

**Imperial College  
London**

THE ROYAL BRITISH LEGION

**CENTRE FOR BLAST INJURY STUDIES**

AT IMPERIAL COLLEGE LONDON

THE ROYAL BRITISH  
LEGION



2017 Annual Networking & Research Update Event

*Care across the continuum,  
from point-of-injury to recovery*

21 November 2017 | Great Hall, Imperial College London

*This event has been accredited by the Royal College of Surgeons of England for up to 5.0 CPD points as well as by the US Navy Medicine Professional Development Center for CME and CNE for up to 6.5 AMA PRA Category 1 credit(s)<sup>™</sup>.*

# Timetable

This year's event is comprised of three sessions and one keynote address. Each session will begin with a moderator introduction and will be followed by a panel discussion, a series of rapid-fire podium presentations and an associated poster session. Networking opportunities over refreshments and food will take place throughout the day.

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## Registration and Introduction

09:00 Registration

09:30 Introduction

Professor Anthony Bull | *Centre Director, Imperial College London*

## Session 1: Injury Prevention and Pre-hospital Care

09:40 Session Introductions by the Moderators

COL Jim Czarnik | *US Medical Liaison to the UK Ministry of Defence*

Professor Mark Wilson | *Clinical Professor of Brain Injury, Imperial College London*

09:50 Current Clinical Issues in Military Pre-hospital Emergency Care

Lt Col Chris Wright | *Defence Consultant Advisor for Pre-hospital Emergency Care*

10:02 Tactical Combat Casualty Care and the Blast Casualty

COL Kirby Gross | *Director, US Army Trauma Training Department*

10:14 Physiological Sensors: Do we really need them?

Surg Cdr Mansoor Khan | *Senior Lecturer, Academic Department of Military Surgery and Trauma*

10:26 Questions and Answers

Session 1 speakers

10:38 Research Highlights 1: Selected Podium Presentations

Dr Thuy-Tien Nguyen | *Experimental capabilities of the Centre for Blast Injury Studies*

Dr Grigorios Grigoriades | *The effect of posture on lower limb injuries in under-vehicle explosions*

Dr Angela Kedgley | *Interphalangeal joints are stronger than metacarpophalangeal joints: the risk of injury to the small joints of the hand*

Dr Nic Newell | *Towards a high-rate computational model of the lumbar spine: material characterisation of the intervertebral discs*

Mrs Angaja Phalguni | *Noise-induced Hearing Loss and Tinnitus in a Military Population: Extent and Nature of the Existing Evidence Base*

Mr Jameel Muzaffar | *Hidden Hearing Loss and High-velocity Shoulder-launched Weapons: Are We Failing to Protect Against Noise-induced Hearing Loss, Tinnitus and Cochlea Synaptopathy?*

Dr Gillian Grafton | *Role of the 5-HT System in Tinnitus: A Systematic Study Using an Animal Model*

Dr Robert Dickinson | *Xenon protects against blast-traumatic brain injury in an in vitro model*

Dr Cornelius Donat | *An integrative approach to studying tertiary effects of blast traumatic brain injury: combined high-field MRI, computational modelling and advanced histopathology in a rodent model*

Maj David Naumann | *Endotheliopathy of trauma is likely to be a battlefield*

*phenomenon and is associated with multiple organ dysfunction syndrome: a prospective observational study*

Maj Max Marsden | *Enhancing decisions for major haemorrhage protocol activation using a Bayesian Network Model*

LTC Jeremy Pamplin | *Virtual Health: A Force Multiplier for Operational Medicine*

COL (Ret.) Elizabeth Mann-Salinas | *Evaluation of the Joint Trauma System Role 2 Registry in Afghanistan*

**11:35 Tea and Coffee Break**

## **Keynote Address**

**11:50 Introduction of Keynote Speaker**

MAJ(P) Daniel J. Stinner | *Visiting Researcher, Imperial College London; US Army Institute of Surgical Research*

### **Keynote Address**

MG Barbara Holcomb | *Commander, US Army Medical Research & Material Command*

**12:20 Lunch, Networking and Poster Viewing**

## **Session 2: In-hospital and Acute Care**

**13:20 Session Introductions by the Moderators**

Col Michael Davis | *Director, US Combat Casualty Care Research Program*

Lt Col Graham Lawton | *Senior Lecturer, Academic Department of Military Surgery and Trauma*

**13:31 Quantifying Blast Injury**

Sqn Ldr Phill Pearce | *Research Postgraduate Student, Imperial College London*

**13:43 The Genomic Response to Trauma**

Professor Karim Brohi | *Professor of Trauma Sciences, Queen Mary University of London*

**13:55 Measuring Patient-specific Injury and Response to Injury in Multiply-injured Patients: Precision Medicine for Trauma**

Dr Todd McKinley | *Professor of Orthopaedic Surgery, Indiana University School of Medicine*

**14:07 Questions and Answers**

Session 2 speakers

**14:20 Research Highlights 2: Selected Podium Presentations**

LTC David Lidwell | *How Far Can We Go: The Evolution of Forward Surgery*

Dr Tobias Reichenbach | *Improving speech comprehension through mind-controlled hearing aids*

COL Anthony Johnson | *The Military Orthopaedic Trauma Registry: Potential for Long-term Outcomes*

CPT Sean Kelly | *Utility of CT Angiography in the Initial Evaluation of Lower Extremity Trauma*

Dr Alex Jahangir | *Early Comparative Outcomes of Continuous Carbon Fiber-reinforced Polymer Plate in Fixation of Distal Femur Fractures*

Dr Hassan Mir | *Fixation Strategy using Sequential Intraoperative Examination under Anaesthesia for Unstable LC Pelvic Ring Injuries Reliably Predicts Union with Minimal Displacement*

MAJ Joseph Petfield | *Risk Factors for Osteomyelitis in Wartime Open Tibia Fractures do not Predict Recurrence of Infection*

LT Benjamin Hoyt | *Intrawound application of antibiotic powder decreases deep*

*infection and reduces severity of heterotopic ossification in combat-related major lower extremity amputation*

LCDR Scott Tintle | *Controlling Axonal Regeneration with Acellular Nerve Allografts Prevents Neuroma Formation*

**15:00**      **Tea and Coffee Break**

### **Session 3: Rehabilitation and Long-term Outcomes**

**15:30**      **Session Introductions by the Moderators**

COL Anthony Johnson | *Chairman, Orthopaedic Surgery, Brooke Army Medical Center Custodian of the Military Orthopaedic Trauma Registry*

Professor Alison McGregor | *Professor of Musculoskeletal Biodynamics, Imperial College London*

**15:40**      **How Early is Early? Early Rehabilitation in Complex Trauma Critical Care**

Maj Peter Le Feuvre | *Physiotherapist, Royal Army Medical Corps*

**15:52**      **Opinion to Evidence: Objective Assessment to Guide Prosthetic and Orthotic Practice**

Dr Jason Wilken | *Director, Collaborative Research and Development, University of Iowa*

**16:04**      **Advances in Amputation Surgery**

LTC Kyle Potter | *Chief, Orthopaedic Surgery, Walter Reed National Military Medical Centre*

**16:16**      **Questions and Answers**

Session 3 Speakers

**16:30**      **Research Highlights 3: Selected Podium Presentations**

Mr Stuart Campbell | *Clinical Rehabilitation Lessons Learned Treating Blast-injured Amputees in Department of Defense Advanced Rehabilitation Center*

LTC Jean-Claude D'Alleyrand | *Outcomes of Unilateral Femoral Lengthening in Blast-injured Service Members with Bilateral Transfemoral Amputations: A Case Series*

LCDR Jason Souza | *Targeted muscle reinnervation (TMR) for improved prosthetic control and management of residual limb pain after amputation following high-energy trauma*

Dr Claire Higgins | *When repair after traumatic injury goes awry*

CPT Nathan Franklin | *Physical Performance Measures and Patient-reported Outcomes which Predict Future Amputation*

Mr Crispin Wiles | *Trauma-induced heterotopic bone: what does morphology tell us?*

Dr Thomas Robinson | *Dispersing Heterotopic Ossification*

MAJ Ian Stewart | *Long-term Outcomes after Combat Trauma: A Review of Recent Evidence*

**17:10**      **Closing Remarks**

**Drinks Reception and Networking**

