



THE UNIVERSITY OF TEXAS SYSTEM

Trauma Research Symposium

Meeting Agenda



Meeting Agenda

Day 1: February 10

7:30am - 8:30am

Registration and Breakfast

8:30am – 9:00am

Introduction and Opening Remarks

Introduction: **James Bynum, PhD**,
Executive Director, TRC4

Opening Remarks: **John M. Zerwas, MD, FAFSA**,
Executive Vice Chancellor for Health Affairs,
University of Texas System

9:00am – 9:30am

*Ronald Stewart, MD, University of Texas Health Science Center
at San Antonio*

*Trauma Research and Combat Casualty Care Collaborative
(TRC4): Background, Mission, Vision and Goals*

9:30am – 10:00am

Keynote Speaker: Brian Eastridge, MD

Chief, Division of Trauma and Emergency Surgery,
University of Texas Health Science Center at
San Antonio

Jocelyn and Joe Straus Endowed Chair in Trauma
Research, University of Texas Health Science Center
at San Antonio

*Advances in Artificial Intelligence to Improve Care for
Trauma (ACT): Leveraging Artificial Intelligence to
Enhance Trauma System Performance in Texas*

10:00am – 10:45am

*Scientific Session 1 – Chair: Brian Eastridge, MD, University
of Texas Health Science Center at San Antonio*

Spencer Knierim, MD

San Antonio Uniformed Services Health Education
Consortium, BAMC

*An Analysis of 24-hour Survival Based on Arrival by
Atypical Ground Transport Versus Ground Emergency
Medical Services*

Pamela Bixby, MA & Nick Medrano, MS

Coalition for National Trauma Research
*Using the National Trauma Research Repository
for Data Collection and Secondary Analyses*

Kevin Ross, MS

Ragged Edge Solutions

*Assessing Human Performance and Integrated
Technologies in Austere Environments*

Day 1: February 10

10:45am – 11:00am

Break/Networking

11:00am – 11:15am

Military Significance: Robert Miller, MD, MBA, MSS, FAAP, FACHE, FACPE

Executive Director of the Military Health Institute at the University of Texas Health Science Center at San Antonio

11:15am – 12:00pm

Military Keynote Speaker: Colonel Valerie Sams, MD, USAF

Trauma Critical Care and Acute Care Surgeon

Director, Center for Sustainment of Trauma & Readiness Skills (CSTARS) Cincinnati

National Disaster Medical System as a Matter of National Defense

12:00pm – 1:00pm

Lunch/Networking

1:00pm – 2:00pm

Scientific Session 2 – Chair: Lucia Nguyen, MD, University of Texas Health Rio Grande Valley

Alisa Isaac, PhD

University of Texas at San Antonio

Effects of Tissue Damage Cues for Traumatic Wound Regeneration

Neda Vishlaghi, PhD

University of Texas Southwestern

The Role of Lymphangiogenesis in Musculoskeletal Injury

Natalie Drucker, MD

University of Texas Health Science Center at Houston

Development of a Multicenter Registry: The Pediatric Prospective Observational Vascular Injury Trial

Kamal Awad, PhD

University of Texas at Arlington

Bioengineered Electrically Conductive and Tri-cellularized Hydrogel as a Synthetic Muscle Graft for Volumetric Muscle Loss Patients

2:00pm – 2:30pm

Keynote Speaker: Benjamin Levi, MD

Dr. Lee Hudson-Robert R. Penn

Chair, University of Texas Southwestern

Division Chief of General Surgery, University of Texas Southwestern

Director, Center for Organogenesis Regeneration & Trauma, Professor in Surgery, University of Texas Southwestern

Utilization of Short-Wave Infrared Imaging and Machine Learning Algorithms for Assessment of Burn Wound Depth

Meeting Agenda

Day 1: February 10

2:30pm – 2:50pm

Break/Networking

2:50pm – 3:55pm

Scientific Session 3 – Chair: Benjamin Levi, MD, University of Texas Southwestern

Celeste Finnerty, PhD

University of Texas Medical Branch

Analysis of Therapeutic Agents for Burn Scar Itch Management in a Large Patient Population - An Observational Study

Kristo Nuutila, PhD, MSc

USAISR

Novel Strategies to Manage Combat Burn Wounds

Andy Wangzhou, PhD

University of Texas at Dallas

Understanding NGF and TrkA Signaling and Function in Adult Human Dorsal Root Ganglion Neurons

Daniel DeArmond, MD

University of Texas Health Science Center at San Antonio

Novel Wearable Device that Promotes Patency and Monitors for Infiltration in Peripheral Intravenous Catheters

4:00pm – 4:45pm

Military/VA/Industry Session – Chair: Robert Rennaker, PhD, University of Texas at Dallas

Chuck Hutti, PhD

MTEC

The Medical Technology Enterprise Consortium: Advancing Military Medicine through Collaboration and Innovation

Annaliese Schultz, MA

Persistent Technology Inc

The Healing Power of Creative Expression in Virtual Reality

Day 1: February 10

4:45pm – 5:00pm

Introduction of Marc Fucarile: Benjamin Levi, MD

5:00pm – 5:30pm

Trauma Keynote Speaker: Mr. Marc Fucarile

Boston Marathon Bombing Survivor
CEO of the M.A.R.C NETWORK
Founder of The ReM.A.R.C.able Foundation

5:30pm – 7:00pm

Reception/Networking and Poster Presentations

Day 2: February 11

7:30am – 8:30am

Registration and Breakfast

8:30am – 9:00am

Keynote Speaker: Erika Brigmon, MD

Assistant Professor of Surgery, Division of Trauma and
Emergency General Surgery at University of Texas Health
Science Center at San Antonio

*TRUST – Trauma Recovery Using Support from Trauma-in-
formed-care. An Approach to Health Equity*

9:00am – 10:00am

Scientific Session 4 – Chair: M. Adam Meledeo, PhD, USAISR

Bryan Cotton, MD

University of Texas Health Science Center at Houston

*An assessment of Green Plasma: The Potential Hemostatic
Superiority of a Currently Discarded Blood Product*

Maria Gonzalez Porras, PhD

University of Texas at San Antonio

*Treatment of Cold-Related Injuries by Nanoparticle-mediated
Control of Adipocyte Thermogenic Activity*

Erica Underwood, PhD

University of Texas Health Science Center at Houston

*Methodological Approach to Assessment of Platelet
Mitochondrial Dysfunction in Traumatic Brain Injury
and Hemorrhagic Shock in a Clinical Setting*

Robert Gerhardt, MD

59th Medical Wing Science and Technology Office

*Extending Life after LSI: Remote Damage
Control Resuscitation*

Meeting Agenda

Day 2: February 11

10:00am – 10:15am

Break/Networking

10:15am – 12:00pm

Scientific Session 5 – Chair: Chris Rathbone, PhD, University of Texas at San Antonio

Elizabeth Cosgriff-Hernandez, PhD

University of Texas at Austin

Multifunctional Wrap to Control Infection and Enhance Bone Regeneration

Vaida Glatt, PhD

University of Texas Health Science Center at San Antonio

Harnessing the Power of Nature: mRNA-Activated Biomimetic Hematoma Scaffold for Regeneration of Volumetric Muscle Loss

George Bittner, PhD

University of Texas at Austin

Traumatic Spinal Cord Injuries Successfully Repaired by a Combination of Novel, Recently-patented, Multi-disciplinary Technologies

Madison Brown

University of Texas at Austin

Civilian Prehospital Tourniquets for Extremity Trauma: More Common and Getting Better all the Time

Teja Guda, PhD

University of Texas at San Antonio

Mechanocultured scaffolds: a solution for large bone trauma

Alexander Tatara, MD, PhD

University of Texas Southwestern

Synthesis and Characterization of a Composite Bone Cement with Inherent Antimicrobial Properties To Prevent Orthopedic Hardware Infection

Suresh K. Bhavnani, PhD

University of Texas Medical Branch/ University of Texas Health Science Center at Houston

The Role of Human-Centered AI in the Analysis of Burn Patients

12:00pm – 1:00pm

Lunch/Networking

Day 2: February 11

1:00pm – 1:30pm

Keynote Speaker: Charles Cox, MD

Clare A. Glassell Distinguished Chair of Pediatric Surgery
University of Texas McGovern Medical School at Houston

George & Cynthia Mitchell Distinguished Chair
in Neuroscience University of Texas McGovern
Medical School at Houston

Director Pediatric Trauma Program at Children's
Memorial Hermann Hospital

Co-Director, Texas Trauma Institute

*Clinical Trial Planning: Precision Medicine Trial Identifying Glyburide
Responsive Genotypes to Reduce Contusion Expansion After TBI*

1:30pm – 2:30pm

*Scientific Session 6 – Chair: Charles Cox, MD, University of Texas
Health Science Center at Houston*

Felipe Salinas, PhD

University of Texas Health Science Center at San Antonio

*Accelerated Image-Guided Robotically Delivered
Transcranial Magnetic Stimulation for Combat PTSD*

Robert Rennaker, PhD

University of Texas at Dallas

*A Novel Neuromodulatory Therapy to Restore
Somatosensation After Traumatic Injury*

Jack Hutcheson, PhD

59th Medical Wing Science and Technology Office

*Evaluation of Efficacy of Intranasal Administration of
TEMPOL for Treatment of Closed Cortical Moderate
Traumatic Brain Injury in a Rat Model*

Seth Hays, PhD

University of Texas at Dallas

*Vagus Nerve Stimulation Therapy for the Treatment of
Chronic, Refractory Post-Traumatic Stress Disorder*

2:30pm – 2:45pm

Conclusion

David Lakey, MD, Vice Chancellor
for Health Affairs, University of Texas System