

MEDICAL READINESS for the Future Fight



MILITARY HEALTH SYSTEM

MHSRS

RESEARCH SYMPOSIUM

2023



Breakout Sessions



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Symposium Information



HOW TO USE THIS BOOK

Please refer to the separate printed Agenda, which includes ALL daily activities in chronological order from Monday, 14 August to Thursday, 17 August.

Wherever you see "BREAKOUT SESSIONS" noted within the Agenda, color coded in **RED**, you can refer to the "Breakout Sessions" on pages 9-45, for detailed information regarding each session.

For example, if you wanted more information about the individual presentations (specifically, the presentation title, time and speaker) taking place Tuesday from 1530-1730 in the Coastal A Ballroom, on the topic "Defense Health Program and U.S. Army Medical Research Funding Opportunities" found in the Agenda, you would refer to the Breakout Session pages to search in chronological order by the **time frame** and **topic**:

1530 - 1730	BREAKOUT SESSIONS			
	Coastal A	Coastal C	Sun C	Sun D
Two-Hour Session 1530 - 1730	Defense Health Program & U.S. Army Medical Research Funding Opportunities Rebecca A. Fisher, Ph.D. Moderator	Food and Drug Administration Regulated Activities and Collaborations with DoD CDR Thomas J. Maruna, USPHS Chandar S. Thakur, Ph.D. LTC Stuart Hobbs, USA Moderators	How SARS-CoV-2 Investments have Improved Medical Readiness for other Emerging Infectious Diseases CDR Andrew G. Letizia, USN Moderator	Emerging Technologies for Treatment of Non-compressible Torso Hemorrhage MAJ Elaine D. Por, USA Sylvain Cardin, Ph.D. Moderators

In this example, that would bring you to page 25 in the Breakout Sessions. You would then see each of the **presenters** listed in order of appearance, along with their individual **presentation title**:

Two Hour Session 1530 - 1730	Defense Health Program & U.S. Army Medical Research Funding Opportunities Rebecca A. Fisher, Ph.D. Moderator	1535 - 1550	Congressionally Directed Medical Research Programs (CDMRP) Overview	MHSRS-23-NAS302	COL Sarah B. Goldman, USA
		1550 - 1600	CDMRP Program Cycle and Strategies for Application Success	MHSRS-23-NAS303	Rebecca A. Fisher, Ph.D.
		1600 - 1608	Traumatic Brain Injury and Psychological Health Research Program	MHSRS-23-NAS304	Dwayne Taliaferro, Ph.D.
		1608 - 1616	Joint Warfighter Medical Research Program	MHSRS-23-NAS305	Angel Davey, Ph.D.
		1616 - 1625	Peer Reviewed Medical Research Program	MHSRS-23-NAS306	Kathryn Argue, Ph.D.
		1625 - 1635	Small Business Innovation Research (SBIR)/Small Business Technology Transfer (STTR) Programs - Overview and Opportunities	MHSRS-23-NAS307	James R. Myers, MBA
		1635 - 1645	USAMRDC and Other Transactions Agreements with the Medical Technology Consortium (MTEC)	MHSRS-23-NAS308	Sara Langdon, MBA
		1645 - 1655	Planning DoD-Funded Research and DoD Collaborations - Strategies for Project Success	MHSRS-23-NAS309	Sarah Fontaine, Ph.D.

Welcome Letter



THE ASSISTANT SECRETARY OF DEFENSE

1200 DEFENSE PENTAGON
WASHINGTON, DC 20301-1200

HEALTH AFFAIRS

Dear MHSRS Attendee,

Welcome to the 2023 Military Health System Research Symposium!

The Department of Defense is pleased to present the MHSRS, the Nation's premier scientific meeting focused on the unique medical needs of the warfighter. Since its inception, this Symposium has been recognized as a scientific hub for prominent researchers to forge and strengthen partnerships between the Services, academia, industry, and our international partners.

This important meeting acknowledges the value of research in confronting medical challenges faced by our deployed warfighters. It serves as a showcase for reporting research-driven data and exploring novel solutions to improve pre-deployment readiness and provide state-of-the-art care before and after battlefield injury. Our responsibility in this area is exemplified by our 2023 theme – *Medical Readiness for the Future Fight*.

In his famous 1962 speech on space exploration, President John F. Kennedy said, "*We choose to go to the Moon...and do the other things, not because they are easy, but because they are hard.*" As we consider future conflict scenarios and the medical challenges our community faces, these words resonate. Please capitalize on the opportunities provided by this week's 460 oral presentations spanning more than 65 scientific topic areas and the approximately 1,400 posters to apply what you learn to future challenges and achieve the full power of collaborative research to create real solutions. We owe our warfighters nothing less.

It is an honor to be the sponsor of this meeting. Thank you for your ongoing support of our warfighters and welcome to the 2023 MHSRS!



Sincerely,

Honorable Lester Martínez López, M.D., M.P.H.

Assistant Secretary of Defense for Health Affairs

General Information



SYMPOSIUM LOCATION

All MHSRS activities will take place in the Gaylord Palms Convention Center.

SYMPOSIUM BADGES

Symposium badges must be worn at all times. There are NO EXCEPTIONS.

MILITARY ATTENDEES

The areas immediately outside the convention center have been designated as “no hat”, “no salute”.

FAMILY MEMBERS & GUESTS

Family members (including children) and guests are not allowed into the Symposium activities or on the shuttles unless registered as an attendee.

EXHIBITS

Join us in the Florida Exhibit Hall A-D (Exhibit Hall/Level 1) to learn about the latest equipment and services to benefit your research.

Monday, 14 August:	1800-2100
<i>(Grand Opening/Assistant Secretary of Defense for Health Affairs Reception)</i>	
Tuesday, 15 August:	1000-1800
Wednesday, 16 August:	0900-1600

POSTER SESSIONS

Please refer to the Poster Session Book for more information.

SYMPOSIUM MEALS

Meals are for registered attendees only and will be served in Florida Exhibit Hall EF (Exhibit Hall/Level 1). A seated buffet breakfast will be served from 0630–0830 Monday – Thursday. A seated buffet lunch will be served from 1130–1330 daily. Thursday’s lunch will be served boxed to allow for take-away, if desired.

A heavy hors d’oeuvre reception with cash bar will be served on Monday as part of the Opening Reception in the Florida Exhibit Hall A-D (Exhibit Hall/Level 1). The dress code for the Opening Reception is casual.

Note: Military and GS Employees – Nine meals are paid for as part of the MHSRS registration fee. These are: breakfast, lunch and dinner on Day 1, and breakfast and lunch on Days 2-4. Do not claim per diem for these meals.

REGISTRATION

The Registration Desk is located in the City Hall Lobby (Ballroom/Level 2).

HOURS OF OPERATION

Sunday, 13 August	1500 - 1900
Monday, 14 August	0630 - 1930
Tuesday, 15 August	0700 - 1700
Wednesday, 16 August	0730 - 1400
Thursday, 17 August	0800 - 1100

AIRPORT SHUTTLE SERVICE: LEVEL 1

Complimentary shuttle service will be provided by Mears Transportation to/from the Orlando International Airport (MCO) to the Gaylord Palms Resort and the Marriott Village (includes Marriott Courtyard, Fairfield Inn, and Spring Hill Suites).

Once you've secured your bags, please follow the “Ground Transportation” signs to the bus pick-up area on Level 1. The bus pick-up area is located in the middle of terminals A & B, and there will be uniformed Mears personnel in bright yellow shirts to assist you. All buses will have MHSRS signage in the window. Shuttles run approximately every 30 minutes.

Date	MCO to Gaylord	Gaylord to MCO
Sunday, 13 August	1000 – 2400	No shuttle service
Monday, 14 August	0800 – 2200	No shuttle service
Tuesday, 15 August	1000 – 2000	0900 – 1900
Wednesday, 16 August	0900 – 2100	0900 – 2000
Thursday, 17 August	No shuttle service	0600 – 1800

INTER-HOTEL SHUTTLE SCHEDULE

Shuttle service will be provided between the Gaylord Palms Resort and the Marriott Village (which includes the Marriott Courtyard, Fairfield Inn, and Spring Hill Suites). Inter-hotel shuttles pick up and drop off between the Gaylord Convention Center Main Transportation lobby (lower level by the Exhibit Hall) and at the bus parking area in the back of the Village Square between the Courtyard and Fairfield Inn at the Marriott Village.

Date	AM Service	PM Service
Sunday, 13 August	No service	1430 – 1930
Monday, 14 August	0600 – 1000	1630 – 2200
Tuesday, 15 August	0600 – 1000	1630 – 2200
Wednesday, 16 August	0600 – 0900	1630 – 1900
Thursday, 17 August	0600 – 0900	1200 – 1530

LUGGAGE CHECK

On Thursday, there will be luggage storage available in Florida Exhibit Hall EF (Exhibit Hall/Level 1) from 0630–1330.

PARKING INFORMATION

The Gaylord Palms Resort is offering a 25% discount on the daily self-parking rate for all attendees.

WI-FI INFORMATION

Complimentary Wi-Fi is offered to all MHSRS attendees.

Meeting Access Location: 2023MHSRS

Meeting Password: 2023mhsrs

SPEAKER INFORMATION

All speakers should report to the Flagler Room Ballroom/Level 2 as soon as they arrive at the MHSRS to make sure that presentations are uploaded properly.

Speaker Ready Room hours are:

Sunday, 13 August	1400 - 1900
Monday, 14 August	0700 - 1700
Tuesday, 15 August	0700 - 1700
Wednesday, 16 August	0700 - 1700
Thursday, 17 August	0700 - 1100



Continuing Education

Jointly provided by Postgraduate Institute for Medicine (PIM) and the Principal Deputy Assistant Secretary of Defense (Health Affairs).

TARGET AUDIENCE

The CE activities are targeted to military providers with deployment experience and research and academic scientists.

EDUCATIONAL OBJECTIVES

EDUCATIONAL OBJECTIVES

After completing this activity, the participant should be better able to:

- Understand the depth and quality of DoD sponsored medical research
- Understand the outcomes of DoD sponsored medical research in approximately 60 research categories
- Have worked to foster a better collaborative environment between military, academic and industry partners

PROGRAM AGENDA

Please refer to the printed agenda (separate brochure).

JOINT ACCREDITATION STATEMENT

In support of improving patient care, this activity has been planned and implemented by the Postgraduate Institute for Medicine and the Assistant Secretary of Defense for Health Affairs. Postgraduate Institute for Medicine is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.



CREDIT DESIGNATION

Please refer to the Continuing Education page on MHSRS.net for information on credit designation as it becomes available.

DISCLOSURE OF CONFLICTS OF INTEREST

Postgraduate Institute for Medicine (PIM) requires faculty, planners, and others in control of educational content to disclose all their financial relationships with ineligible companies. All identified conflicts of interest (COI) are thoroughly mitigated according to PIM policy. PIM is committed to providing its learners with high quality accredited continuing education activities and related materials that promote improvements or quality in healthcare and not a specific proprietary business interest of an ineligible company.

The faculty reported relevant financial relationships with ineligible entities related to the educational content of this CE activity. These faculty disclosures will be listed on MHSRS.net for anyone to review.

The PIM planners and managers have nothing to disclose. The Assistant Secretary of Defense for Health Affairs and The Bridge Group, planners, and managers have nothing to disclose.

DISCLOSURE OF UNLABELED USE

This educational activity may contain discussion of published and/or investigational uses of agents that are not indicated by the U.S. Food and Drug Administration (FDA). The planners of this activity do not recommend the use of any agent outside of the labeled indications. The opinions expressed in the educational activity are those of the faculty and do not necessarily represent the views of the planners. Please refer to the official prescribing information for each product for discussion of approved indications, contraindications, and warnings.

DISCLAIMER

Participants have an implied responsibility to use the newly acquired information to enhance patient outcomes and their own professional development. The information presented in this activity is not meant to serve as a guideline for patient management. Any procedures, medications, or other courses of diagnosis or treatment discussed or suggested in this activity should not be used by clinicians without evaluation of their patient's conditions and possible contraindications and/or dangers in use, review of any applicable manufacturer's product information, and comparison with recommendations of other authorities.

REQUEST FOR CREDIT

To obtain your CME/CE certificate, please follow the steps below at the conclusion of the activity:

1. Go to www.cmeuniversity.com
2. Select 'Login' or 'Create a New Account' (will take less than 1 minute)
 - If you receive a message when creating a new account that "the email you entered is already in use", please click the 'Forgot my Username or Password' link to have your Username and Password sent to you via email.
 - After logging in, you may be asked to verify/update your information; after doing so, click 'Save' at the bottom of the page.
3. Type in 18038 at the top of the page, "Find Post-Test/Evaluation by Course", and click enter.
4. Click on the activity title when it appears.
5. Choose the type of credit you desire.
6. Complete the online assessment.
7. Receive an immediate CME/CE Certificate to download and/or print for your file.

If you have questions regarding the certification of this activity, please contact PIM at inquiries@pimed.com.

Plenary Session



Monday, 14 August

Time	Day 1 Plenary Session
0815 - 0825	Color Guard & National Anthem
0825 - 0830	Welcome
0830 - 0850	Honorable Lester Martínez López, M.D., M.PH Assistant Secretary of Defense for Health Affairs
0855 - 1025	Casualty Care Across the Continuum <i>Operational Vignettes Panel Discussion</i> Terry Rauch, Ph.D. and John Holcomb, M.D. Moderators Panel Participants: Mr. Kaleb Twilligear, COL Jennifer Gurney, USA, Phillip Mason, M.D., Paul Pasquina, M.D.
1025 - 1055	Break
1055 - 1110	2023 MHSRS Annual Individual and Team Award Presentations
1110 - 1130	Honorable Paul Friedrichs, M.D., FACS Director, Office of Pandemic Preparedness and Response Policy The White House
1130 - 1300	Networking Lunch



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Breakout Sessions



Monday, 14 August

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
One Hour Session 1300 - 1400	Female Warfighter Health & Performance Holly L. McClung, MS, RDN, CSSD Nisha Charkoudian, Ph.D. Moderators	1300 - 1315	The Military Women's Health Research Program	MHSRS-23-09598	Lt Col Cubby Gardner, USAF
		1315 - 1330	Epidemiology of Military-Related Injuries Among Female Soldiers in the Israel Defense Forces: A Registry-Based Analysis	MHSRS-23-08654	Iris Hershovich, M.D.
		1330 - 1345	Racial Disparities in Perinatal Outcomes Among the U.S. Armed Forces, FY 2016-2019	MHSRS-23-10143	Amanda Banaag, MPH
		1345 - 1400	Sex-differences in Body Composition and Serum Metabolome Responses to Military Training Suggest Enhanced Fat Oxidation in Women Compared with Men	MHSRS-23-08603	Meaghan Beckner, Ph.D.
One Hour Session 1300 - 1400	Military-Centric Interventions for Battlefield Psychological Injuries Fuad Issa, M.D. Virginia M. DeRoma, Ph.D. Moderators	1300 - 1310	The Effects of Platoon Leader Mental Health and Resilience Training on Soldier Anger and Life Satisfaction	MHSRS-23-09722	Leslie Hammer, Ph.D.
		1310 - 1320	Service Member and Provider Acceptability of Stellate Ganglion Block as a Treatment for Symptoms of Post-Traumatic Stress Disorder: A Qualitative Analysis	MHSRS-23-09501	Kristine Rae Olmsted, MSPH
		1320 - 1330	Cross-Modal Biomarkers for Assessing the Affective State of the Warfighter	MHSRS-23-08466	Jing Wang, M.Eng.
		1330 - 1340	Tunable Transdermal Delivery of Ketamine for Treatment of Post-Traumatic Stress Disorder	MHSRS-23-09249	Sameer Sonkusale, Ph.D.
		1340 - 1350	Effectiveness of the BH GEAR Training on Preparing Medics to Address Behavioral Health Concerns on the Far-Forward Battlefield	MHSRS-23-10479	Katie Nugent, Ph.D.
		1350 - 1400	Q&A		

Breakout Sessions



Monday, 14 August

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
One Hour Session 1300 - 1400	Cellular Therapeutics for Treatment of Shock and Trauma Xiaowu Wu, M.D. Moderator	1300 - 1315	Effects Of Cold Storage On Mitochondrial Bioenergetics And Protein In Human MSCs	MHSRS-23-09990	Barbara Christy, Ph.D.
		1315 - 1330	The Selective Cytopheretic Device (SCD) - A Case Series Of A Novel Immune Cell-Directed Extracorporeal Therapy In The Critically Ill	MHSRS-23-08481	Kevin K. Chung, M.D.
		1330 - 1345	Analysis Of Extracellular Vesicles From Mesenchymal Stromal Cells Grown In A Novel Perfusion-Based Bioreactor -MTEC-19-07-Biomafg-0004	MHSRS-23-09981	Maryane Herzig, Ph.D.
		1345 - 1400	On-Demand Blood: Utilizing A Rugged Expandable Volume Bioreactor To Increase The Production Of Red Blood Cells, Neutrophils, And Other Cell Types For Military And Commercial Applications	MHSRS-23-09388	Janice M. Moser, Ph.D.
One Hour Session 1300 - 1400	Biomedical Community of Interest: Understanding and Learning From the Ukraine Conflict Joseph V. Cohn, Ph.D. Moderator	1300 - 1305	Introductions		Joseph V. Cohn, Ph.D.
		1305 - 1310	Highlights from NDAA 2023 Section 736	MHSRS-23-NAS701	Terry Rauch, Ph.D.
		1310 - 1315	Overview of Biomedical Community of Interest	MHSRS-23-NAS702	Patrick Mason, Ph.D.
		1315 - 1325	Biomedical Col: BioMedical Challenges Encountered in Ukraine (First 100 Days)	MHSRS-23-NAS703	Patrick Mason, Ph.D.
		1325 - 1330	Uniformed Services University Overview	MHSRS-23-NAS704	COL Danielle Holt, USA
		1330 - 1340	A Qualitative Assessment of Ukraine's Trauma System During the Russian Conflict: Experiences of Volunteer Healthcare Providers	MHSRS-23-NAS705	Tracey Koehlmoos, Ph.D.
		1340 - 1350	Casualty Care Assessment of Ukrainian Trauma System: Medical Capabilities in an Active Combat Zone	MHSRS-23-NAS706	Tiffany Hamm, Ph.D.
		1350 - 1400	Q&A		ALL
One Hour Session 1300 - 1400	Scientific Abstracts of Distinction Plenary Session Kelley A. Brix, M.D., M.P.H. Moderator	1300 - 1320	Evaluation of U.S. Special Operations Personnel During Heavy Weapons Training: the INvestigating training assoCiated blaT pAthology (INVICTA) Study, 2020-2023	MHSRS-23-08304	Michael J. Roy, M.D., MPH
		1320 - 1340	Thermal Damage to Skin from 5.6, 8.2, and 95 GHz Microwave Exposures in Swine	MHSRS-23-08735	William Voorhees, M.S.
		1340 - 1400	Strategy to Avoid Excessive Oxygen (SAVE-O2) in Critically Ill Trauma Patients: A Multicenter Cluster-Randomized, Stepped Wedge Trial for Targeted Normoxia	MHSRS-23-10446	Adit Ginde, M.D., MPH

Breakout Sessions



Monday, 14 August

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 1300 - 1500	Young Investigator Competition Plenary Session Michael J. Morris, M.D. Lt Col Adam M. Willis, USAF Moderators	1300 - 1310	Lethal Means Safety Counseling Among Firearm-Ownning U.S. National Guard Personnel: Hyperarousal Symptoms as a Moderator of Treatment Outcomes	MHSRS-23-08149	Ian H. Stanley, Ph.D.
		1310 - 1320	Implantation and Optimization of Full-Thickness Skin Columns- A Therapy for Skin Replacement	MHSRS-23-08361	CPT Corey Keenan, USA
		1320 - 1330	Transcutaneous Electrical Stimulation Alters Physiological Biomarkers of Stress Activation and Marksmanship Performance During High Cognitive Load	MHSRS-23-08526	Caitlin Ridgewell, Ph.D., MPH
		1330 - 1340	Slow Oscillatory Transcranial Direct Current Stimulation Enhances Memory Consolidation and Mitigates Performance Decrements During Sleep Restriction	MHSRS-23-08599	Samantha M. Riedy, Ph.D.
		1340 - 1350	How Long Is Too Long: Prolonging the Zone 1 Aortic Occlusion Time to 4 Hours Using a Partial Resuscitative Endovascular Balloon in a Swine Model	MHSRS-23-09122	Capt Jessie W. Ho, USAF
		1350 - 1400	Combating Volumetric Muscle Loss: An Investigation of a Two-Stage Treatment Strategy Utilizing an Acute Muscle Void Filler Followed by Delayed Definitive Treatment	MHSRS-23-09286	Andrew R. Clark, Ph.D.
		1400 - 1410	Follow-Up Evaluations of Active Duty Military for Pulmonary Diseases Related to Environmental Deployment Exposures (STAMPEDE III)	MHSRS-23-10397	Capt John J. Levasseur, USAF
		1410 - 1420	An Accelerated Treatment Protocol for Traumatic Hemothorax and Pneumothorax in a Resource-Constrained, High-Trauma Setting	MHSRS-23-09455	Smitha Bhaumik, M.D.
		1420 - 1430	Effects of Extracellular Vesicles Derived from Irradiated and Non-Irradiated Skeletal Muscle Stem Cells on Myogenesis and Angiogenesis	MHSRS-23-09541	Umang Sharma, Ph.D.(c)
		1430 - 1440	Injury Risk After Knee Surgery in the U.S. Army: Establishing a Timeline	MHSRS-23-09877	Benjamin G. Adams, PT, DPT, Ph.D.
		1440 - 1450	A Characterization of Fatigue and Fatigue Management Aboard Surface Fleet Ships	MHSRS-23-10056	Alice D. LaGoy, Ph.D.
		1450 - 1500	Incidence and Clinical Features of Nightmare Disorder and Trauma Associated Sleep Disorder in U.S. Military Personnel with Sleep Disturbances	MHSRS-23-10351	Capt Zahari N. Tchopov, USAF

Breakout Sessions



Monday, 14 August

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Three Hour Session 1430 - 1730	Antimicrobial Countermeasures for Wound Infections in Military Personnel CDR Mark P. Simons, USN LTC Charlotte Lanteri, USA Daniel Zurawski, Ph.D. Moderators	1430 - 1445	BIAKÖS Antimicrobial Wound Cleanser (AWC) and Wound Gel (AWG) - Tandem Approach to Providing Biofilm Prevention and Treatment Through Continuum of Care	MHSRS-23-09624	Nina Bionda, Ph.D.
		1445 - 1500	Enhanced Wound Healing by Targeted Treatments that Improve the Efficacy of Innate Immunity and Conventional Antibiotics Against Infecting Biofilms	MHSRS-23-09464	Vernita Gordon, Ph.D.
		1500 - 1515	Broad and Narrow Spectrum Therapeutic Antibodies Against Pseudomonas aeruginosa Infections	MHSRS-23-10371	Mariette Barbier, PhD.
		1515 - 1530	Novel Small Molecules from Two Pharmaceutical Partnerships Eradicate Gram-negative Bacterial Infections In Vivo	MHSRS-23-08467	Daniel Zurawski, Ph.D.
		1530 - 1600	A Local Release, Reloadable Antibiotic Delivery Device Manages Biofilm-Related Infection Better than Clinical Standards in an Ovine Model of Long Bone Open Fracture Infection	MHSRS-23-09268	Dustin Williams, Ph.D.
		1600 - 1615	Break		
		1615 - 1630	In Vivo Efficacy of Oral BWC0977, A Novel Dual-Target Bacterial Topoisomerase Inhibitor Against Biothreat Pathogens In Mouse Infection Models	MHSRS-23-09404	James Matthew Meinig, Ph.D.
		1630 - 1645	Flexible Electrically-Powered Dressings for Disinfection and Wound Healing	MHSRS-23-09399	Shaurya Prakash, Ph.D.
		1645 - 1700	Polymer Impregnated Acellular Biological Grafts for Wound Healing and Prophylaxis	MHSRS-23-09451	Lewis Gaffney, Ph.D.
		1700 - 1715	A High-Throughput, Machine-Learning Guided Platform to Engineer Synthetic Bacteriophages as Therapeutics to Treat Multi-Drug Resistant Bacterial Infections	MHSRS-23-08502	Vatsan Raman, Ph.D.
		1715 - 1730	Preoperative Prophylactic Antibiotics Decrease Culture Yield in Nonunion Repair Procedures	MHSRS-23-09846	Meghan Wally, Ph.D.

Breakout Sessions



Monday, 14 August

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Three Hour Session 1430 - 1730	Mental Health and Traumatic Brain Injury Ida Babakhanyan, Ph.D. Moderator	1430 - 1445	Trajectories of Comorbidities Associated with Military Sustained Mild Traumatic Brain Injury: Pre and Post Injury	MHSRS-23-08493	Yli Agimi, Ph.D.
		1445 - 1500	Differential Impact of Depression and Posttraumatic Stress on Neurobehavioral Symptoms Post TBI	MHSRS-23-08415	Lars Hungerford, Ph.D.
		1500 - 1515	Five Year Cohort Study of US Service Members who had Mild Traumatic Brain Injuries from Afghanistan: Analysis of Sequela Conditions	MHSRS-23-08075	Shing Lai Cheng, MPH
		1515 - 1530	Chronicity of PTSD Symptoms Following TBI: A Comparison of Special Operators and Conventional Forces	MHSRS-23-09552	Shannon Miles
		1530 - 1545	Resilience Moderates the Relationship between Mild Traumatic Brain Injury and Psychological Symptoms	MHSRS-23-08806	Jamie Hershaw-Velasquez, Ph.D.
		1545 - 1600	Race and Ethnic Group Differences in Symptom Progression Among Service Members in Interdisciplinary TBI Treatment Programs	MHSRS-23-07980	Rosemay Remigio-Baker, Ph.D. MPH
		1600 - 1610	BREAK		
		1610 - 1625	Combat Deployed Service Members by Blast TBI and Service Separation Status 5-years Post-Deployment: Comparison of Cognitive, Neurobehavioral, and Psychological Profiles of Those Who Left vs. Those Still Serving	MHSRS-23-08736	Christine Mac Donald, Ph.D.
		1625 - 1640	Suicide in the Special Forces: A Neuropathology Series	MHSRS-23-08732	David Priemer, M.D.
		1640 - 1655	PTSD Symptomatology and fMRI Default Mode Network Effects of Art Therapy on Symptoms of PTSD After TBI: Case Series, Preliminary Data	MHSRS-23-09150	Laura Jones, B.S. Heather Spooner, MA ATR-BC
		1655 - 1710	MDMA-Assisted Therapy for Posttraumatic Stress Disorder: A Systematic Review and Individual Participant Data Meta-analysis	MHSRS-23-10782	MAJ Aaron Wolfgang, USA
1710 - 1730	Questions and Discussion				

Breakout Sessions



Monday, 14 August

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Three Hour Session 1430 - 1730	Advances in Prolonged Care Kimberly B. Pope, Ph.D. Sylvain Cardin, Ph.D. Moderators	1430 - 1444	Acoustic Trauma in the Battlefield – Solutions for Point-of-Injury and Prolonged Casualty Care	MHSRS-23-08972	Amy Boudin-George, AuD
		1444 - 1458	Noninvasive Monitoring of Changes in Cerebral Blood Flow and Volume During Prolonged Field Care for Hemorrhagic Shock and Hypoxia-Induced Injuries with Portable Diffuse Optical Sensors	MHSRS-23-09184	Kurtulus Izzetoglu, Ph.D.
		1458 - 1512	The Expanded Evaluation of a Cuffless, Adhesive-Based Sensor to Support the Prolonged Field Care Environment with the Non-invasive Assessment of Heart Rate, SpO2, Skin Temperature, Hemoglobin, Hematocrit, Potassium, Blood Pressure, and Auscultation	MHSRS-23-09476	David Whittaker, M.D.
		1512 - 1526	A Portable Microfluidic Blood Coagulation Monitoring Device as a Novel Technology for Field Medical Teams to Enable Critical Care in Austere Settings	MHSRS-23-08854	Waander van Heerde, Ph.D.
		1526 - 1540	Validation of the TEG6s During Aeromedical Flight	MHSRS-23-08514	James Bardes, M.D.
		1540 - 1554	The Race to Tamponade Junctional Non-Compressible Hemorrhage and Sustain Hemostasis for 72-Hour Prolonged Field Care	MHSRS-23-09034	Clifford Morgan, Ph.D.
		1554 - 1604	Break		
		1604 - 1618	A Novel 4D Volumetric M-Mode Ultrasound Scanning Technique to Support Automated Hemorrhage and Physiologic Monitoring During Prolonged Damage Control Resuscitation	MHSRS-23-08343	Sahil Patel, M.D.
		1618 - 1632	First 24-Hour Long ICU Testing of a Clinical-Scale Microfluidic Oxygenator in Healthy Swine	MHSRS-23-09443	Yanyi Zhang, Ph.D.
		1632 - 1646	Medical Oxygen Generators for Forward Surgical/ Prolonged Care in Austere Conditions to Treat Combat Casualties and Traumatic Injuries	MHSRS-23-10638	Gokhan Alptekin, Ph.D.
		1646 - 1700	Evaluation of the Advanced Joint Airway Management System (AJAMS) for Educational Efficacy when Training Novices in Endotracheal Intubation Relative to Commercially Available Alternatives	MHSRS-23-09223	Victoria Roach, Ph.D.
		1700 - 1714	Revisiting the Nasopharyngeal Airway (NPA): The Developmental Engineering of a Novel Stenting NPA	MHSRS-23-09600	Steven Venticinque, M.D.
		1714 - 1730	REMIS: Rapid Energetic Medical Instrument Sterilization. Advancement in Forward Surgical Care in Times of Need	MHSRS-23-09929	Amanda Egan, M.S.

Breakout Sessions



Monday, 14 August

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Three Hour Session 1430 - 1730	Advances in AI/ML In Military Medicine: Supporting Readiness, Prevention and Return to Duty Jesus J. Caban, Ph.D. Aaron R. Caldwell, Ph.D. Paige E. Waterman, M.D. Lloyd F. Rose, Ph.D. Moderators	1430 - 1435	Opening Remarks - AI/ML in Military Medicine	MHSRS-23-NAS801	Jesus J Caban, Ph.D.
		1435 - 1440	Opening Remarks from Health Affairs - AI/ML in Military Medicine		Seileen Mullen, SES Principal Deputy Assistant Secretary of Defense, Health Affairs
		1440 - 1500	Advancing the AI/ML Strategy Across the Military Health System - From Operational Medicine to Long-term Treatment	MHSRS-23-NAS802	Holly Joers, SES Program Executive Officer, Defense Healthcare Management Systems
		1500 - 1520	Leveraging AI/ML and Open Innovation to Advance Veterans Health	MHSRS-23-NAS803	Amanda Lienau, Ph.D.
		1520 - 1530	DoD & VA Leadership Q&A on AI/ML	MHSRS-23-NAS804	Seileen Mullen, SES Holly Joers, SES Amanda Lienau, Ph.D.
		1530 - 1545	Break		
		1545 - 1600	Natural Language Processing Applied to Automate Assessments of Complex Cognitive Functioning for Scalable Brain Fitness Assessments	MHSRS-23-09658	Adam Amos-Binks, Ph.D.
		1600 - 1615	Enhancing Clinicians' Workflow with Natural Language Processing to Automatically Track and Resolve Recommendations for Follow-up Dictated in Radiology Reports	MHSRS-23-09991	Jeffrey McCullen, M.S.
		1615 - 1630	Operationalizing a National Infrastructure for Natural Language Processing Enhanced Clinical Decision Support at the Department of Veterans Affairs	MHSRS-23-10090	Suzanne Tamang, Ph.D.
		1630 - 1645	Real-time Deployment of Object Detection AI Models for Identification and Triage of Foreign Bodies Using Edge Computing	MHSRS-23-10183	Eric Snider, Ph.D.
		1645 - 1700	Using Machine Learning to Predict Common and Important Critical Care Complications Based on Proteomics Data	MHSRS-23-08386	Seth A. Schobel, Ph.D.
		1700 - 1715	Predicting Return-to-Duty for Service Members Placed on Limited Duty Status	MHSRS-23-10462	CDR Denise Boggs-Wilkerson, USN Caglar Caglayan
		1715 - 1730	Clinical Decision Support Technology at the Point of Care to Assess Service Member Deployability	MHSRS-23-10636	CDR John de Geus, USN Mark Panaggio

Breakout Sessions



Monday, 14 August

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Three Hour Session 1430 - 1730	Advances in Regenerative Medicine for the Treatment of Neuromusculoskeletal Injuries from Point of Injury to Definitive Care and Beyond Stephen M. Goldman, Ph.D. Moderator	1430 - 1445	Use of Bioengineered Human Acellular Vessels to Treat Traumatic Injuries in the Ukraine-Russia Conflict	MHSRS-23-08285	Shamik Parikh, M.D.
		1445 - 1500	Injectable Hydrogel Laden with TGF-B Heals Segmental Bone Defects in Minipigs without Heterotopic Ossification	MHSRS-23-10547	Juan Taboas, Ph.D.
		1500 - 1515	Bone Regenerative Capacity Of 3D Printed Bioactive Ceramic Scaffolds Coated With A Bioactive Molecule	MHSRS-23-09597	Lukasz Witek, Ph.D.
		1515 - 1530	Platelet Rich Plasma Proteins Predict Pain and Structural Outcomes in Veterans with Knee Osteoarthritis	MHSRS-23-10565	Constance Chu, M.D.
		1530 - 1545	Clinical Assessment of Senescence Cell Burden and Correlation to Severity of Osteoarthritis	MHSRS-23-10238	Johnny Huard, Ph.D.
		1545 - 1600	Break		
		1600 - 1615	A Noninvasive Neuromuscular Stimulation and Measurement System for the Assessment and Treatment of Neuromusculoskeletal Injury and Pain	MHSRS-23-10497	Isaac Clements, Ph.D.
		1615 - 1630	The Beneficial Effects of Formoterol After Volumetric Muscle Loss Injury are not Improved when Delivered in Combination with Rehabilitation nor Direct Delivery via Non-Biodegradable Biomaterial	MHSRS-23-08345	Jarrod Call, Ph.D.
		1630 - 1645	Skeletal Nerves Induce Tendon Repair via Expansion of Tppp3+ Tendon Sheath Progenitor Cells	MHSRS-23-10178	Manssen Cherief, Ph.D.
		1645 - 1700	Erythropoietin is a Post-Traumatic Anti-Inflammatory Treatment that Supports Macrophage Recruitment, Transition, and Phagocytosis of Dead Cells Following Peripheral Nerve Injury in Mice	MHSRS-23-09662	John Elfar, M.D.
		1700 - 1715	Anti-apoptosis and Necrosis Effect of Necrostatin-1 in Skin and Muscle Cell Lines Subjected to Prolonged Cold Storage and Rewarming: Implications for Vascularized Composite Allograft Preservation	MHSRS-23-10478	Yuhuan Luo
		1715 - 1730	Q&A		

Breakout Sessions



Monday, 14 August

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Three Hour Session 1430 - 1730	Precision Medicine Research: Optimizing Warfighter Healthcare, Readiness, and Return to Duty Eric Elster, M.D. Moderator	1430 - 1445	Generating Synthetic Data with a Mechanism-based Critical Illness Digital Twin: Demonstration for Post-Traumatic Acute Respiratory Distress Syndrome	MHSRS-23-08385	Seth A. Schobel, Ph.D.
		1445 - 1500	Re-building a Machine Learning Predictive Model for Combat-related Invasive Fungal Infections	MHSRS-23-08376	Renhua Li, Ph.D.
		1500 - 1515	Identification of Genomic Changes that Explain the Missing Heritability of Disease to Empower Precision Medicine	MHSRS-23-09125	Michael R. Garvin, Ph.D.
		1515 - 1530	A Precision Medicine Approach to Predicting "Long COVID" through Machine Learning Analysis of Whole Blood Transcriptome Data	MHSRS-23-08002	Nusrat J. Epsi, Ph.D.
		1530 - 1545	Distinct Temporal Gene Expression Profiles During the Healing Process in Civilian vs. Military Extremity Wounds	MHSRS-23-08384	Eric R. Gann, Ph.D.
		1545 - 1600	Assessing Clinical Utility of Pharmacogenetic Testing in the Military Health System	MHSRS-23-09328	Lydia D. Hellwig, Sc.M.
		1600 - 1615	Break		
		1615 - 1630	Predicting ARDS in Surgical Critical Care Patients Based on Standard of Care Clinical Data	MHSRS-23-08380	Felipe A. Lisboa, M.D.
		1630 - 1645	Serologic Correlates of Mortality in a Cohort of Critically Ill COVID-19 Subjects Treated with Seraph-100 Hemofiltration	MHSRS-23-08381	Henry T. Robertson, Ph.D.
		1645 - 1700	Development and Validation of WoundX, a Prediction Model for the Successful Closure of Acute Traumatic Extremity Wounds	MHSRS-23-08382	Scott F. Grey, Ph.D.
		1700 - 1715	Early Circulating Cytokine Profiles May Identify Immune Endotypes Associated with Organ Dysfunction in Trauma and Hemorrhagic Shock	MHSRS-23-08684	Simon Tallowin, B.M.,B.S., M.Sc.
		1715 - 1730	Implementing a Novel Study Enrollment Mechanism Using REDCapCloud.com within the U.S. Air Force	MHSRS-23-09687	Lauren Cornell, Ph.D.

Breakout Sessions



Monday, 14 August

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Three Hour Session 1430 - 1730	Innovative Technologies to Optimize Warfighters' Performance and Return to Duty: Individual Wearables and Neuromodulation Thuvan Piehler, Ph.D. Richard Shoge, Ph.D. Stephanie Sloley, Ph.D. Moderators	1430 - 1445	An Objective Assessment of Neuromotor Control After Repeated Sub-Concussive Blast Exposure: Preliminary Data from the INVICTA Study	MHSRS-23-08914	Christopher Rhea, Ph.D.
		1445 - 1500	A Neurocognitive Performance Assessment and Enhancement Program for US Marine Forces Special Operations Personnel	MHSRS-23-10193	Amy Bair, Ph.D.
		1500 - 1515	Multimodal Assessment of Military Readiness among Active Duty Service Members with a History of Mild TBI	MHSRS-23-08552	Mark Ettenhofer, Ph.D.
		1515 - 1530	Neuromodulation-Induced Hebbian Neuroplasticity to Optimize Complex Attention Following Mild Traumatic Brain Injury	MHSRS-23-08416	Lars Hungerford, Ph.D.
		1530 - 1545	Efficacy of Computerized VS. Traditional Cognitive Interventions for the Treatment of Chronic MTBI Symptoms Among Service Members	MHSRS-23-10759	Jason Bailie, Ph.D.
		1545 - 1555	Q&A		
		1555 - 1605	Break		
		1605 - 1620	Closed-loop Augmented Performance (CAP)	MHSRS-23-10656	Walid Soussou, Ph.D.
		1620 - 1635	Electroencephalography Systems Feasibility for Operator State Monitoring	MHSRS-23-09540	Jordayne Wilkins, B.S.
		1635 - 1650	EEG-based Wearables: Advancing Source Identification Methodology for Accurate Brain Health Sensing in Real Time	MHSRS-23-10488	Ashfaq Adnan, Ph.D.
		1650 - 1705	Determination of Head Acceleration Measurement Error Associated with Subject Anthropometry for In-Ear Head Impact and Blast Sensors	MHSRS-23-08683	Jonathan Wilder, B.S.
		1705 - 1720	Phase 3 Randomized, Double-blind, Sham-controlled Trial of e-TNS for the Acute treatment of Migraine (TEAM)	MHSRS-23-08538	Michael Johnson, M.D.
		1720 - 1730	Q&A		

Breakout Sessions



Tuesday, 15 August

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 0800 - 1000	Tissue Wound Management for Prolonged Care Environments Kimberly B. Pope, Ph.D. George Jiang, M.D. Moderators	0800 - 0816	Mesenchymal Cell Derived VEGFC Promotes Lymphangiogenesis Following Trauma	MHSRS-23-08592	Neda Vishlaghi, Ph.D.
		0817 - 0833	Sprayable Immunomodulatory Colloidal Scaffolds for Wound Care Application	MHSRS-23-10073	Tannin Schmidt, Ph.D.
		0834 - 0850	Nonthermal Plasma Directed Electron Beam (NT-PDEB™) as a Treatment Modality for Wound Healing in Combat Casualty Care and Military Operational Medicine	MHSRS-23-10578	Joseph Bauer, Ph.D.
		0851 - 0907	A Next-Generation Point-of-Injury Wound Therapy That Disrupts Biofilm, Reduces Inflammation, and Promotes Healing	MHSRS-23-09035	Peter Rubin, M.D.
		0908 - 0924	The Use of Telemedicine Software to Provide Clinical Reach-back to Aid Decision Making in Ukraine	MHSRS-23-09333	Surg Lt Cdr Gerard McKnight, Royal Navy
		0925 - 0941	The Impact of Fish Skin Grafts on Wound Healing in a Standardized Pre-Clinical Model	MHSRS-23-08901	Petra Kotzbeck, Ph.D.
		0942 - 1000	Successful Soft Tissue Reconstruction Utilizing Acellular Fish Skin Grafts in a Delayed Ukrainian War Blast Injury	MHSRS-23-10740	Mark Suski, M.D.
Two Hour Session 0800 - 1000	Battlefield Biomarkers for TBI: Diagnostic and Prognostic Indicators Kasey E. Moritz, Ph.D. Stephanie S. Sloley, Ph.D. Moderators	0800 - 820	Early GFAP and UCH-L1 Biomarkers and the Prediction of Traumatic Brain Injury and Progression in Patients with Hemorrhagic Shock	MHSRS-23-08511	Jason Sperry, M.D.
		0820 - 0840	Detection and Monitoring of Intracranial Hemorrhage using a Non-Invasive Radiofrequency Device	MHSRS-23-09158	Joseph Korfhagen, Ph.D.
		0840 - 0900	Evaluation of Commercially-Available Point-of-Care Ultrasound for Automated Optic Nerve Sheath Measurement	MHSRS-23-09744	Brad Moore, Ph.D.
		0900 - 0920	Using Physiological Biomarkers to Optimize Management of TBI in Austere Environments	MHSRS-23-10348	Dick Moberg, MSE
		0920 - 0940	Warfighter Brain Health TBI Field Assessment Devices (TFAD) Integration	MHSRS-23-NA-02	Dennis McGurk, Ph.D.
		0940 - 1000	TBI Biomarker Development: A Regulatory Perspective	MHSRS-23-NA-03	LTC Stuart Hobbs, USA

Breakout Sessions



Tuesday, 15 August

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 0800 - 1000	Development and Validation of Sensors and PPE for Blast Polytrauma V. Sujith Sajja, Ph.D. Raj K. Gupta, Ph.D. Moderators	0800 - 0815	Composite Helmet to Mitigate Concussive Forces	MHSRS-23-09613	Girish Srinivas, Ph.D.
		0816 - 0830	Low Cost Blast Acquisition Test Surrogate Device	MHSRS-23-10429	John Grimble, M.S.
		0831 - 0845	Design Development and Optimization of Novel Flexible Capacitive Pressure Sensors for Blast Overpressure Measurement	MHSRS-23-0856	Neda KaramiMohammadi, Ph.D.
		0846 - 0900	3D Printed Nanosensors for High-Fidelity Injury Prevention, Personnel Protective Equipment Design and Simulated Training	MHSRS-23-08505	Xiaonao Liu, Ph.D.
		0901 - 0915	Study of Blast Wave Directionality Using a Wearable 3-D Blast Sensor	MHSRS-23-09785	Blake Muzinich
		0916 - 0930	Occluded Insertion Loss from Intracochlear Pressure Measurements During Acoustic Shock Wave Exposure	MHSRS-23-08964	Nathaniel Greene, Ph.D.
		0931 - 0945	Body-mounted Blast Overpressure Sensor Data Analysis for the INVICTA Program	MHSRS-23-10558	Suthee Wiri, Ph.D.
		0946 - 1000	The COmbat and traiNing QUeryable Exposure/Event Repository (CONQUER) Operational Monitoring Pilot Program: Summarizing Five Years of Continued Blast Overpressure Monitoring Activity	MHSRS-23-10612	Fabio Leonessa, Ph.D.
Two Hour Session 0800 - 1000	Hemorrhage Control and Vascular Dysfunction Thomas H. Edwards, DVM, M.S. Moderator	0800 - 0815	Efficacy of XSTAT P30 for Management of Non-Compressible Torso Hemorrhage in a Swine Model	MHSRS-23-09190	James Ross, Ph.D.
		0815 - 0830	Safety of Percutaneous Intraperitoneal Injection of Hemostatic Products in a Rabbit Model	MHSRS-23-08315	MAJ Zachary Booms, USA
		0830 - 0845	OMX, A Novel Oxygen Delivery Biotherapeutic for Treatment of Hemorrhagic Shock	MHSRS-23-09911	Jeff Fineman, M.D.
		0845 - 0900	Determining the Usability and Efficacy of Ruggedized CounterFlow-Gauze for Managing Lethal Junctional Hemorrhage by Canadian Armed Forces Medics	MHSRS-23-09575	Christian Kastrup, Ph.D.
		0900 - 0915	Crystalloid Reperfusion Exacerbates Loss of Arterial Compliance in Experimental Trauma/Hemorrhagic Shock	MHSRS-23-10279	Joyce Li, B.S.
		0915 - 0930	Development of Supermacroporous, Absorbable, Expansile, Polymeric Gels for Junctional Hemorrhage	MHSRS-23-09821	Al-Murtadha Al-Gahmi, M.D.
		0930 - 0945	Evaluation of the Association of Factor XIII at Hospital Arrival and Outcomes in a Cohort of Severely Injured Patients	MHSRS-23-10111	J. Carolina Gomez Builes, M.D., Ph.D.
		0945 - 1000	Post-Sepsis Cerebral and Peripheral Microcirculatory Dysfunction Alleviation by Drag-Reducing Polymers	MHSRS-23-10550	Denis Bragin, Ph.D.

Breakout Sessions



Tuesday, 15 August

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 0800 - 1000	Military Transitions - Advances in Early Interventions for Promoting and Strengthening Psychological Readiness of Service Members Sharmila A. Chari, Ph.D. Moderator	0800 - 0815	Basic Psychological Needs, Resilience, and Performance: Optimizing Critical Transitions across the Military Lifespan	MHSRS-23-08733	MAJ Andrea Krunnusz, USA
		0815 - 0830	A Landscape Review of Literature on First-Episode Psychosis (FEP) among U.S. Military Service Members	MHSRS-23-09430	Asiya Kazi, M.S.
		0830 - 0845	Upstream Suicide Prevention for Newly Enlisted Navy Sailors: Acceptability, Feasibility, and Scalability of Rational Thinking, Emotion Regulation, and Problem-Solving (REPS)	MHSRS-23-09549	Jessica LaCroix, Ph.D.
		0845 - 0900	Behavioral Health Outcomes and Suicidal Behavior Following Major Limb Loss Among Active Duty U.S. Service Members	MHSRS-23-08862	Kalyn Jannace, Ph.D.
		0900 - 0915	Mil-iTransition: Feasibility and Acceptability of A Peer-Support Cognitive Behavioral Program for Service Members Following Medical and Physical Evaluation Boards	MHSRS-23-08420	Jessica LaCroix, Ph.D.
		0915 - 0930	Problematic Anger and Adjustment Difficulties During the Military-to-Civilian Transition	MHSRS-23-08334	Cynthia LeardMann, M.PH.
		0930 - 0945	Supporting a Healthy Mil-to-Civ Transition: Initial Results from an Internet-delivered Prevention Tool	MHSRS-23-08216	Peter Bamberger, Ph.D.
		0945 - 1000	Veteran Sponsorship Initiative+ for High-Risk Servicemembers Transitioning to Civilian Life	MHSRS-23-10744	Joseph Geraci, Ph.D.
Two Hour Session 0800 - 1000	Innovative Tools and Technologies for Predicting and Assessing Musculoskeletal Injuries of the Warfighter LCDR Joshua M. Swift, USN Pinata H. Sessoms, Ph.D. Moderators	0800 - 0815	Incapacitation Prediction for Readiness in Expeditionary Domains: an Integrated Computational Tool (I-PREDICT) - Development of an Accompanying Software Tool to Facilitate Broader Access and Use	MHSRS-23-08863	Lance Frazer, Ph.D.
		0815 - 0830	ExoSense - A Biosensor Solution for Real-Time and Prognostic Health Status Monitoring in the Field	MHSRS-23-09114	Paulien Roos, Ph.D.
		0830 - 0845	Effectiveness of Force Plate Technology in Predicting Musculoskeletal Injury in United States Air Force Special Warfare Trainees	MHSRS-23-09144	Kathleen Hogan, M.S.
		0845 - 0900	Predictive Monitoring of Tibial Fracture Healing via Telemetric Bending Measurements	MHSRS-23-08606	Kevin Labus, Ph.D.
		0900 - 0915	Body Wear Location Analysis for Wearables-Based MSKI Monitoring	MHSRS-23-09037	Molly Crane, Ph.D.
		0915 - 0930	AIRFrac: Artificial Intelligence Radiographic Point-of-Care Decision-Making Aid for Prehospital Fracture Care in Military and Civilian Population	MHSRS-23-10649	Chun-Nan Hsu, Ph.D.
		0930 - 0945	Initial Development of an Operation Preparedness System in U.S. Marine Forces Special Operations	MHSRS-23-09082	Nicholas Heebner, Ph.D.
		0945 - 1000	The Use of Micro-Doppler Radar to Identify a Known Risk Factor for Musculoskeletal Injury: A Gold Standard Comparison	MHSRS-23-10399	Cayce Onks, Ph.D.

Breakout Sessions



Tuesday, 15 August

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 0800 - 1000	Hearing Loss, Tinnitus, and Balance: Whole-Life Warfighter Performance LTC Isaac D. Erbele, USA Moderator	0800 - 0815	Hearing Loss and Tinnitus in the Canadian Armed Forces: Results of an 8-Year Retrospective Study	MHSRS-23-08777	Laura Bogaert, Ph.D. (cand)
		0815 - 0830	Blast Injuries and Hearing-Related Disability Compensations in Military Personnel	MHSRS-23-08660	Iris Hershcovich
		0830 - 0845	Blast-Related Tinnitus Symptoms Are Associated with Changes in Sensory, Cognitive, and Other Brain Health Functions	MHSRS-23-10311	Stefanie Kuchinsky, Ph.D.
		0845 - 0900	Evidence for Long-Term "Hidden Hearing Loss" in Noise-Exposed Service Members with Normal Hearing Thresholds but a History of Temporary Hearing Loss	MHSRS-23-10338	Douglas Brungart, Ph.D.
		0900 - 0915	Use-Dependent, Selective Blockers of GluA2-Lacking AMPA Receptors to Prevent Noise-Induced Neurodegeneration	MHSRS-23-08283	Mark Rutherford, Ph.D.
		0915 - 0930	Increasing Hearing Protection Device Compliance Through Training	MHSRS-23-08820	Edward Golob, Ph.D.
		0930 - 0945	Small-Arms Impulsive Noise Abatement Preliminary Data	MHSRS-23-08858	Derek Schwaller, B.S.
		0945 - 1000	A Novel Virtual Reality Technology Application to Measure Postural, Vestibular, and Oculomotor Function in Mild Traumatic Brain Injury in Veterans and Civilian Populations	MHSRS-23-10663	W. Geoffrey Wright, Ph.D.
Two Hour Session 1300 - 1500	Case Records of the Joint Trauma System COL Jennifer M. Gurney, USA Moderator	1300 - 1500	Case Records of the Joint Trauma System		COL Jennifer M. Gurney, USA
Two Hour Session 1300 - 1500	From Benchtop to Battlefield - Transitioning Research to Fielded Products Kathleen L. Berst, MBA, PMP, RAC Moderator	1300 - 1305	Introduction and Overview: Research to Development and Introduction to Speakers	MHSRS-23-501	Kathleen L. Berst, MBA, PMP, RAC
		1305 - 1320	DHA Planning for Transition to Development	MHSRS-23-502	Emma D. Gregory, Ph.D.
		1320 - 1400	Navigating the DHA Acquisition Lifecycle	MHSRS-23-503	Kathleen L. Berst, MBA, PMP, RAC
		1400 - 1415	JOMIS Delivering Interoperable Medical Information Technology Capabilities to the Warfighter	MHSRS-23-504	Ryan J. Cool Sr., MPP, PMP
		1415 - 1500	PANEL: Frequently Asked Questions and Q&A		Kathleen L. Berst, MBA, PMP, RAC Emma D. Gregory, Ph.D. Ryan J. Cool Sr., MPP, PMP Kendra L. Lawrence, Ph.D. COL Melinda Eaton, USAF Tom A. Dunn, MBA, M.S. CDR Peter B. Walker, USN Christopher Wilson, M.S., MBA

Breakout Sessions



Tuesday, 15 August

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 1300 - 1500	The Global Health Engagement Research Initiative - 2023 Overview and Updates CAPT Danny Shiau, USN Moderator	1300 - 1315	Military Unique Curriculum in Honduras (MUCH) and Military Emergency Skills in Honduras (MESH) Programs: Increasing Operational Medical Force Readiness	MHSRS-23-NAS101	COL Eric Chin, USA
		1315 - 1330	One Health and Veterinary Systems in Africa: A Synthesis of Coverage, Needs, and Opportunities to Meet Present and Changing Threats	MHSRS-23-NAS102	Robin Breen, M.PH.
		1330 - 1345	Using a One Health Approach to Strengthen Biodefense and Biosurveillance in the South Caucasus	MHSRS-23-NAS103	Kevin J. Olival, Ph.D. Robin Breen, M.PH.
		1345 - 1400	Assessment of Health System Functional Capacities in the Republic of Marshall Islands, Palau and Federated States of Micronesia: Opportunities and Key Constraints	MHSRS-23-NAS104	Deus Bazira, Dr.PH.
		1400 - 1415	Implementation of a Customizable Data Analytics and Visualization Tool to Enhance Disease Surveillance in Guatemala	MHSRS-23-NAS105	Shraddha Patel, M.PH.
		1415 - 1430	Chagas Disease as a Disease of Operational Military Significance: Surveillance Along the U.S. Mexico Border and Policy Approaches to Management	MHSRS-23-NAS106	Paula Stigler Granados, Ph.D.
		1430 - 1445	Isolating Malaria-infected Red Blood Cells via Patterned Dried Blood Spot Cards in the Field to Enhance Surveillance and Diagnostics	MHSRS-23-NAS107	Kim C. Williamson, Ph.D.
		1445 - 1500	Oral Varespladib vs. Placebo for the Treatment of Snakebite Envenoming: An International Randomized Trial	MHSRS-23-NAS108	Rebecca W. Carter, Ph.D.
Two Hour Session 1300 - 1500	Conducting Research with the Military Health System: Understanding the Requirements Laura R. Brosch, R.N., Ph.D. Moderator	1300 - 1330	Implementing Unique DoD Requirements & Lessons Learned Supporting Extramural Research Performers	MHSRS-23-NAS201	Kimberly Odam, M.S.
		1330 - 1400	What Collaborators Need to Know about Conducting Multi-Site Human Research Studies at Military Treatment Facilities	MHSRS-23-NAS202	LTC Jose Pizzaro, M.S.
		1400 - 1430	The DHA Clinical Investigation Program: How it Supports MTF Research	MHSRS-23-NAS203	Nereyda L. Sevilla Dusch, Ph.D.
		1430 - 1500	Potential Economies of Efforts in Working with non-DoD collaborators - Agreements and Technology Transfer	MHSRS-23-NAS204	Robert Charles, J.D.

Breakout Sessions



Tuesday, 15 August

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 1300 - 1500	Medicine and Performance Optimization in the Arctic Ronald Wayne Matheny, Ph.D. Moderator	1300 - 1315	Performance of Medical and Environmental Safety Equipment at Arctic Temperatures	MHSRS-23-08009	Ryan McNeilly, M.S.
		1315 - 1330	Resilience Profile of Brain Activities During Military Cold Water Immersion	MHSRS-23-09711	Weimin Zheng, Ph.D.
		1330 - 1345	Resistance Index of Frostbite as a Predictor for Manual Dexterity Performance in the Cold	MHSRS-23-08635	Douglas Jones, Ph.D.
		1345 - 1400	Energy-dense and Essential Amino Acid-enriched Diets Do Not Alter Whole-Body Protein Balance During Arctic Military Training	MHSRS-23-09750	Emily Howard, Ph.D.
		1400 - 1415	Predicting Postural Stability from Skin Temperature After Cold-Water Immersion in Field Conditions	MHSRS-23-08627	Amy Silder, Ph.D.
		1415 - 1430	Challenges to Tactical Combat Casualty Care in Extreme Cold Weather: an Ongoing Review	MHSRS-23-08783	John Kragh, M.D.
		1430 - 1445	Tourniquet Use in Cold-Weather Casualty Care: Updated Review of Limb Cooling and Cold Injury Risk	MHSRS-23-08257	CPT Daniel O'Connor, USA
		1445 - 1500	Arctic or Extreme Cold Environments Center of Excellence (Proposed): One Year Update on Efforts to Improve Capability Gaps in Operational Medicine from POI to RTD	MHSRS-23-10697	MAJ Titus Rund, AKARNG
Two Hour Session 1300 - 1500	Undersea Operational Research Panel Ben D. Lawson, Ph.D. Moderator	1300 - 1315	Biomimetic Neural Microtissue for Study of Diving and Submarine-Associated Gas and Atmosphere Effects	MHSRS-23-09168	Dianne Hoffman-Kim, Ph.D.
		1315 - 1330	Lung Injury and Inert Gas Elimination in a Rodent Model	MHSRS-23-08525	Richard Mahon, M.D.
		1330 - 1345	Biochemical, Oxidative and Ventilatory Responses Associated with Hypercapnic Hyperoxia	MHSRS-23-08190	Luke Belval, Ph.D.
		1345 - 1400	Analysis of Breath Based Volatile Organic Compounds for Prediction of Pulmonary Oxygen Toxicity in Divers	MHSRS-23-08861	Alan Metelko, Ph.D.
		1400 - 1415	Examining Exercise-Induced Cognitive Effects in Working Navy Divers	MHSRS-23-09287	Justin Handy, Ph.D.
		1415 - 1430	Physiological Metrics and Responses behind Cognitive Performance Decrements due to Cold Stress in Partial Immersion	MHSRS-23-09928	Kristina Diaz, B.S., B.A.
		1430 - 1445	External Heating System Protects Extremity Temperature in Both Wet- and Dry-Suits During Extremely Cold-Water Diving	MHSRS-23-08763	Karen Kelly, Ph.D.
		1445 - 1500	Understanding Unmanned Maritime Systems (UMS) Operator Training	MHSRS-23-09299	Brandon Schrom, M.S.

Breakout Sessions



Tuesday, 15 August

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 1300 - 1500	Expeditionary Diagnostics and Treatment of Vision Injury Tian Wang, Ph.D. Moderator	1300 - 1315	Affordable, Robust and Effective: Eye Imaging Modalities for Role 1 to Enable Safe Prolonged Field Care and Universal Teleophthalmology Support	MHSRS-23-08142	Lt Cdr Guy Hunter, UK Royal Navy
		1315 - 1330	Forward Operating Base Expert Telemedicine Resource Utilizing Mobile Application for Trauma (FOXTR0T)	MHSRS-23-09316	LTC Gary Legault, USA
		1330 - 1345	Minimally Invasive Keratoprosthesis (mi-KPro) for Vision Restoration with Low Complications in Chemically Injuries	MHSRS-23-08594	Jyoti Sharma, Ph.D.
		1345 - 1400	Evidence-based Management of Military Open Globe Injury	MHSRS-23-08442	Lt Col Richard Blanch, UK Strategic Command
		1400 - 1415	Prevention of Blindness by M109S, A Novel Cell Death Inhibitor: M109S Rescued Retinal Ganglion Cells from Optic Nerve Injury in Mice	MHSRS-23-10541	Jonah Scott-McKean, Ph.D.
		1415 - 1430	What Interventions Acutely Reduce the Risk of Retinal Detachment (RD) and Traumatic Proliferative Vitreoretinopathy (PVR)?	MHSRS-23-09817	Sophia Halliday, Ph.D.
		1430 - 1445	Therapeutic Potential of Alpha-Melanocyte Stimulating Hormone in the Prevention and Reversal of Corneal Edema Following Ocular Injury	MHSRS-23-09248	Francesca Kahale, M.D.
		1445 - 1500	A Novel, Reverse-Phase-Shifting, Thermoreversible Foam With Deployment System for the Treatment of Penetrating Globe Trauma in a Newly Described Large-Animal Model	MHSRS-23-08461	Ross Donaldson, M.D., M.P.H.
Two Hour Session 1530 - 1730	Defense Health Program & U.S. Army Medical Research Funding Opportunities Rebecca A. Fisher, Ph.D. Moderator	1530 - 1535	Overview and Introduction	MHSRS-23-NAS301	Rebecca A. Fisher, Ph.D.
		1535 - 1550	Congressionally Directed Medical Research Programs (CDMRP) Overview	MHSRS-23-NAS302	COL Sarah B. Goldman, USA
		1550 - 1600	CDMRP Program Cycle and Strategies for Application Success	MHSRS-23-NAS303	Rebecca A. Fisher, Ph.D.
		1600 - 1608	Traumatic Brain Injury and Psychological Health Research Program	MHSRS-23-NAS304	Dwayne Taliaferro, Ph.D.
		1608 - 1616	Joint Warfighter Medical Research Program	MHSRS-23-NAS305	Angel Davey, Ph.D.
		1616 - 1625	Peer Reviewed Medical Research Program	MHSRS-23-NAS306	Kathryn Argue, Ph.D.
		1625 - 1635	Small Business Innovation Research (SBIR)/Small Business Technology Transfer (STTR) Programs - Overview and Opportunities	MHSRS-23-NAS307	James R. Myers, MBA
		1635 - 1645	USAMRDC and Other Transactions Agreements with the Medical Technology Consortium (MTEC)	MHSRS-23-NAS308	Sara Langdon, MBA
		1645 - 1655	Planning DoD-Funded Research and DoD Collaborations - Strategies for Project Success	MHSRS-23-NAS309	Sarah Fontaine, Ph.D.
		1655 - 1705	Cooperative Research and Development Agreements in DoD-Funded Collaborations	MHSRS-23-NAS310	Robert L. Charles, J.D., LL.M., M.P.H.
		1705 - 1730	Wrap Up - Question & Answer session		Panelists

Breakout Sessions



Tuesday, 15 August

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 1530 - 1730	Food and Drug Administration Regulated Activities and Collaborations with DoD CDR Thomas J. Maruna, USPHS Chandar S. Thakur, Ph.D. LTC Stuart Hobbs, USA Moderators	1530 - 1535	FDA/MRDC Session Introduction		CDR Thomas Maruna, USPHS Chander Thaku, Ph.D.
		1535 - 1605	FDA-OCET Introduction and Umbrella FDA Initiatives/Regulatory Science Program/Early Engagement with CBER and Office of Therapeutic Products Update	MHSRS-23-NAS401	CAPT Tracy MacGill, USPHS
		1605 - 1620	FDA One Health Initiative	MHSRS-23-NAS402	CAPT Briana Skinner, USPHS
		1620 - 1640	USAMRDC Office of Regulated Activities and Interactions with the FDA/MRDC JAG Office Regulatory Update	MHSRS-23-NAS403	LTC Stuart Hobbs, USA Rachel Hunnicutt, Ph.D.
		1640 - 1655	How and When to Interact with the FDA/CDRH	MHSRS-23-NAS404	Heather Agler, Ph.D.
		1655 - 1710	General Considerations for Animal Studies Intended to Evaluate Medical Devices	MHSRS-23-NAS405	Kira Moore, DVM
		1710 - 1725	Accelerating Medical Device Innovation Through Development of Regulatory Science Tools for Interoperable Medical Devices	MHSRS-23-NAS406	Christopher Scully, Ph.D.
		1725 - 1730	Q&A		
Two Hour Session 1530 - 1730	How SARS-CoV-2 Investments Have Improved Medical Readiness for Other Emerging Infectious Diseases CDR Andrew G. Letizia, USN Moderator	1530 - 1540	Multiplex Fragment Analysis Identifies SARS-CoV-2 Omicron Sub-Variants	MHSRS-23-08533	Jeffrey A. SoRelle, M.D.
		1540 - 1550	The Naval Infectious Diseases Diagnostic Laboratory (NIDDL) Pandemic Investments for Warfighter Medical Readiness	MHSRS-23-08542	Victor A. Sugiharto, Ph.D.
		1550 - 1600	Integrated Nanosensors for the Analysis of Volatile Organic Compound (VOC) Biosignatures in Exhaled Breath Samples Collected from Healthy Human Subjects	MHSRS-23-09427	Mangjial Agarwal, Ph.D.
		1600 - 1610	An Intranasal saRNA Vaccine Platform Against SARS-CoV-2 and Pandemic Influenza with Effective Protection Against Respiratory Viral Disease and Transmissibility	MHSRS-23-10443	Madeleine F. Jennewein, Ph.D.
		1610 - 1620	MIMIX: Advancement of a Shelf-stable, Self-applied Microarray Patch for Vaccination Against Infectious Diseases	MHSRS-23-10321	Kathryn Kosuda, Ph.D.
		1620 - 1630	Characterization of Potential SARS-CoV-2 humoral Correlates of Protection in the VIRAMP (Vaccine Effectiveness and Immune Response of SARS-CoV-2 Vaccines in Active Military Personnel) Cohort Using a High Throughput Quantitative Testing Platform	MHSRS-23-09739	Camila Macedo Cincotta, Ph.D.
		1630 - 1640	The Vaccine Acceleration by Modular Progression (VAMP) Program: A Novel Approach to Building the Immune Body Armor	MHSRS-23-09806	Emily Cisney, M.PH.
		1640 - 1650	A Broadly Active Therapeutic for the Treatment and Prevention of Coronavirus Infection: Mechanism of Action, Structural Optimization, Manufacturing Development, and Toxicokinetic Studies	MHSRS-23-10188	James A. Torchia, M.D., Ph.D.
		1650 - 1700	Adapting Lessons Learned During Covid to Develop Next-Generation Polyclonal Antibodies for Novel Infectious Diseases	MHSRS-23-08578	Michael J. Joyner, M.D.
		1700 - 1710	Post-SARS-CoV-2 Era Breeds Highly-Thermostable, High-Concentration, Lyophilizable, and Field-Deployable Therapeutic Monoclonal Antibodies for Applications in Infectious Disease and Snakebites	MHSRS-23-10654	David Tsao
		1710 - 1720	Isolation System for Treatment and Agile Response for High-Risk Infections (ISTARI): New Concepts for Continuous Patient Isolation and Care	MHSRS-23-10392	James V. Lawler, M.D.
		1720 - 1730	Oligomeric Small Molecules That Exhibit Direct Activity Against the Broad Spectrum of Pathogenic Enveloped Viruses	MHSRS-23-09018	Edward M. Rudnic, Ph.D.

Breakout Sessions



Tuesday, 15 August

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 1530 - 1730	Emerging Technologies for Treatment of Non-compressible Torso Hemorrhage MAJ Elaine D. Por, USA Sylvain Cardin, Ph.D. Moderators	1530 - 1545	ALM Hypotensive Resuscitation with Neuroprotection Following Hemorrhagic Shock for Far-Forward Operations	MHSRS-23-08402	Geoffrey P. Dobson, Ph.D.
		1545 - 1600	Learning From the Hibernators: The Use of Beta-Hydroxybutyrate and Melatonin for the Treatment of Hemorrhagic Shock	MHSRS-23-09007	Greg Beilman, M.D.
		1600 - 1615	A Comprehensive Approach of Magnetic Positioning, a Morphometric Algorithm, and a Retrievable Rescue Stent to Manage the Complex Logistics of Non-Compressible Torso Hemorrhage	MHSRS-23-08482	Bryan Tillman, M.D., Ph.D.
		1615 - 1630	Investigating the Relationship Between Bleeding, Clotting, and Coagulopathy During Automated Partial REBOA Strategies in a Highly Lethal Porcine Hemorrhage Model	MHSRS-23-08985	Antonio C. Renaldo
		1630 - 1645	Chitosan-based LifeFoam Improves Survival in Lethal Noncompressible Abdominal Bleeding in Swine	MHSRS-23-10150	Matthew Dowling, Ph.D.
		1645 - 1700	SiOxH Hemostatic Matrix Provides Multi-Day Hemostatic Control of Junctional, High Pressure, and Non-Compressible Hemorrhagic Injuries	MHSRS-23-08554	Adam Jorgensen, Ph.D.
		1700 - 1715	GJA1-20k Reduces Resuscitation Requirements and Renal Injury Post-REBOA Ischemia-Reperfusion Injury	MHSRS-23-07965	Nicole Ewer, B.S.
		1715 - 1730	A PROMPT Update on Partial REBOA: Initial Clinical Data and Overview of the DoD-Funded Partial REBOA Outcomes Multicenter Prospective (PROMPT) Study	MHSRS-23-09084	Stephen Gondek, M.D., M.P.H.
Two Hour Session 1530 - 1730	Battlefield Analgesia Pipeline: Novel Therapeutics from the Benchtop to the Battlefield Carmen Hinojosa-Laborde, Ph.D. MAJ Nathan Davidson, USA Moderators	1530 - 1545	MicroRNA Expression Analysis of the Rat Brain During Neuropathic Pain Development	MHSRS-23-08589	Natasha Sosanya, Ph.D.
		1545 - 1600	Reversal of Mechanical and Thermal Hypersensitivity in Rat Models of Inflammatory Pain and Peripheral Neuropathy by (2R, 6R)-hydroxynorketamine	MHSRS-23-10201	Irwin Lucki, Ph.D.
		1600 - 1615	Effects of a Novel Acetaminophen (APAP) Analog on Survival Time after Extremity Trauma and Moderate or Severe Conscious Hemorrhage in Rats	MHSRS-23-08722	Miryam Pando, Ph.D.
		1615 - 1630	Angiotensin Converting Enzyme (ACE) Inhibitor Loaded Thermoresponsive Hydrogel For Diabetic Peripheral Neuropathy, Local Analgesia And Improved Neuroregeneration	MSRS-23-10083	Jelena Janjic, Ph.D.
		1630 - 1645	Analgesics in the Pre-Hospital Setting: Sublingual Sufentanil Does Not Alter Tolerance to Simulated Hemorrhage in Humans	MHSRS-23-08464	Craig Crandall, Ph.D.
		1645 - 1700	Continuous Ketamine Infusions for ICU Sedation	MHSRS-23-08286	Kaitlin Pruskowski, Pharm.D.
		1700 - 1715	Low-Dose Short-Term Scheduled Ketorolac Reduces Opioid Use and Pain in Orthopaedic Polytrauma Patients: A Randomized Clinical Trial	MHSRS-23-08677	Arun Aneja, M.D., Ph.D.
		1715 - 1730	Prehospital Pain Management May Reduce Chronic Pain Risk in Injured Military Personnel	MHSRS-23-08675	LTC Ofer Almog, Israel Defense Forces

Breakout Sessions



Tuesday, 15 August

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 1530 - 1730	Update on Wearables in the Deployed Environment Alan L. Harner, M.S. Moderator	1530 - 1545	The Continuing Use of Wearables to Develop Methods and Metrics for Assessing Small Unit Operational Performance and Lethality	MHSRS-23-09011	Meghan O'Donovan, M.S.
		1545 - 1600	Exertional Heat Strain Detection: Application of the Human Performance Model Based Systems Engineering System Architecture (MBSE-SA)	MHSRS-23-09363	Tara Sarathi
		1600 - 1615	Predicting Hypoxia Using Eye Tracking to Better Inform Training: Findings	MHSRS-23-10142	Kylie Fernandez-Lee, Ph.D.
		1615 - 1630	Development and Evaluation of an Enhanced Pulse Oximeter for Military Aviation	MHSRS-23-10205	Stephanie Warner, M.S.
		1630 - 1645	Non-Invasive Monitoring of Hydration Status using Raman Spectroscopy	MHSRS-23-08471	Anna Rourke Funderburg
		1645 - 1700	Wearable Biogenic Volatile Organic Compound Monitor for Alerting Upcoming Neurological Events	MHSRS-23-09117	Philip Miller, Ph.D.
		1700 - 1715	Association Between Finger Plethysmographic Features and Impedance-Based Thoracic Fluid Content Measurement in a Lower Body Negative Pressure Model of Hemorrhagic Shock	MHSRS-23-09807	Nina Lane
		1715 - 1730	A Continuous, Non-Invasive Arterial Pressure and Blood Flow Wearable for Early Detection of Impending Hemorrhagic Shock	MHSRS-23-10480	Michelle Khine, Ph.D.
Two Hour Session 1530 - 1730	Leveraging Big Data/Predictive Analytics for Military Health System Decision Making: Considerations for Assessment, Treatment, and Policy Young Sammy Choi, M.D. Dominic E. Nathan, Ph.D. Moderators	1530 - 1543	Actionable Data	MHSRS-23-NA-01	BG Lance Raney, USA
		1543 - 1556	Algorithmic Bias Due to Missingness of Foodborne Disease Outbreak Durations and Total Cases by Pathogen Etiology Using the National Outbreak Reporting System, 2009 - 2019	MHSRS-23-08629	CPT Emily Diemer, USA
		1556 - 1609	Musculoskeletal Specialty Services and Military Returns to Duty: A Retrospective Cohort Study	MHSRS-23-08537	D. Alan Nelson, Ph.D., MPAS
		1609 - 1622	Surgical Management of Ulcerative Colitis and Service Retention in the Active-Duty US Military	MHSRS-23-10126	CPT Alec Donahue, USA
		1622 - 1635	Exposome Signatures of Gastrointestinal Disorders	MHSRS-23-08738	CJ Maldonado, Ph.D.
		1635 - 1648	Big Data Analysis of Early Fasciotomies in Military Lower Extremity Injury	MHSRS-23-10651	Yasser C. Bouklouch, B.Sc. Pharm.D., M.PH.
		1648 - 1701	What Does the Military Health System Need to Support Future Combat Operations? Lessons from Aeromedical Evacuations from 2008 - 2020	MHSRS-23-10673	2LT Matthew McDonough, USA
		1701 - 1714	Post-Concussion Musculoskeletal Disorder Among Service Members	MHSRS-23-10141	Dan Clifton, Ph.D.
		1714 - 1730	Examination of Rotator Cuff Injury Incidence Rates Among Active-Duty Soldiers from 2016 to 2021	MHSRS-23-08133	Soothesuk Kusmupa, MPA, MPH

Breakout Sessions



Wednesday, 16 August

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 0800 - 1000	Microbiome and Pathogenesis: Implications for Systemic Immunity and Wound Healing Richard T. Agans, Ph.D. COL Robert J. Cybulski, USA Moderators	0800 - 0815	Microbiome Focused Machine Learning and 3D Printed Bioengineered Platforms for Prediction of Military Health	MHSRS-23-08205	Nicholas Be, Ph.D.
		0815 - 0830	A Microbiome-Based Therapeutic for Drug-Resistant C. auris	MHSRS-23-10548	Mina Izadjoo, Ph.D.
		0830 - 0845	Gut Microbiome Augmentation via Transplantation Prevents Post-Traumatic Osteoarthritis in Mice	MHSRS-23-07890	Matlock Jeffries, M.D.
		0845 - 0900	Targeted Sequencing Coupled with Supervised Learning Reveals Important Determinants of Combat Wound Outcomes	MHSRS-23-08211	Car Reen Kok, Ph.D.
		0900 - 0915	Concordance Between Traditional Culture and Next Generation Sequencing in Open Fracture Wounds	MHSRS-23-09132	Leah Gitajn, M.D.
		0915 - 0930	The Influence of Anti-Biofilm Products on Osteogenesis and Healing	MHSRS-23-10155	Boyle Cheng, Ph.D.
		0930 - 0945	Microbial Interspecies Associations in Open Fracture and Subsequent Infection Using Next Generation Sequencing	MHSRS-23-09139	Leah Gitajn, M.D.
		0945 - 1000	The Military Gear Microbiome: Risk Factors Surrounding the Warfighter	MHSRS-23-09312	Car Reen Kok, Ph.D.
Two Hour Session 0800 - 1000	Novel Strategies for Treatment of Shock or Blood Failure: Blood and Blood Products Michael Adam Meledeo, Ph.D. Moderator	0800 - 0815	Therapeutic Potential of Platelet-Derived Extracellular Vesicles for the Treatment of Trauma-Induced Coagulopathy and Endothelial Dysfunction	MHSRS-23-10306	Mandeep Kaur, Ph.D.
		0815 - 0830	Pathogen Inactivated Lyophilized Cryoprecipitate for Prehospital Hemostatic Resuscitation	MHSRS-23-09571	Susan Shea, Ph.D.
		0830 - 0845	Comparison of Resuscitation Products in a Canine Hemorrhagic Shock Model	MHSRS-23-08816	Thomas Edwards, D.V.M.
		0845 - 0900	Plasma and Whole Blood Administration Linked to Lower Prehospital Mortality: Evidence from a Military Trauma Registry	MHSRS-23-08662	LTC Ofer Almog, Israeli Defense Force
		0900 - 0915	101 Transfusions: Initial Results of a New Regional Whole Blood Program to Give Patients What They Bleed	MHSRS-23-09219	Jasmine Birch
		0915 - 0930	Revolving Blood Bank: A Concept to Bolster Blood Availability in the Future Operating Environment	MHSRS-23-10685	LCDR Russell Wier, USN
		0930 - 0945	Pharmacologic Improvement of Tissue Oxygen Levels and Survival in the Absence of Fluid Resuscitation following Prolonged Hemorrhagic Shock	MHSRS-23-08472	Lusha Xiang, Ph.D.
		0945-1000	Investigation of a Novel Pre-hospital Countermeasure for Decompensated Hemorrhagic Shock Using Prolyl Hydroxylase Domain Inhibitor	MHSRS-23-08446	Xiaowu Wu, M.D.

Breakout Sessions



Wednesday, 16 August

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 0800 - 1000	Impact and Assessment of Blast Exposure on Psychiatric Symptoms Nancy A. Skopp, Ph.D. Rosemay A. Remigio-Baker, Ph.D., MPH Moderators	0800 - 0815	Diagnostic Blood Micro-RNAs Predictive for Brainstem Damage in Chronic Repetitive Mild Traumatic Brain Injuries Caused by Blast Exposures	MHSRS-23-10492	James Meabon, Ph.D.
		0815 - 0830	Chronic Neurobehavioral Outcomes Following Simulated Aeromedical Evacuation in a Ferret Model of Under-Vehicle Blast-Induced Traumatic Brain Injury	MHSRS-23-08870	Gary Fiskum, Ph.D.
		0830 - 0845	Neural Mechanisms of Emotional Health in Traumatic Brain Injury Patients Undergoing rTMS Treatment	MHSRS-23-08201	Maheen Adamson, Ph.D.
		0845 - 0900	PTSD Following Blasts Injuries in Military Personnel: A Retrospective Cohort Study	MHSRS-23-08658	CPT Tomer Talmy, Israeli Defense Force
		0900 - 0915	Blast Exposure and Chronic Psychiatric Comorbidities in Military Personnel: Exploring the Association Beyond PTSD	MHSRS-23-08659	CPT Tomer Talmy, Israeli Defense Force
		0915 - 0930	Initial and Persistent Sleep Problems After Deployment-Related Concussion: Examining Mechanism of Injury	MHSRS-23-08050	Samual Chung, Ph.D.
		0930 - 0945	Training Matters: Psychiatric Outcomes Following Blast Exposure are Different across Military Occupational Specialty	MHSRS-23-09300	Sarah Martindale, Ph.D.
		0945 - 1000	Q&A Discussant Session		
Two Hour Session 0800 - 1000	Interrupting Behavioral Health Trajectories to Sustain the Force Ronda J. Renosky-Vittori, Ph.D. Moderator	0800 - 0820	Temporal Distancing: A Psychological Skill for Reducing Worry-Related Anxiety and Sustaining Commitment to the Military	MHSRS-23-09534	MAJ Jeffrey Osgood, USA
		0820 - 0840	Long Term MiRNA Changes Predicting Resiliency and Vulnerability Factors of Post-traumatic Stress Disorder in a Large Military Cohort - Millennium Cohort Study	MHSRS-23-09264	Ruoting Yang, Ph.D.
		0840 - 0900	Impact of Signal Quality and Environmental Requirements on the Potential Benefits of a Vocal Biomarker- based PTSD Screening Tool	MHSRS-23-09769	Jing Wang, M.Eng.
		0900 - 0920	Comparing a Cohort of Military Psychiatric Aeromedical Evacuees to Three Large Military Comparison Groups: Opportunities and Challenges in Tackling Big Military Data	MHSRS-23-10603	Lt Col Stephanie Raps, USAF
		0920 - 0940	Service Member's Use of Psychological Techniques to Optimize Performance: Associations with Functional Capacity and Behavioral Health	MHSRS-23-10493	Katie Nugent, Ph.D.
		0940 - 1000	Trauma Resiliency Immersive Adaptive Gaming Environment (TRIAGE)	MHSRS-23-10501	Oanh Tran, B.S., PMP Brandon Conover, Ph.D.

Breakout Sessions



Wednesday, 16 August

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 0800 - 1000	From Laboratory to Clinic: Progress of Orthotic and Prosthetic Technologies and Outcomes Akua Roach, Ph.D. W. Lee Childers, Ph.D., CP Kenneth Furdella, Ph.D. Moderators	0800 - 0815	Kinematic Changes With the Addition of Powered Wrist Flexion for Transradial Prosthetic Users Evaluated Using the Gaze and Movement Assessment (GaMA) Metric	MHSRS-23-10069	Laura Miller, Ph.D.
		0815 - 0830	The Relationship of Exoskeleton Interfaces With the Ability to Off-Load a Tibia Fracture	MHSRS-23-09411	Sarah Pesquera, M.S.
		0830 - 0845	Robotic Lower Limb Surrogate Design That Evaluates Exoskeletons Designed To Reduce Tibial Strain	MHSRS-23-08889	Robert McGrath, Ph.D.
		0845 - 0900	Novel Implementation of a Data-Driven Model of Nonlinear Dynamics to Better Characterize Prosthetic Leg Mechanical Behavior for Prosthesis Classification, Prescription, and Design	MHSRS-23-08849	Kota Takahashi, Ph.D.
		0900 - 0915	Toward a Sensor-Based Framework for Personalized Mobility Interventions in Lower Limb Prosthesis Users	MHSRS-23-08694	Brad Hendershot, Ph.D.
		0915 - 0930	Prescribing Based on the Individual: A Study Investigating Individual Trends Among Three Commercially Available MPKS	MHSRS-23-08240	Kinsey Herrin, MSPO
		0930 - 0945	Advances in AI Techniques for Recognizing User Intents such as Walking Speed for Robotic Lower Limb Prostheses	MHSRS-23-09275	Aaron Young, Ph.D.
		0945 - 1000	Q&A		
Two Hour Session 0800 - 1000	Health and Readiness Unique to the Female Active Duty Service Woman Jill Brown, M.D., MPH Lynette Hamlin, Ph.D., R.N.	0800 - 0815	Implementation of Pharmacist-Led Contraceptive Prescribing Service: A Pilot Program for the Outpatient Military Treatment Facility	MHSRS-23-08351	CPT Madison Crum, USA
		0815 - 0830	Intended and Unintended Pregnancies: Social Determinants and Pregnancy Mental Health from a Decade of Military Research	MHSRS-23-08356	Karen Weis, Ph.D.
		0830 - 0845	Changes in Maternity Leave Policies and Their Subsequent Impact on Mothers	MHSRS-23-09131	Stacy Hawkins, Ph.D.
		0845 - 0900	COVID-19 Vaccination and Subsequent Infertility Diagnoses in US Military Service Members	MHSRS-23-10296	D. Alan Nelson, Ph.D.
		0900 - 0915	Sex Disparities in Urogenital Mycoplasma genitalium Prevalence Among US Army Service Members and their Medical Beneficiaries	MHSRS-23-08872	Matthew Romo, Pharm.D., Ph.D.
		0915 - 0930	Longitudinal Experience using REBOA as an Adjunct to Control Non-Compressible Peri-Partum Hemorrhage	MHSRS-23-08365	MAJ Rachel Russo, USAF
		0930 - 0945	US and UK Female Warfighter Health: Utilizing Shared History, Experiences, Research and Development Efforts to Guide Health and Research Priorities Maximizing Future Operational Capabilities through Collaboration	MHSRS-23-10077	Elizabeth Kostas-Polston, Ph.D.
		0945 - 1000	Discussion		

Breakout Sessions



Wednesday, 16 August

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 0800 - 1000	Responding to a Nuclear Event and CBRN Exposure with Resource Limitations David M. Burmeister, Ph.D. Julie N. Bergmann, Ph.D., MHS David W. Evans, MPM, MSIT Moderators	0800 - 0815	The Development of Countermeasures for Cutaneous Radiation Injuries and Combined Injuries	MHSRS-23-09356	Regina Day, Ph.D. Ernest Phillips, Ph.D.
		0815 - 0830	Developing a Broad-Spectrum, Host-directed Therapy for Multiple Threats and Complex Combined Injuries: Treating Pancytopenia and Resulting Infection, Sepsis, and Hemorrhage Due to Acute Radiation or Sulfur Mustard Exposure Plus Trauma with Leukine®	MHSRS-23-10596	John L. McManus, B.S.
		0830 - 0845	FSL-1: Toll-like Receptor 2/6 Agonist - a Promising Radiation Prophylactic Agent	MHSRS-23-08546	Gregory Holmes-Hampton, Ph.D.
		0845 - 0900	The Impact of Acute Radiation Injury on Renal Function of Rats also Subjected to Extremity Trauma and Hemorrhage	MHSRS-23-10091	CPT Stephanie Marshall, USA
		0900 - 0915	The Effect of Combined Ciprofloxacin and Neulasta Therapy on Survival, Intestinal Recovery, and Gut Microbiota After Lethal Irradiation in Mice	MHSRS-23-08993	CPT Timothy Horseman, USA
		0915 - 0930	Evaluation of Oral Dimethyl Trisulfide (DMTS) as a Prophylactic Counter Measure for Oral Cyanide Toxicity in a Swine (Sus scrofa) Model	MHSRS-23-08765	Madelaine Paredes, Ph.D.
		0930 - 0945	Advanced Development of BIO 300 as a Prophylactic Radiation Countermeasure	MHSRS-23-08234	Vijay Singh, Ph.D.
		0945 - 1000	Off-the-shelf Extracellular Vesicle-Based Therapy Generated by a Synthetic TLR4 Agonist to Treat Hematopoietic Acute Radiation Syndrome	MHSRS-23-09087	Christian Capitini, M.D.
Two Hour Session 1300 - 1500	Advanced Battlefield Care of Severe Burn Casualties at the Point of Need: Prehospital to Definitive Care Sandy J. Snyder, Ph.D., RN Bonnie J. Woffenden, Ph.D. Moderators	1300 - 1317	Fieldable Ultrasound Treatment to Enhance Inflammatory-Proliferative Phase Transition and Reduce Wound Healing Time in Rats and Rabbits	MHSRS-23-08608	Ms. Christine Morton, B.A.
		1317 - 1334	Detection of Smoke Inhalation Lung Injury Using Hand-Held Ultrasound: A Multi-Center Clinical Study	MHSRS-23-09197	Dr. Bryson Hicks, M.D.
		1334 - 1351	Extracellular Vesicles to Prevent Third-Degree Burn Wound Conversion	MHSRS-23-09631	Dr. Evangelos Van Badiavas, M.D., Ph.D.
		1351 - 1409	Epiviosamine Peptides (cP12 and cNP8) Usability Expansion for Burns during Prolong Field Care	MHSRS-23-09246	Dr. Richard Clark, M.D.
		1409 - 1426	A Novel, Reverse-Phase-Shifting, Thermoreversible Foaming Hydrogel Containing Antibiotics for the Treatment of Thermal Burns in a Swine Model - a Pilot Study	MHSRS-23-08138	Ross Donaldson, M.D., M.P.H.
		1426 - 1443	Treatment of Acute Partial Thickness Burn Wounds Using a Novel Transforming Powder Dressing	MHSRS-23-09477	Shanmugasundaram Natesan, Ph.D.
		1443 - 1500	4-aminopyridine Prevents Cell Death and Accelerates Skin Wound Healing Following Burn Injury in Mice	MHSRS-23-09651	John Elfar, M.D.

Breakout Sessions



Wednesday, 16 August

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 1300 - 1500	Military Exposures and Subsequent Long-term Outcomes Col Ian J. Stewart, USAF Moderator	1300 - 1315	Multiple Sclerosis Among Post-9/11 Era Veterans: Associations Among Traumatic Brain Injury, Sex, and Deployment	MHSRS-23-09767	Mary Jo Pugh, Ph.D.
		1315 - 1330	A Prospective, Longitudinal Cohort Study Investigating the Medical and Psychosocial Outcomes of UK Combat Casualties from the Afghanistan War: the ADVANCE Study	MHSRS-23-08857	Gp Capt Alexander Bennett, RAF
		1330 - 1345	Impact of Posttraumatic Amnesia Duration on Traumatic Brain Injury (TBI) First Year Hospital Costs: A Veterans Affairs TBI Model Systems Study	MHSRS-23-10327	Clara Dismuke-Greer, Ph.D.
		1345 - 1400	TBI Classification and Self-reported Blast Characteristics are Strongly Correlated in Veterans of Iraq and Afghanistan	MHSRS-23-10552	Drew Helmer, M.D.
		1400 - 1415	Occupational Risk Associated with IgE Seroconversion to the Mammalian Meat Allergen Galactose-alpha-1,3-galactose in US Active Duty Service Members	MHSRS-23-08966	MAJ Susan Ching, USA
		1415 - 1430	A Nested Case-control Study of Serum Per- and Polyfluoroalkyl Substances and Testicular Germ Cell Tumors among U.S. Air Force Servicemen	MHSRS-23-09506	Mark Purdue, Ph.D.
		1430 - 1445	Military Service-Related Risk Factors for Human Papillomavirus Infection Among Active-Duty US Service Members	MHSRS-23-09133	D. Alan Nelson, Ph.D.
		1445 - 1500	Early Changes in Radiographic Knee Osteoarthritis of the Amputation-side Limb Between 8-Years and 11-Years Post-injury; the ADVANCE Cohort Study	MHSRS-23-08219	Fraje Watson, Ph.D.
Two Hour Session 1300 - 1500	Comprehensive Strategy and Action Plan for Warfighter Brain Health - Way Forward LOE4 (Late/Long Term Effects) Seth A. Kiser, Ph.D. Moderator	1300 - 1315	Assessment of White Matter Fiber Tract Integrity Using Diffusion Tensor Imaging (DTI) in Heavy WeaponsInstructors Yields Cumulative Effects of Repetitive Low-Level Blast Exposure Out to 18 Months Post-Baseline	MHSRS-23-09304	Annegret Dettwiler, Ph.D.
		1315 - 1330	Acute and Chronic Exposure to Blast: Aggregated Findings from the Environmental Sensors In Training (ESIT) Multi-Year Study	MHSRS-23-10449	Walter Carr, Ph.D.
		1330 - 1345	Salivary microRNA Profiles in Military Breachers and Snipers with Long-Term Exposure to Repetitive Blast Overpressure	MHSRS-23-09628	Shawn Rhind, Ph.D.
		1345 - 1400	The DoD/USU Brain Tissue Repository: A Facility on the Front Lines of Studies on the Biologic Aspects of Warfighter Brain Health	MHSRS-23-08741	David S. Priemer, M.D.
		1400 - 1415	Identifying Potential Neuroimaging Biomarkers of Early Trauma-Related Neurodegeneration in Military Personnel	MHSRS-23-09845	Shawn R. Eagle, Ph.D.
		1415 - 1430	A Federated Learning Framework with Uncertainty Quantification to Predict Progression of Post-TraumaticHeadache in College Athletes	MHSRS-23-10641	2LT Byungmoo Kim, USAF
		1430 - 1445	Demographic Characteristics and Outcomes of Active Duty Service Members with mild Traumatic Brain Injury 2020 - 2023	MHSRS-23-08305	Heather J. Mahaney, Ph.D.
		1445 - 1500	Understanding Service Needs of People with Brain Injury	MHSRS-23-08864	Bridget A. Cotner, Ph.D.

Breakout Sessions



Wednesday, 16 August

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 1300 - 1500	Implementation of Interventions for Prevention of Suicide and Other Harmful Behaviors Melissa L. Mehalick, Ph.D. Moderator	1300 - 1315	Military Culture and Guns: Strengths, Opportunities, and Challenges to Prevent/Decrease Firearm Injury, Violence, and Death Across Military Service Members	MHSRS-23-09235	Makala Carrington, MPH
		1315 - 1330	Using a Data-Driven Process to Adapt and Implement Tailored Sexual Assault Prevention Training at the US Air Force Academy: Challenges, Successes, and Opportunities	MHSRS-23-10353	Nichole Scaglione, Ph.D.
		1330 - 1345	Group Brief Cognitive Behavioral Therapy for Suicidal Servicemembers: Preliminary Roll-out	MHSRS-23-09345	Justin Baker, Ph.D.
		1345 - 1400	Project Safe Guard: Evaluating a Lethal Means Safety Intervention to Reduce Firearm Suicide in the National Guard	MHSRS-23-10561	Adam Walsh, Ph.D.
		1400 - 1415	Initial Field Testing of a Cross-Cutting Primary Prevention Intervention for Military Couples	MHSRS-23-08175	Sarah Carter, Ph.D.
		1415 - 1430	Adapting the +Change Alcohol and Sexual Assault Intervention for Use Among Sailors: Results From Qualitative Acceptability Interviews	MHSRS-23-08821	Erin Miggantz, Ph.D.
		1430 - 1445	The U.S. Army's Strategy to Shift Suicide Prevention Training: ACE Base + 1 Annual Discussions	MHSRS-23-10245	SGT Will Hertzman, USA Jason Nolet, A.A.
		1445 - 1500	Unlocking What Makes Military Behavioral Health Interventions Work, Stumble, or Fade Away: Understanding Barriers and Facilitators that Can Be Applied to Sexual Assault Prevention	MHSRS-23-08813	Amy Slep, Ph.D.
Two Hour Session 1300 - 1500	From Sockets to Osseointegration: Human Interface Solutions for Assistive Device Technology Elizabeth Russell Esposito, Ph.D. Moderator	1300 - 1315	A Randomized Clinical Trial of Adjustable Volume Transfemoral Prosthetic Sockets	MHSRS-23-10195	Deanna Gates, Ph.D.
		1315 - 1330	Comparative Effectiveness of Casting Approaches for Transtibial and Transfemoral Prostheses: Interim Results of Clinical Trial	MHSRS-23-09170	Stefania Fatone, Ph.D., BPO(Hons)
		1330 - 1345	Osseointegration among Service Members with Transfemoral Limb Loss: Functional Outcomes at Two-Year Follow-Up	MHSRS-23-08690	Brad Hendershot, Ph.D.
		1345 - 1400	Outcome Measures and Complications of Transfemoral Osseointegration Surgery	MHSRS-23-09466	Julio Rivera, Ph.D.
		1400 - 1415	Outcome Measures and Complications of Transhumeral Osseointegration Surgery	MHSRS-23-09465	Julio Rivera, Ph.D.
		1415 - 1430	Effects of Transfemoral Prosthesis Osseointegration on Cumulative Hip Joint Loading in Civilian Adults	MHSRS-23-09850	Brecca Gaffney, Ph.D.
		1430 - 1445	Clinical, Functional, and Sensorial Outcomes of the Agonist-Antagonist Myoneural Interface (AMI) Lower Extremity Ewing Amputations	MHSRS-23-09898	Corey Sullivan, B.S.
		1445 - 1500	Evaluating Myoelectric Prosthesis Interface and Control Methodologies	MHSRS-23-10745	Matt Wernke, Ph.D.

Breakout Sessions



Wednesday, 16 August

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 1300 - 1500	Surviving and Thriving in a Distributed Operations Environment: Military Health Challenges and Solutions Joseph V. Cohn, Ph.D. Michael Lafiandra, Sc.D. Martin LaFrance, Ph.D. Moderators	1300 - 1315	Managing Casualties Across the Continuum of Care in Distributed Operations	MHSRS-23-09445	COL James Jones, USA
		1315 - 1330	Development of a Research and Acquisition Framework for Navy Expeditionary Medicine	MHSRS-23-08348	Montrell Smith, M.S.
		1330 - 1345	V-BAT for Expeditionary Medicine	MHSRS-23-09055	Mark Kondrat, MBA
		1345 - 1400	Autonomous Casualty Evacuation for Distributed Maritime Operations	MHSRS-23-09263	LCDR Eric Vorm, USN
		1400 - 1415	High Fidelity Model for Perishable Skills Assessment in En Route Care- A Validation Study in Swine	MHSRS-23-08714	Melissa Clemons, Ph.D.
		1415 - 1430	Medical Aspects of Survival in The Operational Post-Crash Environment: Evaluation to Identify Gaps and Limitations of Existing Aviation Life Support Equipment (ALSE) Medical Items in Preparation for Future Conflicts in Large-Scale Combat Operations (LSCO)	MHSRS-23-09703	Gregory Ganz, B.S.
		1430 - 1445	Stabilization of Critical Reagents for Cold-Chain-Free Global Deployment	MHSRS-23-07885	Eric Carnes, Ph.D.
		1445 - 1500	SampleCAP: a Power-Free for Biomolecule and Chemical Sample Concentration	MHSRS-23-10413	Scott Angus, Ph.D.
Two Hour Session 1300 - 1500	Strategic and Tactical Insights for Small Businesses: Gaining Command of New SBIR/STTR Program Protection Criteria James R. Myers, Jr., B.S. Moderator	1300 - 1315	Strategic and Tactical Insights for Small Businesses: Gaining Command of New SBIR/STTR Program Protection Criteria: Overview	MHSRS-23-NAS601	James R. Myers, B.S.
		1315 - 1330	Strategic and Tactical Insights for Small Businesses: SBA Program Manager's Perspective	MHSRS-23-NAS602	Erick Page-Littleford, M.S.
		1330 - 1345	Strategic and Tactical Insights for Small Businesses: DoD Foreign Ownership Control and Influence (FOCI) Training Perspective	MHSRS-23-NAS603	Bryson Reynolds, Ph.D.
		1345 - 1400	Strategic and Tactical Insights for Small Businesses: Cybersecurity & Infrastructure Security Agency (CISA) Perspective	MHSRS-23-NAS604	Gary Hopewell, M.S.
		1400 - 1415	Strategic and Tactical Insights for Small Businesses: Contracting Branch Chief Perspective	MHSRS-23-NAS605	Samantha Connors, MBA
		1415 - 1500	Audience Q&A		All panelists

Breakout Sessions



Wednesday, 16 August

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 1530 - 1730	Traumatic Brain Injury Treatment for Early Combat, In-theater Administration James B. Phillips, Ph.D. LTC Bradley A. Dengler, USA Moderators	1530 - 1535	Introduction		James B. Phillips, Ph.D. LTC Bradley A. Dengler, USA
		1535 - 1553	Decompressive Laparotomy vs. Decompressive Craniectomy after Severe Traumatic Brain Injury - The German SCALPEL Trial and First Clinical Experiences	MHSRS-23-09386	Benny Kölbl, M.D., MBD, OF-3
		1553 - 1611	Traumatized Immunometabolopathy and Immunological Damage Control Resuscitation to Create a Pro-survival Phenotype via Alleviating Acute Encephalopathy	MHSRS-23-09814	Milomir Simovi, Ph.D.
		1611 - 1629	BurRapid Intracranial Access Platform for Traumatic Brain Injury	MHSRS-23-08137	Ross Donaldson, M.D.
		1629 - 1647	Novel Neuroprotective NMDA Receptor (NMDAR) Antagonist for Acute Traumatic Brain Injury: Preclinical Data on Four NMDAR Antagonists	MHSRS-23-09233	Mark Tepper, Ph.D.
		1647 - 1705	Traumatic Brain Injury Treatment for Early Combat, In-theater Administration	MHSRS-23-10117	William Korinek, Ph.D.
		1705 - 1730	Panel Discussion		David Okonkwo, M.D. SFC Hunter Black, USA Ken Curley, M.D. Krista Caudle, Ph.D.
Two Hour Session 1530 - 1730	Enabling Medical Mobility and CASEVAC During Future Large Scale Combat Operations LTC Steven G. Schauer, USA Lt Col Joseph K. Maddry, USAF MAJ Nicholas M. Studer, USA MAJ Elaine D. Por, USA Moderators	1530 - 1545	Integrating Content-based Analyses Into Automated Measure of Closed Loop Communication	MHSRS-23-09101	Frank Robinson, Ph.D.
		1545 - 1600	Development of an Accelerated Extracorporeal Membrane Oxygenation (ECMO) Training Course - Evaluation of Training Modalities	MHSRS-23-09123	Lt. Col. Joseph Maddry, USAF
		1600 - 1615	Xenopus Screening Identifies Drugs that Slow Metabolism in Porcine Limbs and Hearts for Tissue Preservation Applications	MHSRS-23-08119	Megan Sperry
		1615 - 1630	Prehospital Lessons Learned from the War in Ukraine: Anecdotal DCR/DCS Experience from Point of Injury to Role 2	MHSRS-23-08497	John Quinn, M.D., MPH, Ph.D.
		1630 - 1645	The Impact of Prehospital EFAST Exam on Patient Transit Time: A Retrospective Analysis	MHSRS-23-10613	Emily Roberts, M.S.
		1645 - 1700	Diaphragmatic Neurostimulation with Ventilation Provides Respiratory Support in Deeply Sedated Patients - a Novel Solution for En Route or CASEVAC Transportation	MHSRS-23-08515	Thiago Bassi, M.D., Ph.D.
		1700 - 1715	Automatic Patient Monitoring for En Route Care Using Deep Learning and Machine Vision	MHSRS-23-10625	Justin Peel, M.S.
		1715 - 1730	Relationship of Rank, Specialty, and Unit Sustainment Training Frequency to Military Critical Care Air Transport Team Readiness	MHSRS-23-08527	Nicole Lieb, R.N.

Breakout Sessions



Wednesday, 16 August

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 1530 - 1730	<p>Advanced Decision Support and Automation Technologies to Support Combat Casualty Care During Multi-Domain Operations, Large Scale Combat Operations, and Prolonged Care</p> <p>Jose Salinas, Ph.D. Nathan Fisher, M.S. Moderators</p>	1530 - 1545	Field Testing Machine Learning Enabled Technologies: Lessons Learned for Casualty Detection from a UAV and Future Directions	MHSRS-23-10605	Kelly Roman, B.S.
		1545 - 1600	Surgery from a Safe Distance: Enabling Telerobotic Surgical Assistance in High-Latency, Low-Bandwidth Conditions	MHSRS-23-09086	Ethan T. Quist, M.S.
		1600 - 1615	Insights from Field Experimentation of Project Crimson: A Long-Range Autonomous Unmanned Aerial System (UAS) Capability for Delivery of Whole Blood and Medical Supplies	MHSRS-23-09921	Zachary H. Buono, M.S.
		1615 - 1630	Effectiveness of Mobile Applications for Trauma Care of Combat Casualties throughout the Continuum	MHSRS-23-10686	Capt Tesserae Komarek, USAF
		1630 - 1645	Technology End-user Survey Results from Project Convergence 2022	MHSRS-23-09442	Laura L. Scott, Ph.D.
		1645 - 1700	Use of Compensatory Reserve Measurements to Reassess the Shock Index for Early and Accurate Detection of Reduced Central Blood Volume Status	MHSRS-23-08423	Victor A. Convertino, Ph.D.
		1700 - 1715	Field Testing of the Trauma Care in a Rucksack Closed Loop Diagnosis and Resuscitation System for the Medical Management of Circulatory Shock	MHSRS-23-10059	Ronald Poropatich, M.D.
		1715 - 1730	Integrated Smartphone Platform for AI-Enabled, Ultrasound-Guided Vascular Access	MHSRS-23-08580	Lars A. Gjestebj, Ph.D.
Two Hour Session 1530 - 1730	<p>Longitudinal Studies of Service Member, Veteran, and/or Military Family Member Health and Well-Being</p> <p>Jennifer N. Belding, Ph.D. Moderator</p>	1530 - 1545	An Overview of the Millennium Cohort Study: Evaluating the Impact of Military Experiences on Service Member and Veteran Health	MHSRS-23-08276	Sheila Castaneda, Ph.D.
		1545 - 1600	The Department of Veterans Affairs Gulf War Longitudinal Study: Thirty Years of Research	MHSRS-23-08032	Erin Dursa, Ph.D., MPH
		1600 - 1615	Mortality among Service Members and Veterans Following Hospitalized Traumatic Brain Injury	MHSRS-23-08432	Lara Wittine, M.D.
		1615 - 1630	Association of Military Factors with TBI Service-Connected Disability and VA Compensation	MHSRS-23-10314	Clara Dismuke-Greer, Ph.D.
		1630 - 1645	Trajectories of Labor Force Participation and Employment Among Post-9/11 Veterans Following Military Discharge: The Impacts of Gender, Race/Ethnicity, and Health	MHSRS-23-09678	Mary Jo Pugh, Ph.D.
		1645 - 1700	A Prospective Study of Marital Distress and Mental Health Symptoms Across the Deployment Cycle	MHSRS-23-09679	Leanne Knobloch, Ph.D.
		1700 - 1715	Partner Effects: Relationship between Service Member and Spouse Drinking Over Time	MHSRS-23-08039	Rayan Joneydi, Ph.D.
		1715 - 1730	The Millennium Cohort Study of Adolescent Resilience (SOAR): A Longitudinal Evaluation of Factors Associated With the Health and Well-Being of Military-Connected Adolescents	MHSRS-23-08474	Karen Tannenbaum, M.A.

Breakout Sessions



Wednesday, 16 August

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 1530 - 1730	Exertional Illness in the Warfighter: Return to Duty Considerations Francis G. O'Connor, M.D., MPH Moderator	1530 - 1545	Exertional Heat Illness Prognosis Among Service Members: Longitudinal Associations with Medical Separation and Hospitalization	MHSRS-23-09742	Josh Kazman, M.S.
		1545 - 1600	Risk Markers for Heat Intolerance Following a Suspected Heat Injury	MHSRS-23-08663	CPT Tomer Talmy, Israeli Defense Force
		1600 - 1615	Urinary Liver Fatty Acid-binding Protein (L-FABP) is an Effective Biomarker for Early Detection of Severe Heat-related Illness and Acute Kidney Injury	MHSRS-23-08409	Hiroyasu Goto, M.D.
		1615 - 1630	Hot Topic: Improving Continuity of Care in Return to Duty Protocols for Heat Casualties	MHSRS-23-09782	CPT John Wilson, USA
		1630 - 1645	Real-time Prediction of Heat Injury from Continuous Tracking of On-body Physiological and Movement Signals during Military	MHSRS-23-09044	James Williamson, Ph.D.
		1645 - 1700	Right of Bang: Incidence of Sudden Cardiac Arrest in Military Members and Implications for Emergency Action Planning	MHSRS-23-09603	LTC(P) John Campanga, USA
		1700 - 1715	Evaluating Sudden Death in the MHS Requires a Genetic Evaluation	MHSRS-23-08194	Austin Pagani, M.S., CGC
		1715 - 1730	Exercise Collapse Associated with Sick Cell Trait (ECAST) in Warfighters and Athletes: An Evidence- Based Practice Parameter	MHSRS-23-08298	Francis O'Connor, M.D., M.PH.
Two Hour Session 1530 - 1730	Military Injury Biomechanics and Applications for Injury Prevention Tyler F. Rooks, M.S. Frederick T. Brozoski, M.S. Moderators	1530 - 1545	Posterior Cervical Foraminotomy As A Career-Sparing Surgical Alternative for the Warfighter With Cervical Radiculopathy: A Biomechanical Study	MHSRS-23-10106	Hoon Choi, M.D., Ph.D.
		1545 - 1600	Influence of Lumbar Spine Orientation on Fracture Characteristics	MHSRS-23-10257	Rachel Cutlan
		1600 - 1615	Effects of Assistive Device Use on Carry Distance and Grip Strength During Simulated Litter Transport	MHSRS-23-09834	Adrienne Madison, Ph.D.
		1615 - 1630	Thoracic Deformation Under Backface Impact in Hard Body Armor: Clay vs Human Cadaver	MHSRS-23-09528	Derek Pang, M.S.
		1630 - 1645	Development of a 50th Percentile Male Warfighter Model for Incapacitation Prediction in Behind Armor Blunt Trauma	MHSRS-23-10474	Zachary Hostetler, Ph.D.
		1645 - 1700	Comparison of Preliminary Behind Armor Blunt Trauma-Induced Rib Fracture Risk for Porcine Cadavers and Post-Mortem Human Subjects	MHSRS-23-09507	Parker Berthelson
		1700 - 1715	Behind Armor Blunt Trauma Injury Risk in Postmortem Surrogates Due to Live Ammunition Striking Light-Weight Hard-Armor Plates	MHSRS-23-10587	Alexander Iwaskiw
		1715 - 1730	Use of Different Types of Biological Human Surrogates to Develop Regional Tolerances for Behind Armor Blunt Trauma: Preliminary Liver Test Results	MHSRS-23-09580	Alok Shaw
Two Hour Session 1530 - 1730	Aeromedical Aspects of the Army's Future Vertical Lift Program John S. Crowley, M.D. Moderator	1530 - 1555	Aeromedical Aspects of the Army's Future Vertical Lift Program: Overview	MHSRS-23-10711	John Crowley, M.D. Christopher Sullivan, M.S.
		1555 - 1620	Operator State Monitoring for Future Vertical Lift	MHSRS-23-09513	Kathryn Feltman, Ph.D.
		1620 - 1645	Biomedical Tools and Techniques for Maintaining and Enhancing Performance in Future Vertical Lift Aircrew	MHSRS-23-09572	Amanda Kelley, Ph.D.
		1645 - 1710	Protecting Future Vertical Lift Crew and Passengers--New Challenges and Solutions	MHSRS-23-09689	Barney J. McEntire, M.S.
		1710 - 1730	En Route Care Aspects of the Future Vertical Lift Program	MHSRS-23-09403	Rachel Kinsler, M.S.

Breakout Sessions



Thursday, 17 August

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 0830 - 1030	Addressing Military Vaccine Hesitancy: A Crucial Barrier to Force Health Protection and Pandemic Preparedness COL Robert J. O'Connell, USA Moderator	0830 - 0845	"Cotton Mather, You Dog, Damn You," a History of Vaccine Hesitancy	MHSRS-23-09838	Alan Hawk
		0845 - 0900	COVID-19 Vaccine Attitudes, Intentions, and Uptake among US Soldiers: Trends over Time and Associations with Demographics, Leader Behaviors, and Intentions to Leave Service	MHSRS-23-09946	CPT Margeaux Auslander, USA
		0900 - 0915	Examining Associations Between Perceptions of Leadership and COVID-19 Vaccine Hesitancy Among Sailors	MHSRS-23-08362	Lauren Hurtado, B.S.
		0915 - 0930	Assessment of COVID-19 Vaccine Receipt and Factors Associated with Early and Late Vaccine	MHSRS-23-09686	Megan Clare Craig-Kuhn, Ph.D., MPH
		0930 - 0945	Specialized Vaccine Care for Adverse Events Following Immunization (AEFI) and Impact on Vaccine Hesitancy in the Military Health System	MHSRS-23-08691	David Loran, DNP
		0945 - 1000	Characteristics and Long-term Outcomes of SARS-CoV-2 Associated Myocarditis Cases in the Military Health System	MHSRS-23-09890	Simon Pollett, MBSS
		1000 - 1015	COVID-19 mRNA Vaccination and Myocarditis/ Pericarditis in the Setting of Active Surveillance at a Military Treatment Facility	MHSRS-23-08923	Matthew Romo, Pharm.D., Ph.D., M.PH
		1015 - 1030	HPV Vaccine Patterns Among Corps of Cadets, United States Military Academy (2018-2022)	MHSRS-23-08881	Brianna Brasko
Two Hour Session 0830 - 1030	Polytrauma and Multi-Organ Dysfunction Col Ian J. Stewart, USAF Moderator	0830 - 0845	A Clinically-relevant Mouse Model that Displays Hemorrhage Exacerbates Tourniquet-induced Acute Kidney Injury	MHSRS-23-08955	Xiaoming Zhou, Ph.D.
		0845 - 0900	Electrically-Generated Nitric Oxide Gas for Circuit-Centered Anticoagulation During 24-Hours Heparin-Free Artificial Lung Support	MHSRS-23-08894	Andriy Batchinsky, M.D.
		0900 - 0915	Canagliflozin Mitigates Acute Kidney Injury (AKI) Secondary to Resuscitative Endovascular Balloon Occlusion of the Aorta (REBOA) in a Porcine Model of Hemorrhagic Shock	MHSRS-23-08999	David Burmeister, Ph.D.
		0915 - 0930	Compact Bridge Dialysis System for the Post Traumatic Treatment of Hyperkalemia in Austere Conditions	MHSRS-23-10118	Ambalavanan Jayaraman, Ph.D.
		0930 - 0945	Diaphragm Neurostimulation with Mechanical Ventilation Results in Lower Brainstem Inflammation and Lower Driving Pressure in a Moderate-ARDS Porcine Model	MHSRS-23-08518	Thiago Bassi, M.D., Ph.D.
		0945 - 1000	H151 Blocks Extracellular Cold Inducible RNA Binding Protein-Induced STING Activation in Renal Ischemia and Reperfusion Induced Acute Kidney Injury	MHSRS-23-08819	Asha Jacob, Ph.D.
		1000 - 1015	Facing the Challenges of the Next Battlefield by Addressing Non-survivable Injuries of the Past: Does Veno-Venous Extracorporeal CO2 Removal Have a Role in Management of Polytrauma with Traumatic Brain Injury?	MHSRS-23-08895	Andriy Batchinsky, M.D.
		1015 - 1030	Circulating Levels of Biomarkers of Endothelial Dysfunction are Not Worsened by Extracorporeal Membrane Oxygenation Therapy	MHSRS-23-10452	Eriks Ziedins, B.S.

Breakout Sessions



Thursday, 17 August

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 0830 - 1030	Computational Modeling of Human Lethality, Injury, and Impairment from Blast Threats in All Environments Raj K. Gupta, Ph.D. Anthony Santago, Ph.D. LTC Adam Lewis, USA Moderators	0830 - 0842	3D Computational Modeling of Blast Wave Transmission in Human Ear from External Ear to Cochlear Hair Cells - A Preliminary Study	MHSRS-23-09483	Rong Gan, Ph.D.
		0842 - 0854	Elucidating the Role of Formal Methods for Establishing Interoperability between Simulations for Military Health System Applications	MHSRS-23-09554	Nichole Davis, Ph.D.
		0854 - 0904	Multi-Scale Question and Answer		
		0904 - 0916	Development of Rapid Casualty Approximations for Resourcing After Explosive Mass Casualty Incidents	MHSRS-23-09261	SFC Thomas Murphy, USA
		0916 - 0924	Leveraging Technology For Safer Weapons Training: A New Blast Overpressure Modeling Capability	MHSRS-23-09733	Raj Gupta, Ph.D.
		0924 - 0936	Comparison and Evaluation of Blast Overpressure from Operators of Shoulder-Fired Weapon Systems: Field Data vs. High-Fidelity Simulations	MHSRS-23-09888	Suthee Wiri, Ph.D.
		0936 - 0948	Safer Weapon Training through Automated Posture Identification for Minimization of Blast Exposures to Servicemembers and Instructors	MHSRS-23-09996	Teja Garimella, Ph.D.
		0948 - 1000	Training/Operational Question and Answer		
		1000 - 1012	Can a Blast Wave Targeted to the Torso of a Rat Damage the Brain Tissues?	MHSRS-23-08116	Jaques Reifman, Ph.D.
		1012 - 1024	Investigating Cavitation-Induced Primary Injury during Open-Field Blast to Determine Safety Limits for the Warfighter	MHSRS-23-10243	Manik Bansal, Ph.D.
1024 - 1030	Human/Animal Question and Answer				
Two Hour Session 0830 - 1030	Warfighter Operational Resilience: Current and Future Directions in the Development and Implementation of Programs to Maintain "Resilience Under Fire" Susannah Knust, Ph.D. LTC Matthew LoPresti, USA Moderators	0830 - 0845	Brain Fitness: An Individualized, Validated and Scalable Approach to Warfighter Brain Health and Performance	MHSRS-23-09644	Leanne R. Young, Ph.D.
		0845 - 0900	Mental Resilience Based on Professional Qualifications in Combat Soldiers Training	MHSRS-23-10144	COL Avi Benov, Israel Defense Forces
		0900 - 0915	Enhancing Resilience and Optimizing Performance Among Sailors and Marines Using the Advanced Integrated Resilience System (AIRS)	MHSRS-23-08553	Vanessa G. Perez, MPH
		0915 - 0930	Maximizing Warfighter Potential: How an Integrated Approach Using Brain-Body Exercise Can Enhance Performance Under Physical Stress	MHSRS-23-10749	Bradley Fawver, Ph.D.
		0930 - 0945	Using Full Dive Virtual Reality to Operationalize Warfighter Resilience: From Proof of Concept of Hardware and Software to Upcoming Integrated Psychological Skills Training	MHSRS-23-09899	COL Natalie A. Nevins, USAR Susannah K. Knust, Ph.D. Rosellen Roche, M.D., Ph.D.
		0945 - 1000	The Transformation Course: Operationalizing People-Centered Training at Fort Hood's People First Center	MHSRS-23-10063	Joseph Geraci, Ph.D.
		1000 - 1015	Mindfulness in Military Medicine: A Mixed Methods Analysis of Army Medical Specialist Corps Officers' Mindfulness Competency, Beliefs, and Tendencies	MHSRS-23-08189	CPT Alyssa D. Pruiett, USA
1015 - 1030	Panel Discussion		All Speakers		

Breakout Sessions



Thursday, 17 August

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 0830 - 1030	Integrative Medicine Across Operational Environments: Getting Warriors Back to the Fight without Drugs B. Christie Vu, Ph.D. Paul Crawford, M.D. Henry J. Nothnagel, Ph.D. Moderators	0830 - 0845	Exploration of Patient and Physician Experiences and Beliefs Involving Integrative Medicine: A Qualitative Study	MHSRS-23-08940	Paul Crawford, M.D.
		0845 - 0900	Pain is Inevitable, Suffering is Optional: An Interprofessional Single-Session Intervention for Pain	MHSRS-23-08730	Maj Andrea Krunnufusz, USAF
		0900 - 0915	Complementary, Integrative and Standard Rehabilitative Pain Therapies in a Military Population: Preliminary Results of a Randomized Clinical Trial	MHSRS-23-08363	Diane Flynn, M.D.
		0915 - 0930	Accessible Acupuncture for the Warrior with Acute Low Back Pain, an Interim Analysis	MHSRS-23-08834	David Moss, M.D.
		0930 - 0945	Acupuncture For Vasectomy Pre-procedural Anxiety and Pain Control in the Primary Care Setting: A Randomized Comparative Effectiveness Trial	MHSRS-23-08934	David Moss, M.D. Paul Crawford, M.D.
		0945 - 1000	Increased Physical Therapist Capacity is Associated with Reduced Use of Opioids for Soldiers with Low Back Pain	MHSRS-23-10425	Patrick Richard, Ph.D.
		1000 - 1015	Real-Time Objective Pain Assessment Using Forehead Wearable Sensor	MHSRS-23-09379	Jonathan Gasson, MBA
		1015 - 1030	Real-World Outcomes Following a 60-day Peripheral Nerve Stimulation Treatment for Disabling Pain at Walter Reed National Military Medical Center	MHSRS-23-09188	LCDR Sean Lacey, USN
Two Hour Session 0830 - 1030	Solutions to Optimize and Accelerate Recovery from Neuromusculoskeletal Injury Elizabeth Russell Esposito, Ph.D. Brad D. Isaacson, Ph.D. Moderators	0830 - 0845	Self-Reported Intentions to Seek Medical Attention for Musculoskeletal Injuries, Concussions, and Exertion-Related Injuries During Military Training	MHSRS-23-09153	Alexandria B. Gregory, M.A., B.S.
		0845 - 0900	Platform Design for Optical Screening and Conditioning for Injury Resilience	MHSRS-23-09290	Joshua Kline
		0900 - 0915	Novel Low-Powered Wearable Ultrasound Sensors for Assessing Musculoskeletal Function During Dynamic Activity in Real-World Scenarios	MHSRS-23-08602	Erica L. King, B.S.
		0915 - 0930	Exosomes as a Non-Surgical, Customizable, Cell-Free Therapy to Accelerate Musculoskeletal Healing	MHSRS-23-08721	Peng Jiang, Ph.D.
		0930 - 0945	The Effects of Dynamic Multi-Planar Neuromuscular Neck Training with the TopSpin360 in a Military Chronic Neck Pain Population on Neck Pain and Neck Strength and Function	MHSRS-23-09361	Theo Versteegh, Ph.D.
		0945 - 1000	Kinetic Metrics and Exploratory Applications of Telehealth Gait Retraining Following Musculoskeletal Injury in Military Personnel	MHSRS-23-08692	COL (Ret.) Donald Goss, DPT, Ph.D.
		1000 - 1015	A Randomized Trial Comparing Anti-Gravity Treadmill Therapy versus Standard of Care: It's Safe and Patients Like It	MHSRS-23-10409	LTC Daniel Stinner, USA
		1015 - 1030	Development of a Predictive Model to Determine Appropriate Length of MSKI Profile	MHSRS-23-09318	COL Justin Stewart, USA

Breakout Sessions



Thursday, 17 August

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 1100 - 1300	Medical Countermeasure Assessment for Flaviviruses and Other Vector-borne Viral Pathogens of Military Importance LTC Natalie D. Collins, USA Moderator	1100 - 1110	Expanding Vector Mapping of Ticks and Tick-Borne Pathogens of Mongolia and Discovery of Siberian Type Tick-Borne Encephalitis Virus	MHSRS-23-09331	LT Thomas McGlynn, USN
		1110 - 1120	Host Transcriptional Biomarkers to Distinguish Dengue and Other Viral Infections from Bacterial Infections of Global Military Relevance	MHSRS-23-10454	Christopher Woods, M.D.
		1120 - 1130	Biosurveillance of Vector-Borne Viruses Utilizing Metatranscriptomic Sequencing	MHSRS-23-08689	Rachel Spurbeck, Ph.D.
		1130 - 1140	Seroprevalence of Vector-Borne and Hemorrhagic Fever Viruses among a Cross-Section of Adult Ambulatory and Hospitalized Patients with Severe Illness in Nigeria, Ghana, and Liberia, 2017-2022	MHSRS-23-10516	Melanie McCauley, M.D.
		1140 - 1150	Novel, Machine-Learning Derived Peptides as Targets for Antiviral and Anti-inflammatory Activity in the BBB Against Encephalitic Viral Pathogens	MHSRS-23-08540	Carol Anderson, M.S.
		1150 - 1200	Novel Inhibitors of the Alphavirus nsP2 Protease Demonstrate Broad-Spectrum Inhibition of New-World and Old-World Alphaviruses	MHSRS-23-09564	Michael Barrera, M.S.
		1200 - 1210	Preclinical Efficacy and Safety of PTL-244: a Novel Candidate Drug for Therapeutic and Prophylactic Use against Dengue and Other Flaviviruses	MHSRS-23-09425	Bernardus van Buuren, Ph.D.
		1210 - 1220	Discovery of Potent Zika Virus-Specific and Cross-Neutralizing Monoclonal Antibodies Targeting Quaternary Epitopes	MHSRS-23-08596	Letzibeth Mendez-Rivera, M.S.
		1220 - 1230	Genetically Adjuvanted Self-Amplifying RNA Vaccines Against Yellow Fever	MHSRS-23-10602	Emily Voigt, Ph.D.
		1230 - 1240	Evaluating the Safety, Efficacy and Correlates of Protection for an Insect-Specific Flavivirus Vectored Zika Vaccine	MHSRS-23-09322	Albert Auguste, Ph.D.
		1240 - 1250	Safety and Immunogenicity of a 40 µg Adjuvanted Dose of a Chikungunya Virus Virus-Like Particle (CHIKV VLP) Vaccine: Results from Three Phase 2 Clinical Trials	MHSRS-23-09436	Lauren Tinsdale, Ph.D.
		1250 - 1300		Q&A	

Breakout Sessions



Thursday, 17 August

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 1100 - 1300	Clinical Studies to Advance Combat Casualty Care Kimberly B. Pope, Ph.D. Col Vikhyat Bebarta, USAF Reserve IMA Moderators	1100 - 1115	Characteristics and Outcomes of Trauma Patients Receiving Freeze Dried Plasma and Blood Products in a High-Trauma, Resource-Limited Setting	MHSRS-23-08963	Julia Dixon, M.D., MPH
		1115 - 1130	Mortality Benefit of Tranexamic Acid in Trauma Patients with Hemorrhage in a Resource-Limited, High-Trauma Setting	MHSRS-23-08958	Nee-Kofi Mould-Millman, M.D., Ph.D.
		1130 - 1145	Clinical Assessment of Low Calcium In traUMA (CALCIUM): A Preliminary Analysis	MHSRS-23-08186	Franklin Wright, M.D.
		1145 - 1200	Study Design, Rational and Implementation for the Linking Investigators in Trauma and Emergency Services (LITES) Type O Whole Blood and Assessment of Age during Prehospital Resuscitation Trial (TOWAR)	MHSRS-23-08506	Jason Sperry, M.D., MPH
		1200 - 1215	Strategy to Avoid Excessive Oxygen (SAVE-O2) in Major Burn Patients: A Multicenter Cluster Randomized, Stepped Wedge Trial for Targeted Normoxia	MHSRS-23-10457	David Douin, M.D.
		1215 - 1230	From RE-ENERGIZE to VICToRY: Building the First International Consortium for Clinical Trials in Burns	MHSRS-23-09207	Leopoldo Cancio, M.D.
		1230 - 1245	Early Nutrition Achievement and Wound Healing in Patients with Severe Burns	MHSRS-23-09922	Felecia Dispense, M.S., RDN
		1245 - 1300	Video Versus Direct Laryngoscopy for Tracheal Intubation of Critically Ill Adults	MHSRS-23-09776	Matthew W. Semler, M.D., M.Sc.
Two Hour Session 1100 - 1300	Role of Sleep in Performance and Recovery Malena B. Rone, Ph.D. Moderator	1100 - 1120	Development and Validation of a Wearable Device for Continuous Assessment and Measurement of Sleep-Associated Cranial Fluid Dynamics and EEG	MHSRS-23-10191	Paul Dagum, M.D., Ph.D.
		1120 - 1140	Circadian Rhythmicity in Proteomics Analysis of Human Peripheral Blood Mononuclear Cells Reveals Dysregulation of Insulin Regulation and Inflammatory Processes After Exposure to a Night Work Schedule	MHSRS-23-10232	Brieann Satterfield, Ph.D.
		1140 - 1200	Sleep Loss and Behavioral Health in the Military: A 5-Country Perspective	MHSRS-23-08156	Sara Alger, Ph.D.
		1200 - 1220	Relationships Between Sleep and Job Performance While Underway on a U.S. Navy Hospital Ship	MHSRS-23-08838	Lt Matthew Peterson, Ph.D.
		1220 - 1240	The Impact of Fatigue on Threat and Error Management Performance during Line Operational Safety Audit(LOSA) Observations	MHSRS-23-09684	Brig Gen (Ret) Daniel Wyman, M.D., M.P.H.
		1240 - 1300	Survey of Resources, Barriers, and Facilitators of Behavioral Sleep Medicine Services in Military Treatment Facilities and Affiliated Clinics	MHSRS-23-09046	Anne Germain, Ph.D.

Breakout Sessions



Thursday, 17 August

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 1100 - 1300	Psychological Health Research Translation - Current Status and Future Directions Sharmila A. Chari, Ph.D. Asiya Kazi, MSPH Moderators	1100 - 1115	Development of the Defense Health Agency Psychological Health Strategic Research Plan	MHSRS-23-10465	Virginia DeRoma, Ph.D.
		1115 - 1130	Suicide Prevention and Response Independent Review Committee: Implementing Recommendations throughout the Department of Defense	MHSRS-23-08656	Tim Hoyt, Ph.D.
		1130 - 1145	The Role of Rapid Reviews in Translating Mental Health Research to Policy and Practice in the Military Health System	MHSRS-23-08727	Dawn Bellanti, DNP
		1145 - 1200	An Implementation Science Suicide Prevention Pilot	MHSRS-23-08434	Salvatore Libretto, Ph.D.
		1200 - 1215	The Behavioral Health Technician (BHT) Optimization Pilot: Rapid Access to Evidence-Based Treatment for Service Members in the Military Health System	MHSRS-23-09997	Surya Narayanan-Pandit, BSPH
		1215 - 1230	Assessment of Navy Active Duty Mental Health Provider Knowledge of Female Specific Mental Health Services	MHSRS-23-08414	CDR Francine Segovia, USN
		1230 - 1245	Best Practices for Research-to-Practice Translation: Synthesis of Lessons from Implementation Pilots	MHSRS-23-09523	Elizabeth McLaughlin, Ph.D.
		1245 - 1300	Q&A and Panel Discussion		
Two Hour Session 1100 - 1300	Force Health Protection: Operational Exposure Research and Predictive Risk Methods David R. Mattie, Ph.D., DABT Moderator	1100 - 1115	Field Testing of Nanoconfinement Technology for Highly Effective Monitoring of Chemical Exposures at Military-Related Sites	MHSRS-23-09988	Shoaib Shaikh, MBA
		1115 - 1130	Exploring the Exosome with Silicone Wristbands—Simultaneous Collection of Endogenous Metabolites and Exogenous Exposure	MHSRS-23-08883	Mitchell Rubenstein, Ph.D.
		1130 - 1145	Generational Effects of Serving in the Gulf War	MHSRS-23-08520	Marc Williams, Ph.D.
		1145 - 1200	Development of ToxAdvisor Lite - A Mobile Application to Support Immediate Assessment of Chemical Health Risks in Agile Combat Employment	MHSRS-23-10302	Rebecca Clewell, Ph.D.
		1200 - 1215	Development of Preliminary Candidate Surface Guidelines for Air Force-relevant Dermal Sensitizers Using New Approach Methodologies	MHSRS-23-09593	Andrew Keebaugh, Ph.D.
		1215 - 1230	Accelerate Assessment of Particulate Matter Induced Respiratory Injury Leveraging Novel Motile Airway Organoid and Computer Vision	MHSRS-23-09469	Xi (Charlie) Ren, Ph.D.
		1230 - 1245	Using Circulated Multi-Tissue Organoid Platform (CMTOP) as a Non-animal Novel Approach for Evaluating Responses to Occupational and Environmental Exposure	MHSRS-23-08477	Dan Xu, Ph.D.
		1245 - 1300	The Utilization of Lung Surfactant for Assessing Potential Inhalational Hazards of Military Relevance	MHSRS-23-08773	Jayne Coyle, Ph.D.

Breakout Sessions



Thursday, 17 August

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 1100 - 1300	Multifactorial Problems Contributing of Musculoskeletal Injuries in the Military Ronald Wayne Matheny, Ph.D. Timothy Mauntel, Ph.D. Moderators	1100 - 1115	Factors Associated with Return to Duty Time following Musculoskeletal-Related Occupational Disability	MHSRS-23-08459	Daniel R. Clifton, Ph.D., ATC
		1115 - 1130	Biopsychosocial Factors Associated with Musculoskeletal Injury in Marine Corps Officers Differ between Males and Females	MHSRS-23-10029	Amelia S. Barrett, M.S., ATC
		1130 - 1145	MSK NEST Capabilities and Demonstrated Applications	MHSRS-23-10228	Matthew Nagle, M.S.
		1145 - 1200	Back Pain and Mental Health Disorders in the Army: Bidirectional Longitudinal Associations, Behavioral Symptom Presentation, and Prognosis	MHSRS-23-09518	Josh B. Kazman, M.S.
		1200 - 1215	Movement Clearing Assessments for Paratrooper Musculoskeletal Injury Risk Identification	MHSRS-23-08460	Timothy C. Mauntel, Ph.D., ATC
		1215 - 1230	Associations Between the Holistic Health and Fitness Program Implementation and Non-steroidal Anti-inflammatory Medication Use	MHSRS-23-09548	D. Alan Nelson, MPAS, Ph.D.
		1230 - 1245	High-Fat, High-sugar Diet Exacerbates Skeletal Muscle Metabolic Dysfunction in Murine Model of Volumetric Muscle Loss Injury	MHSRS-23-08300	Jarrod A. Call, Ph.D.
		1245 - 1300	Discussion		

Overview Map



REGISTRATION

City Hall Lobby - Ballroom/Level 2

SPEAKER READY ROOM

Flagler - Ballroom/Level 2

PLENARY SESSION

Osceola Ballroom - Ballroom/Level 2

BREAKOUTS

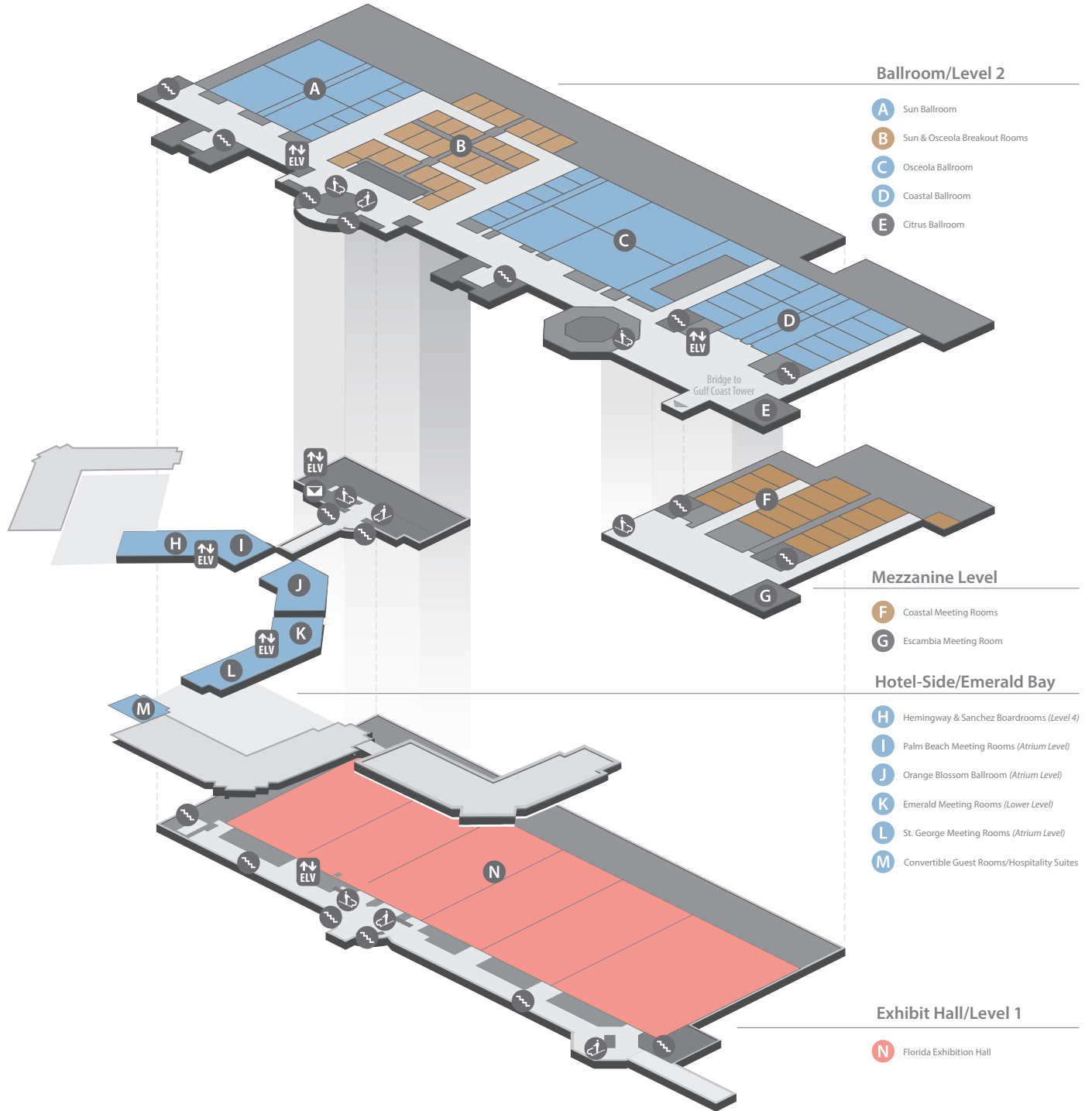
- Coastal A - Ballroom/Level 2
- Coastal C - Ballroom/Level 2
- Coastal D - Ballroom/Level
- Sun A - Ballroom/Level 2
- Sun B - Ballroom/Level 2
- Sun C - Ballroom/Level 2
- Sun D - Ballroom/Level 2

EXHIBIT HALL/POSTER SESSIONS

Florida A-D - Exhibit Hall/Level 1

MEALS

Florida EF - Exhibit Hall/Level 1





COLOR LEGEND

- St. Augustine
- Key West
- Emerald Bay
- Everglades
- Gulf Coast
- Convention Center
- Property Grounds

KEY

- Concierge
- Front Desk
- Valet
- Bus
- Taxi
- Car Rental
- Bell Services
- Smoking Area
- Restrooms
- Elevator
- Stairs
- Escalator
- FedEx Office Business Center
- ATM
- Guest Laundry (Lower Level)

DINING & DRINKS

- MOOR
- Villa de Flora (Mediterranean Buffet)
- Wreckers Sports Bar
- SandBar
- Old Hickory Steakhouse
- Socio

EATERY

- The Cocoa Bean Express
- The Cocoa Bean Coffee House
- Honeybells Frozen Yogurt
- Emerald Bay Marketplace
- The Cocoa Bean Express

SHOPPING

- Mallory Square Market
- Island Paradise
- Emerald Bay Emporium
- PGA TOUR Shop
- Brighton Collectibles
- Alligator Alley
- Relâche Spa Boutique

AMENITIES

- Arcade
- Relâche Spa (Lower Level)
- Relâche Fitness Center (Lower Level)
- South Beach Pool (Adults Only)
- Cypress Springs Water Park

MEETING SPACE

- 102 St. George Meeting Room
- 104 St. George Meeting Room
- 106 St. George Meeting Room
- 108 St. George Meeting Room
- Emerald Meeting Rooms (Lower Level)
- St. George Meeting Rooms, 112 - 114
- Orange Blossom Ballroom
- Boardrooms (Level 4)
- Palm Beach Meeting Room
- Convertible Guest Rooms/Hospitality Suites
- Coquina Lawn
- Mangrove Point

Please note that our hotel, atriums and pool areas are smoke-free. Smoking is permitted in various outdoor locations.



MHS

Military Health System

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