainability and efficacy of prevention efforts. Key initiatives include: (1) the development of a recommendation report to guide future government research funding priorities at the policy level, (2) a scientific proposal to re-examine the aetiology of AD/ADRD through a neurodevelopmental lens, and (3) evidence from a community-based programme that has effectively reshaped perceptions and understanding of dementia-related risk factors across the life course. Collectively, these efforts seek to empower communities to take leadership in their brain health, fostering long-term sustainability, equity, and resilience in AD/ADRD prevention programmes.



Moderator

Professor Owen Ho KO

Owen Ho KO, PhD, is a clinician-scientist at CUHK. He holds a Bachelor of Medical Sciences, a Bachelor of Medicine and Bachelor of Surgery from CUHK, and a PhD in neuroscience from University College London. In his early career, he advanced our understanding of the physical basis of sensory perception by uncovering fundamental rules governing the connections between neurons. After years of medical training, he shifted his research focus from studying the neural basis of information processing to its preservation in diseases. His current research employs preclinical and clinical approaches to investigate the neural circuits and molecular mechanisms underlying nervous system dysfunction in ageing and neurodegeneration, aiming to guide the development of disease-modifying therapeutics.



Panelist

Professor Sandra Sau Man CHAN

Sandra Sau Man CHAN, FRCPsych, is Professor (Clinical) of the Department of Psychiatry at CUHK and the Assistant Dean (Student Support) at the Faculty of Medicine of CUHK. As an educator steering the local undergraduate and postgraduate training in psychiatry, she has been advocating for a healthy sustainable professional training pathway grounded in the nurturing of mental wellness and psychological resilience in physicians. Her research interests include neural network-informed therapeutics for treatment-resistant depression, as well as developmental psychopathology in children from both epidemiological and gut-brain perspectives.

Professor Chan serves as the Convenor of the Clinical Neuroscience Division of the Hong Kong College of Psychiatrists. She keenly looks forward to the translational impact of neuroscience breakthroughs, as well as the advances in AI and big data platforms that have emerged in the past decades, developing into precision algorithms for diagnostics and therapeutics, based on a holistic grasp of the interactions between brain, behaviour and environment.



Panelist

Professor Ted ABEL

Ted ABEL, PhD, is the Roy J. Carver Director of the Iowa Neuroscience Institute and Chair of the Department of Neuroscience and Pharmacology at the University of Iowa. He is also the Co-Director of the Hawkeye Intellectual and Developmental Disabilities Research Center, which focuses on the diagnosis, prevention, treatment, and amelioration of intellectual and developmental disabilities. Professor Abel's research centres on the molecular mechanisms of memory storage and the molecular basis of neurodevelopmental and psychiatric disorders. He has been a pioneer in the use of molecular and genetic approaches to define how neural circuits mediate behaviour and store information. He is a member of the National Academy of Medicine (NAM) and a fellow of the American Association for the Advancement of Science (AAAS).

Professor Abel is currently a member of the Scientific Council of the Brain & Behavior Research Foundation, and serves as Vice Chair of Section 3 (Neurobiology, Physiological and Pharmacological Sciences) of NAM and Secretary of Section V (Neuroscience) of AAAS. He has had senior leadership roles within National Institute of Mental Health (NIMH) as Chair of the Board of Scientific Counselors and as a member of the National Advisory Mental Health Council. He has also served as Chair of the Neuroscience Section of AAAS and as President of the Molecular and Cellular Cognition Society.



Panelist

Professor Vincent Chung Tong MOK

Vincent Chung Tong MOK, MD, is the Endowed Mok Hing Yiu Professor of Medicine and Master of S.H. Ho College at CUHK. He earned his MBBS from the University of Sydney and his MD at CUHK. For over 30 years, his research has focused on age-related dementia mechanisms, diagnostics, and preventive treatments. He was the first to report the link between cerebral small vessel disease and cognitive impairment in Asia and created the world's first stand-alone AI-aided analysis of retinal fundus photographs for screening Alzheimer's dementia. Major awards he obtained include "Higher Education Outstanding Scientific Research Output Award in Natural Sciences" (1st Class, Ministry of Education), "Excellent Research Award" (Food and Health Bureau), "10th Health and Medical Research Fund Anniversary Award" (Food and Health Bureau), "Chief Executive's Commendation for Community Service" (Government of HKSAR), "University Education Award" (Collaborative Teams, CUHK), "Faculty Education Award" (Collaborative Teams, Faculty of Medicine, CUHK), and "Global Australian Award in Education, Science and Research Category" (Advance Global Australians). He currently serves as Honorary Treasurer of the Asian Society Against Dementia and Co-Director of the Charles Kao-CUHK BEAT AD Service. He is the immediate past Chairman of the Specialty Board of Neurology of Hong Kong and former Chief of Neurology at CUHK.



Speaker

Dr Victor DZAU

Victor J. DZAU, MD, is the President of the National Academy of Medicine (formerly the Institute of Medicine) and Vice Chair of the National Research Council. He is Chancellor Emeritus and James B. Duke Distinguished Professor of Medicine at Duke University, where he also served as President and Chief Executive Officer of the Duke University Health System. Previously, Dr DZau was the Hersey Professor of Theory and Practice of Medicine and Chairman of Medicine at Brigham and Women's Hospital, as well as Bloomfield Professor and Chairman of the Department of Medicine at Stanford University.

Dr DZau is an internationally recognised physician-scientist whose work has significantly advanced health and medicine both in the United States and globally. His groundbreaking research in cardiovascular medicine and genetics laid the foundation for angiotensin-converting enzyme (ACE) inhibitors, life-saving drugs used worldwide to treat hypertension and heart failure. He pioneered gene therapy for vascular disease and was the first to introduce DNA decoy molecules in vivo in humans. His innovative research in cardiac regeneration led to the Paracrine Hypothesis of stem cell action and recent strategies for direct cardiac reprogramming using microRNA. He maintains an active National Institutes of Health (NIH)-funded research laboratory.

Topic

The New Frontier of Healthy Longevity: Advancing Innovation for Aging Societies

Abstract

The world is undergoing a demographic transformation, with ageing populations reshaping health systems, economies, and societies—particularly in Asia. While advances in geroscience are uncovering ways to delay the biological processes of ageing and extend healthspan, achieving healthy longevity will also necessitate bold policy reform, economic investment, social innovation, and changes in health systems. In this keynote, Dr Victor DZau will explore the intersection of science and strategy to extend the human healthspan. His presentation will provide a comprehensive vision for transforming longer lives into healthier, more productive, and more equitable ones.



Professor Roger Yat-nork CHUNG Moderator for Dr DZAU's lecture

Co-Director, CUHK Centre for Bioethics
Associate Professor, JC School of Public Health and Primary Care, CUHK
Associate Director, CUHK Institute of Health Equity

Please refer to page 5 for the detailed biography of Professor Chung.