New technologies for clinical and Preclinical research into ultrasound therapy and imaging

Wednesday 11th December 2019

Programme

Delegate Fee: £45
The session is free to those who register to attend Day 2 of Ultrasound 2019
Chairs - Prof Gail Ter Haar, The Institute of Cancer Research, Prof Carmel Moran, University of Edinburgh

10.30  Introduction

10.35  OptimUS: An open source general purpose ultrasound simulation platform, Pierre Gelat, Mechanical Engineering University College London

11.00  Acoustic and thermal characterisation of polyvinyl alcohol (PVA) hydrogels as tuneable tissue phantoms for HIFU treatment, Lisa Braunstein, Division of Radiotherapy and Imaging Institute of Cancer Research

11.25  Prediction of Pelvic Tumour Coverage by Magnetic Resonance Guided High-Intensity Focused Ultrasound (MRgHIFU) from referral ultrasound, Ngo Fung Daniel Lam, Joint Department of Physics The Institute of Cancer Research

Lunch

13.00  A controlled study of proliferation and Prostaglandin E2 up-regulation in pre-osteoblasts stimulated by low intensity pulsed ultrasound, Jill Savva, Centre for Medical and IndustrialUltrasonics, University of Glasgow

13.25  Interleaving passive acoustic mapping with compounded diverging-wave imaging for HIFU treatment monitoring, Chunqi Li, School of Electronics and Electrical Engineering, University of Leeds

13.50  A Thermochromic Tissue Mimicking Material (Th-TMM) for High Intensity Focused Ultrasound and Hyperthermia Procedures, Simone Ambrogio, Medical Physics, Guy's and St Thomas' NHS Foundation Trust

14.15  Elucidation of biological mechanisms of clinically viable low frequency (20 khz) ultrasound applicator for chronic wounds therapy, Olivia Ngo, School of Biomedical Engineering and Mechanical Engineering Drexel University and University of Glasgow

14.40  Refreshments

15.00  Demonstration of the ability to use microbubbles combined with low pressure focused ultrasound to induce cavitation in orthotopic pancreatic tumors, Petros Mouratidis, The Institute of Cancer Research