

# MEDICAL READINESS for the Future Fight



MILITARY HEALTH SYSTEM

# MHSRS

RESEARCH SYMPOSIUM

# 2023



# Agenda



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# Agenda



## Sunday, 13 August 2023

1500 - 1900

REGISTRATION  
(City Hall Lobby)

## Monday, 14 August 2023

0630 - 1930

REGISTRATION  
(City Hall Lobby)

0630 - 0830

BREAKFAST  
(Florida Exhibit Hall EF)

0815 - 1130

PLENARY SESSION  
(Osceola Ballroom)

0815 - 0825

Color Guard & National Anthem

0825 - 0830

Welcome

0830 - 0850

**Honorable Lester Martínez López, M.D., M.P.H**  
Assistant Secretary of Defense for Health Affairs

0855 - 1025

**Casualty Care Across the Continuum**  
*Operational Vignettes Panel Discussion*

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 - 1330

NETWORKING LUNCH  
(Florida Exhibit Hall EF)

# Agenda



1300 - 1730	BREAKOUT SESSIONS			
	Coastal B	Sun B	Sun D	Sun C
<b>One-Hour Session</b> 1300 - 1400	Female Warfighter Health & Performance  Holly L. McClung, MS, RDN, CSSD Nisha Charkoudian, Ph.D. Moderators	Military-Centric Interventions for Battlefield Psychological Injuries  Fuad Issa, M.D. Virginia M. DeRoma, Ph.D. Moderators	Cellular Therapeutics for Treatment of Shock and Trauma  Xiaowu Wu, M.D. Moderator	Biomedical Community of Interest: Understanding and Learning From the Ukraine Conflict  Joseph V. Cohn, Ph.D. Moderator
	Sun A			
<b>One-Hour Session</b> 1300 - 1400	Scientific Abstracts of Distinction Plenary Session  Kelley A. Brix, M.D., MPH Moderator			
	Osceola Ballroom			
<b>Two-Hour Session</b> 1300 - 1500	Young Investigator Competition  Michael J. Morris, M.D. Lt Col Adam M. Willis, USAF Moderators			
1345 - 1445				
BREAK (Osceola Foyer)				
	Coastal A	Coastal C	Sun D	Coastal D
<b>Three-Hour Session</b> 1430 - 1730	Antimicrobial Countermeasures for Wound Infections in Military Personnel  CDR Mark P. Simons, USN LTC Charlotte Lanteri, USA Daniel Zurawski, Ph.D. Moderators	Mental Health and Traumatic Brain Injury  Ida Babakhanyan, Ph.D. Moderator	Advances in Prolonged Care  Kimberly B. Pope, Ph.D. Sylvain Cardin, Ph.D. Moderators	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
	Sun C	Sun B	Sun A	
<b>Three-Hour Session</b> 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	Precision Medicine Research: Optimizing Warfighter Healthcare, Readiness, and Return to Duty  Eric Elster, M.D. Moderators	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	
1800 - 2100				
ASSISTANT SECRETARY OF DEFENSE FOR HEALTH AFFAIRS RECEPTION OPENING OF EXHIBITS (Florida Exhibit Hall A-D)				

# Agenda



## Tuesday, 15 August 2023

0630 - 0830	BREAKFAST (Florida Exhibit Hall EF)			
0700 - 1700	REGISTRATION (City Hall Lobby)			
0800 - 1000	BREAKOUT SESSIONS			
	Sun A	Coastal C	Sun C	Coastal D
<b>Two-Hour Session</b> 0800 - 1000	Tissue Wound Management for Prolonged Care Environments  Kimberly B. Pope, Ph.D. George Jiang, M.D. Moderators	Battlefield Biomarkers for TBI: Diagnostic and Prognostic Indicators  Kasey E. Moritz, Ph.D. Stephanie S. Sloley, Ph.D. Moderators	Development and Validation of Sensors and PPE for Blast Polytrauma  V. Sujith Sajja, Ph.D. Raj K. Gupta, Ph.D. Moderators	Hemorrhage Control and Vascular Dysfunction  Thomas H. Edwards, DVM, M.S. Moderator
	Coastal A	Sun D	Sun B	
<b>Two-Hour Session</b> 0800 - 1000	Military Transitions - Advances in Early Interventions for Promoting and Strengthening Psychological Readiness of Service Members  Sharmila A. Chari, Ph.D. Moderator	Innovative Tools and Technologies for Predicting and Assessing Musculoskeletal Injuries of the Warfighter  LCDR Joshua M. Swift, USN Pinata H. Sessoms, Ph.D. Moderators	Hearing Loss, Tinnitus, and Balance: Whole-Life Warfighter Performance  LTC Isaac D. Erbele, USA Moderator	
0945 - 1045	BREAK			
1000 - 1800	EXHIBITS (Florida Exhibit Hall A-D)			
1000 - 1200	POSTER SESSION 1 (Florida Exhibit Hall A-D)			
1130 - 1330	NETWORKING LUNCH (Florida Exhibit Hall EF)			

# Agenda



1300 - 1500	<b>BREAKOUT SESSIONS</b>			
	<b>Sun C</b>	<b>Sun B</b>	<b>Sun A</b>	<b>Sun D</b>
<b>Two-Hour Session</b> 1300 - 1500	Case Records of the Joint Trauma System  COL Jennifer M. Gurney, USA Moderator	From Benchtop to Battlefield - Transitioning Research to Fielded Products  Kathleen L. Berst, MBA, PMP, RAC Moderator	The Global Health Engagement Research Initiative - 2023 Overview and Updates  CAPT Danny Shiau, USN Moderator	Conducting Research with the Military Health System: Understanding the Requirements  Laura R. Brosch, R.N., Ph.D. Moderator
	<b>Coastal A</b>	<b>Coastal D</b>	<b>Coastal C</b>	
<b>Two-Hour Session</b> 1300 - 1500	Medicine and Performance Optimization in the Arctic  Ronald Wayne Matheny, Ph.D. Moderator	Undersea Operational Research Panel  Ben D. Lawson, Ph.D. Moderator	Expeditionary Diagnostics and Treatment of Vision Injury  Tian Wang, Ph.D. Moderator	
1445 - 1545	<b>BREAK</b> (Sun and Coastal Foyers)			
1530 - 1730	<b>POSTER SESSION 2</b> (Florida Exhibit Hall A-D)			
1530 - 1730	<b>BREAKOUT SESSIONS</b>			
	<b>Coastal A</b>	<b>Coastal C</b>	<b>Sun C</b>	<b>Sun D</b>
<b>Two-Hour Session</b> 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
	<b>Sun A</b>	<b>Coastal D</b>	<b>Sun B</b>	
<b>Two-Hour Session</b> 1530 - 1730	Battlefield Analgesia Pipeline: Novel Therapeutics from the Benchtop to the Battlefield  Carmen Hinojosa-Laborde, Ph.D. MAJ Nathan Davidson, USA Moderators	Update on Wearables in the Deployed Environment  Alan L. Harner, M.S. Moderator	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	

# Agenda



## Wednesday, 16 August 2023

0630 - 0830	BREAKFAST (Florida Exhibit Hall EF)			
0730 - 1400	REGISTRATION (City Hall Lobby)			
0800 - 1000	BREAKOUT SESSIONS			
	Sun A	Coastal C	Sun C	Sun D
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	Novel Strategies for Treatment of Shock or Blood Failure: Blood and Blood Products  Michael Adam Meledeo, Ph.D. Moderator	Impact and Assessment of Blast Exposure on Psychiatric Symptoms  Nancy A. Skopp, Ph.D. Rosemay A. Remigio-Baker, PhD, MPH Moderators	Interrupting Behavioral Health Trajectories to Sustain the Force  Ronda J. Renosky-Vittori, Ph.D. Moderator
	Sun B	Coastal A	Coastal D	
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	Health and Readiness Unique to the Female Active Duty Service Woman  Jill Brown, M.D., MPH Lynette Hamlin, Ph.D., R.N. Moderators	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	
0900 - 1600	EXHIBITS (Florida Exhibit Hall A-D)			
0945 - 1015	BREAK (Florida Exhibit Hall A-D)			
1000 - 1200	POSTER SESSION 3 (Florida Exhibit Hall A-D)			
1130 - 1330	NETWORKING LUNCH (Florida Exhibit Hall EF)			



# Agenda



1300 - 1500					BREAKOUT SESSIONS				
		Sun A	Sun B	Coastal A			Sun D		
Two-Hour Session 1300 - 1500	Advanced Battlefield Care of Severe Burn Casualties at the Point of Need: Prehospital to Definitive Care	Military Exposures and Subsequent Long-term Outcomes	Comprehensive Strategy and Action Plan for Warfighter Brain Health - Way Forward LOE4 (Late/Long Term Effects)	Implementation of Interventions for Prevention of Suicide and Other Harmful Behaviors					
	Sandy J. Snyder, Ph.D., RN Bonnie J. Woffenden, Ph.D. Moderators	Col Ian J. Stewart, USAF Moderator	Seth A. Kiser, Ph.D. Moderator	Melissa L. Mehalick, Ph.D. Moderator					
		Coastal C	Coastal D	Sun C					
Two-Hour Session 1300 - 1500	From Sockets to Osseointegration: Human Interface Solutions for Assistive Device Technology	Surviving and Thriving in a Distributed Operations Environment: Military Health Challenges and Solutions	Strategic and Tactical Insights for Small Businesses: Gaining Command of New SBIR/SSTTR Program Protection Criteria						
	Elizabeth Russell Esposito, Ph.D. Moderator	Joseph V. Cohn, Ph.D. Michael Lafiandra, Sc.D. Martin LaFrance, Ph.D. Moderators	James R. Myers, Jr., B.S. Moderator						
1445 - 1545					BREAK				
1530 - 1730					BREAKOUT SESSIONS				
		Sun C	Sun B	Sun A			Sun D		
Two-Hour Session 1530 - 1730	Traumatic Brain Injury Treatment for Early Combat, In-theater Administration	Enabling Medical Mobility and CASEVAC during Future Large Scale Combat Operations	Advanced Decision Support and Automation Technologies to Support Combat Casualty Care During Multi-Domain Operations, Large Scale Combat Operations, and Prolonged Care	Longitudinal Studies of Service Member, Veteran, and/or Military Family Member Health and Well-being					
	James B. Phillips, Ph.D. LTC Bradley A. Dengler, USA Moderators	LTC Steven G. Schauer, USA Lt Col Joseph K. Maddry, USAF MAJ Nicholas M. Studer, USA MAJ Elaine D. Por, USA Moderators	Jose Salinas, Ph.D. Nathan Fisher, M.S. Moderators	Jennifer N. Belding, Ph.D. Moderator					
		Coastal A	Coastal C	Coastal D					
Two-Hour Session 1530 - 1730	Exertional Illness in the Warfighter: Return to Duty Considerations	Military Injury Biomechanics and Applications for Injury Prevention	Aeromedical Aspects of the Army's Future Vertical Lift Program						
	Francis G. O'Connor, M.D., MPH Moderator	Tyler F. Rooks, M.S. Frederick T. Brozoski, M.S. Moderators	John S. Crowley, Ph.D. Moderator						



# Agenda



## Thursday, 17 August 2023

0630 - 0830	BREAKFAST (Florida Exhibit Hall EF)			
0800 - 1100	REGISTRATION (City Hall Lobby)			
0800 - 0830	2023 MHSRS AWARDS (Sun A)  Young Investigator and Poster Award Presentations			
0830 - 1030	BREAKOUT SESSIONS			
	Sun B	Sun D	Coastal A	Coastal C
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	Polytrauma and Multi-Organ Dysfunction  Col Ian J. Stewart, USAF Moderator	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	Warfighter Operational Resilience: Current and Future Directions in the Development and Implementation of Programs to Maintain "Resilience Under Fire"  Susannah Knust, Ph.D. Moderator
	Sun C	Coastal D		
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	Solutions to Optimize and Accelerate Recovery from Neuromusculoskeletal Injury  Elizabeth Russell Esposito, Ph.D. Brad D. Isaacson, Ph.D. Moderators		
1015 - 1115	BREAK (Sun and Coastal Foyers)			

# Agenda



1100 - 1300	BREAKOUT SESSIONS			
	Coastal C	Sun D	Sun A	Coastal A
<p><b>Two-Hour Session</b></p> <p><b>1100 - 1300</b></p>	<p>Medical Countermeasure Assessment for Flaviviruses and other Vector-borne Viral Pathogens of Military Importance</p> <p>LTC Natalie D. Collins, USA Moderator</p>	<p>Clinical Studies to Advance Combat Casualty Care</p> <p>Kimberly B. Pope, Ph.D. Col Vikhyat Bebartha, USAF Reserve IMA Moderators</p>	<p>Role of Sleep in Performance and Recovery</p> <p>Malena B. Rone, Ph.D. Moderator</p>	<p>Psychological Health Research Translation - Current Status and Future Directions</p> <p>Sharmila A. Chari, Ph.D. Asiya Kazi, MSPH Moderators</p>
	Sun C	Coastal D		
<p><b>Two-Hour Session</b></p> <p><b>1100 - 1300</b></p>	<p>Force Health Protection: Operational Exposure Research and Predictive Risk Methods</p> <p>David R. Mattie, Ph.D., DABT Moderator</p>	<p>Multifactorial Problems Contributing of Musculoskeletal Injuries in the Military</p> <p>Ronald Wayne Matheny, Ph.D. Timothy Mauntel, Ph.D. Moderators</p>		
1130 - 1330	LUNCH			
1330	END OF SYMPOSIUM			



# Overview Map

## REGISTRATION

City Hall Lobby - Ballroom/Level 2

## SPEAKER READY ROOM

Flagler - Ballroom/Level 2

## PLENARY SESSION

Osceola Ballroom - Ballroom/Level 2

## BREAKOUTS

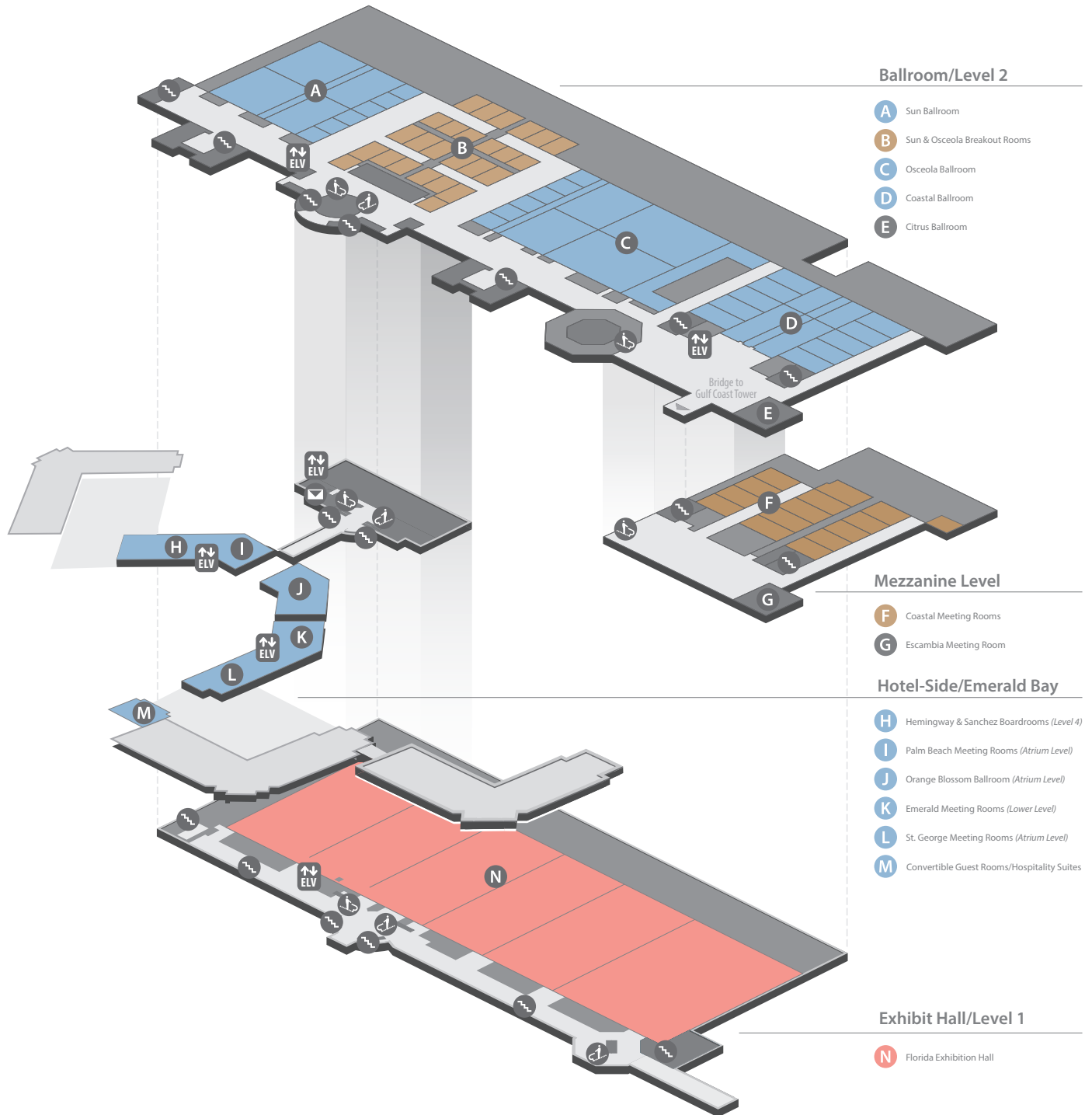
- Coastal A - Ballroom/Level 2
- Coastal C - Ballroom/Level 2
- Coastal D - Ballroom/Level 2
- Sun A - Ballroom/Level 2
- Sun B - Ballroom/Level 2
- Sun C - Ballroom/Level 2
- Sun D - Ballroom/Level 2

## EXHIBIT HALL/POSTER SESSIONS

Florida Exhibit Hall A-D

## MEALS

Florida Exhibit Hall EF





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