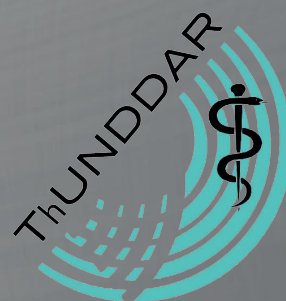


# New technologies for clinical and Preclinical research into ultrasound therapy and imaging

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 Industrial Ultrasonics, 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