

BREAKOUT SESSIONS Monday, 3 August 2026					
Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 1300 - 1500	Developing Novel Solutions to Prevent & Treat Wound Infections on the Front Line Katherine Lipka, Ph.D., MPH Calli M. Rooney, M.S., MBA Moderators	1300 - 1315	Development of a Porcine Fibula Fracture-Related Infection Model for Prolonged Field Care Studies	MHSRS-26-5524	Dena Norouzi, B.S.
		1315 - 1330	Wearable Platform for Wound Infection Management: A Synthetic Biology Approach	MHSRS-26-4077	Svetlana Harbaugh, Ph.D.
		1330 -1345	Novel Cell-Mediated RNA-Based Antimicrobial Solutions to Prevent Combat Wound Infections Suited for Austere Conditions	MHSRS-26-4190	Yoann Le Breton, Ph.D.
		1345 - 1400	Synergy of Nitric Oxide & TGF-β1 in an Antimicrobial Osteoinductive Hydrogel for Field & Hospital Care of Open Bone Wounds	MHSRS-26-5236	Juan Taboas, Ph.D.
		1400 - 1415	Broad-Spectrum, Cavity-Filling Antimicrobial Gel Spray to Address Prolonged Field Care Wound Challenges	MHSRS-26-5353	Lt Col Steven Jeffery
		1415 - 1430	Reducing Battlefield Infections in Prolonged Field Care: Equipping Soldiers with Antibiotic Autoinjectors	MHSRS-26-6004	Sean Hollonbeck, M.D., MPH
		1430 - 1445	Immobilized Polycationic Polymer-Capped BANPs to Create Cytocompatible Bactericidal Surfaces that Prevent Biofilms	MHSRS-26-5942	Prakash Nallathamby
		1445 - 1500	Interrupting Contamination–Colonization–Infection Pathway After War Trauma: A Modified Biological-Warfare Strategy for Combat Care	MHSRS-26-3687	Hailie Uren, MSc, MPharm, BSc
Two Hour Session 1300 - 1500	Solutions to Optimize & Accelerate Recovery from Musculoskeletal Injury Elizabeth Russell Esposito, Ph.D. Brad D. Isaacson, Ph.D. Moderators	1300 - 1315	Length of Care After Musculoskeletal Injury: The Role of Deployment, Sex, & Service Branch	MHSRS-26-3985	Megan Roach, Ph.D.
		1315 - 1330	Risk Factors Associated with Reinjury in the 12 Months Post-Neuromusculoskeletal Injury among Active Duty Service Women, 2017-2023	MHSRS-26-2261	Stanley Zimmerman, MPH
		1330 -1345	Perceived Health & Readiness Following Return to Duty from a Musculoskeletal Injury in US Army Soldiers	MHSRS-26-2405	Tina Greenlee, Ph.D.
		1345 - 1400	Differences in Physical & Mental Health Related Quality of Life in U.S. Marines With & Without a Recent Musculoskeletal Injury	MHSRS-26-2207	Matthew Hoch, Ph.D.
		1400 - 1415	Routine Blood Biomarkers Predict a 16-Fold Graduation Advantage in Air Force Special Warfare Selection	MHSRS-26-5336	Thomas M. Smith, M.S.
		1415 - 1430	Incidence of Shoulder Instability Pathology for Incoming US Service Academy Members: A Magnetic Resonance Imaging Cohort Study	MHSRS-26-5879	Jacob N. Dowe, M.S.
		1430 - 1445	Efficacy of Psychologically-Informed Physical Therapy for Treating Active-Duty Service Members with Musculoskeletal Injuries	MHSRS-26-2422	Hope C. Mowery, Ph.D.
		1445 - 1500	Differences in Anticipated & Unanticipated Task Performance in Those With & Without Chronic Ankle Instability	MHSRS-26-3667	Kéla Porter, Ph.D.
Two Hour Session 1300 - 1500	Emerging Psychological Health Threats in Large-Scale Combat Operations Amy Adler, Ph.D. Moderator	1300 - 1315	Expanding Mental Health Training for Medics in LSCO: Comparing Virtual & In-Person Train-the-Trainer Models for Unit Assets	MHSRS-26-6016	Katie Nugent, Ph.D.
		1315 - 1330	Soldiers with Acute Stress Disorder: Trajectory of Recovery & Return to Readiness after Frontline Treatment	MHSRS-26-4544	Lt Col Carneel Kalla, USAF
		1330 -1345	Neurocognitive Assessments in Emergency Care Environments are Valid	MHSRS-26-5033	Meredith Bucher, Ph.D.
		1345 - 1400	Treating PTSD During Ongoing War: Real-Time Symptom Trajectories & Functional Reintegration in Active-Duty Soldiers	MHSRS-26-2082	Lt Col Michal Lifshitz, IDF
		1400 - 1415	Developing Operational Capability in Human Remains Recovery: Implications for War Fighter Medical Readiness	MHSRS-26-2411	Natalie-Louise Gorton, Ph.D.
		1415 - 1430	Mitigating Situational Stress: Mental Toughness & Operation Life Force Outcomes	MHSRS-26-4725	Christopher Paine, Ph.D.
		1430 - 1445	A Model of Moral Injury Antecedents in U.S. Air Force RPA Personnel	MHSRS-26-4931	Ivan Colon, Psy.D., JD
		1445 - 1500	Mental Health Status of Adults in Ukraine: Results from a Cross-Sectional, Population-based Study in 20 Oblasts	MHSRS-26-4204	Lynn Lieberman Lawry , M.D.
Two Hour Session 1300 - 1500		1300 - 1315	Optimizing Readiness & Lethality in a Blast Overpressure Environment: Tracking & Mitigation Efforts in Special Operations Forces	MHSRS-26-4604	COL (Ret) Mark Ray, USA SGM Christopher McNamara, USA
		1315 - 1330	Blast Overpressure, Acceleration & Cognitive Testing in SWCC (BOATS), a MTBI2 Study	MHSRS-26-4173	Michael Roy, M.D.

BREAKOUT SESSIONS Monday, 3 August 2026					
	Sustaining Brain Health Readiness against Emerging Threats in the Operational Environment Part 1 - Clinical/Operational LTC Matthew LoPresti, USA Raj Gupta, Ph.D. Moderators	1330 -1345	Changes in Eye-tracking Performance due to Blast Overpressure & Heavy Weapons Training in Active Duty Warfighters	MHSRS-26-4714	Walter Carr, Ph.D.
		1345 - 1400	Neuropathological Evaluation of Military Parachutists: A Series from the DoW/USU Brain Tissue Repository	MHSRS-26-2239	David Priemer, M.D.
		1400 - 1415	Characteristics of Eye-tracking Metrics Obtained Using a Portable Device for Assessing Return to Duty Clearance After Concussion	MHSRS-26-2433	Kenneth Cameron, Ph.D.
		1415 - 1430	Measurement of Blast Energy Propagation into the Brain: Comparing PPE to Rapidly Inform Command Risk Management	MHSRS-26-3955	Tonia Rex, Ph.D.
		1430 - 1445	Examination of Repetitive Low-level Blast Exposure Thresholds to Predict Poor Neurobehavioral Functioning	MHSRS-26-5567	Rael Lange, Ph.D.
		1445 - 1500	Occupations at High Risk for Low-Level Blast Exposure & Suicide among United States Service Members & Veterans	MHSRS-26-1029	Neika Sharifian, Ph.D
Two Hour Session 1300 - 1500	Advances in Far-Forward (Roles 1/2) Clinical Care Provision Jonathan Monti, DSc Moderator	1300 - 1315	Cricothyrotomy Simulation Training: Advancing Operational Readiness in Military Nurse Anesthesia Students	MHSRS-26-3868	LTC Andrea Hall, USA
		1315 - 1330	Salvage the Survivable: Rethinking Prehospital Trauma Triage with Rapid Ultrasound Identification of Hemorrhage/ Tension Pneumothorax	MHSRS-26-5195	LCDR Mark Piehl, USN
		1330 -1345	Predictors of First-Attempt Failure in Definitive Airway Management Among Combat Casualties in the Battlefield: A Retrospective Cohort Study	MHSRS-26-4474	CPT Gal Khanchin, IDF
		1345 - 1400	Impact of Altered Consciousness on Fasciotomy Risk for Acute Compartment Syndrome After Traumatic Tibial Fracture	MHSRS-26-5871	Philippe Poirier
		1400 - 1415	Reduced Early Rebleeding & Field-Relevant Residual Fiber Tolerability of the Universal Combat Matrix in GLP Large-Animal Models	MHSRS-26-1036	Adam Jorgensen
		1415 - 1430	Addressing the Triage Training Gap: Effects of Brief SALT Training on Triage Accuracy Among Non-Medical Military Personnel	MHSRS-26-5153	MAJ Sloan Kelly, USA
		1430 - 1445	Feasibility of Prolonged Manual Ventilation	MHSRS-26-5738	Mark F Brady, M.D., MPH
		1445 - 1500	Operational Usability of Real-Time Manual Ventilation Feedback Device in a Military Field Hospital Setting: A Mixed Methods Study	MHSRS-26-5706	Nichole S. Berge, Ph.D., NRP
Two Hour Session 1300 - 1500	Novel Methods for Identifying, Mitigating & Determining Health Impacts of OEH Exposures Part 1/Exposure Monitoring &Interventions Christin Duran, Ph.D., CIH Alan Harner, M.S., MBA Moderators	1300 - 1315	Introduction to the Session	MHSRS-26-NA-01	Christin Duran, Ph.D.
		1315 - 1330	Predictive Approach to Characterizing Health Risk from Exposure to Thermal Degradation Byproducts from High Temperature Processes	MHSRS-26-2466	Rebecca Clewell, Ph.D.
		1330 -1345	Exploring Biohybrid Volatile Organic Compound Sensing with Deep Learning	MHSRS-26-5123	Elisabeth Steel, Ph.D.
		1345 - 1400	Analysis & Discovery of Breath-Based Biomarkers for Performance & Health Metrics	MHSRS-26-5983	Mark Libardoni, Ph.D.
		1400 - 1415	Preventing Combustion Smoke–Induced Airway Injury Through MEK Inhibition	MHSRS-26-2231	Caroline Cherry, Ph.D.
		1415 - 1430	Mitsugumin 53 Protects Against Smoke Inhalation Lung Injury via Suppressing the Proinflammatory Response in a Rat Model	MHSRS-26-2470	Chuanxi Cai, Ph.D.
		1430 - 1445	Computer Vision for Blast Overpressure Exposure Monitoring During Mortar Training	MHSRS-26-3824	Beth Brokaw, Ph.D.
		1445 - 1500	Blast-Induced Operational Combat Casualty Estimation	MHSRS-26-4894	Carly Norris, Ph.D.
Two Hour Session 1300 - 1500	Autonomous Medical Systems for the Field Hugh Connacher, M.S. Sandy Snyder, Ph.D., RN Jody Cantu, Ph.D. Moderators	1530 - 1545	Information Fusion for Multi-Platform Autonomous Casualty Assessment	MHSRS-26-5987	Kimberly Elenberg, DNP
		1545 - 1600	Human Factors in Dense Triage: Managing Cognitive Load in Autonomous TAK-Based Decision Support	MHSRS-26-5535	Kimberly Elenberg, DNP
		1600 -1615	Mixed-Reality Applications for Use in Clinical Decision Support	MHSRS-26-3911	Nicole Caldwell, M.A., RN
		1615 - 1630	Expert Care, No Expert Needed: Validating a Field-Deployable Autonomous Closed-Loop Resuscitation System for Haemorrhagic Shock	MHSRS-26-2229	Yousra Ahmed, MBBCH

BREAKOUT SESSIONS Monday, 3 August 2026					
		1630 - 1645	Hardware-in-Loop Evaluation of Closed-loop Controllers for Management of Ventilation	MHSRS-26-4882	Carlos Bedolla, MSE
		1645 - 1700	Safety Analysis of Uncoordinated Physiological Closed-Loop Critical Care Treatments: Blood Transfusion & IV Anesthesia Study	MHSRS-26-2217	Hassan Jafari Ozoumchelooei, MSE
		1700 - 1715	Effect of Autonomous Oxygen Titration on Maintaining Normoxemia for Acutely Ill Adults: The SAVE O2 AI Randomized Clinical Trial	MHSRS-26-3810	David Douin, M.D., MSc
		1715 - 1730	Precision Automated Critical Care Management (PACC-MAN): A Unified Closed-Loop Platform for Autonomous Prolonged Field Care	MHSRS-26-4959	M. Austin Johnson, M.D., Ph.D.
Two Hour Session 1300 - 1500	Current Challenges in DoW Aerospace Medicine John S. Crowley, M.D., MPH LT Brittany Neilson, USN Moderators	1300 - 1315	2026 Naval Aviation Aircrew Systems & Aeromedical Priorities	MHSRS-26-4456	CDR Adam Preston, USN
		1315 - 1330	Readiness Challenge in Aerospace Medicine: Musculoskeletal Injury Patterns & Skill Sustainment from 9 Years of Surveillance	MHSRS-26-2457	Laura Talbot, Ph.D.
		1330 -1345	Identifying the Neurobiology of Performance & Training Retention in Pilots via Task-Based Functional Magnetic Resonance Imaging	MHSRS-26-3901	Meghan Robinson, Ph.D.
		1345 - 1400	Bioenergy-Immune Response Axis is an Early Target of Spaceflight Induced Stress: An Evidence Based Review of Five Space Projects	MHSRS-26-2367	Nabarun Chakraborty, M.S., MBA
		1400 - 1415	Aeromedical Encounters During the Initial Phase of Operation Rising Lion: A Retrospective Analysis	MHSRS-26-2338	LTC Ivan Gur, IDF
		1415 - 1430	Comparative Analysis of AMRAAM Severity Assessments: Aeromedical Consult Service vs. Ground-Based Operator Pilot-Physician Expert	MHSRS-26-2349	Col Kevin Heacock, M.D.
		1430 - 1445	Physiological Monitoring Under Varied Conditions of Workload & Fatigue	MHSRS-26-2389	Amanda Kelley
		1445 - 1500	Factors Impacting Sleep Across Deployment in United States Navy Aviation Personnel	MHSRS-26-4888	Alice LaGoy, Ph.D.
Two Hour Session 1530 - 1730	Young Investigator Plenary Session Col Adam M. Willis, USAF Maj Williams Hoffman, USAF Moderators	1530 - 1545	Design & Development of a Field-Ready 3D Printing Laboratory for Patient-Specific Treatment of Cranio-Maxillofacial Injuries in Military Operations	MHSRS-26-2234	Major Mario Scheurer Bundeswehr Hospital Ulm, Ulm, Germany Ulm University Medical Center, Ulm, Germany
		1545 - 1600	The Moral, Psychological, Legal & Practical Implications of Palliation on the Battlefield in Large-Scale Combat Operations	MHSRS-26-3865	Charles Coombs, BSc, MBBS, MRCS Royal Army Medical Services, United Kingdom
		1600 -1615	Development of Contemporary HIV-1 Pseudovirus COCOM Panels for Improved Evaluation of Countermeasure Efficacy	MHSRS-26-4630	Michelle Zemil McCrea, M.S. Walter Reed Army Institute of Research, Silver Spring, MD Henry M. Jackson Foundation for the Advancement of Military Medicine, Bethesda, MD
		1615 - 1630	Persistent Sex-, Dose-, Dose-Rate-, & Time-Dependent Plasma & Saliva EV Mirna Cargo after Ionizing Radiation Injury, Supporting EVS as Biomarkers & Mediators of ARS/DEARE	MHSRS-26-4726	Madelyn Bucci, M.S. University of Florida, Gainesville, FL
		1630 - 1645	Therapeutic Reprogramming of Complement C5-Driven Endotheliopathy to Promote Survival & Organ Protection after Hemorrhage	MHSRS-26-4796	Isabella Eastridge University of Texas Health Science Center at San Antonio, San Antonio, TX The Geneva Foundation, Tacoma WA
		1645 - 1700	Prolonged Zone I Partial REBOA Swine Model for Visceral Ischemia-Reperfusion Injury Therapeutic Evaluation	MHSRS-26-5047	Kennedy Nye, M.D. Uniformed Services University of the Health Sciences, Bethesda, MD
		1700 - 1715	One Health in Uniform: Veterinary Medicine Supporting Warfighter Readiness	MHSRS-26-5198	Claire Tucker, DMM, Ph.D. Colorado State University, Fort Collins, CO
		1715 - 1730	Training the AI-Ready Military Radiologist: Competency Validated Through National Machine Learning Competition	MHSRS-26-5489	Bryson J. Hewins, M.D. Naval Medical Center San Diego, San Diego, CA
Two Hour Session 1530 - 1730	Medical Lessons Learned from Ukraine & Israel Conflicts to Improve Casualty Care Strategies Therese West, Ph.D. Moderator	1530 - 1545	Multi-system Combat Trauma in Denied Environments: Rethinking DCS Decision-Making in Contested Evacuation Settings	MHSRS-26-5285	Alan Popkov
		1545 - 1600	Died of Wounds in Modern Combat: A Comparative Analysis of In-Hospital Mortality Among Trauma Casualties in the Swords of Iron War	MHSRS-26-2272	1LT Ranel Loutati, UKR Armed Forces
		1600 -1615	Survival after Severe Penetrating Brain Injury in Modern Warfare: Lessons from High-Volume Wartime Neurosurgical Center in Ukraine	MHSRS-26-2353	Alex Valadka, M.D.
		1615 - 1630	Burn Injuries During a Large-Scale Conflict: Epidemiology, Severity, & Outcomes from a National Trauma Registry	MHSRS-26-3850	MAJ Mor Rittblat, IDF
		1630 - 1645	Multidrug-Resistant Pathogens in Combat Casualties from the Russo-Ukrainian War: Data from the AREVA Trauma Registry	MHSRS-26-4941	Andriy Batchinsky, M.D.
		1645 - 1700	Beyond the Tourniquet: Junctional Hemorrhage During the Swords of Iron War	MHSRS-26-4506	MAJ Danielle Akler, IDF
		1700 - 1715	Initial Results of the SAFETY Study: Use of the Infrascanner Model 2500 to Manage TBI Patients on Frontlines of Ukraine	MHSRS-26-4723	COL Kostiantyn Gumeniuk, UKR

BREAKOUT SESSIONS Monday, 3 August 2026					
		1715 - 1730	Continuing a US-Ukraine Partnership for Trauma Care & Education: Proceedings from Year Three of Targeted Symposia	MHSRS-26-4467	John Holcomb, M.D.
Two Hour Session 1530 - 1730	Human Performance Optimization in Cold-Weather & High-Altitude Environments Camilla Mauzy, Ph.D. Stefanie Shields Ph.D. CPT Connor Broyles, USA Douglas Jones, Ph.D. Moderators	1530 - 1545	Integrated Salivary microRNA & DNA Methylation Networks Predict Frostbite Susceptibility in Arctic Operations	MHSRS-26-4983	Ruoting Yang, Ph.D.
		1545 - 1600	Exosomes Derived from Human Stem Cells Acts as Early Stabilizer to Ameliorate Symptoms of Cold Stress: Systems Biology Analysis	MHSRS-26-2286	Nabarun Chakraborty, M.S., MBA
		1600 -1615	A 3-D Virtual Human Model to Reduce the Risk of Cold-Stress Injuries	MHSRS-26-2340	Jaques Reifman, Ph.D.
		1615 - 1630	Field Testing Autonomous Heated Footwear for Frostbite Prevention in Extreme Cold Environments	MHSRS-26-1047	Doug Jones, Ph.D.
		1630 - 1645	Phenotypes of Modern Non-Freezing Cold Injury: Implications for Diagnosis & Return to Duty	MHSRS-26-4417	Jonathon Lowe, BMBS
		1645 - 1700	Acute Mountain Sickness: Validating Risk Biomarkers & Investigating High Altitude-Induced Alternative Energy Recruitment	MHSRS-26-3658	Camilla A. Mauzy, Ph.D.
		1700 - 1715	Pharmacologic Induction of Tolerance for Hypoxia & Hypothermia (PhIT-HyHo)	MHSRS-26-2399	Allan Doctor
		1715 - 1730	SWIFTARC 1&2 Trials: Safety, Tolerability & Efficacy of Inhaled Salmeterol & Fluticasone to Improve High Altitude Performance	MHSRS-26-4508	James P Maloney
Two Hour Session 1530 - 1730	Sustaining Brain Health Readiness against Emerging Threats in the Operational Environment Part 2 - Physiological/Biomedical LTC Matthew LoPresti, USA Raj Gupta, Ph.D. Moderators	1530 - 1545	Microglia Glucocorticoid Receptor is Critical in Cognition, Gliosis, & Neuronal Impairment after Traumatic Brain Injury	MHSRS-26-5310	Olga Kokiko-Cochran, Ph.D.
		1545 - 1600	High Frequency Hydrostatic Shock Alters Brain Organoid Transcription in a High Throughput Device	MHSRS-26-4599	Kevin Roehm, Ph.D.
		1600 -1615	Plasma PSD-95 Is Elevated at Rest and During Live-Fire Training in Military Snipers: A Candidate Marker of Synaptic Perturbation	MHSRS-26-6037	Maria Shiu, M.S.
		1615 - 1630	Direct, Quantitative Comparison of Personal Protective Equipment During Breaching: Measuring Brain Blast Exposure	MHSRS-26-4279	Tonia Rex, Ph.D.
		1630 - 1645	Cyto- & Myeloarchitectural Alterations in Repetitive Head Impact: A Preliminary Study from the CARE Consortium	MHSRS-26-4572	Syed Salman Shahid, Ph.D.
		1645 - 1700	The Long Reach of Blast: Leaky Gut as a Persistent Biomarker of Blast-Related TBI Years After Military Service in Veterans	MHSRS-26-5601	Fatemeh Haghighi, Ph.D.
		1700 - 1715	Brain-Derived Exosome Biomarkers Predict Cognitive Decline after Traumatic Brain Injury in Service Members & Veterans	MHSRS-26-5608	Katie Edwards, Ph.D.
		1715 - 1730	Changes in MicroRNA Expression in Range Safety Officers Following Repetitive Subconcussive Blast Exposure	MHSRS-26-5881	Piper Deleon, B.S.
	Auditory & Vestibular Health: Combat Support, Injury Mitigation, & Technological Advancements Kathryn Marshall, Ph.D. Moderator		Intro to Session	MHSRS-26-NA-10	Kathryn Marshall, Ph.D.
Two Hour Session 1530 - 1730		1530 - 1545	In-Helmet Noise Dosimetry: Closing the Aircrew Exposure Monitoring Gap for Warfighter Hearing Health	MHSRS-26-5164	Brian Frost Allen Schrader
		1545 - 1600	Histological Study of Synergistic Protective Effects of Helmet & Earplugs on Blast-Induced Auditory Injuries in Chinchilla	MHSRS-26-2408	Yijie Jiang, Ph.D.
		1600 -1615	The Potential Impacts of Acute & Chronic Blast Exposure on Warfighter Performance in Combat Environments	MHSRS-26-5833	Douglas Brungart, Ph.D.
		1615 - 1630	The Paradoxical Response of Blast-Induced Auditory Trauma to Hyperbaric Oxygen Therapy - Lessons Learned from the Recent War	MHSRS-26-2339	LTC Ivan Gur, IDF
		1630 - 1645	Frequency- & Intensity-Dependent Effects of Noise Exposure on Vestibular Function	MHSRS-26-5708	Federica Raciti, Ph.D.
		1645 - 1700	Virtual Reality Balance Assessment Detects mTBI-Related Deficits Missed by Gold-Standard Clinical Testing	MHSRS-26-5673	Geoff Wright, Ph.D.
		1700 - 1715	Mapping Sensory-Motor Boundaries in Augmented Reality: Implications for Vestibular Rehabilitation	MHSRS-26-3906	Vrajeshri Ordek, Ph.D.

BREAKOUT SESSIONS Monday, 3 August 2026				
		1715 - 1730	Feasibility of a Tablet-Based App for Exercise Program Prescription & Monitoring in Vestibular Rehabilitation	MHSRS-26-4257 Chelsea Manetta, DPT