



## THOR ANNUAL SYMPOSIUM 2026

In collaboration with the Irish Blood Transfusion Service (IBTS) and Velico  
Powerscourt Hotel  
June 7-10

### SUNDAY, June 7

**1800-2100: Opening Reception**  
Location: Powerscourt Hotel Lobby  
Sponsors Address  
Richard Meehan  
President and CEO  
Velico

### MONDAY, June 8

**0815-0825 Symposium Opening**  
Professor Andy Godfrey  
Medical and Scientific Director, Irish Blood Transfusion Service  
Adjunct Professor of Haematology, Trinity College Dublin  
IE

**0825 -0835 Symposium Introduction**  
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

**0835-0850 Geopolitical Landscape of the New World Order**  
Phil Hogan  
Former EU Commissioner and Irish Government Minister

**0850 - 0935 Global Risk of Nuclear Conflict**  
Honorable Andrew Weber  
Senior Fellow  
Council on Strategic Risks  
USA

**0935-0950 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

**0950-1005 Break**

## **SESSION 2: ACUTE RADIATION SYNDROME**

**1005-1030 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

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

Prof Ray Powles, CBE, MD, FRCP, FRCPath  
Head Haemato-oncology, 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**

Surgeon Commander Tom Scorer, MD, FRCPath, Royal Navy  
Consultant in Haematology  
Derriford Hospital, University Hospitals Plymouth NHS Trust, Plymouth  
Honorary Associate Professor  
University of Plymouth, School of Biomedical Sciences  
Lecturer, Academic Department of Military Medicine  
Royal Centre for Defence Medicine  
Birmingham, 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

## **1200-1400 Lunch**

### **INDUSTRY SPONSORED SESSION**

**1400-1415 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 PRIMER**

**1415-1445 RDCR Primer for Newcomers**  
Tom Woolley, OBE, MD, FRCA  
Assistant Head of Research Defence Medical Services  
British Army  
UK

### **SESSION 4: RDCR IN IRELAND**

**1445-1530 RDCR in Ireland: Epidemiology of Life-Threatening Bleeding in Ireland and the Need for Hemostatic Resuscitation**

Moderator- Prof. Ciaran McDonnell  
Vascular Surgeon  
Mater Misericordiae University Hospital Dublin.  
IE

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

Michael Dockery, MD, FCAI, FRCA, FFPMRCA  
Consultant Anesthesiologist, University Hospital Waterford  
Clinical Lead, National Clinical Programme for Anaesthesia



Chair, National Transfusion Advisory Group  
IE

Morgan McMonagle, MD  
Vascular Surgeon  
University Hospital Waterford  
IE

Sorcha Ní Loingsigh, MD  
Consultant Haematologist,  
Irish Blood Transfusion Service  
IE

## **SESSION 5: CLINICAL TRIALS OF PLASMA AND PLATELETS**

### **1530-1550 Frontline on Demand Plasma Phase 1 Trial**

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

### **1550-1610 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

### **1610-1630 CLIP-II Trial (Frozen Platelet Trial)**

Professor Michael Reade, MBBS, DPhil, FRCP, FCCM, 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  
AUS

### **1630-1645 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

**1645-1700 Break**

## **SESSION 6: WHOLE BLOOD TRIALS AND FUTURE DIRECTIONS**

### **1700-1720 Whole Truth about Whole Blood**

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

### **1720-1740 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

### **1740-1800 SWIFT Trial Results (Prehospital Whole Blood Trial)**

Jason Smith, MD  
Consultant in Emergency Medicine and Honorary Professor, University Hospitals  
Plymouth, UK  
Medical Director, Defense Medical Services, Royal Centre for Defense Medicine  
Birmingham, UK

### **1800-1820 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

### **1820-1835 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, DPhil, FRCP, FCCM, 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  
AUS

**1835-1845 Break**

## **EVENING EVENTS**

**1845 -1945 Sponsor Reception/Poster Review**

**1945-2145 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 C. Dorlac, MD FACS  
Col (Ret), USAF, MC, FS  
Surgeon: Trauma/Surgical Critical Care  
Vice Chair and Chair of Regional Committees, Committee on Trauma, American College of Surgeons  
Medical Director, PHTLS, NAEMT  
Associate Clinical Professor Of Surgery, University of Colorado  
Medical Center of the Rockies  
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**

Dr. Therese West  
Combat Casualty Care Portfolio  
Defense Health Agency, STPMD  
Frederick, MD, USA

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 of Neurological Surgery  
University of Texas 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, FRCSC  
Staff Neurosurgeon, Cleveland Clinic  
Professor of Neurosurgery, Cleveland Clinic Lerner College of Medicine  
Of Case Western Reserve University School of Medicine,  
Medical Director and Scientific Advisory Board Chair, Brain Trauma Foundation  
Adjunct Associate Professor of Neurosurgery, Uniformed Services University  
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

**1200-1430 Lunch**

## **SESSION 9: COMMON BIOLOGY OF HEMORRHAGIC SHOCK**

**1430-1455 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

**1455-1520 Common Biology of Hemorrhagic Shock and Why it May be Important**

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

**1520-1545 Omics as a Tool to Achieve Precision Resuscitation Medicine**

Afshin Beheshti, PhD  
Director of the Center for Space Biomedicine, Trivedi Institute for Space and Global Biomedicine  
Associate Director of the McGowan Institute for Regenerative Medicine  
Professor of Surgery  
Professor of Computational and Systems Biology  
University of Pittsburgh  
USA

**1545-1600 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

## **SESSION 9A: BREAKOUT SESSION: MILITARY PREHOSPITAL WORKSHOP**

**1430-1600 Military Prehospital Workshop: Walking Blood Banks for Combat Casualties**

Russell P. Wier, DO  
CDR MC USN



Chief, Joint Trauma Education & Training (JTET) Branch  
Joint Trauma System (JTS)

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

Agenda:  
Rationale for and Implementation of Walking Blood Banks  
TCCC/JTS/Valkyrie Training Program

**1600-1615 Break**

## **SESSION 10: THINK TANK: HOW TO ACHIEVE PRECISION RESUSCITATION MEDICINE**

**1615-1745 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, Bethany Brown

**1745-1755 Building Ireland's Life science Economy**

Senator Fiona O'Loughlin

**1755-1815 Government Policy in Supporting Investment in Life Sciences**

**Moderator:** Ivan Yates

**Panel:** Philip C. Spinella, MD, Richard Meehan, Becky Butler Cap, MBA, Senator O'Loughlin

**1815-1830 Break**

## **EVENING EVENTS**

**1830 -1945 Sponsor Reception/Poster Review**

**1945-2115 Awards Gala Dinner: Opening Remarks: Ivan Yates**

## **Wednesday, June 10**

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

**0900-0925 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



**0925-0950      **Basket Trial Concept for All Etiologies of Severe Bleeding****

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

**0950-1015      **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

**1015-1030      **Moderated Discussion****

Professor Michael Reade, MBBS, DPhil, FRCP, FCCM, 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  
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

**1030-1045      **Break****

**SESSION 12: ORGAN SYSTEMS UNDER SEIGE: MECHANISMS AND MANAGEMENT OF ORGAN FAILURE**

**1045-1110      **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

**1110-1135      **Mechanisms of Endothelium Failure After Injury****



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

**1135-1200 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

**1200-1215 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 12b: BREAKOUT SESSION: CIVILIAN PREHOSPITAL WORKSHOP**

**1045-1215: Civilian Prehospital Workshop**

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

Panelists: Ethan Miles, Randi Schaefer, Eric Bank, Marc Piehl

Agenda: The First 10 Minutes: Blood, Bias, and Big Decisions

“Are We Moving Faster Than the Evidence?” Physiology vs. Outcomes

“Who Gets Blood?” Looking at Equity, Bias, and Patient Selection

“Blood vs. Everything Else” The Competing Priorities in Early Resuscitation

**1215-1315 Lunch**

**SESSION 13: PROLONGED FIELD CARE ON EARTH AND OUTER SPACE**

**1315-1340 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



**1340-1405      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

**1425-1450      What is Available and Needed for Resuscitation in Space**

Afshin Beheshti, PhD  
Director of the Center for Space Biomedicine, Trivedi Institute for Space and Global Biomedicine  
Associate Director of the McGowan Institute for Regenerative Medicine  
Professor of Surgery  
Professor of Computational and Systems Biology  
University of Pittsburgh  
USA

**1450-1505      Moderated Discussion**

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

**Session 14:      MEETING SUMMARY**

**1505-1520      SOMA Update**

Sandro "Rabbit" Heinrich  
Military Vice President, SOMA

**1520-1530      Co-TCCC Update**

Harold Montgomery "Monty"  
TCCC Joint Program Manager  
Vice Chair, Committee on TCCC  
Joint Trauma System / CoTCCC  
Defense Health Agency J-3/5/7

**1530-1540      Parallel Session Summary**

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

Russell P. Wier, DO  
CDR MC USN  
Chief, Joint Trauma Education & Training (JTET) Branch  
Joint Trauma System (JTS), USA

**1540-1545      Closing Remarks**

Philip C. Spinella, MD  
President, THOR Network Foundation  
Professor, Surgery and Critical Care Medicine,  
University of Pittsburgh, USA



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