

## Technical Seminar: Minimally Invasive Surgical (MIS) Technologies

By Mr. Ricky FUNG

A meaningful and knowledgeable seminar was organized by the Young Members Committee (YMC) with more than 60 attendees to discuss minimally invasive surgery (MIS) on 20 September 2017. MIS is surgery done through small incisions using miniaturized surgical tools and cameras or telescopes. The seminar was presented by Prof. Zheng LI who is the Assistant Professor of Department of Surgery and Associate Member of Biomedical Engineering Program in the Chinese University of Hong Kong. Prof. LI has extensive experience in the MIS technologies and products designed for comprehensive modern surgical training and skills development.

Prof. LI first introduced the research groups and major facilities in Jockey Club Minimally Invasive Surgical Skills Centre, Chow Yuk Ho Technology Centre for Innovative Medicine and Advanced Bio-Medical Robotics Lab. The groups focus on biomedical engineering development and assistive technology for the aging society. He shared the video on how the MIS technologies and products operate in the Technology Centre and Lab.

Prof. LI then illustrated the background of medical and surgical robotics and compared the advantages and disadvantages of open surgery, MIS and robot assisted MIS. The technology of robot assisted MIS improves the accuracy and dexterity but still need to enhance the sensation. He also presented three MIS robot systems which are Da Vinci Surgical System, SPORT System and Flex Robotic System. A detailed description about the system designs, operations and components used was given. Moreover, he introduced his researches about flexible surgical instruments and robots and soft device and robots. Prof. LI and his research teams utilize the engineering skills and medical research together for the benefit of the patients

All participants were impressed by the insight brought by the experienced speakers and he was eager to promote the MIS Technologies for modern surgical training and future development. On behalf of YMC, we would like to express our sincere gratitude to Prof. LI for his sharing and insights.



<Photo Caption: The speaker, Prof. Zheng Li (Left), receiving souvenir from YMC Chairman, Ir Ambrose Chen>