

SEVENOAKS U3A SCIENCE SEMINAR 2018 ON TECHNOLOGY MEETS MEDICINE

On 13 June, Sevenoaks U3A Science Group held its annual Science Seminar at the Orchard Conference Centre, East Malling, on the theme of Technology meets Medicine: Bio-Engineering & Robotics. Over 100 attendees, many from U3As across Kent as well as Sevenoaks U3A, enjoyed three informative and entertaining presentations given by senior academics from Kings College London Medical School. The programme opened with Professor Kawal Rhode outlining the impact of technology on medical procedures and then presenting examples of Image Guided Robotic Aids to Surgery. This was followed by Dr Ernest Kamavuako explaining the range of prosthesis available to those losing limbs and then presenting examples of recent advances in Myoelectric Prosthesis Control; where electrical signals generated in muscles can be used to control artificial limbs and hands. In the third presentation, Dr Hongbin Lui explained research into the field of Soft Robots for Medical Interventions, where highly flexible probes and sensors can be used in ways that offer less intrusive surgical procedures. All three presentations included excellent pictures and videos illustrating the application of technologies meaning that all attendees, independent of background knowledge, could understand and appreciate the impact of recent research. The presentations were followed by a lively question and answer session involving the audience and the three presenters offering an opportunity for clarification of the advantages and limitations of current technology.

Dr Tony Sinden



Dr Ernest Kamavuako – Explains bionic hand movements



Professor Kawal Rhode



Dr Hongbin Liu

Powerpoint Presentations of Dr Kamavuako and Dr Liu' talks are available via these links

Myoelectric Control of Artificial Limbs – Dr Kamavuako

Haptic Mechatronics and Medical Robotics - Dr Liu