

The [Hyatt Regency Hotel](#) Manchester

Situated in the heart of the University district, the hotel is a short walk from the city centre. The hotel offers discounted accommodation for meeting delegates. There are many great hotels nearby with a price range to suit any budget. See visitmanchester.com for details.

PROVISIONAL PROGRAMME Day 1: 20th June 2023

9:00 – 9:45 Registration and tea/coffee

9:45 – 10:00 Welcome and Housekeeping

10:00-10:30 **Keynote Speaker: Professor Kostas Kostarelos, Manchester**
Professor of Nanomedicine, the University of Manchester



Graphene in Medicine

Graphene was “re-discovered” in Manchester in 2004 and is the thinnest and lightest compound known to man. It’s conductivity and transparency make it an ideal material for many applications in medicine. Prof Kostarelos will explain some of the past and future uses for this fascinating material in medicine.

10:30-11:30 **Abstract Session 1**

- **10:30-10:45** Preoperative triAge to optimise efficiency of the screening process: an algorithm to streamline elective surgical patients (PACMAN): a cohort study.
Mrs M Di Biase
- **10:45-11:00** Applying machine learning to cardiopulmonary testing variables for the prediction of surgical intervention.
Dr M Alabdah
- **11:00-11:15** Postoperative troponin and preoperative CPET are associated with mortality in an elective UK non-cardiac surgical cohort.
Dr M Pruski
- **11:15-11:30** Major adverse cardiovascular events following myocardial injury after non-cardiac surgery (MINS): A systematic review and meta-analysis.
Dr E Quintela

11:30-11:50 Tea/coffee

11:50-12:50 **Abstract Session 2**

- **11:50-12:05** Propofol effects on the heart rate and electrocardiogram in humans.
Mr M Fabus
- **12:05-12:20** Adding objectivity to submaximal exercise testing by assessment of heart rate recovery at home – a healthy volunteer study IV (SEARCH-IV).

Mr J Luckhurst

- **12:20-12:35** Remote photoplethysmography and automated capillary refill time technique for microcirculation assessment in septic shock patients.

Dr M Klibus

- **12:35-12:50.** Sustainable Waste Management in Anaesthesia and Critical Care-
Dr L Brooks

12:50-13:50 Lunch provided (select any dietary requirements when booking)

13:30-15:20 **BJA Symposium: Medical Devices and Innovation**

13:50-14:15 **Professor Tom Clutton-Brock MBE, Birmingham**

Professor of Anaesthesia and Intensive Care Medicine, University of Birmingham. Director of the Medical Devices Testing and Evaluation Centre (MD-TEC)

The Pandemic Ventilator Challenge: what next for medical device regulation and innovation?

Prof Clutton-Brock's MD-TEC team played a vital role in developing and testing ventilators in the Government's Ventilator Challenge during the COVID-19 pandemic, helping to rapidly assess ventilator prototypes and advise on the approval process. Tom will share what we've learned from the pandemic and what the future holds for regulation and innovation.

14:15-14:40 **Professor Caroline Jay, Manchester**

Professor of Computer Science, the University of Manchester
Research Director of the Software Sustainability Institute

Human centred systems – incorporating artificial intelligence into healthcare diagnostics

Artificial Intelligence is increasingly being designed for use in healthcare settings to support diagnosis. Prof Jay will describe a new approach to automating ECG interpretation that uses an understanding of how humans perceive signal data as the basis for an algorithm for diagnosing long QT Syndrome. The algorithm exploits 'cognitive fit', such that the human and machine share the same representation of the data. Caroline will reflect on the importance of considering clinical knowledge alongside machine learning, and the implications for trust in AI within healthcare settings.

14:40-15:05 **Dr Peter Young OBE, Norfolk**

Consultant in Anaesthesia and Critical Care, Queen Elizabeth Hospital, Kings Lynn
Vice President, Association of Anaesthetists

Getting an innovation off the ground

Dr Young was part of the founding team behind King's Lynn Institute for Patient Safety (KLIPS), which has spent the last 20 years innovating; designing and testing devices which reduce risk in all areas of healthcare. Peter will share his experience in turning ideas into reality with examples from his diverse portfolio of device innovation.

15:05-15:20 **Panel discussion**

15:20-15:40 Tea/coffee

15:40-16:55 **Abstract Session 3**

- **15:40-15:55** Progression of Hypoxaemia in Apnoeic Children during General Anaesthesia: A Computational Modelling Study.
Miss S Lai
- **15:55-16:10** Impact of COVID-19 on tracheostomy care at a tertiary NHS hospital.
Miss H Dane
- **16:10-16:25** Precision guidance of simulated percutaneous dilatational tracheostomy: a pilot prototype device development study.
Dr P Alexander
- **16:25-16:40** Assessment of a medical device prototype designed to improve the safety of speaking valve utilisation in patients with tracheostomies.
Dr A Song
- **16:40-16:55** High ventilatory inefficiency with low psoas muscle index increase the risk of 3-year mortality after liver resection and pancreaticoduodenectomy-
Mr P Duro-Ocana

17:00-17:20 **Anaesthetic Research Society Annual General Meeting**

All members (and non-members who are interested) are very welcome.

You can read more about the ARS, how to get involved and how to get put yourself forward for a role with the society at www.ars.ac.uk.

End of Day 1 Scientific Programme

17:20 Drinks at the hotel bar (self-pay)

19:30 **65th Anniversary Dinner**

£40 per head. All members and non-members welcome.

Choose the dinner option when booking the course.



Day 2: 21st June 2023



8:30 – 9:00 Registration and tea/coffee

9:00 – 10:30 **Abstract Session 4**

- **09:00-09:15** Comparison of preoperative handgrip strength with revised cardiac risk index and modified frailty index for predicting 30-day in hospital mortality and morbidity.
Dr K Jain
- **09:15-09:30** A four-year follow-up of Abdominal Aortic Aneurysm Get Fit randomised control trial.
Dr T Tay
- **09:30-09:45** A systematic review of the effect of melatonin on mortality in hospitalised patients with COVID-19 in randomised controlled trials.
Mr R Docherty
- **09:45-10:00** The carbon footprint of Bubble-PAPR™: a novel item of personal protective equipment.
Dr A Pinder
- **10:00-10:15** Association between critical care and chronic medication discontinuation.
Miss C Kanodia
- **10:15-10:30** The burden of perioperative teicoplanin allergy in Yorkshire 2013-22.
Dr A Littlejohn

10:30-10:50 Tea/Coffee

10:50-12:20 **BJA Symposium: Performance Biology**

10:50-11:15 **Professor Jamie McPhee, Manchester**

Professor of Musculoskeletal Physiology, Manchester Metropolitan University.

Skeletal muscle function and its response to disuse, disease and rehabilitation

Prof McPhee leads the Department of Sport and Exercise Sciences within the MMU Institute of Sport. Jamie will explain his research into muscle ageing, muscle wasting following disuse or disease processes, fatigue and recovery of physical function using nutrition, exercise and technology interventions. Prof McPhee's research has relevance for patients with muscle impairments and for athletes wanting to improve sports performance.

11:15-12:05 **Dr Sarah Caddy, West Midlands**

General Practitioner and Director of Chimp Management

Performance psychology

Dr Caddy works alongside Prof Steve Peters at Chimp Management. The team specialises in training people to manage their mind more effectively, with an approach grounded in neuroscience research. Using examples and some well-known characters, Sarah will highlight how simplifying neuroscience to understand and manage emotions, thinking and behaviours can help patients and others optimise performance.

12:05-12:20 **Panel Discussion**

12:20-13:20 Lunch provided

13:20-14:05 **Abstract Session 5**

- **13:20-1335** Pulmonary artery wave intensity analysis in a pig model of lung resection.
Dr T Keast
- **13:35-1350** Remimazolam Besylate inhibits human lung cancer cell proliferation, migration and induces apoptosis *in vitro*.
A Alsharif
- **13:50-14:05** Elevated resting extracellular Ca²⁺ entry is conserved in the Ca_v1.1 p.T1009K variant that is associated with malignant hyperthermia.
Dr J Wylde

14:05-14:30 Tea/Coffee

14:30-15:15 **Abstract Session 6**

- **14:30-14:45** Tea-mwork Makes the Dream Work: MDT Tea Trolley Flashcard Training.
Dr S Teh
- **14:45-15:00** Virtual Reality Tracheostomy Safety Course- as good as the real thing?
Dr S Kennion
- **1500:1515** ClinCirc identifies that circadian disruption is associated with inflammation in critical care.
Prof. J Blaikley

15:15-15:45 **Keynote Speaker: Professor Paul Dark, Manchester**

Professor of Critical Care Medicine, the University of Manchester
National Deputy Medical Director, NIHR Clinical Research Network

Research during major incidents

Professor Dark has provided strategic leadership in the development and delivery of national clinical NHS research, particularly in critical care and emergency medicine. Following the Manchester Arena bomb in May 2017, research was possible into the region's response because of the systems and infrastructure that were in place. Paul will explain how research is possible in these difficult circumstances and the role of the NIHR in facilitating such work.

15:45-16:00 Results, prizes and awards.
Close of meeting.

Please be aware, the exact timings of the talks are subject to change in the final programme, however we will endeavour to keep the days of the presentation the same for the talks.