Faculty Biographies

Helen Anderson

Helen is a consultant anaesthetist at Derriford Hospital, Plymouth. She trained in anaesthesia in the North East and worked as a Consultant Anaesthetist at Freeman Hospital, Newcastle upon Tyne NHS Trust from 2007-2013. She has been involved in Cardiopulmonary Exercise Testing (CPET) since 2005, both a research tool and a vital part of the pre-operative assessment process for the management of high risk surgical patient. In 2013, she moved to the warmer (but wetter) climes of Cornwall and is currently the lead for Pre-operative Assessment and CPET in Plymouth where the service has continued to expand and hopes to develop an exercise intervention program for surgical patients.

John Carlisle

49 years old. Peak VO2 46 ml/kg/min. adjusted median life expectancy 41 (more) years. I work in Torbay hospital as a consultant in preoperative preparation, anaesthesia & critical care.

Main areas of interest: perioperative risk compared to 'at home' risk, cardiopulmonary exercise testing, evidence-based medicine including systematic reviews, detection of data fabrication.

Editor for Anaesthesia. Please feel free to email me at john.carlisle@nhs.net.

Professor Gerard Danjoux

Graduated: Newcastle University (1989)

Anaesthetic training: Northern Deanery (1992 – 2002) Fellowship training: Australia (1998/9) and Canada (2000/1)

Consultant in Anaesthesia and Sleep Medicine at South Tees Hospitals

NHS Foundation Trust (2002 to date).

Clinical interests

Preparation and perioperative care of patients for high-risk surgery

Cardiopulmonary exercise testing and risk evaluation

Sleep Medicine

Quality Improvement

PREP – developed Prehabilitation toolkit for primary care clinicians

PREPWELL – leading a regional programme with Public Health specialists to develop, implement and sustain a community-based health and wellbeing programme for patients before surgery

Research interests

Improving patient fitness for surgery through aerobic exercise training

Patient behaviour change preoperatively

Research Lead Preoperative Association

Evaluating the effect of pharmacological interventions in simulated haemorrhage and tissue trauma – run volunteer programme with MOD $\,$

Preoperative screening for OSA

Other Roles

Visiting Professor at Teesside University and Associate Clinical Lecturer at Newcastle University

Member of Perioperative Medicine Leadership Committee at RCoA

Faculty for European and National Perioperative Cardiopulmonary Exercise Testing Courses

UK lead for organiser of 2nd World Congress in Prehabilitation (Holland 2018)

Sandy Jack

Sandy Jack Professor of Prehabilitation Medicine at University Hospital Southampton. She was previously a Consultant Clinician Scientist at Aintree University Hospital NHS Foundation Trust, Liverpool where her main clinical roles was Director of the Clinical Diagnostic and Preoperative Assessment Exercise service across the Trust.

Her research interests are primarily exercise physiology in health and disease with a special interest in the ventilatory control responses in patients with idiopathic hyperventilation. More recently her research interests have been centered on the use of exercise testing in preoperative assessment and perioperative management in patients undergoing major surgery. Other interests include cough, lung sounds and lung mechanics in a variety of lung diseases and also neurophysiological studies using functional magnetic resonance imaging and the dipole methodology. Current collaborations include, Showa University Japan, Sunnyside University, NY, USA, and Bristol NHS Trusts and the Xtreme Everest Group at University College London.

Karen Kerr MB ChB FRCA MSc

Consultant Anaesthetist, Departmental Lead for CPET, Sheffield Teaching Hospitals (STH)

A general anaesthetist with an interest in the objective assessment of fitness before major surgery and improving that fitness.

The CPET service in Sheffield began in 2005, we have cemented our place within the perioperative pathway for a multitude of surgical specialities.

A past elected committee member of the Vascular Anaesthetic Society of Great Britain and Ireland, the focus is no longer just on the vascular patients but on improving the fitness and outcomes for all those that pass through the doors of CPET in Sheffield. In 2019 I graduated with an MSc Sports and Exercise Science to help us do just that.

Denny Levett

Denny is a Professor in Perioperative Medicine and Critical Care at Southampton University and Southampton University Hospital NHS Foundation trust. Denny has chaired the National Perioperative CPET course biannually since it was established in 2009 and is the chair for the newly formed national perioperative exercise testing and training society (POETTS, www.poetts.co.uk). Denny leads the Perioperative Medicine and CPET service at University Hospital Southampton NHS trust.

Denny leads the perioperative medicine service at UHS including a pre-operative CPET service, a high risk shared decision making clinic, a pre-operative anaemia service and a surgery school. Her clinical and research interests explore the role of exercise in pre-operative risk stratification and pre-operative optimisation to improve surgical outcomes. She is president of the Perioperative Exercise Testing and Training Society (POETTS) (www.poetts.co.uk) and established and chairs the National Perioperative Cardiopulmonary Exercise Testing course. She is part of the Fit 4 Surgery research groupin Southampton, working with Professors Jack and Grocott investigating exercise, psychological and nutritional prehabilitation and a clinical lead in the Wesfit team. She is the clinical CI for the INSPIRE trial evaluating inspiratory muscle training before surgery as a means of reducing post-operative complications.

Feel free to email me at: d.levett@soton.ac.uk

Kay Mitchell

Kay is the Critical Care Senior Research Manager, NIHR Respiratory Biomedical Research Unit, based at University Hospital Southampton, UK. Kay is also a key member of the team organizing medical research expeditions at the University College London (UCL) Centre for Altitude Space and Extreme Environment (CASE) Medicine. These have included the Caudwell Xtreme Everest expedition (2007) and Xtreme Everest 2, which took place in March 2013. These expeditions involve using healthy volunteers to improve our understanding of the effects of hypoxia, and thus development treatments to improve outcomes. A key feature is the use of CPET to examine oxygen efficiency and utilisation, and Kay helped deliver CPET testing on a number of the expeditions.

Kay also set up and developed the clinical cardiopulmonary exercise testing service at the Whittington and UCL hospitals in London in 2007 in collaboration with Professor Mike Grocott.

In addition, Kay is developing the Southampton Academy of Research (SoAR). This has been set up to develop research capacity and capability amongst health researchers in Southampton. Kay studied at the Oxford School of Nursing before completing a BSc in

Human Sciences at UCL. She has worked as an intensive care nurse at UCLH and Homerton hospital in London, and in Southampton, focusing on practice development, research and education. She completed her MSc in Adult Critical Care at Imperial College London in 2007. She moved her base to Southampton in August 2012, and develops multi-professional research in critical care. She is registered for a PhD in epigenetic markers of good and poor adaptation to hypoxia.

James Prentis

Consultant in Anaesthesia and Perioperative Medicine, Newcastle

James trained at Kings in London before undertaking anaesthetic training in the North East. He was appointed as a consultant anaesthetist at the Freeman Hospital in 2012. His clinical week mainly involves hepatobiliary surgery including liver and pancreas transplantation and pre-assessment of the major surgical patient incorporating the cardiopulmonary exercise testing service.

He undertook 3 years of research prior to becoming a consultant in the field of risk assessment prior to major surgery and has published widely on cardiopulmonary exercise testing in a variety of surgical patients. His other areas of current interest include developing enhanced recovery pathways, postoperative cognitive decline and critical incident check lists.

Marshall Riley

Consultant Respiratory Physician, Belfast City Hospital, and Honorary Senior Lecturer, Queen's University of Belfast, Belfast, N. Ireland. Twenty years' experience in cardiopulmonary exercise testing, including two years spent at Harbor-UCLA with Dr. K. Wasserman.

Michael Swart

Consultant in anaesthesia, critical care and perioperative medicine for the last 22 years at Torbay Hospital, Torquay, UK.

For 30 years I have tried to improve patient care by developing shared decision making before surgery, assessment of high risk surgical patients, optimising high risk surgical patients before surgery and providing their optimal post-operative care. I will continue this work for a few more years (3-8 years?). In my final years of clinical practice I will focus on supporting younger clinicians who are the future. The future is more important than the past.

Michael is a council member of the Royal College of Anaesthetists. He has been an advisor to the Department of Health for anaesthesia as part of the Enhanced Recovery Programme and involved in the development of Perioperative Medicine at the Royal College of Anaesthetists. He is currently one of the joint Perioperative Medicine Clinical Leads at the Royal College of Anaesthetists.

Professor Susan A. Ward, MA, DPhil

Emeritus Professor, University of Leeds, Leeds, UK Human Bio-Energetics Research Centre, Crickhowell, Powys, UK

Professor Ward gained her DPhil in Physiology from Oxford University in 1974. Following two years as a Lecturer in the Department of Physiology at Liverpool University, she moved to the University of California at Los Angeles, becoming Professor of Anesthesiology and Physiology in 1988. She returned to the United Kingdom in 1993, first to the Department of Physiology at the University of London's St George's Hospital Medical School, then to South Bank University as Chair of Sports Science and, in 1998, to the University of Glasgow as Director of the Centre for

Exercise Science and Medicine. In 2003, she was appointed to the Chair of Sport and Exercise Science and Head of the School of Sport and Exercise Sciences at the University of Leeds, and then Emeritus Professor in 2007. Her research interests include the control of ventilation, pulmonary gas exchange and muscle energetics during exercise in health, altered environments and disease, and she has over 160 publications on these topics. She is a Fellow of the American College of Sports Medicine, the European Respiratory Society and, by invitation, the European College of Sports Science; previously served as Chair of the Pulmonary Circulation, Gas Exchange and Exercise Group of the European Respiratory Society; is immediate past Editor-in-Chief of the "European Journal of Applied Physiology"; and is a consultant for Xtreme Everest 2 (www.xtreme-everest.co.uk), a collaborative venture between Duke University USA, the University of Southampton and University College London. She presently operates a research and educational consultancy.

Malcolm West

Malcolm West is a National Institute for Health Research (NIHR) funded clinical lecture in surgery and a colorectal surgical registrar at the University of Southampton, United Kingdom. He has completed a PhD in exercise physiology, perioperative surgical risk stratification and mitochondrial energetics. During his PhD Malcolm was the Clinical Lead for the Perioperative Cardiopulmonary Exercise Testing service at University Hospitals Aintree, Liverpool, UK. His research interests include the pathophysiological mechanisms of cancer therapies and prehabilitation and their effects on physical fitness, mitochondrial function, tumour microenvironment and postoperative outcomes. Malcolm has published extensively in the perioperative medicine and surgical risk arena and was recently awarded the prestigious British Journal of Surgery John Farndon Prize.