



2026 UT System Trauma Research Symposium Preliminary Meeting Agenda

Day 1: February 17

Welcome/Check-In

7:30am - 8:45am: Registration and Breakfast

Opening Session

8:45am – 9:00am: Introduction

James Bynum, PhD

Executive Director, Trauma Research and Combat Casualty Care Collaborative (TRC4)

9:00am – 9:15am: Opening Remarks

Ronald Stewart, MD

University of Texas Health San Antonio

9:15am – 9:45am: Morning Keynote

Jane Wigginton, MD, MSCS

University of Texas at Dallas

Chief Medical Officer, TX Biomedical Device Center

Medical Science Research Director, Center for BrainHealth

Co-Director, Clinical and Translational Research Center

Presentation:

UT System Pivotal Trial: Closed-loop Vagus Nerve Stimulation for Upper Limb Functional Recovery in Chronic Spinal Cord Injuries

Break & Networking

9:45am – 10:00am

Scientific Session 1

10:00am – 10:45am

Chair: Jane Wigginton, MD, MSCS, University of Texas at Dallas

Speaker 1: Shawana Tabassum, PhD, University of Texas at Tyler

SWEAT-TBI: Smart Wearable Electrochemical Aptamer-based Tracker for Traumatic Brain Injury Biomarkers

Speaker 2: Jacob Provencio, BS, University of Texas at San Antonio

Next-Generation Airway Management: Proof-of-Concept Fabrication of a Pneumatically Steerable Endotracheal Tube

Speaker 3: Patrick Ng, MD, University of Texas Health San Antonio

FORCE -Field Operations Research Clinical Engine- Development of a Prehospital, Clinical Trial Platform for Trauma, Prehospital, En Route Care and Prolonged Field Care Research

Military Focus Session

10:45am-10:55am

Lieutenant General (Ret.) Robert Miller, MD, MBA, MSS, FAAP, FACHE, FACPE

Associate Vice President & Director Military Health Institute

USAA Patty and Joe Robles, J Distinguished Chair for Military Health

Retired Lieutenant General, United States Air Force

10:55am – 11:35am: Military Keynote Address

Jeffrey D. Freeman, PhD, MPH

Inaugural Executive Director, National Institute for Defense Health Cooperation, and Special Assistant to the Uniformed Services University of the Health Sciences President

11:35am – 12:00pm:

Colonel Jennifer Gurney, MD, FACS

Chief, Joint Trauma System

Defense Health Agency

Presentation:

Beyond the Battlefield: Large-Scale Combat Operations and the Research Imperatives for Forward Surgical Care on the Future Battlefield

Lunch & Networking

12:00pm – 1:00pm

1:00pm-1:15pm: University of Texas System Remarks

John M. Zerwas, MD, FASA

Chancellor, The University of Texas System

1:15pm-1:30pm: Afternoon Keynote

Celeste Finnerty, PhD

Associate Professor, University of Texas Medical Branch

Presentation:

TRC4 Post-doctoral Fellowship Program

Scientific Session 2

1:30pm – 2:45pm

Chair: Celeste Finnerty, PhD, University of Texas Medical Branch

Speaker 1: Joana Bianchi, PhD, University of Texas Health Houston
Cell Therapies for TBI: Immunomodulatory Assays to Reliably Assess Potency

Speaker 2: Elnaz Ghotbi, PhD, University of Texas Southwestern Medical Center
Epidermal BDNF Regulates Digit Tip Regeneration and Meissner Corpuscle Maintenance

Speaker 3: Mehdi Rasouli, DVM, PhD, University of Texas Medical Branch
Emerging Regenerative Therapies for Growth Plate Injury

Speaker 4: Patrick Laing, PhD, University of Texas at Austin
Structural and Functional Brain Mechanisms of Enhanced Fear Extinction in PTSD and TBI

Speaker 5: Junda Gao, MD, University of Texas Health Houston
Therapeutic Targeting of TREM2⁺ Macrophages to Accelerate Liver Repair After Traumatic Injury

Break & Networking

2:45pm – 3:00pm

Scientific Session 3

3:00pm – 4:00pm

Chair: Michelle Nelson, PhD, RN, CNE, ACUE, Stephen F. Austin State University

Speaker 1: Neda Vishlaghi, PhD, University of Texas Southwestern Medical Center
Lymphatic PIK3CA Signaling Is Essential for Tendon Repair Following Musculoskeletal Injury

Speaker 2: Ayhan Atmanli, MD, PhD, University of Texas Health Houston
Molecular Regulation of Cellular Mechanotransduction of the Blood Brain Barrier in Traumatic Brain Injury-induced Coagulopathy

Speaker 3: Pablo Valdes Quevedo, MD, PhD, University of Texas Medical Branch
Raman Spectroscopy for Point of Care Diagnostics of Cerebrospinal Fluid Leaks in Traumatic Brain Injury

Speaker 4: Natalie Drucker, MD, University of Texas Health Houston
Development of a Multicenter Registry: The Pediatric Prospective Observational Vascular Injury Trial

Scientific Session 4

4:00pm – 5:00pm

Chair: Charles Cox, MD, University of Texas Health Houston

Speaker 1: Aric Logsdon, PhD, Texas Tech University Health Sciences Center

Targeting extracellular matrix composition at the blood-brain barrier to treat traumatic brain injury

Speaker 2: Victoria Siu, BA, University of Texas at Austin

THE HIDDEN WOUND: Resiliency as a Predictor of Post-Trauma Mental Health

Speaker 3: Emily Saweris, BSA, University of Texas Health Houston

Associations Between ABCC8 and TRPM4 Gene Variants and Intracranial Pressure Dynamics Following Traumatic Brain Injury.

Speaker 4: Jenifer Juranek, PhD, University of Texas Health Houston

Subacute volumetric edema imaging in severe TBI predicts long-term functional outcomes

5:00pm – 6:00pm: Evening Keynote

Sean Douglas

Master Resilience Trainer

Retired US Air Force

3x TEDx Speaker

Founder of The Success Corps

Author & Podcast Host

Presentation:

What Trauma Research Teaches Us About Healing, Human Potential, and Resilience

Reception, Networking & Poster Presentations

6:00pm – 8:00pm

Day 2: February 18

Registration & Breakfast

7:30am – 9:00am

9:00am-9:30am: Morning Keynote

Brian Eastridge, MD

University of Texas Health San Antonio

Chief, Division of Trauma and Emergency Surgery

Jocelyn and Joe Straus Endowed Chair in Trauma Research

Amina Qutub, PhD

The University of Texas at San Antonio

Associate Professor, Department of Biomedical and Chemical Engineering, Burzik Professor in Engineering Design

Elizabeth Stewart, MD

University of Texas Health San Antonio

Resident, Long School of Medicine, Department of Surgery,

Presentation:

A Statewide Artificial Intelligence & Data Ecosystem for Trauma Care

Scientific Session 5

9:30am – 10:45am

Chair: Brian Eastridge, MD, University of Texas Health San Antonio

Speaker 1: Paul Bernal, CEO, AEMULUS-XR

The Augmented Reality of Pre-Hospital Training

Speaker 2: Taylor George, DrPH, MHS, University of Texas Health San Antonio; DPS

Zero Preventable Deaths in Texas: 75th Ranger Regiment Principles Adapted for Statewide Law Enforcement Implementation

Speaker 3: Emre Umucu, PhD, University of Texas at El Paso

Training AI-Driven Community Integration and Employment Tool via Federal Rehabilitation Data and Machine Learning

Speaker 4: Ellie Rahbar, PhD, Texas A&M University

From Swine to Simulations: Building Better Predictive Trauma Models for Hemorrhagic Shock, REBOA & Resuscitation

Speaker 5: Captain Alexander Bowers, MD, University of Texas at San Antonio/ United States Air Force

From Battlefield to Community: Simulation-Based Education for Walking Blood Bank Whole Blood Transfusion

Break & Networking

10:45am – 11:15am

Scientific Session 6

11:15am – 12:00pm

Chair: Chris Rathbone, PhD, University of Texas at San Antonio

Speaker 1: Braden Miller, MD, University of Texas at San Antonio

Ex-Vivo Machine Perfusion of Hemoglobin Based Oxygen Carrier (HBOC) for Extended Procurement-to-Transplantation Timelines after Trauma

Speaker 2: Nanshu Lu, PhD, University of Texas at Austin

Multimodal Wearable E-Tattoo Sensors for the Pre-Hospital Detection of Internal Hemorrhage

Speaker 3: Phil Sizer, PT, PhD, Texas Tech University Health Sciences Center

Project OASIS (Optimized Autonomous Systems for Isolated Support): Providing Pre-Hospital Whole Blood Resuscitation in Rural Healthcare Deserts

Lunch & Networking

12:00pm – 1:00pm

1:00pm – 1:30pm: Afternoon Keynote

Benjamin Levi, MD

University of Texas Southwestern Medical Center

Dr. Lee Hudson-Robert R. Penn Chair

Division Chief of General Surgery

Director, Center for Organogenesis Regeneration & Trauma, Professor in Surgery

SWATT the FLAME (Fueling Lifesaving Advances in Metabolic Efficiency): A UT Burn Initiative

Scientific Session 7

1:30pm – 2:15pm

Chair: Benjamin Levi, MD, University of Texas Southwestern Medical Center

Speaker 1: Alisa Isaac, PhD, University of Texas at San Antonio

Autologous Damaged Tissue Peptides for Regeneration of Deep-Partial Thickness Burns

Speaker 2: Mariah Arave, MD, Brooke Army Medical Center

Innovative Splinting Solutions: The Role of 3D Printing in Resource Limited

Speaker 3: Bryce Palmer, BS, Texas Tech University Health Sciences Center

Corneal Abrasion in Burn Admissions: Severity and Geographic Access Factors in a Retrospective Cohort

Closing Session

2:15pm – 2:30pm

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