



2024 RDCR Symposium

October 6-9, 2024
Miami, Florida

DRAFT AGENDA

(will be final as of OCT 1, 2024)

SUNDAY

1800 **Welcoming Reception Opening Remarks**
“Affecting Change Against Headwinds”
General (Ret) USA Stan McChrystal
Chairman and CEO McChrystal Group
USA

MONDAY

0745-0750 **THOR Symposium Introduction**
Geir Strandenes, MD
Anesthetist and Senior Advisor
Norwegian Coordination Center for Blood Preparedness
Department of Immunology and Transfusion Medicine
Haukeland University Hospital
Norway

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

0750-0805 **THOR Symposium Opening Remarks**
“Health Care System Resilience and Future Directions”
Major General Dr. Paul Friedrichs
US Joint Staff Surgeon
Pentagon, Arlington, VA
USA



0805-0835 **Preparation for World Wide Conflict**
COL Jennifer Gurney, MD
Chief, Joint Trauma System
USA

SESSION 1: PREHOSPITAL LESSONS LEARNED

Moderator: Geir Strandenes, MD

0835-0855 **Ukraine Prehospital Lessons Learned (What Works and Doesn't) Therapies/Devices/Training**
John Quinn, EMT-P, MD, MPH, PhD
Prague Center for Global Health Institute of Hygiene and Epidemiology
First Faculty of Medicine
Charles University
UK

0855-0915 **Israel Prehospital Lessons Learned (What Works and Doesn't) Therapies, Devices, Training)**
BG Prof. Elon Glassberg
Israeli Defense Forces
Israel

0915-0935 **South Texas Prehospital Lessons Learned PPH and GI Bleeding (What Works and Doesn't) Therapies, Devices, Training)**
Lt. William Bullock EMT-P, MPA
San Antonio Fire, Blood Program Team Lead
South Texas Blood & Tissue, Specialized Program Coordinator
USA

0935-0950 **Discussion**

0950-1035 **How to Support Provider Resilience**
Leader of Session: Mary J. Edwards, M.D., FACS, FAAP

Panelists:

Mary J. Edwards, M.D., FACS, FAAP
Pediatric Trauma Medical Director
Chief of Pediatric Surgery and Surgeon in Chief
Bernard and Millie Duker Children's Hospital
Albany, NY
COL, USA (RET)
USA



Bellal Joseph, MD FACS
*Professor of Surgery Chief of Trauma
EGS Critical Care & Burns Chief of General Surgery
Vice Chair of Research Department of Surgery
The University of Arizona
USA*

BG Prof. Elon Glassberg
*Israeli Defense Forces
Israel*

Col Thomas Woolley, MD FRCA RAMC
*Consultant Anaesthetist
British Army
UK*

1035-1050 **Break**

SESSION 2: PREHOSPITAL BLOOD USE AND STANDARDS

Moderator: Mark Yazer, MD and John Holcomb

1050-1105 **Survey of Prehospital Blood Use in the US**
Randall Schaefer, DNP, RN, ACNS-BC, CEN
*CEO, Schaefer Consulting
USA*

1105-1120 **AABB Prehospital Transfusion Standards**
Audra Taylor, MD
*Vice President of Blood Operations
South Texas Blood & Tissue
USA*

1120-1135 **Prehospital Reimbursement of Blood Products**
Jon R. Krohmer, MD, FACEP, FAEMS
EMSMD LLC / Velico / Prehospital Blood Coalition
USA

1135-1150 **The Barriers to Prehospital Blood use in Brazil**
Daíse Esswein Müller
*Coordenadora Médica SAMU Aeromédico SC
Brazil*

1150-1200 **Discussion**



1200-1400 **Lunch / Break**

SESSION 3: INDUSTRY WORKSHOPS

Moderator: Philip Spinella, MD

1400-1430 **Overview of Quantra® QStat® in the management of TIC**

Todd Allen
Clinical Development Director
HemoSonics, LLC
USA

SESSION 4: BLOOD PRODUCTS AND EMERGENCY PREPAREDNESS

Moderators: Eilat Shinar and Jennifer Gurney

1430-1450 **The Requirements for Blood in Civilian MCE/Large Scale War**

Jeremy W. Cannon, MD, SM, FACS
Trauma, Surgical Critical Care & Emergency Surgery
University of Pennsylvania
USA

1450-1505 **Civilian Walking Blood Banks as Part of a National Blood Preparedness Plan**

Geir Strandenes, MD
Anesthetist and Senior Advisor
Norwegian Coordination Center for Blood Preparedness
Department of Immunology and Transfusion Medicine
Haukeland University Hospital
Norway

1505-1520 **Walking Blood Bank Implementation US planning**

Donald Jenkins, MD FACS
Vice Chair for Quality, Department of Surgery
Associate Deputy Director, Military Health Institute
UT Health San Antonio
USA

1520-1535 **Coke Bottles and 3D Printed Caps for Blood Containers**

Martin Rognhaug
Norwegian Armed Forces
Norway



- 1535-1555 **Panel Discussion**
Panel: Speakers joined by:
- Pampee P. Young, M.D., Ph.D.
*Chief Medical Officer
Biomedical Services
American Red Cross National Headquarters
USA*
- Prof Denese Marks
*Research Program Leader
Australian Red Cross
Australia*
- Kenneth Bertram, MD PhD
*Biogenerator
USA*

1555-1610 **Break**

SESSION 5: REBOA PRO/CON DEBATE

Moderators: Bellal Joseph, MD and Bryan A. Cotton, MD MPH

- 1610-1625 **Con**
Martin A. Schreiber, MD FACS FCCM
*COL, MC, USAR
Adjunct Professor of Surgery
Uniformed Services University of the Health Sciences
USA*
- 1625-1640 **Pro**
Andrew Beckett, CD MD FRCS FACS
*Royal Canadian Medical Service
Canada*
- 1640-1650 **Discussion**



SESSION 6: COLD WEATHER RESUSCITATION

Moderators: Tom Woolley, MD & Vik Bebarta, MD

- 1650-1710 **Vascular Biology of Cold Injury**
Andrew P. Cap, MD, PhD
Colonel, U.S. Army, Retired
Professor of Medicine
Uniformed Services University
USA
- 1710-1730 **Pharmaceuticals for Improved Flow in Cold Injury**
Rachel Nygaard, PhD
Associate Prof, University of Minnesota
Research Director, Hennepin County Medical Center
USA
- 1730-1740 **Discussion**

SESSION 7: PREHOSPITAL CASE PRESENTATIONS

Moderator: COL Jennifer Gurney, MD

- 1740-1830 **Panelists:**
- BG Prof. Elon Glassberg
Israeli Defense Forces
Israel
- Prof Dr. Marc Maegele
Department of Traumatology and Orthopedic Surgery
Cologne-Merheim Medical Center (CMMC)
Germany
- 1830 -1930 **Reception Hour/Poster Session/Trainee Awards Ceremony**
- 1930 **Dinner**
Opening Remarks:
Dr. Lester Martinez-Lopez
Assistant Secretary of Defense for Health Affairs
USA



TUESDAY

SESSION 8: THOR, SOMA and Co-TCCC Updates

Moderator: Travis M. Polk MD, FACS, Commander, MC, USN

- 0745-0800 **Introduction of THOR Working Groups**
Philip Spinella, MD
Professor of Surgery
Professor of Critical Care Medicine
Co-Director, Trauma and Transfusion Medicine Research Center
Associate Medical Director, Center for Military Medicine Research
University of Pittsburgh
USA
- 0800-0820 **Special Operations Medical Association Update (15)**
Dr. Christi Verchinin
SOMA Board of Directors
AFSOC Special Operations Surgical Team (SOST)
USA
- 0820-0840 **Tactical Combat Casualty Care Committee Update (15)**
Harold Montgomery
TCCC Joint Program Manager
Vice Chair, Committee on TCCC
Defense Health Agency J-3/5-7
USA

SESSION 9: RESUSCITATION AND WOMEN

Moderator: Lucy Zumwinkle Kornblith, MD, FACS

- 0840-0905 **LTOWB Data Review**
Christine M. Leeper, MD
Assistant Professor Department of Surgery
University of Pittsburgh
USA
- 0905-0930 **Effect of Sex on Hemostasis and Quality of Blood Products**
Julia Coleman, MD MPH
Assistant Professor
Department of Surgery, Division of Trauma, Critical Care, Burn
The Ohio State University
USA



- 0930-1000 **Evidence Based Guidelines for Emergency Transfusion in Females of Childbearing Potential: Mitigating the Risks of Hemolytic Disease of the Fetus and Newborn**
Molly Sherwood
Director of Research
Allo Hope Foundation
USA
- 1000-1020 **Ethics of Rh Exposure to Rh Negative Females of Childbearing Potential**
Jay Malone, MD PHD
Associate Professor of Pediatric Critical Care Medicine
Medical Director of Ethics, St. Louis Children's Hospital
USA
- 1020-1035 **Discussion**
- 1035-1050 **Break**
- SESSION 10: CLINICAL TRIAL DATA UPDATE**
Moderator: Phil Spinella, MD
- 1050-1110 **Cryostat-2 PROCOAG Trial Results**
Prof Dr. Marc Maegele
Department of Traumatology and Orthopedic Surgery
Cologne-Merheim Medical Center (CMMC)
Institute for Research in Operative Medicine (IFOM)
University Witten-Herdecke (UWH)
Germany
- 1110-1130 **Cold Stored Platelet for Hemorrhagic Shock (CRISP) Trial Results**
Jason Sperry, MD MPH
Professor of Surgery and Critical Care
University of Pittsburgh Medical Center
USA
- 1130-1150 **Cold Stored Platelet Trial for Traumatic Brain Injury (CRISP TBI) Results**
Matthew D. Neal, MD FACS
Roberta G. Simmons Associate Professor of Surgery
University of Pittsburgh Medical Center
USA
- 1150-1200 **Discussion**
- 1200-1400 **THOR Shirt distribution / Group Photo / Lunch / Break**



SESSION 11: INDUSTRY WORKSHOPS

Moderator: Philip Spinella, MD

1400-1430 **Optimizing Fibrinogen Replacement in Trauma with Pathogen Reduced Cryoprecipitated Fibrinogen Complex**

Cerus

Roman Dudaryk MD

Professor of Anesthesiology

Division of Trauma Anesthesia/Critical Care Medicine

Director of Quality, Department of Anesthesiology

University of Miami/Jackson Memorial Hospital

USA

SESSION 12: PREHOSPITAL USE OF TXA

Moderator: Bryan A. Cotton, MD MPH

1430-1440 **Prehospital TXA for Severe Trauma (PATCH) Trial**

John Holcomb, MD FACS

COL, USA (Ret)

Professor of Surgery, Department of Surgery

University of Alabama at Birmingham

USA

1440-1500 **Efficacy and Safety of Autoinjector IM use of TXA**

CDR Kellye Donovan

Acquisition and Logistics professional, Program Analyst EMS Team

USMC Pharmacy SME at Marine Corps Systems Command

USA

1500-1520 **Endothelial Effects of TXA**

Joseph Rappold, MD FACS

Maine Medical Center/Tufts University

USA

1520-1540 **Immune Effects of TXA**

Matthew D. Neal, MD FACS

Roberta G. Simmons Associate Professor of Surgery

University of Pittsburgh Medical Center

USA

1540-1550 **Discussion**

1550-1610 **Break**



SESSION 13: ADAPTIVE TRIAL DESIGNS AND PRECISION RESUSCITATION MEDICINE

Moderator: Philip Spinella, MD

1610-1640 Innovative Trial Design to Support Research in Precision Resuscitation Medicine

Juliana Tolles, MD MHS

Associate Professor of Emergency Medicine, Harbor-UCLA Medical Center

Medical and Statistical Scientist, Berry Consultants

USA

Kelley M. Kidwell

Professor of Biostatistics

University of Michigan

USA

1640-1720 Interactive Research Design Consultation (Feedback for 2 Proposed Trial Adaptive Trial Designs)

Roger Lewis, MD PhD

Senior Medical Scientist, Berry Consultants

USA

SESSION 14: CHANGING PRACTICE

Moderator: Martin Schreiber, MD

1720-1740 Changing Practice Without RCTs: When to Pull the Trigger with New Therapies

Philip C. Spinella, MD

Professor of Surgery

Professor of Critical Care Medicine

Co-Director, Trauma and Transfusion Medicine Research Center

Associate Medical Director, Center for Military Medicine Research

University of Pittsburgh

USA

1740-1830 Panel Discussion

Australia: Prof Denese Marks

Research Program Leader

Australian Red Cross

Australia

Israel: Prof. Eilat Shinar, MD

Magen David Adom

Israel



US: Evan M Bloch, MD, MS
Associate Professor of Pathology
Associate Division Director, Transfusion Medicine | Medical Director, Apheresis
Johns Hopkins University School of Medicine
USA

Europe: Prof Dr. Marc Maegele
Department of Traumatology and Orthopedic Surgery
Cologne-Merheim Medical Center (CMMC)
Institute for Research in Operative Medicine (IFOM)
University Witten-Herdecke (UWH)
Germany

1830-1930 **Reception Hour/Poster Session**

1930 Dinner



WEDNESDAY

0730-1200 **Parallel Sessions: Science and Practical Care**

PARALLEL SESSIONS: SCIENCE

SESSION 15A: WHAT'S GOING ON (PATHOPHYSIOLOGY -PART 1)

Moderated by Lucy Kornblith, MD

0730-0800 **Oxygen Debt and Blood Failure**

Kevin Ward, MD

Executive Director: Max Harry Weil Institute for Critical Care Research and Innovation

Professor: Departments of Emergency Medicine and Biomedical Engineering

University of Michigan

LT COL U.S. Army Reserves MC

USA

0800-0825 **Innovative Approaches to Studying TIC to Achieve Precision Resuscitation, the TACTIC 2.0 Frontier**

Mitchell Jay Cohen, MD

Professor, Department of Surgery

University of Colorado

USA

0825-0850 **RBC Dysfunction from Traumatic Shock**

Angelo D'Alessandro, PhD

Assistant Professor and Director of the Metabolomics Core

University of Colorado

USA

0850-0915 **RBC Thromboinflammation**

Michael Goodman, MD FACS

Professor of Surgery

Dario Rodriquez Jr. Chair of Trauma Research

Associate Program Director, General Surgery Residency

University of Cincinnati Department of Surgery

USA

0915-0925 Discussion



SESSION 15B: WHAT'S GOING ON (PATHOPHYSIOLOGY - PART 2)

Moderated by Denise Marks

- 0925-0945 **Calcium Signaling and Clinical Implications for Treatment of Hypocalcemia in Resuscitation**
Kalev Freeman, MD
Associate Professor of Emergency Medicine and Pharmacology
University of Vermont
USA
- 0945-1005 **Complement Responses to Transfusion and Relevance to ABO Compatibility**
Michael Yaffe, MD PhD
Director, MIT Center for Precision Cancer Medicine; David H. Koch Professor in Science;
Professor of Biological Engineering; Intramural Faculty, Koch Institute
USA
- 1005-1025 **Changes in Platelet RNA Architecture with Storage**
Lucy Zumwinkle Kornblith, MD, FACS
Associate Professor of Surgery Trauma and Surgical Critical Care
San Francisco General Hospital
USA
- 1025-1035 **Discussion**
- 1035-1045 **Break**

SESSION 15C: I'LL TELL YOU WHAT'S GOING ON (ASSAY DEVELOPMENT)

Moderated by Susan Shea, PhD

- 1045-1055 **Functional Hemostasis Monitoring is not Indicated for TIC**
John Holcomb, MD FACS
COL, USA (Ret)
Professor of Surgery, Department of Surgery
University of Alabama at Birmingham
USA
- 1055-1115 **Novel Flow Based Hemostasis Assays for TIC**
Keith Neeves, PhD
Professor, Department of Bioengineering
Department of Pediatrics, Section of Hematology, Oncology, and BMT
University of Colorado Denver
USA
- 1115-1130 **Modified Flow Based Assays for TIC**
Nathan White, MD



*Associate Professor, Department of Emergency Medicine
Director, Resuscitation Engineering Science Unit (RESCU)
University of Washington
USA*

1130-1150 OMICS Based Assays to Assess Blood Failure

*Kirk Hansen, PhD
Professor, Structural Biology and Biochemistry
University of Colorado
USA*

1150-1200 Discussion

1200-1400 Lunch / Break

SESSION 16: INDUSTRY WORKSHOPS

Moderator: Philip Spinella, MD

1400-1415 Physiologic Closed-Loop Control of Life Support – The Future of Combat Medicine

*Joshua Lampe
Acting Vice President, Clinical and Scientific Affairs
Zoll*

1415-1430 Point of Injury Hemostasis

*Michael Weissman
Clinical Education Manager
Celox Medical*

SESSION 17: WE HAVE GOT TO FIND A WAY (PRECISION TRANSFUSION PRODUCT DEVELOPMENT)

Moderated by Chrstitine M. Leeper, MD

1430-1450 Hypoxic RBC

*Angelo D'Alessandro, PhD
Assistant Professor and Director of the Metabolomics Core
University of Colorado
USA*

1450-1510 Dried Product Combinations/Engineered Dried Plasma/Engineered Dried Platelet Products



Martin A. Schreiber, MD FACS FCCM
COL, MC, USAR
Adjunct Professor of Surgery
Uniformed Services University of the Health Sciences
USA

1510-1530 **Genetically Engineered Transfusable Platelets**
Christian Kastrup, PhD
Professor of Surgery
Versiti Blood Research Institute
Medical College of Wisconsin
USA

1530-1550 **Cold Stored and Frozen Platelets**
Prof Denese Marks
Research Program Leader
Australian Red Cross
Australia

1550-1600 **Discussion**

SESSION 18: FUNDING PRIORITIES AND OPPORTUNITIES

Moderated by Don Jenkins

1600-1615 **FDA**
Carlos H. Villa MD PhD
Office of Blood Research and Review (OBRR)
FDA Center for Biologics Evaluation and Research (CBER)
USA

1615-1635 **US Department of Defense**
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

1635-1650 **DARPA**
Jean-Paul Chretien, MD PhD
Program Manager, DARPA
USA

1650-1700 **Conference Summary**
Geir Strandenes and Philip C. Spinella