



THOR ANNUAL SYMPOSIUM 2026

In collaboration with the Irish Blood Transfusion Service (IBTS) and Velico
June 7-10, 2026

SUNDAY, June 7

1800-2100: Opening Reception
Location: 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 Haematology 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

1200-1330 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 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

SESSION 4: 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 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

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

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)

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

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, 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

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 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

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

1200-1400 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 10: 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 10b: BREAKOUT SESSION: MILITARY PREHOSPITAL WORKSHOP

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

Patrick Thompson
Managing Director, ATEM
South Africa

Topics Include:

Rationale for Walking Blood Banks - Pat Thompson
TCCC/JTS/Valkyrie Training Program - Jennifer Gurney and Russ Weir
UN Training Program - Pat Thompson



1600-1615 Break

SESSION 11: 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, Jennifer Muszynski, Bethany Brown

1745-1815 Government Policy in Supporting Investment in Life Sciences

Minister Burke (tentative) Panel Discussion with Ivan Yates

1815-1830 Break

EVENING EVENTS

1830 -1930 Sponsor Reception/Poster Review

1930-2100 Dinner: Opening Remarks: Ivan Yates and Minister of Health (tentative)

Wednesday, June 10

SESSION 12a: 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

SESSION 12b BREAKOUT SESSION: CIVILIAN PREHOSPITAL WORKSHOP

0900-1030: Civilian Prehospital Workshop: “The First 10 Minutes: Blood, Bias, and Big Decisions”

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

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

Topics:

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

1030-1045 Break



SESSION 13: 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

1215-1315 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 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

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



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