

Research Grants Council to present public lecture on Happy, Healthy, Longevity – AI Can Help on December 16

The following is issued on behalf of the University Grants Committee:

In line with the Government's initiative to promote STEAM (Science, Technology, Engineering, the Arts and Mathematics) education for all, for fun and for diversity, the Research Grants Council (RGC) will organise a series of public lectures titled Happy, Healthy, Longevity – AI Can Help from December 2023 to January 2024, covering areas including technology, innovation and health. The first lecture will be held at the Hong Kong Science Museum on December 16 (Saturday). All are welcome.

The RGC has invited Associate Professor and Assistant Head of the Department of Industrial and Manufacturing Systems Engineering of the University of Hong Kong, Dr Calvin Or, and Professor and Head of the Division of Upper Gastrointestinal and Metabolic Surgery of the Department of Surgery of the Chinese University of Hong Kong, Professor Chiu Wai-yan, to introduce wearable robots that can enhance the mobility of the elderly, and the latest development of artificial intelligence (AI) and robotic surgery respectively. Details are as follows:

Time: 2.30pm – 4.30pm

Venue: Lecture Hall, 1/F, Hong Kong Science Museum

Language: Cantonese

Admission: Free (seats are available on a first-come, first-served basis)

Members of the public can also watch a live broadcast of the lecture through the Facebook page (www.facebook.com/hkscm) or the YouTube Channel (www.youtube.com/user/hksciencemuseum) of the Hong Kong Science Museum.

First session: User-centered design of wearable robots for older adults

Increases in life expectancy have been accompanied by increases in the prevalence of low mobility among older adults, which can significantly reduce the quality of life. Among older adults, reduction in mobility mainly occurs due to the physical challenges caused by loss of muscle mass. Wearable robots can provide active assistance to limbs to enhance mobility of the elderly. Despite proven feasibility, many wearable robots have remained in the concept stage. Dr Or will introduce a project focusing on a user-centered approach to the design and development of wearable robots for older adults.

Second session: The next phase of surgery – kindest cut through AI and robotics

The development of minimally invasive surgery (MIS) has revolutionised

the approach to surgical treatment for diseases and the introduction of a robotic surgical system-refined precision in MIS. Recently, AI has been widely applied to enhance the diagnostic capability of endoscopy for gastrointestinal cancers. Professor Chiu will share his team's experiences in performing the world's first flexible robotic endoscopic submucosal dissection for treatment of early gastric and colonic neoplasia and explain how AI can assist surgeons in achieving more precise and safe surgeries at all scales down to the microscopic level through nano-robotics in the next phase.

The RGC has been regularly organising public lectures since 2009, featuring various distinguished scholars as speakers. These lectures aim to promote research knowledge of Hong Kong's tertiary institutions and to raise public awareness of the significance and value of local research work.

For enquiries, please call 2524 3987 or visit the University Grants Committee webpage (www.ugc.edu.hk/eng/rgc/about/events/lectures/lectures.html). In addition, members of the public can register for the RGC's email subscription service at www.ugc.edu.hk/eng/rgc/about/subscribe to receive regular updates.