



## THOR ANNUAL SYMPOSIUM 2026

June 7-10

### SUNDAY, June 7

**1800-2100: Opening Reception**  
Location: Powerscourt Hotel Lobby

### MONDAY, June 8

**0830-0840 Opening of Meeting (TBD)**

**0840 -0850 Conference Opening**  
Philip C. Spinella, MD  
Professor of Surgery / Critical Care Medicine  
Co-Director, Trauma and Transfusion Medicine Research Center  
Associate Medical Director, Center for Military Medicine Research  
University of Pittsburgh  
USA

#### SESSION 1: RISK OF WWII AND NUCLEAR WAR

**0850-0915 Signs of Deficient Blood Formation - the Clinical Aftermath of Hiroshima and Nagasaki**  
Dr. Emily Mayhew  
Historian in Residence  
Department of Bioengineering  
Imperial Internal Lead, Paediatric Blast Injury Research  
Imperial College London  
UK

**0915-1000 Global Risk of Nuclear Conflict**  
Honorable Andrew Weber  
Senior Fellow  
Council on Strategic Risks  
USA



**1000-1015 Moderated Discussion**

Isabel Lauren Jackson, PhD  
Founder and CEO  
True North BioPharm, LLC  
USA

LTC Andrew Beckett, MD, FACS  
Surgeon  
CAF/University of Toronto  
CA

**1015-1030 Break**

**SESSION 2: ACUTE RADIATION SYNDROME**

**1030-1055 Considerations of Operational Challenges for Mass Casualty Nuclear Detonation Incidents**

Prof Ray Powles, CBE, MD, FRCP, FRCPath  
Head Haematooncology Icon Cancer Centre London  
Chairman Conservative Health  
Co-Chair European Blood and Marrow Transplant Nuclear Accident Committee  
Member Global Emergency Nuclear Accident WBMT Society  
UK

**1055-1120 Health Effects from Nuclear Detonation and Estimated/Current Treatment Gaps**

Nicholas Dainiak, MD, FACP  
Clinical Professor  
Department of Therapeutic Radiology  
Yale University School of Medicine  
USA

**1120-1145 Supply Chain and Surge Capacity Limitations of Blood Products for Large Scale Combat Operations**

Thomas Scorer, MD  
Honorary Associate Professor  
School of Biomedical Sciences  
University of Plymouth  
UK

**1145-1200 Moderated Discussion**



Travis Polk, MD, FACS  
Professor of Surgery  
Deputy Director, Center for Military Medicine Research  
University of Pittsburgh  
USA

Isabel Lauren Jackson, PhD  
Founder and CEO  
True North BioPharm, LLC  
USA

**1200-1330 Lunch**

## **INDUSTRY SPONSORED SESSION**

**1330-1345 Key Drivers of Morbidity and Mortality after Potentially Lethal Radiation Exposure - A Meta-Analysis of 4 large NHP Studies**  
John McManus  
President, Health Security and Critical Care, Partner Therapeutics, Inc.  
US

## **SESSION 3: RDCR IN IRELAND**

**1345-1430 RDCR in Ireland: Epidemiology of Life-Threatening Bleeding in Ireland and the Need for Hemostatic Resuscitation**

Moderator- Prof. Ciaran McDonnell

David Menzies, MD  
Deputy Clinical Director  
National Ambulance Service  
Cherry Orchard Hospital, Ballyfermot  
IE

Michael Dockery, MD, FCAI, FRCA, FFPMRCA  
Consultant Anaesthetist  
Clinical Lead, National Clinical  
University Hospital Waterford  
IE

Morgan McMonagle, MD  
Vascular Surgeon  
University Hospital Waterford  
IE



## **SESSION 4a: CLINICAL TRIALS OF PLASMA AND PLATELETS**

### **1430-1455 Frontline on Demand Plasma Phase 1 Trial**

Andrew P. Cap, PhD, MD  
Chief Scientific Officer  
Velico Medical  
USA

### **1455-1520 CHIPS Trial (Cold Platelet Trial)**

Philip C. Spinella, MD  
Professor of Surgery / Critical Care Medicine  
Co-Director, Trauma and Transfusion Medicine Research Center  
Associate Medical Director, Center for Military Medicine Research  
University of Pittsburgh  
USA

### **1520-1545 CLIPS-II Trial (Frozen Platelet Trial)**

Professor Michael Reade, MBBS, MPH, DPhil, DMedSc, FAICD, FHEA, FRCP, FANZCA, FCICM  
Director, Greater Brisbane Clinical School  
Professor of Critical Care Medicine  
University of Queensland  
Brigadier, Defence Professor of Military Medicine & Surgery  
Joint Health Command, Australian Defence Force  
Consultant Intensive Care Physician  
Royal Brisbane and Women's Hospital, Brisbane  
Consultant Anaesthetist  
Ipswich Hospital, Brisbane  
AUS

### **1545-1600 Moderated Discussion**

Melissa Cushing, MD  
Professor of Pathology and Anesthesiology  
Medical Director of the Clinical Laboratories  
Division Director of Transfusion Medicine  
Executive Vice Chair for Clinical Affairs for the Department of Pathology and Laboratory Medicine  
Weill Cornell Medicine  
USA

Karim Brohi, MD, FRCS, FRCA  
Consultant Trauma Surgeon  
Royal London Hospital  
Professor of Trauma Sciences  
Queen Mary University of London  
UK



## **SESSION 4b: BREAKOUT SESSION: MILITARY PREHOSPITAL WORKSHOP**

### **1430-1600 Military Prehospital Workshop**

Patrick Thompson  
Managing Director, ATEM  
South Africa

### **1600-1615 Break**

## **SESSION 5: WHOLE BLOOD TRIALS AND FUTURE DIRECTIONS**

### **1615-1635 Fresh WB vs. Cold WB Data**

COL Jennifer Gurney, MD  
Chief, Joint Trauma System  
US Army  
USA

### **1635-1655 TOWAR Trial Results (Prehospital Whole Blood Trial)**

Jason Sperry, MD, MPH  
Section Chief, Trauma Surgery  
Andrew B. Peitzman Professor of Surgery  
Director, Acute Care Surgery Fellowship  
University of Pittsburgh  
USA

### **1655-1715 SWIFT Trial Results (Prehospital Whole Blood Trial)**

Surgeon Commodore Jason Smith, MD, CBE KHP Royal Navy  
Consultant in Emergency Medicine, JHG  
Derriford Hospital, University Hospitals Plymouth NHS Trust, Plymouth  
Honorary Professor  
Plymouth University Peninsula Schools of Medicine and Dentistry  
Emeritus Defence Professor of Emergency Medicine  
Academic Department of Military  
Emergency Medicine  
Royal Centre for Defence Medicine, Birmingham  
UK

### **1715-1735 Dried Whole Blood Analogue**



Macky Neal, MD, FACS  
Watson Chair and Professor of Surgery  
Vice Chair of Surgery, Academic Training  
Director of Emergency General Surgery  
Co-Director, Trauma and Transfusion Medicine Research Center  
Professor of Clinical and Translational Science and Critical Care Medicine  
University of Pittsburgh  
USA

**1735-1750      Moderated Discussion**

Philip C. Spinella, MD  
Professor of Surgery / Critical Care Medicine  
Co-Director, Trauma and Transfusion Medicine Research Center  
Associate Medical Director, Center for Military Medicine Research  
University of Pittsburgh  
USA

Professor Michael Reade, MBBS, MPH, DPhil, DMedSc, FAICD, FHEA, FRCP, FANZCA, FCICM  
Director, Greater Brisbane Clinical School  
Professor of Critical Care Medicine  
University of Queensland  
Brigadier, Defence Professor of Military Medicine & Surgery  
Joint Health Command, Australian Defence Force  
Consultant Intensive Care Physician  
Royal Brisbane and Women's Hospital, Brisbane  
Consultant Anaesthetist  
Ipswich Hospital, Brisbane  
AUS

**SESSION 6: SPECIAL OPERATIONS MEDICAL ASSOCIATION UPDATE**

**1750-1805      SOMA Update**

To be determined

**1805-1830      Break**

**EVENING EVENTS**

**1830 -1930      Sponsor Reception/Poster Review**

**1930-2100      Dinner: Opening Remarks-TBD**



**Tuesday, June 9**

**SESSION 7: UKRAINE WAR LESSONS LEARNED**

**0845-0910**

**Drone Warfare**

Roman Kuziv, MD  
Lt. Col  
Commander of Medical Forces and Sustainment Group East  
Armed Forces of Ukraine  
UKR

**0910-0935**

**Medical Consequences of Drone Warfare**

Warren Dorlac, MD  
Surgeon  
UC Health  
Visiting Associate Clinical Professor, Surgery-GI, Trauma, and Endocrine Surgery  
University of Colorado Anschutz, School of Medicine  
USA

**0935-1000**

**Autonomous Trauma Care: Now and Future Potential**

Travis Polk, MD, FACS  
Professor of Surgery  
Deputy Director, Center for Military Medicine Research  
University of Pittsburgh  
USA

**1000-1015**

**Moderated Discussion**

Ronald Poropatich, MD, MS  
Professor of Medicine  
Director, Center for Military Medicine Research, Health Sciences  
University of Pittsburgh  
USA

**1015-1030**

**Break**



## **SESSION 8: TRAUMATIC BRAIN INJURY**

### **1030-1055 Comparison of Prehospital Plasma and Whole Blood for Blunt Traumatic Brain Injury**

Timothy Billiar, MD  
George Vance Foster Professor and Chair, Department of Surgery  
Distinguished Professor of Surgery  
Executive Vice President and Chief Scientific Officer for UPMC  
Associate Senior Vice Chancellor For Clinical Academics, University of Pittsburgh Health Sciences  
Associate Medical Director, UPMC International and Commercial Services Division  
University of Pittsburgh  
USA

### **1055-1120 Penetrating & Blunt Brain Trauma: Differences in Pathophysiology and Treatment**

Alex Valadka, MD  
Professor Neurological Surgery  
UT Southwestern Medical Center  
Chief of Neurological Surgery  
Parkland Health & Hospital System  
USA

### **1120-1145 Guidelines for Penetrating Traumatic Brain Injury: Key Recommendations and TBI Trial Network**

Greg Hawryluk, MD, PhD  
Neurosurgeon  
Cleveland Clinic  
Medical Director  
Brain Trauma Foundation  
USA

### **1145-1200 Moderated Discussion**

Susan Rowell, MD, MBA, MCR  
Professor of Surgery, Trauma and Acute Care Surgery  
Director, Traumatic Brain Injury Research Program  
The University of Chicago Medicine & Biological Sciences  
USA

Bryan Cotton, MD, MPH  
Trauma Surgeon  
University of Texas-Houston  
USA

### **1200-1400 Lunch**

## **SESSION 9: RDCR PRIMER**



**1400-1430 RDCR Primer for Newcomers**

Tom Woolley, OBE, MD, FRCA  
Assistant Head of Research Defence Medical Services  
British Army  
UK

**SESSION 10a: ORGAN SYSTEMS UNDER SEIGE: MECHANISMS AND MANAGEMENT OF ORGAN FAILURE**

**1430-1455 Cardiovascular System Failure After Injury**

Karim Brohi, MD, FRCS, FRCA  
Consultant Trauma Surgeon  
Royal London Hospital  
Professor of Trauma Sciences  
Queen Mary University of London  
UK

**1455-1520 Mechanisms of Endothelium Failure After Injury**

Kalev Freeman, MD, PhD  
Associate Professor of Emergency Medicine and Pharmacology  
University of Vermont  
USA

**1520-1545 Mechanisms of Post-Injury Immune Dysfunction and Organ Failure**

Prof. Markus Huber-Lang, MD  
Director, Institute of Clinical and Experimental Trauma Immunology  
University Hospital Ulm  
Germany

**1545-1600 Moderated Discussion**

Matthew Neal, MD, FACS  
Watson Chair and Professor of Surgery  
Vice Chair of Surgery, Academic Training  
Director of Emergency General Surgery  
Co-Director, Trauma and Transfusion Medicine Research Center  
Professor of Clinical and Translational Science and Critical Care Medicine  
University of Pittsburgh  
USA

**SESSION 10b BREAKOUT SESSION: CIVILIAN PREHOSPITAL WORKSHOP**



**1430-1600: Civilian Prehospital Workshop**

Holly O'Byrne, MPA, Lieutenant/Paramedic  
Whole Blood Coordinator  
DC Fire and EMS Department  
USA

**1600-1615 Break**

**SESSION 11: THE GOOD, BAD AND THE UGLY OF CLINICAL TRIALS OF HEMORRHAGE**

**1615-1640 Recent Trial Designs: Lessons Learned**

Jan Jansen, MBBS, PhD  
Professor, Division of Trauma & Acute Care Surgery  
Director, Center for Injury Science  
Associate Vice Chair for Clinical Trials, Department of Surgery  
University of Alabama at Birmingham  
USA

**1640-1705 Basket Trial Concept for All Etiologies of Severe Bleeding**

Roger Lewis, MD, PhD  
Senior Medical Scientist  
Berry Consultants, LLC  
USA

**1705-1730 Platform Trial Concept for Patients with Severe Traumatic Bleeding**

Zoe McQuilten, MBBS, PhD, FRACP, FRCPA  
Tony Charlton Chair of Oncology  
Head, Cancer Research Program  
Deputy Director, Transfusion Research Unit  
Monash University  
Consultant Haematologist  
Alfred Health  
AUS

**1730-1745 Moderated Discussion**

Professor Michael Reade, MBBS, MPH, DPhil, DMedSc, FAICD, FHEA, FRCP, FANZCA, FCICM  
Director, Greater Brisbane Clinical School  
Professor of Critical Care Medicine



University of Queensland  
Brigadier, Defence Professor of Military Medicine & Surgery  
Joint Health Command, Australian Defence Force  
Consultant Intensive Care Physician  
Royal Brisbane and Women's Hospital, Brisbane  
Consultant Anaesthetist  
Ipswich Hospital, Brisbane  
AUS

Philip C. Spinella, MD  
Professor of Surgery / Critical Care Medicine  
Co-Director, Trauma and Transfusion Medicine Research Center  
Associate Medical Director, Center for Military Medicine Research  
University of Pittsburgh  
USA

**1745-1815 Break**

## **EVENING EVENTS**

**1815 -1915 Sponsor Reception/Poster Review**

**1915-2100 Dinner: Opening Remarks: TBD**

## **Wednesday, June 10**

### **SESSION 12: COMMON BIOLOGY OF HEMORRHAGIC SHOCK**

**0845-0910 Gap Analysis for Diagnostics and Therapeutics for Hemorrhage**

Karim Brohi, MD, FRCS, FRCA  
Consultant Trauma Surgeon  
Royal London Hospital  
Professor of Trauma Sciences  
Queen Mary University of London  
UK

**0910-0935 Common Biology of Hemorrhagic Shock and Why it May be Important**

Andrew P. Cap, PhD, MD  
Chief Scientific Officer  
Velico Medical USA



**0935-1000 Omics as a Tool to Achieve Precision Resuscitation Medicine**

Afshin Beheshti, PhD  
Director of Space Biomedicine  
Surgery Department, McGowan Institute of Regenerative Medicine  
University of Pittsburgh  
USA

**1000-1015 Moderated Discussion**

Mitchell Cohen, MD  
Professor of Surgery  
Associate Vice Chair of Basic & Translational Research  
University of Colorado Anschutz  
Director of Service, Surgery  
UCHealth, Colorado  
USA

**1015-1030 Break**

**SESSION 13: THINK TANK: HOW TO ACHIEVE PRECISION RESUSCITATION MEDICINE**

**1030-1200 How to Achieve Precision Resuscitation Medicine via Multi-OMICS and Artificial Intelligence**

**Moderator: Ivan Yates**

**Panel:** Afshin Beheshti, Macky Neal, Mitchell Cohen, Karim Brohi, Timothy Billiar, Jennifer Muszynski, Bethany Brown

**1200-1315 Lunch**

**SESSION 14: PROLONGED FIELD CARE ON EARTH AND OUTER SPACE**

**1330-1355 The Doc and the Bearer Team: CASEVAC on the Western Front of the Great War**

Dr. Emily Mayhew  
Historian in Residence  
Department of Bioengineering  
Imperial Internal Lead, Paediatric Blast Injury Research  
Imperial College London  
UK

**1355-1435 What Does a Medic Carry and What Should They Carry in Their Aid Bag**

Ethan Miles, MD  
Chief Medical Officer at North American Rescue  
USA



**1435-1500      What is Available and Needed for Resuscitation in Space**

Afshin Beheshti, PhD  
Director of Space Biomedicine  
Surgery Department, McGowan Institute of Regenerative Medicine  
University of Pittsburgh  
USA

**1500-1515      Moderated Discussion**

COL Jennifer Gurney, MD  
Chief, Joint Trauma System  
US Army  
USA

**Session 15: MEETING SUMMARY**

**1515-1530      Parallel Session Summary**

Holly O'Byrne, MPA, Lieutenant/Paramedic  
EMS Supervisor, Washington, DC  
USA

Patrick Thompson  
Managing Director, ATEM  
South Africa

**1530-1535      Closing Remarks**

Philip C. Spinella, MD  
Professor of Surgery / Critical Care Medicine  
Co-Director, Trauma and Transfusion Medicine Research Center  
Associate Medical Director, Center for Military Medicine Research  
University of Pittsburgh  
USA