



2021 RDCR Symposium
November 8-10, 2021 St. Pete Beach, Florida
Draft Agenda
Some speakers may not be confirmed

Monday
0800-0810

Conference Introduction: THOR Past, Present, and Future

Philip C Spinella, MD FCCM

Professor, Pediatrics

*Director, Translational Research Program Division of Critical Care Department of Pediatrics Washington University in St Louis
USA*

Geir Strandenes, MD

Senior Anesthetist

*Dept of War Surgery and Emergency Medicine Norwegian Armed Forces Medical Services
Norway*

SESSION 1: CRITICAL THINKING AND TRANSFORMATIONAL CHANGE REQUIREMENTS FOR TRAUMA CARE

Moderators:

Dr. Tony Hudson

Emergency Physician

UK National Health Service

UK

Marc Depasquale

Medic

USA

0810-0840 Importance of Medics Historically in Military Medicine

Dr. Emily Mayhew

Department of Bioengineering

Historian in Residence

Imperial College, London

UK

0840-0900 Critical Thinking for Traumatic Hemorrhagic Shock Treatment

Pat Thompson

Medic

UK / S. Africa



0900- 0920 **History of Prolonged Field Care and Cases from the US Joint Trauma System**
Sean Keenan, MD FAAEM FAWM
Consultant, Joint Trauma System Emergency/Prehospital Medicine
USA

0920-0950 **Beyond Transfusion: Transformational Change in Trauma Care.**
COL Andrew P. Cap, MD, PhD
Medical Corps, US Army
Chief, Blood Research, US Army Institute of Surgical Research
Associate Professor of Medicine, Uniformed Services University
Program Director, Clinical Research Fellowship | Staff Hematologist-Oncologist
San Antonio Military Medical Center
USA

0950-1005 **Discussion**

1005-1020 **Break**

SESSION 2: TECHNOLOGICAL ADVANCEMENTS THAT MAY IMPROVE RDCR
Moderators:

Travis M. Polk, MD, FACS, Commander, MC, USN |
Chair, Joint Program Committee-6 |
Director, US Combat Casualty Care Research Program (CCCRP) |
US Army Medical Research and Development Command (USAMRDC) |
Army Futures Command (AFC)
USA

Col (ret.) Michael R. Davis, MD FACS
Professor of Surgery
Uniformed Services University
Adjunct Professor
University of Texas, San Antonio
USA

1020-1040 **Automation, Artificial Intelligence Applied to Medical Technologies for Use in**
Austere Environments - Automated Vascular Access, Automated Airway Access
Brian A. Telfer, PhD
Senior Staff Member, Human Health and Performance Systems Group
MIT Lincoln Laboratory
USA

1040-1100 **Advanced Biosensing, Smart Tourniquets, Decision Support**
Conor L. Evans, PhD
Associate Professor
Massachusetts General Hospital
Harvard Medical School
USA



- 1100-1120 Moving Toward Autonomous Field Care With Advanced Technologies**
Adam B. Cohen, MD
Physician/Program Manager
Johns Hopkins University
USA
- 1120-1140 Telemedicine, Trauma Care in a Rucksack (TRACIR)**
COL Jeremy C. Pamplin, MD
Director
Telemedicine and Advanced Technology Research Center
Medical Research and Development Command
USA
- 1140-1200 Panel discussion**
- 1200-1430 Lunch & Break**
- SESSION 3: WHEN TO CHANGE CLINICAL PRACTICE?**
- Moderators:
- Kevin R. Ward, MD**
Professor, Department of Emergency Medicine
University of Michigan
Michigan Center for Integrative Research in Critical Care (MCIRCC)
USA
- Christopher Bjerkvig, MD**
Helse-Bergen / Norwegian Navy
Norway
- 1430-1450 Experience Based Medicine vs Evidence Based Medicine**
Paul E. Pepe, MD, MPH, FAEMS, MACP, MCCM
Chair, Metropolitan EMS Medical Directors Global Coalition
USA
- 1450-1505 Leading Change in Your Own Backyard**
BG Prof Elon Glassberg
Surgeon General & Chief of the Medical Corps
Israeli Defense Forces
Israel
- 1505-1525 What Data is Needed to Start a Prehospital Low Titer Group O Whole Blood Resuscitation Program?**
Jakob Stensballe, MD, PhD
Consultant Anaesthesia and Transfusion Medicine
Section for Transfusions Medicine, Capitol Region Blood Bank
Copenhagen University Hospital, Rigshospitalet
Denmark



1525-1545 **What Data is Needed for Blood Collectors to Supply Low Titer Group O Whole Blood?**
Rebecca Cardigan BSc PhD FRCPATH
*National Head of Component Development
NHS Blood & Transplant
UK*

1545-1605 **The Rationale and Evidence for Low-Titer Group O Whole Blood**
Col Thomas Woolley, MD FRCA RAMC
*Consultant Anaesthetist
Defence Professor of Anaesthesia and Critical Care
British Army
UK*

1605-1630 **Panel Discussion**

1630-1650 **Break**

SESSION 4: CLINICAL EXPERIENCE WITH LTOWB

Moderators:

Donald Jenkins, MD
*Professor of Surgery
U. of Texas Health Science Center at San Antonio
USA*

Torunn Apelseeth, MD PhD
*Department of Immunology and Transfusion Medicine
Haukeland University Hospital
Norway*

1650-1710 **Prehospital Provider Experience - What Has Changed for You?**
Lt. William Bullock, EMT-P, SAFD
*Lieutenant - EMS Medic Officer
San Antonio Fire & EMS
USA*

1710-1730 **In-Hospital Provider Experience - What Has Changed for You?**
Christopher Bjerkvig, MD
*Helse-Bergen / Norwegian Navy
Norway*



1730-1800 **Blast Session: Lessons Learned in The Blood Bank with Supporting Hemostatic Resuscitation Strategies**

Mark H. Yazer, MD
Professor of Pathology
University of Pittsburgh
USA

Einar K. Kristoffersen, MD, PhD
Head of Department/Professor Bloodbank
Haukeland University Hospital
Norway

Prof Eilat Shinar, MD
Magen David Adom
Israel

1800-1820 **Discussion**

1900-2030 **Buffet Dinner**



Tuesday
0800-0840

History of Transfusion

Dr. Emily Mayhew

*Department of Bioengineering
Historian in Residence
Imperial College London
UK*

SESSION 5: IMPLEMENTATION OF RDCR/DCR AND INNOVATIVE SOLUTIONS

Moderators:

Bryon P. Jackson, MD

*Associate Director, Transfusion Medicine
Director, Blood Management University of Maryland Medical Center
USA*

Col Thomas Woolley, MD FRCA RAMC

*Consultant Anaesthetist
Defence Professor of Anaesthesia and Critical Care
British Army
UK*

0840-0905 RDCR Implementation in Israel Challenges and Successes

LTC Dr. Ofer Almog

*Head, Trauma and Combat Medicine Branch
Israel Defense Force – Medical Corps
Israel*

0905-0930 Swedish Implementation Strategy for RDCR

José-Gabriel Sato Folatre, MD

*Helicopter Emergency Medical Service
Region Västra Götaland
Sweden*

0935-0945 Discussion

0945-1000 Break

SESSION 6: INNOVATIVE USE OF TRANSFUSION THERAPIES

Moderators:

Geir Strandenes, MD

*Senior Anesthetist
Dept of War Surgery and Emergency Medicine Norwegian Armed Forces Medical
Services
Norway*

Jay Johannigman MD FACS FCCM

*Trauma Surgeon
Critical Care Surgery Specialist
University of Cincinnati Medical Center
USA*



1000-1020 Blood Supply Shortages and Innovative Solutions during the COVID pandemic
Donald Jenkins, MD
Professor of Surgery
U. of Texas Health Science Center at San Antonio
USA

1020-1040 Plasma Trial for Sepsis
Jakob Stensballe, MD, PhD
Consultant Anaesthesia and Transfusion Medicine
Section for Transfusions Medicine, Capitol Region Blood Bank
Copenhagen University Hospital, Rigshospitalet
Denmark

1040-1100 Convalescent Plasma: Key (Re)Learnings From the COVID-19 Pandemic
Peter Marks M.D., PhD
Director, Center for Biologics Evaluation and Research (CBER)
Food and Drug Administration

1100-1120 Precision Transfusion Medicine: Can it Be Achieved?
Philip C Spinella, MD FCCM
Professor, Pediatrics
Director, Translational Research Program Division of Critical Care Department of Pediatrics
Washington University in St Louis
USA

1120-1140 Discussion

1140-1430 Lunch & Break

SCIENCE & PRACTICAL CARE PARALLEL SESSIONS

SESSION 7A: BASIC SCIENCE

Moderators:

Mitchell Jay Cohen, MD

Director of Surgery, Denver Health Medical Center Professor and Vice Chair, Department of Surgery University of Colorado
USA

Rebecca Cardigan BSc PhD FRCPATH

National Head of Component Development
NHS Blood & Transplant
UK

1430-1450 Prolyl hydroxylase domain inhibitors to treat shock physiology
James Bynum, PhD
Chief, Coagulation and Blood Research
US Army Institute of Surgical Research
USA



- 1450-1510** **ADAMTS 13 (in Plasma) Repairs Endothelium**
Nicole Juffermans, MD PhD
Academic Medical Center
The Netherlands
- 1510-1530** **Microfluidic Assessment of Hemostasis**
Susan Shea, PhD
Instructor, Research Track
Department of Pediatrics
Washington University in St. Louis School of Medicine
USA
- 1530-1550** **Platelet Defects with Trauma**
Lucy Zumwinkle Kornblith, MD, FACS
Assistant Professor of Surgery Trauma and Surgical Critical Care
Zuckerberg San Francisco General Hospital
USA
- 1550-1610** **Delayed Cold Stored Platelets - The Effect of Temperature on Platelet Function**
Torunn Apelseth, MD PhD
Department of Immunology and Transfusion Medicine
Haukeland University Hospital
Norway
- 1610-1630** **Immunothrombosis: What Trauma Induced Coagulopathy Taught Us About COVID-19 Therapies**
Matthew D. Neal, MD FACS
Associate Professor of Clinical and Translational Science and Critical Care Medicine
University of Pittsburgh Medical Center
USA
- 1630-1700** **Discussion**
- 1700-1710** **BREAK**
- SESSION 7B: TENSION PNEUMOTHORAX AND SHOCK**
Moderators:
Geir Strandenes, MD
Senior Anesthetist
Dept of War Surgery and Emergency Medicine Norwegian Armed Forces Medical Services
Norway
- Dr. Tony Hudson**
Emergency Physician
UK National Health Service
UK



- 1500-1510** **Physiology of a Tension Pneumothorax**
Christopher Bjerkvig, MD
Helse-Bergen / Norwegian Navy
Norway
- 1510-1520** **Epidemiology of tension pneumothorax on the battlefield**
COL Jennifer M. Gurney, MD, FACS
COL, MC, US Army
Surgeon, USAISR
Chief, Defense Committee on Trauma, Joint Trauma System
Program Manager, Combat Wound Care Research Team, USAISR
USA
- 1520-1530** **Intervention for pneumothorax, when, where and who**
Jay Johannigman MD FACS FCCM
Trauma Surgeon
Critical Care Surgery Specialist
University of Cincinnati Medical Center
USA
- 1530-1600** **Roundtable discussion**
- SESSION 8: TRANEXAMIC ACID AND PREHOSPITAL PLASMA**
Moderators:
Ernest E. Moore, MD
Chief of Surgery
University of Colorado Health Sciences Center
USA
- Stacy Shackelford, Col, USAF, MC**
Joint Trauma System, Chief
DHA Combat Support
USA
- 1710-1730** **Secondary analyses of the PAMPer and STAAMP trials: Where are the Signal s?**
Jason Sperry MD MPH
Professor of Surgery and Critical Care
Trauma and Gen Surg Section Chief
University of Pittsburgh Medical Center
USA
- 1730-1755** **TXA Results from a Traumatic Brain Injury Trial**
Ian Roberts, MD
Professor of Epidemiology
London School of Hygiene & Tropical Medicine
UK



- 1755-1815** **TXA and Thrombosis Risk: The Last Talk You Should Ever Hear About This Topic**
Matthew D. Neal, MD FACS
Assistant Professor of Clinical and Translational Science and Critical Care Medicine
University of Pittsburgh Medical Center
USA
- 1815-1835** **TXA Effects on the Endothelium**
Joseph F. Rappold, MD FACS
Chief, Acute Care Surgery Professor of Surgery
Maine Medical Center | Tufts University School of Medicine
USA
- 1835-1850** **Discussion**
- 1930- 2130** **Buffet Dinner**



Wednesday
SESSION 9:

ACUTE RADIATION SYNDROME

Moderators:

Mary Homer, PhD

*Biomedical Advanced Research and Development Authority (BARDA)
Office of the Assistant Secretary for Preparedness and Response
U.S. Department of Health and Human Services*

Ashley Cecere, MS

*Biomedical Advanced Research and Development Authority (BARDA)
Office of the Assistant Secretary for Preparedness and Response
U.S. Department of Health and Human Services
USA*

0800-0820 US Assistant Secretary for Preparedness and Response - Concept of Operations and Determining Capabilities

Chad M. Hrdina, MS, GC-WMD, EMT

*Director of the Division of Requirements
Biomedical Advanced Research and Development Authority (BARDA)
Office of the Assistant Secretary for Preparedness and Response
U.S. Department of Health and Human Services
USA*

0820-0840 Blood Product Requirements Following Mass Casualty Events to Include Nuclear Disasters

David P. Durham, PhD

*Senior Quantitative Analyst / Modeler | ASPR SIIM
Department of Health and Human Services (HHS)
USA*

0840-0850 Discussion

SESSION 10A: BIOENGINEERING BLOOD FOR THE FUTURE

Moderators:

Col Thomas Woolley, MD FRCA RAMC

*Consultant Anaesthetist
Defence Professor of Anaesthesia and Critical Care
British Army
UK*

Jeremy W. Cannon, MD, SM, FACS

*Col, US Air Force Reserve, MC
Associate Professor of Surgery
Trauma Medical Director and Section Chief of Trauma
Division of Traumatology, Surgical Critical Care & Emergency Surgery
University of Pennsylvania
USA*



0850-0900 **Tissue Engineering, Regenerative Medicine and Blood: What's in the Art of the Possible**
Abi Spear, PhD
Principal Scientist
Defence Science and Technology Laboratory
UK

0900-0925 **Genetic Engineering of Blood Products**
Prof Jan Frayne, PhD
School of Biochemistry
Faculty of Life Sciences
University of Bristol
UK

0925-0950 **Bioengineering and Platelets**
Dr. Cedric Ghevert
Senior Lecturer in Transfusion Medicine / Consultant Haematologist NHS Blood and Transplant
Cambridge University
UK

0950-1015 **Synthetic Biology and the Potential for a Dried Whole Blood Surrogate**
Allan Doctor, MD
Professor, University of Maryland
Director, Center for Blood Oxygen Transport and Hemostasis
USA

1015-1040 **Discussion:**

1040-1055 **Break**

SESSION 10B: WORKSHOP ON PROXIMAL HEMORRHAGE CONTROL

Moderators:

Dr. Tony Hudson
Emergency Physician
UK National Health Service
UK

Pat Thompson
Medic
UK / S. Africa

0850-1040 **The Lost Art of Proximal Hemorrhage Control: Theory, Practice and Evaluation**

SESSION 11: RESUSCITATION STRATEGIES FOR TRAUMATIC INJURY PART 1

Moderators:

Pat Thompson
Medic
UK / S. Africa



Nicole Juffermans, MD PhD
*Academic Medical Center
The Netherlands*

1055-1115 Prehospital Intubation, Elemental vs Detrimental
Paul E. Pepe, MD, MPH, FAEMS, MACP, MCCM
*Chair, Metropolitan EMS Medical Directors Global Coalition
USA*

1115-1135 Prehospital Evaluation of Thoracic Injuries (Summary of Tuesday Workshop)
Jay Johannigman MD FACS FCCM
*Trauma Surgeon
Critical Care Surgery Specialist
University of Cincinnati Medical Center
USA*

1135-1155 Indications for Calcium
Ernest E. Moore, MD
*Chief of Surgery
University of Colorado Health Sciences Center
USA*

1155-1215 Discussion

1215-1345 Lunch

SESSION 12: RESUSCITATION STRATEGIES FOR TRAUMATIC INJURY PART 2

1345-1445 Case Presentation (ICU Use of Hemostatic Resuscitation, Post-Shock Care/Crystalloid Use in ICU)

Moderator:
Stacy Shackelford, Col, USAF, MC
*Joint Trauma System, Chief
DHA Combat Support
USA*

Panelists:
Joseph F. Rappold, MD FACS
*Chief, Acute Care Surgery Professor of Surgery
Maine Medical Center | Tufts University School of Medicine
USA*

Ernest E. Moore, MD
*Chief of Surgery
University of Colorado Health Sciences Center
USA*



Jakob Stensballe, MD, PhD

*Consultant Anaesthesia and Transfusion Medicine
Section for Transfusions Medicine, Capitol Region Blood Bank
Copenhagen University Hospital, Rigshospitalet
Denmark*

Nicole Juffermans, MD PhD

*Academic Medical Center
The Netherlands*

Geir Strandenes, MD

*Senior Anesthetist
Dept of War Surgery and Emergency Medicine Norwegian Armed Forces Medical
Services
Norway*

SESSION 14: HEMOVIGILANCE

Moderators:

Philip C Spinella, MD FCCM

*Professor, Pediatrics
Director, Translational Research Program Division of Critical Care Department of
Pediatrics Washington University in St Louis
USA*

Geir Strandenes, MD

*Senior Anesthetist
Dept of War Surgery and Emergency Medicine Norwegian Armed Forces Medical
Services
Norway*

1445 – 1505 Hemovigilance and International Hemovigilance Network Overview

Barbee I. Whitaker, PhD

*Lead General Health Scientist
Office of Biostatistics and Epidemiology
Center for Biologics Evaluation and Research (CBER)
USA*

1505 -1525 Hemovigilance With New Blood Collection and Transfusion Products/Processes and Post Market Surveillance.

Arlinke G. Bokhorst, arts M&G

*Directeur Stichting TRIP
The Netherlands*

1525-1535 Discussion



1535-1600 Conference Wrap Up

Geir Strandenes, MD

Senior Anesthetist

Dept of War Surgery and Emergency Medicine

Norwegian Armed Forces Medical Services

Norway

Philip C Spinella, MD FCCM

Professor, Pediatrics

Director, Translational Research Program

Division of Critical Care

Washington University in St Louis

USA