

Appendix 1

About the New Cornerstone Investigator Program

The New Cornerstone Investigator Program is a funding initiative that takes a forward-thinking approach to encouraging basic research spearheaded by leading scientists. The Program funds two major research fields, Mathematics & Physical Sciences and Biological & Biomedical Sciences, and encourages interdisciplinary research. Each investigator will be granted of 25 million RMB (approximately 3.5 million USD) for experimental research or 15 million RMB (approximately 2.1 million USD) for theoretical research over five years. At the end of the term, investigators will be eligible for renewal of funding, contingent upon evaluation and approval. To date, The Program has supported 104 outstanding New Cornerstone Investigators.

About 600 leading scientists applied in 2023. After several rounds of rigorous evaluation by national and international experts, 46 were selected, with Professor Siew Ng became the first scholar in Hong Kong selected as a New Cornerstone Investigator in the field of Biological and Biomedical Sciences. She was also the first female clinician-scientist selected in mainland China.

Appendix 2

Professor Siew Ng's accomplishments in innovation, technology and academia

Professor Siew Ng is a world-renowned researcher of the gut microbiome. Born in Penang, Malaysia, she went to the United Kingdom to study medicine, completing her PhD at Imperial College London in 2009. In 2010, she moved to Hong Kong and joined CU Medicine. Professor Ng is currently the Assistant Dean (Development) of CU Medicine; a Professor in the Department of Medicine and Therapeutics; Associate Director of the Centre for Gut Microbiota Research; and Director of the Microbiota I-Center (MagIC). She has also been appointed the Croucher Professor in Medical Sciences, the very first named professorship bestowed by the Croucher Foundation.

Professor Ng first became intrigued with the germs in the gut during her PhD studies and devoted herself to studying Inflammatory Bowel Disease (IBD), a chronic gastrointestinal disease that was then prevalent in the West but virtually unknown in Asia. Since joining CU Medicine, she has led researchers from over 30 countries and regions in the Asia-Pacific region as they study the disease, bringing about a paradigm shift in public health regionally and globally. Professor Ng was the first to define the genetics, epidemiology and potential environmental triggers of IBD in newly industrialised countries.

In 2013, she introduced faecal microbiota transplantation (FMT) to Hong Kong to treat patients with life-threatening gut infections. Her patented technology, MOZAIC™, which improves the success rate of FMT, is the first microbiome innovation adopted by the local Hospital Authority to provide a territory-wide FMT service in Hong Kong. In 2019, Professor Ng established MagIC as part of the Hong Kong government's InnoHK initiative,

and founded a biotechnology company that focuses on translating innovative microbiome solutions into effective diagnostics and therapeutics.

The awards and recognition Professor Siew Ng received over the years include being appointed 2019 Sir Francis Avery Jones Visiting Professor, St Mark's Hospital; and Joanna and David B. Sachar Visiting Professor, The Icahn School of Medicine, Mount Sinai. She was also awarded the 2014 and 2020 Ministry of Education Higher Education Outstanding Scientific Research Output Award – First-class Award in Natural Sciences, China's highest honour in the field. She was named a Highly Cited Researcher by Clarivate for four consecutive years, from 2020 to 2023. In 2021, Expertscape listed Professor Ng as one of the world's top 20 IBD researchers. In 2023, she received the Higher Flyer Innopreneur Award and the Most Popular Innopreneur Award from the Federation of Hong Kong Industries for her outstanding leadership in innovative technology. Recently, she has been elected as a foreign member of the Academia Europaea for her distinguished achievements in the advancement and propagation of excellence in scholarship in medicine, for the betterment of public health.