

— **Optimizing Readiness** —  
The Power of Military Medical Research



MILITARY HEALTH SYSTEM

**MHSRS**

RESEARCH SYMPOSIUM

**2022**

**Program Guide**



# Download the MHSRS 2022 Mobile App Today!

The official MHSRS mobile app is now available in the iTunes and Google Play stores. Download today and keep the program guide at your fingertips. Search “MHSRS 2022” on iTunes or Google Play to download the latest version.



## Breakout Sessions & Posters

Search for sessions and posters by date, time, and topics—plus find out more about MHSRS 2022 presenters and speakers.

## Interactive Floor Plan

Take the exhibit hall for a spin! Bookmark exhibitors you don't want to miss, plot the shortest distance between two booths, and search for products and services that you're most interested in.

## Search Everything

Browse the full list of sessions, posters, speakers, and exhibitors, and more in just a few taps!

## Share Your Experiences

Connect with MHSRS on social media and share photos of your experiences at MHSRS. Please note: photos uploaded to the mobile app are visible to all attendees and exhibitors.

## Sync with My MHSRS Planner

Log in to the app using the email you used to register for MHSRS and import saved sessions, posters, and exhibitors from your My MHSRS Planner.



# Table of Contents



How To Use This Book .....	4
Greeting .....	5
Assistant Secretary of Defense for Health Affairs .....	5
Symposium Information .....	6
General Information .....	6
Continuing Education (CE) .....	8
Agenda .....	10
Monday, 12 September .....	10
Tuesday, 13 September .....	11
Wednesday, 14 September .....	13
Thursday, 15 September .....	14
Breakout Sessions .....	16
Monday, 12 September .....	16
Tuesday, 13 September .....	24
Wednesday, 14 September .....	35
Thursday, 15 September .....	46
Exhibits .....	52
Exhibit Hall Floor Plan .....	52
Exhibitors by Booth .....	53
Exhibitor by Category .....	55
Exhibitors .....	61
Gaylord Palms Overview Map .....	75
Gaylord Palms Convention Center Map .....	Back Cover

# Symposium Information



## HOW TO USE THIS BOOK

On pages 10-15 you will find the complete MHSRS 2022 Agenda, which includes ALL daily activities in chronological order from Monday, 12 September to Thursday, 15 September.

Wherever you see “BREAKOUT SESSIONS” noted within the Agenda, color coded in **RED**, you can refer to the “Breakout Sessions” section on pages 16-51, 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 1300-1730 in the Sun C123 Ballroom, on the topic “Emerging Technologies for Treatment of Non-compressible Torso Hemorrhage” found on page 12 in the Agenda, you would refer to the Breakout Session pages to search in chronological order by the **time frame** and **topic**:

	Sun B	Desoto	Sun D456	
<b>Two-Hour Session</b> 1400-1500	Advances in Regenerative Medicine Therapies for Treatment of Neuromusculoskeletal Injuries: Enabling Enhanced Functional Outcomes Judi A. Sgambato, Ph.D. Moderators	What's New in Airway Science and Technology MAJ Steven Schauer, USA Moderator	Defense Health Program and U.S. Army Medical Research Funding Opportunities Rebecca A. Fisher, Ph.D. Moderator	
1500-1530	BREAK			
	Sun A	Sun B	Sun D456	Suwannee
	Young Investigator Competition PLENARY SESSION	SARS CoV-2 Clinical Studies/ Epidemiology	En route Care Innovation - Increasing Effectiveness of En Route Combat	Improving Sleep in the DoD: Investigations in Operational, Therapeutic, and

In this example, that would bring you to page 28 in the Breakout Sessions. You would then see each of the **presenters** listed in order of appearance, along with their individual **presentation title**:

## Monday, 12 September

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
<b>Three Hour Session</b> 1500-1800	<b>SARS CoV-2 Therapeutics and Diagnostics</b> Col Vikhyat Bebarta, M.D., USAF Reserve IMA Moderator	1500 - 1515	The Federal COVID-19 Response: Accelerating Therapeutics at the Speed of Relevance	MHSRS-22-04968	BG Deydre Teyhen, USA
		1530 - 1545	Vadadustat for the Prevention and Treatment of Acute Respiratory Distress Syndrome (ARDS) in 450 Hospitalized Patients With Coronavirus Disease 2019 (COVID-19)	MHSRS-22-07190	Holger Eltzhig, M.D., Ph.D.
		1545 - 1600	Inter-Rater Reliability for the Pragmatic Evaluation of Point of Care Lung Ultrasound for the Triage of COVID-19 Patients Using a Simple Scoring Matrix	MHSRS-22-06219	Maj Patrick Ng, USAF
		1600 - 1620	Using Real World Data to Inform Ongoing Decisions on COVID Therapeutics	MHSRS_22-NA17	Adit Ginde, M.D., MPH
		1620 - 1640	Evaluation of the Seraph 100 Microbind Affinity Blood Filter for the Treatment of Severe COVID-19	MHSRS_22-NA18	Lt Col Ian Stewart, USAF
		1640 - 1700	Insights into Pandemic Research and Response through EPICC and Other IDCRP Studies	MHSRS_22-NA19	Dr. Simon Pollett, MBSS

# Welcome Letter



## THE ASSISTANT SECRETARY OF DEFENSE

1200 DEFENSE PENTAGON  
WASHINGTON, DC 20301-1200

### HEALTH AFFAIRS



Dear Attendee,

Welcome to the 2022 Military Health System Research Symposium (MHSRS). It is an honor to serve as the sponsor for this important meeting. The MHSRS, which focuses on the unique medical needs of the Warfighter, is America's largest scientific meeting of its class. Since its inception, the MHSRS has grown as a forum for the Nation's most prominent researchers. Particularly valuable are the research partnerships it fosters and strengthens between the Services, academia, industry, and international allies.

This year's theme – *Optimizing Readiness...The Power of Military Medical Research* – highlights our commitment to overcoming seemingly insurmountable Warfighter medical challenges. It also highlights ever-enduring progress. Commonly, the results presented at MHSRS demonstrate improvements in pre-deployment readiness, battlefield care, and rehabilitation.

The 2022 MHSRS offers a reason for celebration. After two years of COVID-19 related cancellations, this meeting is back. The 2022 call for scientific abstracts netted 2,347 submissions, the highest number ever. The symposium will feature 65 scientific breakout sessions, over 1,300 poster presentations, and a thought-provoking line-up of plenary and guest speakers.

Welcome to the 2022 MHSRS and thank you for your ongoing support of this vital Symposium!

Sincerely,

Seileen M. Multen  
Acting



# General Information

## SYMPOSIUM BADGES

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

## 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 (Lower Level) to learn about the latest equipment and services to benefit your research.

Monday, 12 September: 1800-2100 (Grand Opening/Assistant Secretary of Defense for Health Affairs Reception)

Tuesday, 13 September: 0900-1800

Wednesday, 14 September: 0900-1630

## POSTER SESSIONS

Please refer to the Poster Session Book for more information.

## SYMPOSIUM MEALS

Meals are for registered attendees only. Breakfast will be from 0600–0830 Monday - Thursday. Lunch will be from 1145–1330 on Monday and 1130–1330 on Tuesday and Wednesday. A box lunch will be offered on Thursday from 1100–1330. All meals will be served in Florida Exhibit Hall EF–Lower Level. 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 on the lower level of the Gaylord Palms Convention Center. The dress code for this event 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 of the Gaylord Palms Convention Center.

## HOURS OF OPERATION

Sunday, 11 September	Monday, 12 September	Tuesday, 13 September	Wednesday, 14 September	Thursday, 15 September
1500 - 1900	0600 - 1930	0600 - 1800	0700 - 1630	0700 - 1100

## IMPORTANT PHONE NUMBERS

Shuttle Information: (407) 843-0855 - mention MHSRS

## LUGGAGE CHECK

On Thursday, there will be luggage storage available in Florida Hall C from 0630–1400.

## SHUTTLE SERVICE

Shuttle service is for registered MHSRS participants and exhibitors only.

## AIRPORT SHUTTLE SERVICE: LEVEL 1

Shuttle service will be provided by Mears Transportation to/from the Orlando International Airport (MCO) to the **Gaylord Palms Resort and Marriott Village, which includes Marriott Courtyard, Fairfield Inn, and Spring Hill Suites**. Shuttles will be positioned outside, in the middle of terminals A & B on Ground Transportation Level 1 ONLY. Mears team members, dressed in bright yellow shirts, will be located curbside on Level 1 to assist you. Please look for “MHSRS” signage in the window of the shuttle. Shuttles depart every 30 minutes.

### MCO – Gaylord

Sunday, 11 September  
Monday, 12 September  
Tuesday, 13 September  
Wednesday, 14 September  
Thursday, 15 September

### Gaylord – MCO

1000 – 2300  
0800 – 2300  
0800 – 2200  
0800 – 2100  
No shuttles (departures only)

No shuttles (arrivals only)  
No shuttles (arrivals only)  
0900 – 2100  
0900 – 2200  
0600 – 1830

**Note: All airport returns will be from the Gaylord Palms lobby.**

# General Information



## 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 can be reached at the Gaylord Main Transportation lobby and at the bus parking area in the back of the Village Square between the Courtyard and Fairfield Inn at the Marriott Village.

Shuttles run approximately every 15 minutes; travel time is between 15-25 minutes.

	AM Service	PM Service
Sunday, 11 September	no service	1430 – 1930
Monday, 12 September	0600 – 1000	1630 – 2200
Tuesday, 13 September	0600 – 1000	1630 – 2200
Wednesday, 14 September	0600 – 0900	1630 – 1900
Thursday, 15 September	0600 – 0900	1200 – 1600

## PARKING INFORMATION

The Gaylord Palms Resort is offering an \$18.00 daily self-parking rate for all attendees.

## WI-FI CONFERENCE INFORMATION

Complimentary Wi-Fi is offered to all conference attendees. **Meeting Access Location: 2022MHSRS Meeting Password: 2022mhsrs**

## SPEAKER INFORMATION

All speakers should report to the Flagler Room on the upper level of the conference center as soon as they arrive at the conference to make sure that presentations are uploaded properly. Speaker ready room hours are:

Sunday, 11 September	1400 - 1900
Monday, 12 September	0700 - 1700
Tuesday, 13 September	0700 - 1700
Wednesday, 14 September	0700 - 1700
Thursday, 15 September	0700 - 1100



JOINTLY ACCREDITED PROVIDER™  
INTERPROFESSIONAL CONTINUING EDUCATION

# Continuing Education



## CONTINUING EDUCATION (CE)

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 agenda on pages 10-15.

### 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.

### PHYSICIAN CONTINUING MEDICAL EDUCATION

The Postgraduate Institute for Medicine designates this live activity for a maximum of **24 AMA PRA Category 1 Credit(s)**<sup>™</sup>. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

### CONTINUING NURSING EDUCATION

The maximum number of hours awarded for this Continuing Nursing Education activity is 24 contact hours.

### CONTINUING PSYCHOLOGIST EDUCATION

Continuing Education (CE) credits for psychologists are provided through the co-sponsorship of the American Psychological Association (APA) Office of Continuing Education in Psychology (CEP). The APA CEP Office maintains responsibility for the content of the programs.

### CREDIT DESIGNATION

This program offers 24 continuing education credits for psychologists.

### 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.



# Continuing Education



## 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](http://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 17336 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.

# Agenda (as of 23 August; subject to change)



## Sunday, 11 September

1500-1900

**REGISTRATION**  
(City Hall Lobby)

## Monday, 12 September

0600-1930

**REGISTRATION**  
(City Hall Lobby)

0630-0830

**BREAKFAST**  
(Florida EF)

0800-1145

**PLENARY SESSION**  
(Osceola Ballroom)

0945-1015

**BREAK**  
(Osceola Foyer)

1145-1330

**NETWORKING LUNCH**  
(Florida EF)

1330-1800

**BREAKOUT SESSIONS**

	Sun A	Desoto	Sun B	Sun C123
<b>One-Hour Session</b> 1330-1430	Below Zero Medicine Research  Ronald W. Matheny, Jr., Ph.D. Moderator	Novel Interventions for Non-pharmacological Pain Management  Henry Nothnagel, Ph.D. Moderator	Advances in Blast-Induced Neurotrauma and Battlefield Treatments  Michael J. Urban, Ph.D. Moderator	Pathophysiology of Combined Traumatic Injury  David M. Burmeister, Ph.D. Cullen Case, MPA Moderators
	Sun D456	Suwannee	Lafayette	
<b>One-Hour Session</b> 1330-1430	Solutions to Promote Resilience and Mitigate Acute Stress in the Face of Trauma and Mass Casualty Events  Ronda J. Renosky-Vittori, Ph.D. Moderator	Human and Machine Co-Learning  Erin McCormick Moderator	U.S. DoD Warfighter Brain Health Initiative: The Future Strategy for Traumatic Brain Injury Care and Research	
1430-1500	<b>BREAK</b> (Sun and Osceola Foyers)			
	Desoto	Suwannee	Sun D456	Sun B
<b>Three-Hour Session</b> 1500-1800	SARS CoV-2 Therapeutics and Diagnostics  Col Vikhyat Bebartha, USAF Reserve IMA Moderator	Improving Warfighter Readiness and Performance through Health Services Research  Tracey K. Koehlmoos, Ph.D. Moderator	<b>1500-1600</b> Reducing Death From Injury: Timing is Everything and Other Lessons Never Too Late to Learn  Col Stacy A. Shackelford, USAF Moderator  <b>1600-1800</b> Case Records of the Joint Trauma System  COL Jennifer M. Gurney, USA John Holcomb, M.D. Moderators	Treatment Strategies Following Musculoskeletal Injury  Brad D. Isaacson, Ph.D. Elizabeth Russell Esposito, Ph.D. Brad D. Hendershot, Ph.D. Linzie Wagner, PMP, CRA Moderators

# Agenda

(as of 23 August; subject to change)



	Sun C123	Sun A	Lafayette
<b>Three-Hour Session</b> 1500-1800	Antimicrobial Development to Counter Wound Infections in Military Personnel  CDR Mark P. Simons, USN Ms. Elizabeth Chipriano, M.S. Moderators	Advanced Decision Support and Automation Technologies to Support Combat Casualty Care in Future Multi-Domain Operations  Jose Salinas, Ph.D. Nathan Fisher, M.S. Moderator	Novel Clinical Assessments and Interventions for mild Traumatic Brain Injury  Michael J. Roy, M.D., MPH Sarah Fontaine, Ph.D. Moderators

1800-2100	<b>PRINCIPAL DEPUTY ASSISTANT SECRETARY OF DEFENSE (HEALTH AFFAIRS) RECEPTION</b>  <b>OPENING OF EXHIBITS</b> (Exhibit Hall - Florida A-D)		
-----------	---	--	--

## Tuesday, 13 September

0600-1800	<b>REGISTRATION</b> (City Hall Lobby)		
-----------	--	--	--

0630-0830	<b>BREAKFAST</b> (Florida EF)		
-----------	----------------------------------	--	--

### BREAKOUT SESSIONS

	Sun C123	Sun B	Suwannee	Lafayette
<b>Two-Hour Session</b> 0800-1000	Mitigating Bloodborne Infection Risk in Large Scale Combat Operations  COL Julie Ake, USA MAJ Baishali Kanjilal, USA Moderators	Advances in Prolonged Care  Kimberly Pope, Ph.D. Sylvain Cardin, Ph.D. Moderators	Pain Management for the Future Fight  COL Thomas Stark, USA Jelena M. Janjic, Ph.D. Moderators	Expeditionary Eye Care  COL Scott McClellan, USA Whitney A. Greene, Ph.D. Moderators

	Sun D456	Desoto	Sun A
<b>Two-Hour Session</b> 0800-1000	Clinical Practice Guidelines for Behavioral Health Interventions in Forward Locations for Non-Specialty Providers  Fuad Issa, M.D., FAPA Sharmila A. Chari, Ph.D. Moderators	Advances in Warfighter Nutrition  Lee M. Margolis, Ph.D. Moderator	Injury Biomechanics and Prevention for Military Applications  Frederick Brozoski, M.S. Moderator

0900-1800	<b>EXHIBITS</b> (Exhibit Hall - Florida A-D)		
-----------	---	--	--

1000-1030	<b>BREAK</b> (Exhibit Hall - Florida A-D)		
-----------	--	--	--

1000 - 1200	<b>POSTER SESSION 1</b> (Exhibit Hall - Florida A-D)		
-------------	---	--	--

1130-1330	<b>LUNCH</b> (Florida EF)		
-----------	------------------------------	--	--

# Agenda

(as of 23 August; subject to change)



1300-1730	BREAKOUT SESSIONS			
	Sun A	Lafayette	Sun C123	Suwannee
<b>Two-Hour Session</b> 1300-1500	Scientific Abstract PLENARY SESSION  Farrukh Rizvi, Ph.D. Moderator	Development of New Front Line Therapies to Prevent & Treat Endemic Viral Diseases (non SARS CoV-2)  John Dye, Ph.D. Moderator	Emerging Technologies for Treatment of Non-compressible Torso Hemorrhage  Sylvain Cardin, Ph.D. Moderator	Integrative Prevention Approaches to Decrease Harmful Behaviors and Increase Service Member Psychological Health, Readiness, & Performance  MAJ Karmon D. Dyches, USA MAJ(P) Matthew LoPresti, USA Moderators
	Sun B	Desoto	Sun D456	
<b>Two-Hour Session</b> 1300-1500	Advances in Regenerative Medicine Therapies for Treatment of Neuromusculoskeletal Injuries: Enabling Enhanced Functional Outcomes  Judi A. Sgambato, Ph.D. Moderators	What's New in Airway Science and Technology  MAJ Steven Schauer, USA Moderator	Defense Health Program and U.S. Army Medical Research Funding Opportunities  Rebecca A. Fisher, Ph.D. Moderator	
1500-1530	<b>BREAK</b> (Exhibit Hall - Florida A-D, Sun and Osceola Foyers)			
	Sun A	Sun B	Sun D456	Suwannee
<b>Two-Hour Session</b> 1530-1730	Young Investigator Competition PLENARY SESSION  Michael J. Morris, M.D. Moderator	SARS CoV-2 Clinical Studies/ Epidemiology  James Christensen, Ph.D. Moderator	En route Care Innovation - Increasing Effectiveness of En Route Combat Casualty Care  Lt Col Cubby Gardner, USAF Moderator	Improving Sleep in the DoD: Investigations in Operational, Therapeutic, and Biomarker Strategies  Malena Rone, Ph.D. LCDR J. Kent Werner, Jr., USN Moderators
	Lafayette	Desoto	Sun C123	
<b>Two-Hour Session</b> 1530-1730	Ongoing Health Issues in Military High Performance Flight  LCDR Brennan Cox, USN LT Alexandra Kaplan, USN Moderators	Treatment Innovations for Acute Respiratory Distress Syndrome (ARDS)  Sandy Snyder, MSN, RN Moderator	Strategic and Tactical Insights for Small Business  CDR Tatana M. Olson, USN Moderator	
1600-1800	<b>POSTER SESSION 2</b> (Exhibit Hall - Florida A-D)			

# Agenda

(as of 23 August; subject to change)



## Wednesday, 14 September

0700-1630	<b>REGISTRATION</b> (City Hall Lobby)			
0630-0830	<b>BREAKFAST</b> (Florida EF)			
0800-1000	<b>BREAKOUT SESSIONS</b>			
	<b>Sun C123</b>	<b>Sun D</b>	<b>Desoto</b>	<b>Sun B</b>
<b>Two-Hour Session</b>  0800-1000	Point of Injury Care: From Bench to Battlefield  Michael Adam Meledeo, Ph.D. Moderator	NDAA FY18 Sec 734 - The Longitudinal Medical Study on Blast Exposure of Members of the Armed Forces: Program Overview and Updates  Thuvan Piehler, Ph.D. Emma Gregory, Ph.D. Richard Shoge, Ph.D. Moderators	Suicide Prevention Research Initiatives in DoD  Melissa Mehalick, Ph.D. Moderator	Advancements in Prosthetic and Orthotic Technologies  Elizabeth Russell Esposito, Ph.D. Moderator
	<b>Lafayette</b>	<b>Sun A</b>		
<b>Two-Hour Session</b>  0800-1000	Employment of Advanced Technologies For Integrated Health Monitoring and Geolocation for Training and Operations in Multi-Domain Environments  LCDR Joshua Swift, USN Moderator	Military Exposures and Subsequent Long-term Outcomes  Lt Col Ian Stewart, USAF Moderator		
1000-1030	<b>BREAK</b> (Exhibit Hall - Florida A-D)			
0900-1630	<b>EXHIBITS</b> (Exhibit Hall - Florida A-D)			
1000-1200	<b>POSTER SESSION 3</b> (Exhibit Hall - Florida A-D)			
1130-1330	<b>LUNCH</b> (Exhibit Hall - Florida A-D)			
1300-1800	<b>BREAKOUT SESSIONS</b>			
	<b>Sun B</b>	<b>Sun A</b>	<b>Sun D456</b>	<b>Suwannee</b>
<b>Two-Hour Session</b>  1300-1500	Advances in Craniofacial Trauma and Infections: Preventative, Reconstructive, Rehabilitative and Regenerative Strategies to Accelerate Return-to-Duty  LCDR Daniel Hammer, USN John Simecek, Ph.D. Moderator	Cellular Therapeutics for Treatment of Shock and Trauma  James Bynum, Ph.D. Moderator	Acutely Administered Interventions for Battlefield Traumatic Brain Injury  J.B. Phillips, Ph.D. Krista Caudle, Ph.D. Moderators	Stress and Adjustment Disorders in Military Service Members  Marija S. Kelber, Ph.D. Moderator

# Agenda

(as of 23 August; subject to change)



	Lafayette	Desoto	Sun C123	
<b>Two-Hour Session</b> 1300-1500	Wearables: Future Capability, Past Successes and Current Challenges in a Deployed Environment  Alan L. Harner, M.S. Moderator	Technologies and Approaches to Support Specialty Virtual Health in Denied, Intermittent, or Low-Bandwidth Communications Environments  Jeannette R. Little, M.S. Moderator	U.S. Army Medical Research and Development Command Office of Regulated Activities and U.S. Food and Drug Administration: Collaborations and Regulatory Updates  MAJ Victor Zottig, USA CDR Thomas Maruna, USPHS Moderators	
1500-1530	<b>BREAK</b> (Exhibit Hall - Florida A-D, Sun and Osceola Foyers)			
	Sun B	Sun C123	Sun A	Suwannee
<b>Two-Hour Session</b> 1530-1730	Burn Injury Management in Theater  Bonnie J. Woffenden, Ph.D. Sandy Snyder, MSN, RN Moderators	Novel Strategies for Treatment of Shock or Blood Failure: Antishock Pharmaceuticals and Blood Products  Michael Adam Meledeo, Ph.D. Moderator	Innovative Technologies, Strategies, Models, and Analytical Tools for Predicting, Preventing, Tracking and Treating Musculoskeletal Injuries of the Warfighter  LCDR Joshua Swift, USN Pinata Sessoms, Ph.D. Moderators	Force Health Protection: Research in Exposure and Risk Assessment  David R. Mattie, Ph.D. Moderator
	Lafayette	Desoto	Sun D456	
<b>Two-Hour Session</b> 1530-1730	Artificial Intelligence, Machine Learning, and Predictive Analytics in Military Medicine  Jesus J Caban, Ph.D. Sammy Choi, M.D. Moderators	Biomedical Manufacturing For Warfighter Treatment Needs  Lloyd F. Rose, Ph.D. Mary Clare McCorry, Ph.D. Moderators	From Bench to Bedside: Technology Commercialization  Paul G. Michaels, eJD Moderator	

## Thursday, 15 September

0700-1100	<b>REGISTRATION</b> (City Hall Lobby)			
0630-0830	<b>BREAKFAST</b> (Exhibit Hall - Florida A-D)			
0800-0830	<b>2022 MHSRS AWARDS</b> (Sun A) Young Investigator and Poster Award Presentations			
0845-1300	<b>BREAKOUT SESSIONS</b>			
	Sun B	Sun D456	Sun A	Sun C123
<b>Two-Hour Session</b> 0845-1045	Sepsis 360 - Early Detection and Treatment in the Operational Environment  LTC Tyson J. Sjulín, USA Moderator	Trauma Resuscitation and Critical Care on the Future Battlefield  Caryn Stern, DrPH, MPH Moderator	Blast, Blunt, Accelerative Exposure in Military Training Exercises  Michael J. Roy, M.D., MPH Olivia H. Webster, B.A. LTC Brian Johnson, USA Moderators	Battlefield Biomarkers for TBI: Diagnostic and Prognostic Indicators  Kasey E. Moritz, Ph.D. Stephanie S. Sloley, Ph.D. Moderators

# Agenda

(as of 23 August; subject to change)



	<b>Lafayette</b>			
<b>Two-Hour Session</b> 0845-1045	Precision Medicine Research: Optimizing Warfighter Healthcare, Readiness, and Return to Duty  Victor L. Sylvia, Ph.D. CAPT Eric A. Elster, USN Moderators			
1045-1100	<b>BREAK</b> (Sun and Osceola Foyers)			
	<b>Sun B</b>	<b>Sun A</b>	<b>Lafayette</b>	<b>Sun D456</b>
<b>Two-Hour Session</b> 1100-1300	Blast Overpressure and Acoustic Sensor, and PPE Effectiveness across Different Environmental Conditions  V. Sujith Sajja, Ph.D. Raj Gupta, Ph.D. Moderators	Novel Treatments, Strategies, and Technologies in Hearing and Balance Health  Mei Sun, Ph.D. Moderator	Updates on Military Women's Health  LTC Leilani Siaki, USA CAPT Jennifer Buechel, USN MAJ Angela Phillips, USAF Moderators	Military-Centric Therapeutic Strategies for Traumatic Brain Injury  Deborah Shear, Ph.D. Anke Scultetus, M.D. Moderators
	<b>Sun C123</b>			
<b>Two-Hour Session</b> 1100-1300	Research Investigations on Implementation of Novel Learning and Education Training Strategies to Improve Readiness for Battlefield Care  Michael Morris, M.D. Amber M. Mallory, Ph.D. Moderators			
1100-1330	<b>LUNCH</b> (Florida EF)			
1330	<b>End of Symposium</b>			

# Breakout Sessions



## Monday, 12 September

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
One Hour Session 1330 - 1430	Below Zero Medicine Research Ronald W. Matheny, Jr., Ph.D. Moderator	1330 - 1400	Arctic Medicine in the Joint Environment	MHSRS_22-NA08	LTC Jonathan S. Pederson, USA
		1400 - 1415	Arctic and High Altitude Medicine Center of Excellence (Proposed): Translating Policy & Research to Operational Medicine from POI to RTD	MHSRS_22-NA09	MAJ Titus Rund, ARNG
		1415 - 1430	Potential of Prostacyclins in Treating Frostbite	MHSRS_22-NA10	LTC Geoff Chin, USA
One Hour Session 1330 - 1430	Novel Interventions for Non-pharmacological Pain Management Henry Nothnagel, Ph.D. Moderator	1330 - 1350	Patient Outcomes from a Physician Led Integrative Medicine Clinic at a Large Air Force Military Treatment Facility	MHSRS-22-06073	David Moss, M.D.
		1350 - 1410	Results of a Prospective, Multicenter Study of Percutaneous PNS for the Treatment of Disabling Axial Back Pain	MHSRS-22-06679	Steven Cohen, M.D.
		1410 - 1430	Non-invasive Pain Management Using Audio Visual Neuromodulation	MHSRS-22-06736	Jeffery Bower, Ph.D.
One Hour Session 1330 - 1430	Advances in Blast-Induced Neurotrauma and Battlefield Treatments Michael J. Urban, Ph.D. Moderator	1330 - 1345	Characterization of a Ferret Model of Under-Vehicle Blast-Induced Traumatic Brain Injury	MHSRS-22-07403	Molly Goodfellow, Ph.D.
		1345 - 1400	Novel Microglia Activation Targets Following Blast-Induced Neurotrauma	MHSRS-22-07005	Pamela VandeVord, Ph.D.
		1400 - 1415	Mitochondrial Uncoupling Prodrug to Treat Repeated Mild Blast Traumatic Brain Injury	MHSRS-22-06517	W. Brad Hubbard, Ph.D.
		1415 - 1430	The Protective Effects of Liraglutide on Auditory Injury After Repeated Low-Level Blast TBI in Chinchilla	MHSRS-22-07756	Bryan Pfister, Ph.D.
One Hour Session 1330 - 1430	Pathophysiology of Combined Traumatic Injury David M. Burmeister, Ph.D. Cullen Case, MPA Moderators	1330 - 1345	Reversal of Neutrophil Functional Suppression and Susceptibility to Pneumonia due to Trauma-induced Activation of G-Protein Coupled Receptor Kinase 2	MHSRS-22-06691	Carl Hauser, M.D.
		1345 - 1400	Measurement of Exosome Encapsulated Signature Key Proinflammatory Mediators Missing in Action When Assessing the Combat Injured Immune and Pathophysiological Response to Complex Blast-related Polytraumatic Extremity Injury	MHSRS-22-05832	2LT Sarah Walsh, USA
		1400 - 1415	Acute Mechanisms of Sterile Tissue Injury Induced Vascular Leak, Ileus and Death	MHSRS-22-07553	Anthony Bauer, Ph.D.
		1415 - 1430	Tissue Damage Volume Quantified on Computed Tomography is Associated with Organ Dysfunction in Polytrauma Patients with Fractures	MHSRS-22-06816	Greg Gaski, M.D.



# Breakout Sessions



## Monday, 12 September

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
One Hour Session 1330 - 1430	Solutions to Promote Resilience and Mitigate Acute Stress in the Face of Trauma and Mass Casualty Events  Ronda J. Renosky-Vittori, Ph.D. Moderator	1330 - 1335	Introduction	MHSRS_22-NA11	Ronda J. Renosky-Vittori, Ph.D.
		1335 - 1355	Resilience Amidst Mass Casualty in Special Operations Surgical Teams: A Holistic and Integrated Paradigm	MHSRS-22-05317	Erika Ann Jeschke, Ph.D.
		1355 - 1430	Panel Discussion		Deborah C. Beidel, Ph.D. Brittany C Davis, Ph.D. MAJ(P) Matthew LoPresti, Ph.D.
One Hour Session 1330 - 1430	Human and Machine Co-Learning  Erin McCormick, Ph.D. Moderator	1330-1334	Introduction	MHSRS_22-NA37	Erin McCormick, Ph.D.
		1334-1348	An Adaptive Human-Robotic Interaction Architecture for Augmenting Surgery Performance Using Real-time Workload Measurement	MHSRS-22-07683	Denny Yu, Ph.D., C.P.E.
		1348-1402	Training AI Using Limited Data and Deploying AI on Mobile Platforms: Point-of-Care Ultrasound for In-Field Assessment of Pneumothorax	MHSRS-22-07430	Sean Montgomery, M.D.
		1402-1416	Semiautonomous Trauma Training Systems for Personalized Medical Training	MHSRS-22-04983	Tiffany Jastrzembski Myers, Ph.D.
		1416-1430	A Semi-supervised Learning Approach for Weakly Labeled Datasets Applied to Activity Recognition during Military Training	MHSRS-22-07867	Alessio Medda, Ph.D.
One Hour Session 1330-1430	U.S. DoD Warfighter Brain Health Initiative: The Future Strategy for Traumatic Brain Injury Care and Research	1330 - 1400	Warfighter Brain Health Initiative	MHSRS_22-NA12	Katherine Lee, M.S.
		1400 - 1420	Warfighter Brain Health Initiative Accelerating Progress in Traumatic Brain Injury Research and Care, National Academies of Sciences, Engineering, and Medicine Report	MHSRS_22-NA13	CAPT Travis Polk, USN
		1420 - 1430	Q&A		CAPT Travis Polk, USN Katherine Lee, M.S.



Download the MHSRS mobile app for the latest updates.



# Breakout Sessions



## Monday, 12 September

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Three Hour Session 1500-1800	SARS CoV-2 Therapeutics and Diagnostics Col Vikhyat Bebart, M.D., USAF Reserve IMA Moderator	1500 - 1515	The Federal COVID-19 Response: Accelerating Therapeutics at the Speed of Relevance	MHSRS-22-04968	BG Deydre Teyhen, USA
		1515 - 1530	Extracorporeal Blood Purification in COVID 19 with Seraph 100 Microaffinity Blood Filter: A Single-Center Case Series	MHSRS-22-07789	Capt Melissa Rosas, USAF
		1530 - 1545	Vadadustat for the Prevention and Treatment of Acute Respiratory Distress Syndrome (ARDS) in 450 Hospitalized Patients With Coronavirus Disease 2019 (COVID-19)	MHSRS-22-07190	Holger Eltzschig, M.D., Ph.D.
		1545 - 1600	Inter-Rater Reliability for the Pragmatic Evaluation of Point of Care Lung Ultrasound for the Triage of COVID-19 Patients Using a Simple Scoring Matrix	MHSRS-22-06219	Maj Patrick Ng, USAF
		1600 - 1620	Using Real World Data to Inform Ongoing Decisions on COVID Therapeutics	MHSRS_22-NA17	Adit Ginde, M.D., MPH
		1620 - 1640	Evaluation of the Seraph 100 Microbind Affinity Blood Filter for the Treatment of Severe COVID-19	MHSRS_22-NA18	Lt Col Ian Stewart, USAF
		1640 - 1700	Insights into Pandemic Research and Response through EPICC and Other IDCRP Studies	MHSRS_22-NA19	Dr. Simon Pollett, MBSS
		1700 - 1715	Wastewater Based SARS-CoV-2 Surveillance Approaches for Army Installations	MHSRS-22-06282	CPT Bill Kowallis, USA
		1715 - 1730	Aviana's SARS-CoV-2 Diagnostic: Identifying Acute Viral Infection, Viral Load, and Serology: A Novel Technology with Potential for the Warfighter	MHSRS-22-07709	Anand Singh, M.S.
		1730 - 1745	Determining Mixed SARS-CoV-2 Genotype Infections: A Bioinformatic Framework Developed Using the EPICC Cohort	MHSRS-22-05174	Kimberly Bishop-Lilly, Ph.D.
1745 - 1800	Human-Immune-System Humanized DRAGA Mice (HLA-A2.HLA-DR4.Rag1 KO.IL-2RgckO.NOD) as Surrogate In Vivo Human Model for COVID-19 Research and Generation of Therapeutic Human Monoclonal Antibodies	MHSRS-22-05060	Sofia Casares		

# Breakout Sessions



## Monday, 12 September

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
<b>Three Hour Session</b> <b>1500-1800</b>	<b>Improving Warfighter Readiness and Performance through Health Services Research</b> <b>Tracey P. Koehlmoos, Ph.D.</b> <b>Moderator</b>	1500 - 1515	Introduction	MHSRS_22-NA29	Tracey K. Koehlmoos, Ph.D.
		1515 - 1530	The Musculoskeletal Outcomes and Readiness Evaluation (MORE) Project: Introduction to a Large, Multiservice Analysis of Health Care Trajectories and Endpoints	MHSRS-22-06975	Daniel Clifton, Ph.D.
		1530 - 1545	Protocol for the Implementation of Psychologically-informed Physical Therapy to Prevent Chronification in Service Members with Musculoskeletal Disorders (MSD)	MHSRS-22-05806	Marco Campello, Ph.D.
		1545-1600	Factors Associated with Utilization of Embedded Mental Healthcare Services Among U.S. Air Force Remotely Piloted Aircraft Operators	MHSRS-22-04928	Rachel Martinez, Ph.D.
		1600-1615	Healthcare Utilization and Readiness Outcomes Among Soldiers With Post-Deployment At-Risk Drinking, By Multimorbidity Class	MHSRS-22-06941	Rachel Sako Adams, Ph.D.
		1615-1630	Barriers and Potential Solutions to Implementing Evidence-Based PTSD Treatment in Military Treatment Facilities	MHSRS-22-04892	Carmen McLean, Ph.D.
		1630 - 1645	Big Data, Big Team: The Comparative Effectiveness and Provider-Induced Demand Collaboration (EPIC) Project	MHSRS-22-07020	Tracey K. Koehlmoos, Ph.D.
		1645 - 1700	Improving Definitive Care for Wounded Warriors in a Near-Peer Conflict: The Military-Civilian National Disaster Medical System Interoperability Study (MCNIS)	MHSRS-22-05824	CAPT Eric Deussing, USN
		1700 - 1715	Changes in Surgical Delivery for Elective and Surgical Interventions in the Military Health System During the COVID-19 Pandemic	MHSRS-22-05572	Alysa Pomer, Ph.D.
		1715-1800	Fishbowl Discussion		

# Breakout Sessions



## Monday, 12 September

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Three Hour Session 1500 - 1800	<p><b>1500-1600</b> Reducing Death From Injury: Timing is Everything and Other Lessons Never Too Late to Learn</p> <p>Col Stacy A. Shackelford, USAF Moderator</p> <p><b>1600-1800</b> Case Records of the Joint Trauma System</p> <p>COL Jennifer M. Gurney, USA John Holcomb, M.D. Moderators</p>	1500 - 1600	Reducing Death From Injury: Timing is Everything and Other Lessons Never Too Late to Learn	MHSRS-22-NAS06	Col Stacy Shackelford, USAF Deborah del Junco, Ph.D.
		1600 - 1800	Case Records of the Joint Trauma System	MHSRS-22-NAS05	COL Martin Schreiber, M.D., USAR CAPT Jay Yelon, USN CAPT Travis Polk, USN Nicholas Naimas, M.D, MBA Jayson Aydelotte, M.D. Lt Col Valerie Sams, USAF LTC Jason Radowsky, USA Raymond Fang, M.D., Col (Ret) USAF COL Mark Buzzelli, USA Deborah Stein, M.D. Col Stacy Shackelford, USAF
Three Hour Session 1500 - 1800	<p><b>Treatment Strategies Following Musculoskeletal Injury</b></p> <p>Brad D. Isaacson, Ph.D. Elizabeth Russell Esposito, Ph.D. Brad D. Hendershot, Ph.D. Linzie Wagner, PMP, CRA Moderators</p>	1500 - 1515	Musculoskeletal Injuries - The Impact to Military Readiness and Resilience	MHSRS_22-NA14	Paul Pasquina, M.D.
		1515 - 1530	Surveyed Reasons for Seeking Care for Musculoskeletal Injuries During Military Training	MHSRS-22-07060	Carolyn Dartt, MEd, ATC
		1530 - 1545	An Examination of Potential Barriers and Facilitators to Implementing Direct Access to Physical Therapy in Military Health System (MHS) Direct Care	MHSRS-22-06412	Wayne Dickey, Ph.D.
		1545 - 1600	Adverse Outcomes Associated with Persistent Psychotropic Polypharmacy Treatment for Behavioral Health and Pain Conditions Among a Cohort of Army Active Duty Soldiers	MHSRS-22-06629	Mark Bauer, M.D.
		1600 - 1615	Variation in Non-pharmacologic and Opioid Prescribing Patterns Among Military Providers Treating Soldiers Diagnosed with Low Back Pain in the Military Health System	MHSRS-22-07232	Patrick Richard, Ph.D.
		1615 - 1630	What Is the Surgical Burden of Treatment for High Energy Lower Extremity Trauma?	MHSRS-22-07311	Christopher Stewart, M.D.
		1630 - 1645	Break		
		1645 - 1700	Long-Term Health Outcomes of Limb Salvage versus Amputation for Combat-Related Trauma	MHSRS-22-05568	Jeremy Tran, M.D.
		1700 - 1715	Implications of Extremity Tourniquet Use on Wound Infection	MHSRS-22-05616	Stefanie Shiels, Ph.D.
		1715 - 1730	Developing Optical Redox Imaging for Diagnosis and Treatment Evaluation of Osteoarthritis and Post-Traumatic Osteoarthritis: Effects of Oxygen Tension and Glucose Availability	MHSRS-22-07110	Corinne R. Henak, Ph.D.
		1730 - 1745	The Influence of Therapeutic Exercise After Ankle Sprain on the Incidence of Subsequent Knee, Hip and Lumbar Spine Injury in the Military Health System	MHSRS-22-06641	Kaitlyn Foster, PT, DPT
		1745 - 1800	Arthroscopic Bankart Repair for Recurrent Anterior Shoulder Instability Recovers Faster Than Arthroscopic Posterior Capsulolabral Repair	MHSRS-22-06013	CPT Patrick Rooney, USA

# Breakout Sessions



## Monday, 12 September

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Three Hour Session 1500 - 1800	Antimicrobial Development to Counter Wound Infections in Military Personnel  CDR Mark P. Simons, USN Elizabeth Chipriano, M.S. Moderators	1500 - 1510	Effective Treatment of Wound Infections via the Microbiome - Without Antimicrobials	MHSRS-22-5487	Frank Sams-Dodd, Ph.D.
		1510 - 1520	Prophylactic Tobramycin Injection Reduces Infection Following Internal Fixation of Open Fractures	MHSRS-22-5622	Arun Aneja, M.D., Ph.D.
		1520 - 1530	Bacterial "Suicide" via a Toxin-Antitoxin System in Pseudomonas aeruginosa and Acinetobacter baumannii	MHSRS-22-5627	Monique van Hoek, Ph.D.
		1530 - 1540	Preclinical and Early Development Pipeline of Novel Antimicrobials	MHSRS-22-5517	LT Alexandria Kesterson, USN
		1540 - 1550	Functionalized Titanium Implant Surfaces for Enhanced Antibacterial Properties and Improved Osteointegration	MHSRS-22-7304	Sachin Kadian, Ph.D.
		1550 - 1600	Comparative Efficacy of EBL-1003 (Apramycin) in the Treatment of Carbapenem-resistant Acinetobacter baumannii (CRAB) Infections	MHSRS-22-6139	Sven Hobbie, Ph.D.
		1600-1610	Q&A		
		1610 - 1630	Break		
		1630 - 1640	GelATA Wound Care Dressing Against Hostile Wound Infection by Hyperbiofilm Forming Bacteria	MHSRS-22-6267	Mohamed El Masry, M.D., Ph.D.
		1640 - 1650	Next-generation Anti-Infective Biologics: Combating Multi-Drug Resistant Bacterial Wound Infection, Pneumonia and Sepsis with Cocktails of Thermostabilized, Broadly-Neutralizing Antibodies Engineered for Intramuscular Delivery	MHSRS-22-5638	Jacob Glanville, Ph.D.
		1650 - 1700	Advancing the Rational Design of Durable Fixed Bacteriophage Cocktails against Multidrug Resistant Bacterial Pathogen	MHSRS-22-7305	Mikeljon Nikolich, Ph.D.
		1700 - 1710	D-PLEX, a Doxycycline Releasing Antimicrobial Product for Surgical Site Wounds, Reduces Surgical Site Infection Rates and Drug Resistant-bacteria in Surgical Injuries of Soft and Bone Tissues	MHSRS-22-4920	Noam Emanuel, Ph.D.
		1710 - 1720	Blue Light Revives Antibiotic Sensitivity in Multidrug-resistant Bacteria via Multiple Mechanisms	MHSRS-22-7212	Leon Leanse, Ph.D.
		1720 - 1730	Local Antibiotic Therapy for Open Long Bone Fractures: Appropriate Prophylaxis or Unnecessary Exposure for the Orthopedic Trauma Patient?	MHSRS-22-7602	Khaled El-Qawaqzeh. M.D.
		1730 - 1740	Q&A		
1740 - 1800	Networking				

# Breakout Sessions



## Monday, 12 September

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Three Hour Session 1500 - 1800	<b>Advanced Decision Support and Automation Technologies to Support Combat Casualty Care in Future Multi-Domain Operations</b>  Jose Salinas, Ph.D. Nathan Fisher, M.S. Moderators	1500 - 1512	Development of a Clinical Decision Support System to Support Prolonged Field Care at the Point of Injury	MHSRS-22-07322	Amy Papadopoulos, Ph.D.
		1512 - 1524	Machine Learning Development and External Validation of Novel Primary and Secondary Triage Tools for Mass Casualty Incidents	MHSRS-22-06386	MAJ Nabeela Malik, USA
		1524 - 1536	Continuous Vital Sign Prediction of Rotterdam Score After Traumatic Brain Injury	MHSRS-22-07386	Ryan Felix, B.S.
		1536 - 1548	Automated Diagnosis of Foot and Ankle Injuries in Radiographs with Deep Hierarchical Attention Based Multiple Instance Learning Convolutional Neural Network (HAMIL-Net)	MHSRS-22-06217	Chun-Nan Hsu, Ph.D.
		1548 - 1600	A Mathematical Model for Simulation of Vasoplegic Shock and Vasopressor Therapy	MHSRS-22-05642	Yi-Ming Kao
		1600 - 1612	Flight Assessment of a Remotely Controlled and Monitored Medical Device Platform for Airborne Casualty Evacuation	MHSRS-22-07114	Zachary Buono, M.S.
		1612 - 1624	Identifying Critical DQ2 with Compensatory Reserve During Simulated Hemorrhage in Humans	MHSRS-22-05258	Victor Convertino, Ph.D.
		1624 - 1640	Break		
		1640 - 1652	TCCC Decision Support with ML Prediction of Hemorrhage Risk, Shock Probability	MHSRS-22-05561	Christopher Nemeth, Ph.D.
		1652 - 1704	Augmented Reality Technology Is a Usable Tool for the Reduction of Cognitive Workload When Caring for Burn Casualties	MHSRS-22-05044	MAJ Angela Samosorn, USA Sena Veazey, M.S.
		1704 - 1716	ASAP: A Semi-Autonomous Precise Robotic Framework for Remote Surgery Under Delays	MHSRS-22-06855	Juan Wachs, Ph.D.
		1716 - 1728	Robotic Perception Technologies for Combat Casualty Care Applications	MHSRS-22-06645	Ethan Quist, M.S.
		1728 - 1740	Real-Time Vessel Tracking for Ultrasound-Guided Semi-Automated Vascular Access	MHSRS-22-05679	Lars Gjestebj, Ph.D.
		1740 - 1800	MICROSOFT CORPORATION: Visions of the Future. Operational Medicine Today, Tomorrow, and Beyond	MHSRS_22-NA36	Michael Uohara, M.D. Danielle Micciantuono, MSN, RN

# Breakout Sessions



## Monday, 12 September

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Three Hour Session 1500 - 1800	Novel Clinical Assessments and Interventions for mild Traumatic Brain Injury Michael J. Roy, M.D., M.P.H. Sarah Fontaine, Ph.D. Moderators	1500 - 1515	Predictive Value of ANAM Composite Score on Functional Task Performance in Civilian Adults with mild Traumatic Brain Injury	MHSRS-22-07694	Mark E. Lester, DPT, Ph.D.
		1515 - 1530	An Independent Analysis of the Potential Diagnostic Accuracy of the Brain Gauge Tactile-based Cognitive Assessment Aid for Acute mild Traumatic Brain Injury Using Data from Military Service Members	MHSRS-22-06722	Brian J. Ivins, MPS
		1530 - 1545	Comparing Cerebrovascular Reactivity Stimulation Methods for Return to Duty Assessment After mild Traumatic Brain Injuries	MHSRS-22-07798	Corey M. Thibeault, Ph.D.
		1545 - 1600	A Within-Subjects Comparison of Multiple mild Traumatic Brain Injuries in Military Cadets: An NCAA-DoD CARE Consortium Study	MHSRS-22-07021	Shawn R. Eagle, Ph.D., ATC
		1600 - 1615	Quantification of Enlarged Perivascular Space in TBI Patients Using Super-Resolution 2D T2-weighted Images	MHSRS-22-07489	Rao Gullapalli, Ph.D.
		1615 - 1630	Development and Clinical Validation of Technology for Multimodal Neurocognitive Assessment of Traumatic Brain Injury among Active Duty Military Personnel	MHSRS-22-06414	Mark L. Ettenhofer, Ph.D.
		1630 - 1645	Virtual Environments for Vestibular Rehabilitation Following Traumatic Brain Injury: Comparison of Performance on Large-Scale Virtual Reality and Mobile Augmented Reality Platforms	MHSRS-22-06437	Kerry B. Rosen, Ph.D.
		1645 - 1700	Do Subjective and Objective Measures of Function Change Similarly in People with Persistent mild Traumatic Brain Injury Symptoms?	MHSRS-22-07504	Kody R. Campbell, Ph.D.
		1700 - 1715	Randomized, Controlled Clinical Trial of Acoustic Stimulation, an Allostatic Neurotechnology to Reduce Postconcussive Symptoms after mild Traumatic Brain Injury	MHSRS-22-05729	Michael J. Roy, M.D., MPH
		1715 - 1730	Strategic Memory Advanced Reasoning Training (SMART) as a Novel Approach to Cognitive Rehabilitation in Warfighters: Preliminary Findings from the VoCET Clinical Trial	MHSRS-22-06680	Jason M. Baillie, Ph.D.
		1730 - 1745	The Portable Warrior Test of Tactical Agility: A Dual-task Performance Test for mTBI Rehabilitation	MHSRS-22-05458	Karen L. McCulloch, Ph.D., PT
		1745 - 1800	Post-Deployment Accelerated Comprehensive Evaluation and Rehabilitation (PACER) Program: Early Evidence for Effective and Comprehensive Rehabilitation After mild Traumatic Brain Injury Among Late-Career Special Operators	MHSRS-22-06275	Alicia A. Swan, Ph.D.

# Breakout Sessions



## Tuesday, 13 September

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 0800 - 1000	Mitigating Bloodborne Infection Risk in Large Scale Combat Operations  COL Julie Ake, USA MAJ Baishali Kanjilal, USA Moderators	0800 - 0815	Monoclonal Antibodies with Multiple Targets to Prevent Bloodborne HIV Transmission in Combat Settings	MHSRS-22-06366	Sandhya Vasan, M.D.
		0815 - 0830	HIV Immunoprophylaxis with Bispecific Antibodies	MHSRS-22-06697	Denise Hsu, Bsc(med) MBBS, Ph.D.
		0830 - 0845	Broadly Neutralizing Monoclonal Antibody Combinations Against HIV-1	MHSRS-22-07286	Shelly Krebs, Ph.D.
		0845 - 0900	Anti-SIV Monoclonal Antibodies in Macaques Are a Robust Model for HIV Monoclonal Antibody Countermeasures in Humans	MHSRS-22-06367	Hannah King, Ph.D.
		0900 - 0915	Evaluation of Care of Military Blood Donors Screening Positive for Syphilis	MHSRS-22-05625	Capt Cara Hojniski, USAF
		0915 - 0930	Army Liposome Formulations are Potent Adjuvants for Eliciting Innate and Adaptive Immune Responses Across a Variety of Applications	MHSRS-22-05676	MAJ Joshua Carmen, USA
		0930 - 0945	Modulations to HIV-1 Specific B Cells Expressing Activation Markers Associate with Antibody Responses within the First 2 Weeks of Infection	MHSRS-22-06982	Samantha Townsley, Ph.D.
		0945 - 1000	Co-display of CSP and Pfs230 Antigens on a Liposome Vaccine Targeting Two Plasmodium Falciparum Life Stages	MHSRS-22-06696	Wei Chaio Huang, Ph.D.
Two Hour Session 0800 - 1000	Advances in Prolonged Care  Kimberly Pope, Ph.D. Sylvain Cardin, Ph.D. Moderators	0800 - 0815	Design of Intelligent, Reusable Up to 10 Day Container System for Transporting Blood to and Throughout the Battlefield for Prolonged Field Care	MHSRS-22-07003	Arif Rahman, Ph.D.
		0815 - 0830	Lightweight, Compact System for Generating Lactated Ringer's Solution	MHSRS-22-05180	Girish Srinivas, Ph.D.
		0830 - 0845	Manual Syringe Operated Dialysis for Providing Renal Replacement Therapy to Injured Combat Casualties in Austere Conditions: In vitro Clearance Study	MHSRS-22-07155	Lakhmir Chawla, M.D.
		0845 - 0900	Using Machine Learning to Assess Cardiovascular Sufficiency in the Field	MHSRS-22-06018	SFC Luke Sciulli, USA
		0900 - 0915	A Non-invasive Fracture Stabilizing Orthosis for Prolonged Care	MHSRS-22-06763	W. Brett Johnson, Ph.D.
		0915 - 0930	Twenty-Four Hour Hypothermic Machine Perfusion of Porcine Limbs Using the Universal Limb Stasis System for Extended Storage (ULISSES™)	MHSRS-22-05560	Leonid Bunegin, B.S.
		0930 - 0945	Continuous Compartmental Pressure as an Aid to Diagnose Acute Compartment Syndrome	MHSRS-22-05930	Ed Harvey, M.D., MSc
		0945 - 1000	A Comprehensive and Customizable Technology for Treatment of Acute and Chronic Wounds in the Battlefield and Beyond	MHSRS-22-06540	Spencer Brown, Ph.D. Vaidehi Shah



# Breakout Sessions



## Tuesday, 13 September

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 0800 - 1000	Pain Management for the Future Fight COL Thomas Stark, USA Jelena M. Janjic, Ph.D. Moderators	0800 - 0815	The Development of a Potent Polymeric Opioid Prodrug with Sustained Local Analgesia But No CNS Effects	MHSRS-22-05984	Xin Wei, Ph.D.
		0815 - 0830	Kratom Alkaloids as Non-addictive Analgesics, Anxiolytics, and Opioid Dependence Therapeutics: A Possible Mental Health Trifecta On and Off the Battlefield	MHSRS-22-07758	Jenny Wilkerson, Ph.D.
		0830 - 0845	Prevention of Neuropathic Pain and Neuroinflammation after Traumatic Brain Injury by Neuroprotectin D1 and GPR37 Signaling	MHSRS-22-06160	Ru-Rong Ji, Ph.D.
		0845 - 0900	Effects of Extremity Trauma on Physiological Responses and Survival to Hemorrhage in Conscious Rats	MHSRS-22-05838	Carmen Hinojosa-Laborde, Ph.D.
		0900 - 0915	Analgesics in the Pre-Hospital Setting: Effects of Ketamine, Fentanyl, and Morphine on Tolerance to Simulated Hemorrhage in Conscious Humans	MHSRS-22-04948	Craig Crandall, Ph.D.
		0915 - 0930	Low-Dose Short-Term Ketorolac Reduces Opioid Use and Pain Scores in Orthopaedic Polytrauma Patients	MHSRS-22-05614	Arun Aneja, M.D., Ph.D.
		0930 - 0945	Ketamine Decreased Opioid Use in U.S. Military Combat Operations from 2010-2019	MHSRS-22-06507	LT Sally Westcott, USN
		0945 - 1000	Mental Health Predictors of Response to Standard Medical Interventions at a Military Pain Specialty Clinic	MHSRS-22-06162	Tara Sheridan, M.D.
Two Hour Session 0800 - 1000	Expeditionary Eye Care COL Scott McClellan, USA Whitney Greene, Ph.D. Moderators	0800 - 0815	Blockade of Pro-Inflammatory Interleukin-36 Promotes Epithelial Closure in Corneal Injury	MHSRS-22-05315	WonKyung Cho, M.D.
		0815 - 0830	Topical Losartan Inhibits Corneal Scarring Fibrosis and Collagen Type IV Deposition after Descemet's Membrane-Endothelial Excision in Rabbits	MHSRS-22-05514	Steven Wilson, M.D.
		0830 - 0845	Development of a Novel Cyto-Protective Small Compound Rescuing Retinal Cells from Death	MHSRS-22-05845	Shigemi Matsuyama, DVM, Ph.D.
		0845 - 0900	Assessment of the Immune Response in a Rodent Model of Whole Eye Transplantation	MHSRS-22-07541	Bing Li, M.D.
		0900 - 0915	Development of a Medical Specific Night Vision Device for Use in Military Operations	MHSRS-22-06774	CPT Andrew Francis, USA
		0915 - 0930	Emerging Solutions to Optimize Vision and Performance for Warfighter Readiness	MHSRS-22-06956	MAJ Katelyn Earls, USA
		0930 - 0945	Toward Portable Smartphone-Based Optical Coherence Tomography for Diagnostic Eye Care	MHSRS-22-05610	Joseph Malone
		0945 - 1000	Ocular Trauma in Deployed United States Service Members from 2001-Present: A Literature Review	MHSRS-22-05905	2LT Ian Lee, USA

# Breakout Sessions



## Tuesday, 13 September

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 0800 - 1000	Clinical Practice Guidelines for Behavioral Health Interventions in Forward Locations for Non-Specialty Providers  Fuad Issa, M.D. Sharmila A. Chari, Ph.D. Moderators	0800 - 0815	Clinical Practice Guidelines for Non-Specialty Providers Managing Behavioral Health Issues in Austere Settings - An Overview	MHSRS-22-07418	Fuad Issa, M.D.
		0815 - 0830	Basic Assessment and Intervention Principles for Forward Behavioral Health Care	MHSRS-22-06328	Margaret Baisley, Ph.D.
		0830 - 0845	The Management of Serious Behavioral Health Conditions	MHSRS-22-05145	Amanda Edwards-Stewart, Ph.D.
		0845 - 0900	Pharmacotherapy in Management of Serious Behavioral Health Conditions That May Manifest in Forward Environments	MHSRS-22-07480	Fuad Issa, M.D.
		0900 - 0915	Forward Management of Provider Stress and Burnout	MHSRS-22-05613	Melissa Wilson, Ph.D.
		0915 - 0930	Behavioral Health Impact of Mass Casualty Event (MASCAL)	MHSRS-22-05978	Christina Dean, P.D.
		0930 - 0945	Key Tasks in Forward Behavioral Health Command Consultation by Non-Specialty Personnel	MHSRS-22-05395	Tim Hoyt, Ph.D.
		0945 - 1000	Preparing Medics to Address Behavioral Health Concerns on the Far-Forward Battlefield: Planned Efforts to Adapt Clinical Practice Guidelines	MHSRS-22-06615	Katie Nugent, Ph.D.
Two Hour Session 0800 - 1000	Advances in Warfighter Nutrition  Lee M. Margolis, Ph.D. Moderator	0800 - 0815	Food Format, Energy, and Essential Amino Acid Content of Isonitrogenous, Protein-containing Foods Do Not Differentially Affect Intramuscular Anabolic Signaling Pathways	MHSRS-22-05704	Jess Gwin, Ph.D.
		0815 - 0830	Ketone Ester Plus Carbohydrate Supplementation Impairs Physical Performance and Decreases Glucose Turnover versus Carbohydrate Alone	MHSRS-22-07137	Emily Howard, Ph.D.
		0830 - 0845	Efficacy of Fatty Acid-Enriched Diet Supplements to Attenuate Social Stress: A Genome-To-Phenome Analysis	MHSRS-22-05844	Nabarun Chakraborty, M.S., MBA
		0845 - 0900	Impact of Precision Nutrition Counseling for Active Duty Service Members at Risk for Metabolic Syndrome	MHSRS-22-06005	Mary McCarthy, Ph.D., RN
		0900 - 0915	Analyzing Eating Behavior within the Military Environment and Culture: Development, Use, and Results of the Military Eating Behavior Survey	MHSRS-22-06065	MAJ Julianna Jayne, USA
		0915 - 0930	Nutrition Interventions in Military Dining Facilities can Enhance Meal Quality while Promoting Meal Satisfaction	MHSRS-22-06713	Catherine Champagne, Ph.D.
		0930 - 0945	Assessment of Diet and Stress Effects in Rodent Models of Operationally-Relevant Brain Insults Using a Multi-Omics Approach	MHSRS-22-06761	James DeMar, Ph.D.
		0945 - 1000	Wrap-up		

# Breakout Sessions



## Tuesday, 13 September

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 0800 - 1000	Injury Biomechanics and Prevention for Military Applications  Frederick Brozoski, M.S. Moderator	0800 - 0815	Head Flail Corridors for Use in Occupant-Centric Vehicle Design	MHSRS-22-07097	Ardyn Olszko, M.S.
		0815 - 0830	Water Movement of Intervertebral Discs in Axial Compression	MHSRS-22-04972	Cori Espelien
		0830 - 0845	Long-Term Lumbar Spine Loading Flexion/Compression Injury and Response	MHSRS-22-07525	Concetta Morino
		0845 - 0900	Subaxial Cervical Spine Motions with Different Sizes of Head Supported Mass Under Accelerative Forces	MHSRS-22-07692	Hoon Choi, Ph.D.
		0900 - 0915	Preliminary Head-Supported Mass Performance Guidance for Dismounted Soldier Environments	MHSRS-22-07168	Adrienne Madison, Ph.D.
		0915 - 0930	Thoracic Organ Injury Tolerance from Blunt Impacts	MHSRS-22-07491	Jack Seifert, B.S.
		0930 - 0945	The Severe Limitations of Clay for Assessing Human Response for Behind Armor Blunt Trauma	MHSRS-22-07850	Joost Op 't Eynde, M.S.
		0945 - 1000	Tolerance for Behind Armor Blunt Trauma: A Novel Paradigm to Develop Regional Thoraco-abdominal Criteria	MHSRS-22-06999	Narayan Yoganandan, Ph.D.
Two Hour Session 1300 - 1500	Scientific Abstract PLENARY SESSION  Farrukh Rizvi, Ph.D. Moderator	1300 - 1315	Mental Health Diagnoses and Suicide Attempts in Combat-injured Service Members: A DoD/VA Retrospective Cohort Study	MHSRS-22-05113	Lauren E. Walker, MSSW The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc., Bethesda, MD Uniformed Services University of the Health Sciences, Bethesda, MD
		1315 - 1330	White Matter Hyperintensities, Cognitive Function, Comorbidities, Blood Biomarkers, and mild TBI: A LIMBIC-CENC Multicenter Study	MHSRS-22-07572	David F. Tate, Ph.D. University of Utah School of Medicine, Salt Lake City, UT George E. Wahlen Veterans Affairs Medical Center, Salt Lake City, UT Brigham Young University, Provo, UT
		1330 - 1345	Therapeutic Interfering Particles: A Novel, Intranasally-administered, Single-dose Agent for the Treatment and Prevention of SARS-CoV-2 Infection	MHSRS-22-07381	Leor S. Weinberger, Ph.D. VxBiosciences, Oakland, CA
		1345 - 1400	United States Military Fatalities during Operation New Dawn, Operation Inherent Resolve, and Operation Freedom's Sentinel	MHSRS-22-07841	Edward L. Mazuchowski, M.D., Ph.D. HNL Lab Medicine, Allentown, Pennsylvania Defense Health Agency, Joint Trauma System/Armed Forces Medical Examiner System, San Antonio, TX
		1400 - 1415	Whole Blood Is Associated with A Lower Independent Risk of Mortality and Improved Hemostasis: Results of a Multi-Center Prospective Observational Study of Patients in Hemorrhagic Shock	MHSRS-22-05115	Jason L. Sperry, M.D., MPH University of Pittsburgh Medical Center, Pittsburgh, PA
		1415-1430	Evaluation of Navy SEALs During Heavy Weapons Training: The Investigating Training Associated Blast Pathology (INVICTA) Study	MHSRS-22-05620	Michael J. Roy, M.D., MPH Uniformed Services University, Bethesda, MD
		1430 - 1445	Forward Operating Base Expert Telemedicine Resource Utilizing Mobile Application for Trauma (FOXTROT)	MHSRS-22-04906	COL Jennifer S. Stowe, USA U.S. Army Aeromedical Research Laboratory, Fort Rucker, AL
		1445 - 1500	Predictors of Sustained Response to Functional Restoration in a Military Population with Chronic Pain	MHSRS-22-05810	COL(ret) Diane M. Flynn, M.D. Madigan Army Medical Center, Tacoma, WA

# Breakout Sessions



## Tuesday, 13 September

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 1300 - 1500	Development of New Front Line Therapies to Prevent & Treat Endemic Viral Diseases (non SARS CoV-2)  John Dye, Ph.D. Moderator	1300 - 1315	A Phase 2 Open-Label Study to Assess the Safety and Immunogenicity of an Alum-Adjuvanted Chikungunya Virus-Like Particle (VLP) Vaccine in Prior Recipients of Other Alphavirus Vaccines Versus Alphavirus Naïve Controls	MHSRS-22-07528	LTC Melinda J. Hamer, USA
		1315 - 1330	Modeling the Kinetics of the Humoral Response to a Chikungunya Virus-like Particle Vaccine	MHSRS-22-07192	Steven T. Stoddard, M.S., Ph.D.
		1330 - 1345	Safety and Immunogenicity of a Zika Purified Inactivated Virus (ZPIV) Vaccine in Flavivirus Naïve and Japanese Encephalitis Virus (IXIARO™) or Yellow Fever (YF-VAX®) Primed Volunteers	MHSRS-22-07741	Kavon Modjarrad, M.D., Ph.D.
		1345 - 1400	Advancement of a Next Generation Needle-Free Injection Device for Effective Delivery of the Venezuelan Equine Encephalitis Virus DNA Vaccine	MHSRS-22-05154	Erin Spiegel, Ph.D.
		1400 - 1415	LAT8881 and Other Naturally Derived Human Cytokine Peptides Limit Respiratory Virus Replication and Severe Disease in Mouse Models of Viral Infection	MHSRS-22-05695	Michelle D. Tate, Ph.D.
		1415 - 1430	Combating Respiratory Infection with Microbiome-derived Biotherapeutics	MHSRS-22-05079	Christopher Belnap, Ph.D.
		1430 - 1445	Application of Unbiased Proteomics and Artificial Intelligence (AI) Methods to Prioritize Host-based Targets for Repositioning Drugs as Broad-spectrum Inhibitors of Acutely Infectious Viral Agents	MHSRS-22-05943	Aarthi Narayanan, Ph.D.
		1445 - 1500	Developing Human Monoclonal Antibody-based Therapies for Hemorrhagic Fever Viruses	MHSRS-22-06652	Andrew S. Herbert, Ph.D.
Two Hour Session 1300 - 1500	Emerging Technologies for Treatment of Non-compressible Torso Hemorrhage  Sylvain Cardin, Ph.D. CAPT Travis Polk, USN Moderators	1300 - 1315	Zone 3 Aortic Occlusion Provides Abdominal Organ Protection and May Confer a Survival Benefit Compared to Zone 1 Aortic Occlusion Following Trauma with Pelvic Injury	MHSRS-22-07836	Alexis Cralley, M.D.
		1315 - 1330	Clinical Launch of the Next Generation pREBOA-PRO™ Catheter Designed for Partial Resuscitative Endovascular Balloon Occlusion of the Aorta (REBOA)	MHSRS-22-06176	Stephanie Doris, D.O.
		1330 - 1345	Integrated Device for Semi-Automated Vascular Access by Expert and Novice Users	MHSRS-22-06420	Matthew Johnson, M.S.
		1345 - 1400	Gastroesophageal Resuscitative Occlusion of the Aorta (GROA): Tandem use with REBOA for Treatment of Lethal Abdominal Hemorrhage	MHSRS-22-05913	Brendan McCracken, M.D.
		1400 - 1415	Minimally Invasive Delivery System Rapidly Administers Counterflow Hemostatic Powder into The Abdomen to Manage Non-Compressible Truncal Hemorrhage in Swine	MHSRS-22-07414	Christian Kastrup, Ph.D.
		1415-1430	The Physiology of Aortic Flow and Pressures during Partial Resuscitative Endovascular Balloon Occlusion of the Aorta (pREBOA)	MHSRS-22-06168	Jacob Marble, B.S.
		1430 - 1445	Thermoreversible Reverse-Phase-Shift Foam for Treatment of Non-Compressible Torso Hemorrhage, a Safety Trial in a Porcine Model	MHSRS-22-06134	Ross Donaldson, M.D., MPH.
		1445 - 1500	Development of a Novel Intra-Abdominal Catheter Placement Device for Use in the Battlefield	MHSRS-22-06195	Sean Crimmins

# Breakout Sessions



## Tuesday, 13 September

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 1300 - 1500	Integrative Prevention Approaches to Decrease Harmful Behaviors and Increase Service Member Psychological Health, Readiness, & Performance MAJ Karmon D. Dyches, USA MAJ(P) Matthew LoPresti, USA Moderators	1300 - 1312	Introduction to the DoD's Integrative Prevention Strategy and Research Agenda	MHSRS_22-NA20	MAJ Karmon D. Dyches, USA
		1312 - 1330	Hazing Prevention in the United States Military: A Systematic Review	MHSRS-22-05959	Cristobal Berry-Caban, Ph.D.
		1330 - 1348	The Cohesion Assessment Team (CAT): A Multidisciplinary Unit Assessment Grounded in Army Doctrine	MHSRS-22-06131	Coleen Crouch, Ph.D.
		1348 - 1406	Community-based Participatory Approach for Violence Prevention: Using Community Translation to Adapt a Firearm Violence Intervention for Service Members in Colorado	MSHRS-22-07285	Jessica Buck-Atkinson, MPH
		1406 - 1424	Building Military Resilience Through Training: Phase II—Demonstration of Effectiveness of an Emotional Intelligence Training (EIT) Program in Military Populations	MHSRS-22-07626	COL William Killgore, USA
		1424 - 1442	Cross-cutting Prevention Model to Decrease Negative Behaviors and Increase Signature Behaviors within the Military	MHSRS-22-07482	Rachel Larson, Ph.D. Nicola Winkel, MPA
		1442 - 1500	How do Heavy Drinking Soldiers Conceptualize Sexual Consent? Examining the Intersection Between Consent and Sexual Assault Within the Military	MHSRS-22-06824	Lindsay Orchowski, Ph.D.
Two Hour Session 1300 - 1500	Advances in Regenerative Medicine Therapies for Treatment of Neuromusculoskeletal Injuries: Enabling Enhanced Functional Outcomes Judi A. Sgambato, Ph.D. Moderators	1300 - 1315	An Injectable Electrode to Augment Bone Healing: Proof of Concept Comparing Finite Element Analysis with Human and Sheep Cadaveric Modeling	MHSRS-22-07355	Peter J. Nicksic, M.D.
		1315 - 1330	NuCress™ Bone Filler Scaffold: A Multi-structural Novel Bone Growth Scaffold for Stability in Spine	MHSRS-22-06704	Malathi Srivatsan, Ph.D.
		1330 - 1345	Functional Musculoskeletal Tissue Restoration Using Bioprinted Collagen Microfiber Implants	MHSRS-22-07443	Kyle W. Christensen, Ph.D.
		1345 - 1400	Non-invasive Mechano-regeneration of Skeletal Muscle and Restoration of Function in a Rat Model of Critical Volumetric Muscle Loss Injury	MHSRS-22-06878	Giorgio Giatsidis, M.D., Ph.D.
		1400 - 1415	Humanized Skeletal Muscle in MYF5/MYOD/MYF6 Null Pig Embryos for Treatment of Volumetric Muscle Loss (VML) Injuries	MHSRS-22-05268	Mary G. Garry, Ph.D.
		1415 - 1430	NTX-001 PEG Fusion Improves Peripheral Nerve Function in a Large Bore Nerve Model	MHSRS-22-07809	Seth Schulman, M.D.
		1430 - 1445	Graft-free Repair of Peripheral Nerve Gaps Using Traction Neurogenesis	MHSRS-22-05897	Sameer B. Shah, Ph.D.
		1445 - 1500	Development of Bioactive, Piezoelectric Scaffolds as a Solution to Traumatic Nerve Injury	MHSRS-22-05148	Greg M. Harris, Ph.D.

# Breakout Sessions



## Tuesday, 13 September

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 1300 - 1500	What's New in Airway Science and Technology LTC Steven Schauer, USA Moderator	1300 - 1315	Introduction	no slides	LTC Steven Schauer, USA
		1315 - 1335	A Mixed Methods End-user Assessment to Determine the Ideal Supraglottic Airway Device for Inclusion into the Medic's Aid Bag	MHSRS-22-05876	Jessica Mendez, B.S.
		1335 - 1355	Does Cuff Design Change Insertion Force of Tracheostomy Tubes?	MHSRS-22-06023	Ulf Borg
		1400 - 1415	Pragmatic Trial Examining Oxygenation prior to Intubation (PREOXI) Trial: A Planned Multicenter Randomized Clinical Trial of Preoxygenation Strategies	MHSRS-22-06964	Kevin Gibbs, M.D.
		1415 - 1435	Direct versus Video Laryngoscope (DEVICE) Trial: A Planned, Multicenter, Randomized Clinical Trial in Emergency Departments and Intensive Care Units	MHSRS-22-07078	Matthew Prekker, M.D.
		1435 - 1455	Air Flow Standards and Performance for Portable Suction Devices Intended for Combat or Prehospital Use	MHSRS-22-07452	Saketh Ram Peri
		1455 - 1500	Wrap-up		LTC Steven Schauer, USA
Two Hour Session 1300 - 1500	Defense Health Program and U.S. Army Medical Research Funding Opportunities Rebecca A. Fisher, Ph.D. Moderator	1300 - 1305	Overview and Introduction	MHSRS-22-NAS01	Rebecca Fisher, Ph.D.
		1305 - 1320	Congressionally Directed Medical Research Programs (CDMRP) Overview	MHSRS-22-NAS01	COL Sarah Goldman, USA
		1320 - 1335	CDMRP Research Programs and Process	MHSRS-22-NAS01	Rebecca Fisher, Ph.D.
		1335 - 1350	CDMRP Funding and Strategies for Success	MHSRS-22-NAS01	Christie Vu, Ph.D.
		1350 - 1400	Small Business Innovation Research (SBIR)/Small Business Technology Transfer (STTR) Programs - Overview and Opportunities	MHSRS-22-NAS01	James R. Myers, BA
		1400 - 1410	USAMRDC and Other Transactions Agreements with the Medical Technology Consortium (MTEC)	MHSRS-22-NAS01	Sara Langdon, MBA
		1410 - 1420	Human Subjects Protections in DoD-Funded Research	MHSRS-22-NAS01	Carson Cancel, M.A., CIP
		1420 - 1430	Cooperative Research and Development Agreements in DoD-Funded Collaborations	MHSRS-22-NAS01	Robert L. Charles, JD, LLM, MPH
		1430 - 1445	Planning DoD-Funded Research and DoD Collaborations	MHSRS-22-NAS01	Akua Roach, Ph.D.
1445 - 1500	Funding Opportunities and Programs - Questions & Answers	MHSRS-22-NAS01	Panelists		

# Breakout Sessions



## Tuesday, 13 September

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 1530 - 1730	Young Investigator Competition PLENARY SESSION  Michael J. Morris, M.D. Moderator	1530 - 1540	Antimicrobial Blue Light-augmented Negative-pressure Wound Therapy	MHSRS-22-05071	Jie Hui, Ph.D. Wellman Center for Photomedicine, Massachusetts General Hospital, Boston, MA Harvard Medical School, Boston, MA
		1540 - 1550	Evaluating the Impacts of Hearing Protection on Fire Team Lethality, Survivability, Communication, and Mission Success in Dismounted Combat	MHSRS-22-06097	Rebecca E. Bieber, AuD., Ph.D., CCC-A Henry M. Jackson Foundation for the Advancement of Military Medicine Inc., Bethesda, MD Walter Reed National Military Medical Center, Bethesda, MD
		1550 - 1600	Novel Curriculum to Train Novices on Lateral Canthotomy and Cantholysis	MHSRS-22-05192	CPT Haana McMurray, USA Walter Reed National Military Medical Center, Bethesda, MD
		1600 - 1610	Antibacterial Efficacy of a Chitosan-Based Hydrogel Modified with Epsilon-Poly-L-Lysine Against Pseudomonas aeruginosa in a Murine Infected Burn Wound Model	MHSRS-22-05654	CPT Andrea Moon, USA Tripler Army Medical Center, Honolulu, Hawaii
		1610 - 1620	Bronchoalveolar Lavage Fluid Cytology of Deployed Military Personnel with Chronic Respiratory Symptoms from the STAMPEDE III Study	MHSRS-22-04995	CPT Joshua M. Boster, USA Brooke Army Medical Center, Joint Base San Antonio, Fort Sam Houston, TX
		1620 - 1630	Sleep Enhancement Technology in 2021: An Updated Survey of Apps	MHSRS-22-05713	Emily Stekl, B.A. Walter Reed Army Institute of Research, Silver Spring, MD
		1630 - 1640	Severity of Sleep Disturbance and Sleep-Related Impairment of Sailors Aboard U.S. Navy Warships	MHSRS-22-06053	Andrew Kubala, Ph.D. Leidos, Inc., San Diego, CA Naval Health Research Center, San Diego, CA
		1640 - 1650	Evaluating the Effect of the Personnel Element of the Army's Holistic Health and Fitness System on Health-Related Behaviors and Injury: An Interim Analysis	MHSRS-22-06056	MAJ Julianna M. Jayne, USA U.S. Army Research Institute of Environmental Medicine Natick, MA
		1650 - 1700	Ketamine Metabolite (2R,6R)-HNK Provides Pain Reduction via an AMPA Receptor-dependent Mechanism and Alters AMPA Receptor Expression in the vPAG	MHSRS-22-06689	MAJ Jonathan G. Yost, USA Uniformed Services University of the Health Sciences Bethesda MD
		1700 - 1710	A Pilot Study of the Flow Rate and Pressure Differences Between Four Pressurized Intraosseous Infusion Strategies in an In-Vivo Swine Model of Hemorrhagic Shock	MHSRS-22-07696	LT Phillip Fry, USN Naval Medical Center San Diego San Diego, CA
		1710 - 1720	Differential Impact of Sleep Disturbances on Suicidal Ideation in Veterans with Traumatic Brain Injury: A VA TBI Model Systems Study	MHSRS-22-05770	Alexandria V. Gonzalez, PsyD James A. Haley Veteran's Hospital Tampa, FL
1720-1730	Confidence and Utilization Are Poorly Associated with Point-of-Care Ultrasound Competency among Air Force Internal Medicine Trainees	MHSRS-22-06208	Capt Brian P. Elliott, USAF Wright Patterson Medical Center, Wright Patterson AFB, OH Boonshoft School of Medicine, Wright State University Dayton, OH		

# Breakout Sessions



## Tuesday, 13 September

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 1530 - 1730	SARS CoV-2 Clinical Studies/Epidemiology James Christensen, Ph.D. Moderator	1530 - 1545	SARS-CoV-2 Outbreak Dynamics at a United States Marine Recruit Training Facility: An Observational, Phylogenetic Cohort Study	MHSRS-22-05902	CDR Andrew Letizia, USN
		1545 - 1600	Designing a Wastewater-Based Epidemiology Study at the United States Air Force Academy: Using SARS-CoV-2 to Test a Sentinel System for Early Disease Outbreak Detection	MHSRS-22-07745	Armand Balboni, M.D., Ph.D.
		1600 - 1615	Warfighter Readiness and Post-Acute Sequelae of COVID-19 in Active Duty Marines - COVID-19 Health Action Response in Marines (CHARM) 2.0 Study	MHSRS-22-06731	LCDR Elizabeth Cooper, USN
		1615 - 1630	Prometheus 2.0 in the Field	MHSRS-22-06228	COL Viseth Ngauy, USA
		1630 - 1645	The Prevalence, Risk Factors, and Role of Vaccination in Mitigating Long COVID: Evidence from the EPICC Cohort	MHSRS-22-06156	Stephanie Richard, Ph.D.
		1645 - 1700	COVID-19 Vaccine Receipt, Infecting Genotype, and Time-since-symptom-onset Predict the Shedding of Viable SARS-CoV-2 in the Upper Respiratory Tract	MHSRS-22-07320	Darci Smith, Ph.D.
		1700 - 1715	Toward a Pan-sarbecovirus Vaccine: From Concept through Clinical Trial of a Broadly Immunogenic Nanoparticle Vaccine Platform	MHSRS-22-07783	Kayvon Modjarrad, M.D., Ph.D.
		1715 - 1730	Antibody Durability, Vaccine-related Symptoms, and Omicron Neutralization after BNT162b2 mRNA COVID-19 Vaccination in the Prospective Assessment of SARS-CoV-2 Seroconversion (PASS) Study	MHSRS-22-07869	Si'Ana Coggins, Ph.D.
Two Hour Session 1530 - 1730	En route Care Innovation - Increasing Effectiveness of En Route Combat Casualty Care Lt Col Cubby Gardner, USAF Moderator	1530 - 1545	Neuropathologic Effects of Air-Evacuation-Relevant Hypobaria on Ferrets Following Traumatic Brain Injury Combined with Hemorrhagic Shock	MHSRS-22-06609	Julie L Proctor, M.S.
		1545 - 1600	Enroute Care in Confined Spaces: Medic Posture Study	MHSRS-22-06754	Amy L. Lloyd, MSE
		1600 - 1615	Efficacy of Medical Device Alarm Integration into a Simulated H-60 Integrated Communication System	MHSRS-22-07501	Laura Kroening, B.S.
		1615 - 1630	Early Enteral Nutrition in Aeromedically Evacuated Critically Ill/Injured Patients with a Resultant Validation Algorithm for the Theater Validating Flight Surgeon (TVFS)	MHSRS-22-07153	Lt Col Sarah Huffman, USAF
		1630 - 1645	Frequency of Use for Form Fields in En-route Critical Care Medical Records to Inform Electronic Health Record Development	MHSRS-22-05683	Maj William Davis, USAF
		1645 - 1700	Automated vs Clinician Control of Inspired Oxygen in Trauma Patients	MHSRS-22-05525	Michael Goodman, M.D.
		1700 - 1715	Evacuation of Patients With Disease Nonbattle Injury by Critical Care Air Transport Teams	MHSRS-22-06484	Maj Patrick Ng, USAF
		1715 - 1730	Prehospital Time Following Traumatic Injury Is Independently Associated with the Need for In-hospital Transfusion and Early Mortality for Specific Injury Types	MHSRS-22-05463	Francis X. Guyette, M.D.



# Breakout Sessions



## Tuesday, 13 September

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 1530 - 1730	Improving Sleep in the DoD: Investigations in Operational, Therapeutic, and Biomarker Strategies  Malena Rone, Ph.D. LCDR J. Kent Werner, Jr., USN Moderators	1530 - 1545	Improving Sleep in the DoD: Investigations in Operational, Therapeutic, and Biomarker Strategies Introduction	MHSRS_22-NA21	Malena Rone, Ph.D. LCDR Kent Werner, USN
		1545 - 1600	A Comprehensive Evaluation of Sleep Disorders in Male and Female U.S. Military Personnel	MHSRS-22-05121	Vincent Mysliwec, M.D.
		1600 - 1615	Satisfaction with Crew Endurance Training: Results from U.S. Navy Senior Leaders and Surface Warfare Officers	MHSRS-22-05097	Nita Shattuck, Ph.D.
		1615 - 1630	Assessing Circadian Phase Shifts in the Operational Environment: Lessons Learned during a 72H Live-Fire Simulation	MHSRS-22-06709	Tina Burke, Ph.D.
		1630 - 1645	The Neurochemistry of Good Sleep	MHSRS-22-07608	COL William Killgore, USA
		1645 - 1700	Slow Oscillatory Transcranial Direct Current Stimulation During a Restricted Sleep Opportunity Enhances Performance During Subsequent Sustained Wakefulness	MHSRS-22-07396	John Hughes, M.D.
		1700 - 1715	Altered Aquaporin-4 Expression and Impairment of Glymphatic Function following Blast Injury	MHSRS-22-07372	Jeffery Iliff, Ph.D.
		1715 - 1730	Q&A		
Two Hour Session 1530 - 1730	Ongoing Health Issues in Military High Performance Flight  LCDR Brennan Cox, USN LT Alexandra Kaplan, USN Moderators	1530 - 1545	Investigation of Atorvastatin to Mitigate Effects of Hypobaric Neuronal Injury in a Miniature Swine Model	MHSRS-22-05531	Bianca Cerqueira, Ph.D.
		1545 - 1600	Effects of Added Mental and Physical Activity on Physically-Loaded Breathing	MHSRS-22-05781	Barbara Shykoff, Ph.D.
		1600 - 1615	Pilot-Centered Flight Simulation for Synthesizing Hypoxic Events in High-Performance Aircraft	MHSRS-22-05829	Shawn Harrison
		1615 - 1630	Predicting Hypoxia Using Eye Tracking to Better Inform Training	MHSRS-22-06455	Mitchell Tindall, Ph.D.
		1630 - 1645	Effects of Physiological Arousal on Cognitive Performance: Perceptual-Cognitive Assessment for Student Fighter Aviator Measures	MHSRS-22-07699	John Gassaway, Psy.D.
		1645 - 1700	Objective Performance Prediction and Optimization Using Physiological and Cognitive Metrics	MHSRS-22-07146	Sophia Yuditskaya, MS
		1700 - 1715	The Role of Active Musculature in Pilot Posturing: a n I-PREDICT Study	MHSRS-22-06601	Lance Frazer, Ph.D.
		1715 - 1730	Exposome Signatures of Cervical (Neck) Pain: Impact on Medical Readiness Stratification	MHSRS-22-06946	Carlos Maldonado, Ph.D.

# Breakout Sessions



## Tuesday, 13 September

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 1530 - 1730	Treatment Innovations for Acute Respiratory Distress Syndrome (ARDS) Sandy Snyder, MSN, RN Moderator	1530 - 1545	A Novel Functionally Enhanced Probiotic to Mitigate Acute Respiratory Distress Syndrome (ARDS)	MHSRS-22-05758	Christian Furlan Freguia, Ph.D.
		1545 - 1600	Designer Extracellular Vesicle Therapies for Acute Respiratory Distress Syndrome	MHSRS-22-07737	Ana I. Salazar-Puerta, M.S.
		1600 - 1615	Neutralization of Extracellular Nicotinamide Phosphoribosyltransferase Ameliorates Blast/Ventilator-induced Acute Lung Injury in Rats	MHSRS-22-05823	Milomir O. Simovic, M.D., Ph.D.
		1615 - 1630	Recombinant Human MG53 Protein Mitigates Cytokine Storm and Pyroptosis to Protect Against Influenza Virus-induced Lung Dysfunction	MHSRS-22-06775	Jianjie Ma, Ph.D.
		1630 - 1645	Rectal Delivery of Oxygen Microbubbles Augments Systemic Oxygenation in a Porcine Model of Smoke Inhalation-Induced Acute Respiratory Distress Syndrome	MHSRS-22-07266	Keely Buesing, M.D.
		1645 - 1700	COVID-19 ECMO and Right Ventricular Failure: Lessons Learned and Standardization of Management	MHSRS-22-06831	Maj Jason Thomas, USAF
		1700 - 1715	Development of a Paracorporeal Pump-Integrated Artificial Lung to Facilitate the Safe Transport of Warfighters with Life-Threatening Respiratory Failure from the Battlefield to a Regional Medical Center	MHSRS-22-07113	Dongfang Wang, M.D., Ph.D.
		1715 - 1730	Multi-Day Intensive Care Unit Evaluation of a Nitric Oxide Eluting Artificial Lung Support Device without Systemic Anticoagulation	MHSRS-22-05632	Teryn Roberts, Ph.D.
Two Hour Session 1530 - 1730	Strategic and Tactical Insights for Small Business CDR Tatana M. Olson, USN Moderator	1530-1550	Challenge and Opportunity Overview from the DHA SBIR/STTR Program Director	MHSRS-22-NAS02	CDR Tatana Olson, Ph.D.
		1550-1610	Strategic and Tactical Insights: DHA Component Acquisition Executive Organization's Perspective	MHSRS-22-NAS02	Kathleen Berst, M.B.A.
		1610-1630	Strategic and Tactical Insights: Marine Corps Systems Command Perspective	MHSRS-22-NAS02	John Philpott, M.S.
		1630-1650	Strategic and Tactical Insights: AFWERX's Perspective on Strategic Partnerships	MHSRS-22-NAS02	Col E. Mark Shusterman, USAFR
		1650-1730	Moderated Audience Q&A with Panelists and DHA SBIR/STTR Program Staff	MHSRS-22-NAS02	J.R. Myers, B.A. Colleen Gibney, M.A.

# Breakout Sessions



## Wednesday, 14 September

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 0800 - 1000	Point of Injury Care: From Bench to Battlefield Michael Adam Meledeo, Ph.D. Moderator	0800 - 0815	"Are We Doing Enough"? Prehospital Traumatic Cardiac Arrest Resuscitation - The IDF Experience	MHSRS-22-07334	MAJ Sami Gendler, IDF
		0815 - 0830	Exploring Combat Application Tourniquet Errors and Duration Among Skilled and Novice Medical Trainees	MHSRS-22-07417	Mark Mazzeo, M.S.
		0830 - 0845	Enzymatic Debridement of Burn Wounds Using the Proteolytic Gel SN514	MHSRS-22-06260	Shanmugasundaram Natesan, Ph.D.
		0845 - 0900	Towards Point-of-Care Internal Hemorrhage Detection through a Syndecan-1 Lateral Flow Assay	MHSRS-22-06844	Cassandra Parent
		0900 - 0915	Triad of Complementopathy, Endotheliopathy and Coagulopathy - Impact on Clinical Outcomes in Severely Injured Trauma Patients	MHSRS-22-05433	Zhangsheng Yang
		0915 - 0930	Immunopathology of Terminal Complement Activation and Complement C5 Blockade Creating a Pro-survival and Organ-protective Phenotype for Trauma/Hemorrhage Prolonged Damage Control Resuscitation	MHSRS-22-05799	Yansong Li, M.D.
		0930 - 0945	Maintaining Renal Function, Tissue Perfusion, and Survival Following Traumatic Shock	MHSRS-22-05255	Lusha Xiang, M.D.
		0945 - 1000	Microcirculation-targeted Resuscitation Strategies: Prognostic and Survival Benefits in a Preclinical Model of Hemorrhagic Shock	MHSRS-22-07112	Jad Khoraki, M.D.
Two Hour Session 0800 - 1000	NDAA FY18 Sec 734 - The Longitudinal Medical Study on Blast Exposure of Members of the Armed Forces: Program Overview and Updates Thuvan Piehler, Ph.D. Emma Gregory, Ph.D. Richard Shoge, Ph.D. Moderators		Introduction	no slides	Thuvan Piehler, Ph.D. Emma Gregory, Ph.D. Richard Shoge, Ph.D.
		0800-0815	The NDAA FY18 Section 734 Program: Overview of Efforts to Characterize the Effects of Repetitive, Low-Level Blast Overpressure Exposure on Brain Health and Performance	MHSRS-22-06322	CAPT Scott Cota, USN
		0815-0830	Surveillance of Blast Overpressure Studies-Pilot	MHSRS-22-05261	Steve Jones, MPH
		0830-0845	NDAA Sec 734 Line of Inquiry Weapon Systems: Overview and Blast Overpressure Tool - A Module for Human Body Blast Wave Exposure for Safer Weapons Training	MHSRS-22-06533	Raj Gupta, Ph.D.
		0845-0900	FY18 NDAA Section 734 Blast Overpressure Study: Line of Inquiry 3 of 5-Exposure Environment (Army Public Health Center, Aberdeen Proving Ground, Maryland)	MHSRS-22-04981	Timothy A. Kluchinsky Jr., Dr.PH, MSPH
		0900-0915	NDAA FY18 Section 734 Program - Line of Inquiry 4, Blast Characterization	MHSRS-22-07793	Timothy Bentley, Ph.D
		0915-0930	The NDAA FY18 Section 734 Program's Health and Performance Line of Inquiry: Overview of Findings Suggesting that Low-Level Blast Exposure Is Associated with Adverse Brain Health Outcomes	MHSRS-22-05921	Stephanie Sloley, Ph.D.
		0930-0945	Joint Health Risk Management Enhanced Capability Demonstration Experimentation for Blast Overpressure Exposure Information Management	MHSRS-22-05101	Adam Becker
		0945-1000	Q&A		

# Breakout Sessions



## Wednesday, 14 September

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 0800 - 1000	Suicide Prevention Research Initiatives in DoD  Melissa Mehalick, Ph.D. Moderator	0800 - 0820	Comparing the Clinical Utility of Universal vs. Indicated Suicide Risk Screening in the Military Primary Care Clinics: Results of the Primary Care Screening Methods Study (PRISM) Study	MHSRS-22-05602	Craig Bryan, PsyD
		0825 - 0845	A Military Health System Intervention for Firearm Suicide Prevention: Findings from the Formative Phase	MHSRS-22-07015	S. Rachel Kennedy, PhD, MPH, RN
		0850 - 0910	If They Leave Me I'll Die: Relationship Characteristics Associated with Suicide in Military Psychiatric Inpatients	MHSRS-22-07846	CPT Hannah Martinez, USA
		0915 - 0935	Evaluation Results from Implementing a Zero Suicide Systems Approach to Reduce Suicide Events at Five Air Force Bases	MHSRS-22-05414	Jessie Rudi, Ph.D.
		0940 - 1000	Individual Differences in Personality Moderate the Effects of Sleep Deprivation on Suicidal Ideation	MHSRS-22-07629	COL William Killgore, USA
Two Hour Session 0800 - 1000	Advancements in Prosthetic and Orthotic Technologies  Elizabeth Russell Esposito, Ph.D. Moderator	0800 - 0815	Lower Limb Prosthetic Suspension in Hot and Humid Environments: Hybrid Dynamic Air Exchange Versus Perforated Elastomeric Liners	MHSRS-22-07387	Glenn Klute, Ph.D.
		0815 - 0830	Pilot Clinical Verification of Active Cooling System for Improved Residual Limb Health	MHSRS-22-07250	Ryan Myers, Ph.D.
		0830 - 0845	Early Outcomes of Osseointegrated Implants in Transfemoral Amputations	MHSRS-22-06229	Ariana Sheridan, Ph.D.
		0845 - 0900	Associations Between Hip Joint Biomechanics and Patient-Reported Outcomes in Civilian Adults after Transfemoral Prosthesis Osseointegration	MHSRS-22-06356	Brecca Gaffney, Ph.D.
		0900 - 0915	Investigation of Mechanical Loading on Osseointegrated Implant Systems in Service Members with Transfemoral Limb Loss	MHSRS-22-06621	Brad Hendershot, Ph.D.
		0915 - 0930	Wearable Technology for Quantifying Osseointegrated Prosthesis Loading and Joint Movements During At-Home Use	MHSRS-22-05837	Luke Osborn, Ph.D.
		0930 - 0945	Comparing Wearable Ultrasound and Electromyographic Muscle-Based Sensing Modalities for the Continuous Classification and Prediction of Human Ambulation	MHSRS-22-07570	Nicholas Fey, Ph.D.
		0945 - 1000	Myoelectric Prosthesis Interface and Control Methodologies: Preliminary Results from the First Fifteen Subjects	MHSRS-22-06962	Matthew Wernke, Ph.D.

# Breakout Sessions



## Wednesday, 14 September

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 0800 - 1000	Employment of Advanced Technologies for Integrated Health Monitoring and Geolocation for Training and Operations in Multi-Domain Environments  LCDR Joshua Swift, USN Moderator		Introduction	MHSRS_22-NA22	LCDR Joshua Swift, USN
		0800 - 0815	Real-time Monitoring for Military Training Operations with Accurate Geolocation	MHSRS-22-06200	Brian King
		0815 - 0830	Heat-Stress Evaluation Using 3-D Virtual Human Thermoregulatory Model	MHSRS-22-05090	Jose Rubio, Ph.D.
		0830 - 0845	Aggregating Exoskeleton and Biosensor Data for Real-time Health Status Monitoring in the Field	MHSRS-22-06331	Philip Whitley, Ph.D.
		0845 - 0900	Can We Trust Wearable Personal Status Monitors? Current State of Sleep Tracking Performance and Implications for Military Use	MHSRS-22-07590	Rachel Markwald, Ph.D.
		0900 - 0915	Novel Physiological Sensor for Noninvasive Monitoring of Warfighter Health and Readiness	MHSRS-22-06820	Bernard Choi, Ph.D.
		0915 - 0930	Wearable, Multi-modal, and AI-programmed Health Monitoring through Skin-like Polymer Electronics	MHSRS-22-06895	Sihong Wang, Ph.D.
		0930 - 0945	Compensatory Reserve Metric	MHSRS-22-07819	Clifton Haider, Ph.D.
		0945 - 1000	Wearable Physiological Monitoring for Warfighters	MHSRS-22-06902	James Galagan, Ph.D.
Two Hour Session 0800 - 1000	Military Exposures and Subsequent Long-term Outcomes  Lt Col Ian Stewart, USAF Moderator	0800 - 0815	Clinical Findings of Pathologically Confirmed Constrictive Bronchiolitis in Active Duty Service Members	MHSRS-22-06931	Capt Connor J. Wakefield, USAF
		0815 - 0830	Association Between Traumatic Brain Injury and Subsequent Cardiovascular Disease Among Post-9/11 Veterans: A Long-term Impact of Military Relevant Brain Injury Consortium Study	MHSRS-22-05870	Mary Jo Pugh, Ph.D.
		0830 - 0845	Effects of Blast Severity on Symptom Presentation and Cognitive Performance	MHSRS-22-05391	Sarah L. Martindale, Ph.D.
		0845 - 0900	The Impact of History of Recurrent TBI on the Protective Effects of Resilience on Mental Health Recovery Among Service Members with Traumatic Brain Injury	MHSRS-22-04894	Rosemay A. Remigio-Baker, PhD
		0900 - 0915	Elevated FDG-PET Uptake in Left Brain Pallidum Distinguishes Between mTBI and Deployed Control Veterans and Is Related to Cumulative Number of Blast mTBIs	MHSRS-22-06939	James S. Meabon, Ph.D.
		0915 - 0930	Changes in Mental, Physical, and Behavioral Health Among Injured Service Members and Veterans From 2019-2020	MHSRS-22-04969	Cameron McCabe, Ph.D.
		0930 - 0945	Respiratory Exposure to Putative Gulf War Toxins Induces Epigenetic Alterations in Alveolar Macrophages with Subsequent Chronic Pulmonary Inflammation	MHSRS-22-07425	Adam Soloff, Ph.D.
		0945 - 1000	All-cause and Cause-specific Mortality Rates after Severe Extremity Injuries Among Previously Deployed Active Duty Service Members	MHSRS-22-06863	Jessamyn Boltz, MPH

# Breakout Sessions



## Wednesday, 14 September

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 1300 - 1510	<b>Advances in Craniofacial Trauma and Infections: Preventative, Reconstructive, Rehabilitative and Regenerative Strategies to Accelerate Return-to-Duty</b> LCDR Daniel Hammer, USN John Simecek, Ph.D. Moderators		Introduction	no slides	LCDR Daniel Hammer, USN John Simecek, Ph.D.
		1300 - 1310	An Analysis of Head and Neck Surgical Workload During Recent Combat Operations from 2002-2016	MHSRS-22-06385	Caryn Stern, DrPH
		1310 - 1320	Benefits and Limitations of Throat Packs Under Intubation Anesthesia in Oral and Maxillofacial Surgery – A Randomized Controlled Clinical Trial	MHSRS-22-05722	Andreas Pabst, M.D., Ph.D.
		1320-1330	Comparison of Operating Room Time Length with the Use of Virtual Surgical Planning Versus Conventional Treatment of Mandible Fractures	MHSRS-22-0499	Timothy Woernley, DDS
		1330 - 1340	Patient-specific Rehabilitation of Craniomaxillofacial Trauma Using Computer-assisted 3D Geometric Reconstruction Tools	MHSRS-22-06832	Beatriz Paniagua, Ph.D.
		1340 - 1350	Immediate Dental Rehabilitation in Fibula Free Flap Maxillofacial Reconstruction Utilizing a Novel Digital Workflow and 3D Printing	MHSRS-22-07818	LCDR Daniel Hammer, USN
		1350 - 1400	Returning the Warfighter Back to the Fight: The Balboa Rapid Dental Restoration Protocol Following Fibula Free Flap Maxillofacial Reconstruction	MHSRS-22-07810	CDR Michael Andersen, USN
		1400 - 1410	NMCS D In-house Teeth in a Day Protocol: Leveraging Today's Technology for Dental Rehabilitation of the Difficult Reconstruction Patient	MHSRS-22-07825	CDR Michael Andersen, USN
		1410 - 1420	Evaluation of an Ultrahydrophilic and Nanostructured Dental Implant Surface – An Innovative Option for the Regeneration of Combat-related Maxillofacial Injuries	MHSRS-22-05705	Andreas Pabst, M.D., Ph.D.
		1420 - 1430	A Conceptual Framework for a Multidisciplinary Approach and Clinical Care Pathway (CCP) to Enhance Functional Rehabilitation for Head and Neck Reconstruction Patients following Fibula Free Flap Harvest	MHSRS-22-06391	Marisa Pontillo, PT, Ph.D.
		1430 - 1440	Enhanced Functional Restoration Following Fibula Free Flap Harvest: Functional and Biomechanical Assessment of a Novel Clinical Pathway for Head and Neck Reconstruction Patients	MHSRS-22-06382	Trevor Kingsbury, Ph.D.
		1440 - 1450	The Orthodontist's Role in Post-Battlefield Craniomaxillofacial Trauma Reconstruction	MHSRS-22-6150	Maj Forrest Carter, USAF
		1450 - 1500	Novel Multi-structural Scaffold for Enhanced Bone Regeneration in Craniomaxillofacial Injury Defects	MHSRS-22-07383	David Lam, DDS, M.D., Ph.D.
		1500 - 1510	BoneTape: A Novel Biocompatible and Bioresorbable Bone Fracture Fixation Technology for Craniomaxillofacial Fracture Stabilization	MHSRS-22-06636	Michael Floros, Ph.D.

# Breakout Sessions



## Wednesday, 14 September

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 1300 - 1500	Cellular Therapeutics for Treatment of Shock and Trauma  James Bynum, Ph.D. Moderator	1300 - 1314	Pro-Regenerative Immune Cells Direct Articular Repair of Full-Thickness Osteochondral Defects in Rat	MHSRS-22-05516	Johanna Bolander, Ph.D.
		1314 - 1328	Combination of Local Mesenchymal Stem Cell Therapy and Machine Perfusion Ameliorates Ischemic Tissue Damage During the Ex Vivo Preservation of Porcine Vascularized Composite Allografts	MHSRS-22-05831	Alejandro Bernal, M.D.
		1328 - 1342	Design of Therapeutic Autologous Clots for Regeneration of Musculoskeletal Injuries	MHSRS-22-07058	Gianluca Fontana, Ph.D.
		1342 - 1356	Recombinant Coagulation Factor Synthesis via CRISPR/Cas9 Targeted Gene Overexpression	MHSRS-22-05386	CPT Danny Lammers, USA
		1356 - 1410	Gene Expression Changes During 40C Storage of Human Bone Marrow Mesenchymal Stromal Cells	MHSRS-22-05539	Barbara Christy, Ph.D.
		1410 - 1424	Functional Recovery of Trehalose-loaded Red Blood Cells after Lyophilization and Rehydration	MHSRS-22-05920	Jonathan Kopechek, Ph.D.
		1424 - 1438	Novel Platform for Delivery of Lung Cell Therapies	MHSRS-22-05540	Luiz Maracaja, M.D.
		1438 - 1452	Mechanical Rejuvenation of Mesenchymal Stem Cells for Enhancing Vascular Regeneration	MHSRS-22-05372	Aaron Baker, Ph.D.
		1452 - 1500	Wrap-up		
Two Hour Session 1300 - 1500	Acutely Administered Interventions for Battlefield Traumatic Brain Injury  J.B. Phillips, Ph.D. Krista Caudle, Ph.D. Moderators	1300 - 1305	Introduction - Moderators	no slides	J.B. Phillips, Ph.D. Krista Caudle, Ph.D.
		1305 - 1323	The Current State of Prehospital Pharmacologic Management of Moderate and Severe Traumatic Brain Injury: A Systematic Review	MHSRS-22-06265	2LT William Coburn, USA
		1323 - 1341	Acetate-based Energy Supplements Increased Mitochondrial ATP Synthesis After Penetrating Traumatic Brain Injury	MHSRS-22-05927	Jignesh Pandya, Ph.D.
		1341 - 1359	Advancing the Cerebroprotectant AST-004 to Human Traumatic Brain Injury Clinical Trials	MHSRS-22-05442	Theodore Liston, Ph.D.
		1359 - 1417	Influence of Oxygenation on Neurodegeneration following Traumatic Brain Injury in a Swine Model	MHSRS-22-05082	Brendan Beely, RRT
		1417 - 1435	The Search for a Physiologically-Meaningful Prehospital Hypotension Threshold in Major Traumatic Brain Injury	MHSRS-22-05320	Daniel Spaite, MD
		1435 - 1500	Panel Discussion		James B. Phillips, Ph.D. Krista Caudle, Ph.D. Ken Curley, M.D. Geoff Manley, M.D.

# Breakout Sessions



## Wednesday, 14 September

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 1300 - 1500	Stress and Adjustment Disorders in Military Service Members  Marija S. Kelber, Ph.D. Moderator	1300 - 1305	Stress and Adjustment Disorders in Military Service Members: An Introduction	MHSRS_22-NA35	Marija S. Kelber, Ph.D.
		1305 - 1320	The Course of Adjustment Disorder in U.S. Active Duty Service Members: Prognostic Factors, Diagnostic Change, and Functional Outcomes	MHSRS-22-06001	Maria Morgan, Ph.D.
		1320 - 1335	Adjustment Disorders in the U.S. Military: Challenges in Assessment and Diagnosis	MHSRS-22-06888	Jouhayna Bajjani-Gebara, Ph.D.
		1335 - 1350	Secondary Notation of Adjustment Reaction in Medical Encounters - A Harbinger of Adverse Service Outcomes?	MHSRS-22-07407	Timothy Powers, M.S.
		1350 - 1405	Military Healthcare Officers in War: Demographics, Deployment Characteristics, and Postdeployment Psychological Disorders	MHSRS-22-05340	Judy Dye, Ph.D.
		1405 - 1420	War and Peace: Post-Traumatic Stress Disorder Among Israel Defense Forces Soldiers, Analysis of Two Decades	MHSRS-22-06483	COL Avi Benov, IDF
		1420 - 1435	Glasgow Coma Scale Scores as Predictors for Development of PTSD in Trauma Patients	MHSRS-22-05774	COL Avi Benov, IDF
		1435 - 1450	Piloting DoD and Civilian Partnerships Using Intensive Outpatient Programs to Treat the Psychological Consequences of Sexual Assault	MHSRS-22-06284	Holly Hoffmeyer, Ph.D.
		1450 - 15000	Wrap-up		
Two Hour Session 1300 - 1500	Wearables: Future Capability, Past Successes and Current Challenges in a Deployed Environment  Alan L. Harner, M.S. Moderator		Introduction	MHSRS_22-NA23	Alan Harner, M.S.
		1300 - 1315	Optimizing the Human Weapons System through Wearable Technology for Infectious Disease Detection and Human Performance Optimization	MHSRS-22-07670	1LT Logan Hunt, USA
		1315 - 1330	West Point Proximity Logging Limited User Test: User Feedback on a Wearable Technology	MHSRS-22-07790	COL Robert von Tersch, USA
		1330 - 1345	Lessons Learned while Advancing an Infrastructure for Wearable-based Sleep Data Capture in U.S. Navy Surface Forces	MHSRS-22-07687	Rachel Markwald, Ph.D.
		1345 - 1400	Metabolic Measurement Capsule for Gut Microbiome Health Monitoring	MHSRS-22-06463	Elizabeth Ledwosinska, Ph.D.
		1400 - 1415	Bringing Reliable High-Resolution Oculometric Methods into the Field to Support the Assessment of Warfighter Health and Readiness-to-Perform	MHSRS-22-07752	Josh Ruben
		1415 - 1430	Framework for Wearable Sensor Data Characterization and Validation in Naturalistic Real-World Military Settings	MHSRS-22-06769	Scott McLean, Ph.D.
		1430 - 1445	Building Physiology Based Models for Predicting Performance Impairment	MHSRS-22-05125	Matthew Daley
		1445 - 1500	Utilizing Wearables to Develop Methods and Metrics for Assessing Collective Small Unit Lethality and In-Field Performance	MHSRS-22-05102	Meghan O'Donovan, M.S.



# Breakout Sessions



## Wednesday, 14 September

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 1300 - 1500	Technologies and Approaches to Support Specialty Virtual Health in Denied, Intermittent, or Low-Bandwidth Communications Environments  Jeannette R. Little, M.S. Moderator	1300 - 1305	Introduction	no slides	Jeanette R Little, MS
		1305 - 1317	National Emergency Tele Critical Care Network (NETCCN): The Rapid Genesis and Maturation of a Medical Intelligent System of Systems	MHSRS-22-05730	Matthew Quinn, MS
		1317 - 1329	Simulation-Based Systems Assessment for Rapid Prototyping of a National Emergency Tele-Critical Care Network	MHSRS-22-07278	LTC Patricia Schmidt, USA
		1329 - 1341	National Emergency Tele Critical Care Network (NETCCN): The Deloitte Experience and Lessons Learned from Initial Field Testing	MHSRS-22-07128	Shantaram Rangappa, M.D.
		1341 - 1353	Disaster Telemedicine Response System (DISTRESS): Development and Fielding of a Rapidly Deployable, Hardware Light On-Demand TeleCritical Care Solution for the National Emergency Tele Critical Care Network (NETCCN)	MHSRS-22-07682	Christopher Colombo, M.D.
		1353 - 1405	The COVID Gamechanger: Providing Telehealth Expertise through the National Emergency Tele-Critical Care Network (NETCCN)	MHSRS-22-05508	J. Chris Farmer, MD
		1405 - 1417	Enabling Secure, Interoperable Digital Health Platforms and Data to Scale and Coordinate Virtual Hospital Support for COVID-19, Future Disasters and MDO	MHSRS-22-07822	Tracy Rausch, CCE
		1417 - 1429	2021 Year in Review: Advanced Virtual Support to Operational Forces (ADVISOR) – Delivering Low-Bandwidth Virtual Support to the Operations Forces	MHSRS-22-05392	Michael Kile, LPN
		1429 - 1441	Physiological Monitoring-based Virtual Clinical Decision Support Tools for Austere Medicine: Pains, Gaps, and “Blue Sky” Solutions from the Medics’ Perspective	MHSRS-22-07579	Michaelina Dupnik, B.S.
		1441 - 1453	Augmented Reality Clinical Decision Support Tool Can Enhance Key Burn Management Performance	MHSRS-22-06374	Maria Serio-Melvin, Ph.D.
		1453 - 1500	Discussion/Questions		
Two Hour Session 1300 - 1500	USAMRDC Office of Regulated Activities & U.S. Food and Drug Administration: Collaborations and Regulatory Updates  MAJ Victor Zottig, USA CDR Thomas Maruna, USPHS Moderators	1300 - 1320	Introduction - Perspectives	MHSRS-22-NA24	Emily Badraslioglu (USAMRDC) Heather Agler, Ph.D. (FDA/CDRH)
		1320 - 1350	Panel - COVID-19 Response and COVID-19 Updates	MHSRS-22-NA25	Maj Scott Baker, USAF (USAMRDC) Jacqueline Gertz, Ph.D (FDA/CDRH) Heather Agler, Ph.D. (FDA/CDRH) Emily Badraslioglu (USAMRDC) Kira Moore, DVM (FDA/CDRH)
		1350 - 1420	Panel: Digital Health Technologies	MHSRS-22-NA26	Christopher Scully, Ph.D (FDA/CDRH) Sandy Weininger, Ph.D (FDA/CDRH) Heather Agler, Ph.D. (FDA/CDRH) Maj Scott Baker USAF (USAMRDC)
		1420 - 1450	Panel - Regenerative Therapy	MHSRS-22-NA27	Laura Ricles, Ph.D, (FDA/CBER) Lyal Tressler (USAMRDC)
		1450 - 1500	Wrap-up		MAJ Victor Zottig, USA CDR Thomas Maruna, USPHS

# Breakout Sessions



## Wednesday, 14 September

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 1530 - 1730	Burn Injury Management in Theater  Bonnie J. Woffenden, Ph.D. Sandy Snyder, MSN, RN Moderators	1530 - 1545	Twenty Years of Burn Care in the IDF- From the Battlefield to Rehabilitation Facilities	MHSRS-22-07271	CAPT Dimtry Kotovich, IDF
		1545 - 1600	Suitability of Wound Care Dressings and Solutions for Use with StrataGraft® Construct	MHSRS-22-05460	Ashley Schwarzenstein, M.S.
		1600 - 1615	Fish Skin Compared to Cadaver Skin as a Temporary Covering for Full Thickness Burns: An Early Feasibility Trial - 12 Month Follow-up Completion	MHSRS-22-07429	Jeffrey Shup, M.D.
		1615 - 1630	Burn-derived Mesenchymal Stem Cells Mitigate Scar Formation in Burn Wounds - A Comparison of Preclinical Efficacy in Porcine Thermal Injury Model	MHSRS-22-07715	Ayesha Aijaz, Ph.D.
		1630 - 1645	Strategy to Avoid Excessive Oxygen (SAVE-O2) in Major Burn Patients: A Multicenter Cluster Randomized, Stepped Wedge Trial for Targeted Normoxia	MHSRS-22-05957	David Douin
		1645 - 1700	Development and Implementation of an Enterally Based Resuscitation Bundle for Major Burn Injuries in an Austere Setting: Early Results from a Pilot Hybrid II Effectiveness-Implementation Randomized Trial	MHSRS-22-07221	Barclay Stewart, M.D., Ph.D.
		1700 - 1715	Feasibility Study of Lung Ultrasound Imaging to Aid in the Diagnosis of Smoke Inhalation Injury	MHSRS-22-07604	Edward Kelly, M.D.
		1715 - 1730	Thermal Damage to Skin from 8.2 and 95 GHz Microwave Exposures in Swine	MHSRS-22-05532	Randy Stone, Ph.D.
Two Hour Session 1530 - 1730	Novel Strategies for Treatment of Shock or Blood Failure: Antishock Pharmaceuticals and Blood Products  Michael Adam Meledeo, Ph.D. Moderator	1530 - 1545	Early Markers of Glycocalyx Shedding in Acute Hemorrhage as a Potential Indicator of Endotheliopathy	MHSRS-22-04935	Tiffani Chance, Ph.D.
		1545 - 1600	Human Serum Albumin for Resuscitation Following Hemorrhage in Rats Causes Hemolysis and Improves Hemodynamics Similar to Oleic Acid-Saturated Bovine Serum Albumin	MHSRS-22-05418	Alexander Penn, Ph.D.
		1600 - 1615	Safety and Efficacy of Polymerized Hemoglobin on Guinea Pig Resuscitation from Hemorrhagic Shock	MHSRS-22-07375	Cynthia R. Muller, Ph.D.
		1615 - 1630	FX06 - A Fibrin Cleavage Product - Improves Survival, Prevents Organ Damage and Ameliorates Neurocognitive Deficit after Hemorrhagic or Septic Shock via a Novel Mechanism	MHSRS-22-07134	Petra Wulfroth, Ph.D.
		1630 - 1645	Volume Resuscitation or Vasoconstriction Following Hypovolemic Shock?: What NIRS Monitoring Tells Us About Cerebral and Somatic Blood Flow	MHSRS-22-06049	Ulf Borg
		1645 - 1700	U.S. Central Command Military Blood Utilization Practices 2011 to 2020	MHSRS-22-05167	Lt Col Andrew Hall, USAF
		1700 - 1715	Synergistic Resuscitation Strategies: Fibrinogen Supplementation in Adjunct to Four-Factor Prothrombin Complex Concentrate for Trauma-related Hemorrhage	MHSRS-22-07618	Hamidreza Hosseinpour, M.D.
		1715 - 1730	4D Bio3 On-Demand Blood: Manufacturing Red Blood Cells for Warfighter and Civilian Applications	MHSRS-22-06616	Robert Thomas

# Breakout Sessions



## Wednesday, 14 September

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 1530 - 1730	<b>Innovative Technologies, Strategies, Models, and Analytical Tools for Predicting, Preventing, Tracking and Treating Musculoskeletal Injuries of the Warfighter</b>  LCDR Joshua Swift, USN Pinata Sessoms, Ph.D. Moderators		Introduction	MHSRS-22-NA28	LCDR Joshua Swift, USN Pinata Sessoms, Ph.D.
		1530-1545	Combining Automated Experimentation and Transfer Learning to Accelerate Research in Injury Biomechanics and Treatment	MHSRS-22-07240	Keith Brown, Ph.D.
		1545-1600	AI-assisted Diagnostic Musculoskeletal Ultrasound for Quantitative Injury Assessment	MHSRS-22-06207	Laura Brattain, Ph.D.
		1600-1615	Applied Fatigue Modeling for Operational Performance Evaluations	MHSRS-22-04947	Connor Pyles, M.S.
		1615-1630	Movement Assessment in Operational Units Across the DoD	MHSRS-22-06757	Lt Col Robert Briggs, USAF
		1630-1645	Using Novel Technologies to Predict Musculoskeletal Injuries in a Tactical Warfare Training Environment: Results from Air Force Special Warfare Training and Recommendations for Implementation	MHSRS-22-07400	Lt Col Ben Hando, USAF
		1645-1700	A Novel Method for Artificial Intelligence Based Ground Reaction Force Measurement from Video	MHSRS-22-07616	Travis Eliason
		1700-1715	Self-adhesive Motion Tape Fabric Sensors for Functional Movement and Muscle Engagement Monitoring	MHSRS-22-05278	Kenneth Loh, Ph.D.
		1715-1730	A Multi-day Wearable EMG e-tattoo Capable of Edge-computing for Muscle Fatigue	MHSRS-22-06172	Nanshu Lu, Ph.D.
Two Hour Session 1530 - 1730	<b>Force Health Protection: Research in Exposure and Risk Assessment</b>  David R. Mattie, Ph.D. Moderator	1530 - 1545	Comparative Analysis of Passive Dosimeter Solutions for Environmental Exposure Monitoring Aboard Submarines	MHSRS-22-05449	Mitchell Rubenstein, Ph.D.
		1545 - 1600	Dense Urban Environment Dosimetry for Actionable Information and Recording Exposure (DUE DARE)	MHSRS-22-05657	David J. Lary, Ph.D.
		1600 - 1615	Towards a Proactive Stance for Identifying Chemicals of Emerging Concern: The Department of Defense Proposed Dried Blood Spot Repository	MHSRS-22-05499	Lindsay A. Holden, Ph.D.
		1615 - 1630	Effects of Extended Duration Impulse Noise and Jet Fuel Exposures on Hearing Loss in a Rodent Model	MHSRS-22-05238	LT Maria A. Spencer, USN
		1630 - 1645	The Effect of a Single Exposure to Simulated Burn Pit Products in Mice with Healthy and Inflamed Airways and Their Response to Influenza A	MHSRS-22-07397	Claire M. Doerschuk, M.D.
		1645 - 1700	Impact of Flight on Exhaled Breath Volatile Content and Pulmonary Function	MHSRS-22-05915	Sean W. Harshman, Ph.D.
		1700 - 1715	Effects of Inhaled Chemical and Particle Mixture on Lung Surfactant (LS) Function: Linkage to Adverse Health Effects	MHSRS-22-07277	Saber Hussain, Ph.D.
		1715 - 1730	Discussion and Wrap-Up		

# Breakout Sessions



## Wednesday, 14 September

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 1530 - 1730	Artificial Intelligence, Machine Learning, and Predictive Analytics in Military Medicine  Jesus J. Caban, Ph.D. Sammy Choi, M.D. Moderators	1530 - 1540	Opening Remarks - AI/ML in Military Medicine	MHSRS_22-NA36	Jesus J. Caban, Ph.D.
		1540 - 1610	Leadership Keynote Panel	MHSRS_22-NA36	Brian C. Lein, M.D., SES Assistant Director, Healthcare Administration, DHA  Gregory Little, SES Deputy CDAO for Enterprise Capabilities DoD Chief Digital and Artificial Intelligence Office
		1610 - 1622	Medical Evaluation Readiness Information Toolset (MERIT): Developing A Data-Driven Decision Support Tool To Augment Complex Clinical Decisions	MHSRS-22-05658	Rachel Armstrong, Ph.D.
		1622 - 1634	Application of Natural Language Processing and Unsupervised Machine Learning to Understand Unmet Needs of Military Clinicians	MHSRS-22-05910	Holly Pavliscsak, B.S. Benjamin Knisely, Ph.D.
		1634 - 1646	Optimizing Concussion Care Seeking: Identification of Institutional and Individual Factors Predicting Previous Concussion Diagnosis Status	MHSRS-22-05200	Johna Register-Mihalik, Ph.D.
		1646 - 1658	EHR-based Language Models for Identifying Patients at Risk of Developing Mental Health Conditions and Suicide Ideation after first mTBI	MHSRS-22-07794	Peter Hoover, M.S.
		1658 - 1710	PASC, ACM, Cerebral Infarction Predictions Using Advanced MLOps Pipeline of EHR Data of Large Sample of VA Patients	MHSRS-22-05474	Eugene Geis, Ph.D.
		1710 - 1722	Development of Proteomic Classifier toward Early Detection of Cancer Using Longitudinal Analysis and Machine Learning	MHSRS-22-04941	Tao Liu, Ph.D.
		1722 - 1730	Closing Remarks		Jesus J. Caban, Ph.D. Sammy Choi, M.D.
Two Hour Session 1530 - 1730	Biomedical Manufacturing For Warfighter Treatment Needs  Lloyd F. Rose, Ph.D. Mary Clare McCorry, Ph.D. Moderators	1530 - 1555	Transforming Manufacturing Technologies to Achieve Scalable, Consistent, Cost-effective Production of Cell and Tissue Therapies	MHSRS-22-05397	Mary Clare McCorry, Ph.D.
		1555 - 1610	Advancing the Storage and Transport of Engineered Tissues using Anti-freeze Protein Mimics at a Radically New High Sub-zero Temperature	MHSRS-22-07711	Arthi Shridhar, Ph.D.
		1610 - 1625	Creation of Standardized, Chemically Defined, and Xeno-Free Universal Cell Culture Media for Primary Human Cells	MHSRS-22-07765	Thomas Shupe, Ph.D.
		1625 - 1640	Enabling the Scalable Modular Automated and Closed Manufacturing of the Tissue Engineered Muscle Repair (TEMR) Product for Use in Volumetric Muscle Loss (VML)	MHSRS-22-07217	Sarah Piet, Ph.D.
		1640 - 1655	Automated Manufacture of Functional, Vascularized Human Liver Tissue	MHSRS-22-05142	James Hoying, Ph.D.
		1655 - 1710	My Science Works! Now What?	MHSRS-22-06473	Mrs. Sharon Ballard
		1710 - 1725	Catapult: A Targeted Technology Maturation Pipeline to Expedite Commercialization of Transformative Technologies into Healthcare Solutions	MHSRS-22-05160	Cathy Rasmussen, Ph.D.
		1725 - 1730	Wrap-up		

# Breakout Sessions



## Wednesday, 14 September

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 1530 - 1730	From Bench to Bedside: Technology Commercialization Paul G. Michaels, eJD Moderator	1530 - 1540	Introduction	no slides	Paul G. Michaels, eJD
		1540 - 1620	Overview of the MRDC Research Program and Programmatic Acquisition Process	MHSRS-22-NAS07	Dawn L. Rosarius, SES Mark Dertzbaugh, Ph.D.
		1620-1640	Overview of the MRDC Tech Transfer Process	MHSRS-22-NAS07	Barry Datlof, MBA
		1640 - 1700	Overview of Institute of Surgical Research as a Lab and its Tech Transfer Processes	MHSRS-22-NAS07	Tammy Crowder, Ph.D.
		1700 - 1720	Overview of DHA and its Responsibilities for the Tech Transfer Process	MHSRS-22-NAS07	Robert Charles, JD
		1720-1730	Discussion and Wrap-up		

# Breakout Sessions



## Thursday, 15 September

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 0845 - 1045	Sepsis 360 - Early Detection and Treatment in the Operational Environment  LTC Tyson J. Sjulín, USA Moderator	0845 - 0858	Transcriptomic and Metabolite Panel of Early Markers to Predict Onset of Burn Sepsis within One Day of ICU Admission: A Longitudinal Study in Burn Sepsis Patients	MHSRS-22-05819	Nabarun Chakraborty, M.S., MBA
		0858 - 0911	Development of a Nanopore Sequencing Assay for the Quantification of Host-Response Features that Predict Mortality in Sepsis Subjects	MHSRS-22-06462	Josh Chenoweth, Ph.D.
		0911 - 0924	Multiplexed Host Immune Response Biosensor for Rapid Sepsis Stratification and Endotyping at the Point-of-Care	MHSRS-22-06836	Danielle Clark, Ph.D.
		0924 - 0937	Early Prediction of Bacterial Sepsis in Trauma Patients Using Fluorescence Probes and Associated Immune Mechanisms	MHSRS-22-05766	Yanfang Feng, Ph.D.
		0937 - 0950	Identifying Neutrophil Phenotypes in Sepsis Patients Using a Synergistic Combination of Organ-on-chip, Proteomic Analysis and Machine Learning	MHSRS-22-05364	Qingliang Yang, M.S.
		0950 - 1003	Thermal Imaging Technology for the Detection of Surgical Site Infections in Clinical and Telemedicine Settings	MHSRS-22-05482	CPT Beau Prey, USA
		1003 - 1016	Hemoperfusion for Rapid Source Control During Bloodstream Infections	MHSRS-22-06716	Keith McCrea, Ph.D.
		1016 - 1029	Seasonality of Microbiology of Combat-related Wound Infections in Afghanistan	MHSRS-22-05131	Capt Matthew Soderstrom, USAF
		1029 - 1042	Disease Agnostic Countermeasures for Biological Warfare	MHSRS-22-06400	COL David Saunders, USA
		1042 - 1045	Wrap-Up		
Two Hour Session 0845 - 1045	Trauma Resuscitation and Critical Care on the Future Battlefield  Caryn Stern, DrPH, MPH Moderator	0845 - 0900	Extrapolating Civilian Prolonged Casualty Care Data to the Military Context	MHSRS-22-06932	LTC Steven Shauer, USA
		0900 - 0915	Killed In Action (KIA): An Analysis of Military Personnel Who Died of Their Injuries Before Reaching Definitive Medical Treatment in Afghanistan (2004-2014)	MHSRS-22-04909	Maj Stacey Webster, RAMC
		0915 - 0930	Managing Combat-Related Vascular Injuries: Are Our General Surgeons Adequately Prepared?	MHSRS-22-04897	LT Joseph Lee, USN
		0930 - 0945	Low Titer Group O Whole Blood Data Sources Among Combat Casualties	MHSRS-22-07309	COL Jennifer Gurney, USA
		0945 - 1000	Development, Validation and Usability of a Prehospital Environment Massive Transfusion Prediction Algorithm	MHSRS-22-05435	Scott Grey, Ph.D.
		1000 - 1015	The Internal Jugular Vein-to-Common Carotid Artery Doppler Power Ratio as a Central Venous Pressure Surrogate During Simulated Hemorrhage and Transfusion: Proof-of-Principle Measurements from a Wireless, Wearable Ultrasound	MHSRS-22-07256	Jon-Émile S. Kenny, M.D.
		1015 - 1030	Lyophilized Synthetic Platelet (Lyo-SynthoPlate™) Technology for Far Forward Hemorrhage Control	MHSRS-22-06114	Ujjal DS Sekhon, Ph.D.
		1030 - 1045	Strategy to Avoid Excessive Oxygen (SAVE-O2) in Critically Ill Trauma Patients: A Multicenter Cluster-Randomized, Stepped Wedge Trial for Targeted Normoxia	MHSRS-22-06264	David J. Douin, M.D.

# Breakout Sessions



## Thursday, 15 September

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 0845 - 1045	Blast, Blunt, Accelerative Exposure in Military Training Exercises Michael J. Roy, M.D., MPH Olivia H. Webster, B.A. LTC Brian Johnson, USA Moderators	0845 - 0900	Concussive and Normative Accelerative Blunt Force Exposures in Military Training: Objective Data in Support of a 'Check Engine' Range in the Military	MHSRS-22-05478	Adam Bartsch, Ph.D., PE
		0900 - 0915	Brain Gauge™ Measure after Heavy Weapons Training in U.S. Special Operators: A Component of the INVICTA Study	MHSRS-22-05529	David O. Keyser, Ph.D.
		0915 - 0930	Time Course and Interrelations Between Neurocognitive Performance and Self-Reported Symptoms Following Blast Exposure	MHSRS-22-07834	Walter Carr Ph.D.
		0930 - 0945	Blast Effects on Neurocognitive Functioning in a Mixed Sample of Special Operations and Conventional Military Forces	MHSRS-22-05675	Lars Hungerford, Ph.D.
		0945 - 1000	Increased Measures of Neuroinflammation in Special Operators with a History of Blast Overpressure Exposure	MHSRS-22-07816	James R. Stone, M.D., Ph.D.
		1000 - 1015	Investigating Tauopathy in Military Occupational Blast: A [18F]flortaucipir Positron Emission Tomography Study in Canadian Armed Forces Members	MHSRS-22-07520	Shamantha J. Lora
		1015 - 1030	Objective Measurement of Blast-related Effects Among Normal Healthy Individuals in a Longitudinal Monitoring Pilot Program	MHSRS-22-06790	Walter Carr, Ph.D.
		1030 - 1045	Lifetime Blast Exposure During Military Career Negatively Impacts Recovery from Traumatic Brain Injury	MHSRS-22-06653	Jason M. Bailie, Ph.D.
Two Hour Session 0845 - 1045	Battlefield Biomarkers for TBI: Diagnostic and Prognostic Indicators Kasey E. Moritz, Ph.D. Stephanie S. Sloley, Ph.D. Moderators	0845 - 0900	Blood-brain Barrier Permeability Changes Following Blast Overpressure Exposures in Gyrencephalic (ferret) and Lissencephalic (rat) Models	MHSRS-22-05541	Venkata R. Kakulavarapu, Ph.D.
		0900 - 0915	Longitudinal Biochemical and Behavioral Alterations in a Ferret Gyrencephalic Brain Model of Blast related mild Traumatic Brain Injury	MHSRS-22-06457	Rao P. Gullapalli, Ph.D., MBA
		0915 - 0930	Plasma Biomarkers of Traumatic Brain Injury in a Porcine Model of Injury	MHSRS-22-06852	Samuel Shin, M.D., Ph.D.
		0930 - 0945	Neuroproteomic, Bioinformatic, and System Biology Approaches in Experimental Overpressure Blast-induced Traumatic Brain Injury for Biomarker Discovery and Theranostics Potentials	MHSRS-22-05852	Hamad Yadikar, Ph.D.
		0945 - 1000	Remote Blast-related mild Traumatic Brain Injury is Associated with Differential Expression of Exosomal microRNAs Identified in Neurodegenerative and Immunological Processes	MHSRS-22-06137	Christina DeVoto, M.S.
		1000 - 1015	Biomarker-Based Precision Medicine Approach to Traumatic Brain Injury Subphenotypes – a DOD-funded 5-center Consortium Study: Interim Analyses of T-tau, P-tau, NF-L and pNF-H	MHSRS-22-06945	Kevin Wang, Ph.D.
		1015 - 1030	Admission Biomarkers Derived from Blood Multi-omics Predict 30-day Survival in Severely Injured TBI Patients with Hemorrhagic Shock	MHSRS-22-05940	Sultan Abdelhamid
		1030 - 1045	Bench to Battlefield: Key Lessons from the Fielding of the Blood Based Biomarkers to CENTCOM	MHSRS_22-NA30	LTC Bradley A. Dengler, USA

# Breakout Sessions



## Thursday, 15 September

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 0845 - 1045	Precision Medicine Research: Optimizing Warfighter Healthcare, Readiness, and Return to Duty  Victor L. Sylvia, Ph.D. CAPT Eric A. Elster, USN Moderators	0845 - 0900	A Novel, High-Prevalence and -Penetrance Single-Nucleotide Polymorphism Associated with Trauma-Associated Critical Illness	MHSRS-22-05195	Yoram Vodovotz, Ph.D.
		0900 - 0915	Contribution of Heredity to the Higher Incidence of Breast Cancer in Active Duty Servicewomen Compared to Civilian Beneficiaries	MHSRS-22-05327	Rachel Ellsworth, Ph.D.
		0915 - 0930	Genome-wide Profiling of DNA Methylome in Combat Casualty Wounds with Differing Outcomes and Colonization Status	MHSRS-22-05450	Seth Schobel, Ph.D.
		0930 - 0945	Genetic Testing May Provide New Precision Medicine Options for the Warfighter	MHSRS-22-05126	Indu Kohaar, Ph.D.
		0945 - 1000	Genetic Variation and Differential Gene Expression Profile of Shiga Toxin 2 Resistant and Sensitive Human Cell Lines	MHSRS-22-06140	Ghulam Chaudry, Ph.D.
		1000 - 1015	DHA VIPRR Care Clinic 2.0: Using Data and Formalized Process Improvement to Expand Readiness Opportunities for Underserved Service Members	MHSRS-22-05963	MAJ Garrett Larson, USA
		1015 - 1030	Distinct Inflammatory Networks Are Associated with Organ Dysfunction in Orthopaedic Trauma Patients	MHSRS-22-06479	Greg Gaski, M.D.
		1030 - 1045	A Combined Predictive Model Comprised of Circulating Biomarkers, Clinical, and Genetic Variables Improve Prognostication of Nosocomial Infection in Polytrauma Patients	MHSRS-22-05434	Henry Robertson, Ph.D.
Two Hour Session 1100 - 1300	Blast Overpressure and Acoustic Sensor, and PPE Effectiveness across Different Environmental Conditions  V. Sujith Sajja, Ph.D. Raj Gupta, Ph.D. Moderators	1100 - 1115	Comparison of Wearable Wireless Blast Sensor Technologies	MHSRS-22-06942	LTC Brian Johnson, USA
		1115 - 1130	Infrasound Measurements for U.S. Army Infantry Weapons During Training	MHSRS-22-06180	Alessio Medda, Ph.D.
		1130 - 1145	Earplug Acceleration Measurement for Monitoring Impact and Blast Exposure	MHSRS-22-07653	Anthony Dietz, Ph.D.
		1145 - 1200	Validation of Electromechanical Hearing Protection Evaluation Methods	MHSRS-22-06214	Ted Argo, Ph.D.
		1200 - 1215	Characterization of the Performance of Human Lung and Lung Plus Rib Cage Physical Models to Underwater Impulse Acoustics	MHSRS-22-05800	Brandon Casper, Ph.D.
		1215 - 1230	Transient Increase of ICP by Elevation of Intrathoracic Pressure as a Means to increase Brain Stiffness and Neurological Protectivity	MHSRS-22-07272	Vincent Bryan, Ph.D.
		1230 - 1245	Simulation and Data Analysis of Cumulative Blast Exposure in the Brain and Mitigation by Helmet Pad Placement	MHSRS-22-06743	Peter Matic, Ph.D.
		1245 - 1300	Dynamic Neck Strength as a Potential Screening Tool for Assessing Concussion Risk: A Pilot Study	MHSRS-22-05365	Theo Versteegh, Ph.D.



# Breakout Sessions



## Thursday, 15 September

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 1100 - 1300	Novel Treatments, Strategies, and Technologies in Hearing and Balance Health  Mei Sun, Ph.D. Moderator	1100 - 1110	Introduction	MHSRS_22-NA31	Mei Sun, Ph.D.
		1110 - 1120	Acute Hearing Deficits Associated with Military Training Involving Impulsive Blast	MHSRS-22-06067	Devon Kulinski, AuD
		1120 - 1130	The Design and Application of a Health Behavioral Change (HBC) Roadmap	MHSRS-22-05043	Theresa Schulz, Ph.D.
		1130 - 1140	Experimental Induction of a Stem Cell Compartment in the Adult Mouse Cochlea after Noise Exposure	MHSRS-22-07265	Dorota Piekna-Przybylska, Ph.D.
		1140 - 1150	Increasing Hearing Readiness and Reducing Referrals Using Boothless Audiometry	MHSRS-22-06135	Benjamin Sheffield, M.S.
		1150 - 1200	Vestibular Rehabilitation Exercise Compliance Using Text Message-Based Surveys Following mTBI in Military Personnel and Civilians: A T-REV Clinical Trial Study	MHSRS-22-07073	Anthony Kontos, Ph.D.
		1200 - 1210	Validating Augmented Reality Tools as Treatment Options for Vestibular Injury	MHSRS-22-06445	Vrajeshri Ordek, Ph.D.
		1210 - 1220	Mitigation of Hearing Damage with Liraglutide Treatment in Chinchillas after Repeated Blast Exposures at mild-TBI	MHSRS-22-05995	Rong Gan, Ph.D.
		1220 - 1230	Identifying Molecular Targets Underlying Noise-Induced Tinnitus	MHSRS-22-07546	McKenzie Rice
		1230 - 1240	Recommendations for a Military Health System Auditory Blast Injury Prevention Standard	MHSRS-22-06987	Elizabeth Brokaw
		1240 - 1250	Smartphone-derived 3D Head and Pinnae Modeling for Personalized 3D Virtual Audio	MHSRS-22-07205	Christopher Smalt, Ph.D.
		1250 - 1300	Wrap-up	MHSRS_22-NA32	Mei Sun, Ph.D.

# Breakout Sessions



## Thursday, 15 September

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 1100 - 1300	Updates on Military Women's Health LTC Leilani Siaki, USA CAPT Jennifer Buechel, USN MAJ Angela Phillips, USAF Moderators		Introduction	MHSRS_22-NA33	LTC Leilani Siaki, USA CAPT Jennifer Buechel, USN MAJ Angela Phillips, USAF
		1100 - 1112	Baby Bumps in the Road: Changes in Physical Performance, Human Capital, and Career Advancement Two Years Before and Two Years After Birth	MHSRS-22-07342	Jennifer Heissel, Ph.D.
		1112 - 1125	Prenatal Mentoring Intervention Fosters Improved Pregnancy Outcomes at Three Major Military Installations	MHSRS-22-05830	Karen Weis, Ph.D.
		1125 - 1138	The Experience of Living with PCOS as a Military Member	MHSRS-22-07628	Lt Col Kim Hopkins, USAF
		1138 - 1151	Intentions, Perceptions, and Behaviors of U.S. Army Female Warfighters at Risk of Urogenital Infections in Seeking Access of Water, Sanitation, and Medical Care in Operational Settings	MHSRS-22-04964	Elizabeth Kostas-Polston, Ph.D.
		1151 - 1204	Proteomic Analysis of Uterine Smooth Muscle Tumors and Rare Uterine Fibroid Variants	MHSRS-22-05710	Maj Stuart Winkler, USAF
		1204 - 1217	Refining Military Clinical Support Capabilities in Adolescent/Young Adults versus Older Adults with Cervical Cancer: An Investigation of Cancer Health Disparities Using the National Cancer Database	MHSRS-22-05886	CPT Collin Sitler, USA
		1217 - 1230	Survival of Breast Cancer Patients by Insurance Status: Comparison of Active Duty/Non-Active Duty Members in the U.S. Military Health System and the U.S. General Population	MHSRS-22-05197	Jie Lin, M.D., MPH
		1230 - 1243	Proteome Alterations Correlate with Disease Prognosis and Self-Described Race in High-Grade Endometrial Cancers	MHSRS-22-06068	G. Larry Maxwell
		1243 - 1256	Factors Contributing to Racial Disparity in Survival in All Endometrial Cancers with the Largest Disparity in Mixed Epithelial and Low-Grade Endometrioid Cancers	MHSRS-22-05646	CPT Suzanne Jokajtys, USA
		1256 - 1300		Wrap-up	

# Breakout Sessions



## Thursday, 15 September

Breakout Session Time	Breakout Session Name	Speaker Presentation Time	Presentation Title	MHSRS Number	Presenter
Two Hour Session 1100 - 1300	Military-Centric Therapeutic Strategies for Traumatic Brain Injury  Deborah Shear, Ph.D. Anke Scultetus, M.D. Moderators	1100 - 1115	Roadmap for Progress in TBI Care and Research: Recommendations from the National Academies of Sciences, Engineering, and Medicine (NASEM) Study Sponsored by the U.S. Department of Defense	MHSRS-22-6088	Michael McCrea, Ph.D.,
		1115 - 1130	Cerebral Blood Flow is Reduced During Aeromedical Evacuation-Relevant Hypobaric Following Rat Traumatic Brain Injury	MHSRS-22-07079	Gary Fiskum, Ph.D.
		1130 - 1145	PEG based HA-Dexamethasone Hydrogel Improved Motor and Cognitive Function in a Rat Moderate Controlled Cortical Impact TBI Model	MHSRS-22-07203	Jeoung Soo Lee, M.D.
		1145 - 1200	Performance of Prehospital Systolic Blood Pressure Versus Calculated Mean Arterial Pressure for Predicting Mortality in Major Traumatic Brain Injury	MHSRS-22-05371	Daniel Spite, M.D.
		1200 - 1215	Associations Among Patient-Reported and Performance-Based Assessment of Vestibular Symptoms and Function following mTBI	MHSRS-22-06789	Laura Wolf
		1215 - 1230	A Comparison of Vestibular Function between Civilian and Military mild Traumatic Brain Injury Patients	MHSRS-12-06667	Nicholas Wood
		1230 - 1245	Efficacy of Acute Hydrogen Gas Administration for Higher Brain Dysfunction after Traumatic Brain Injury	MHSRS-22-06204	MAJ Yohei Otsuka, USA
		1245 - 1300	Delayed Splenectomy versus Delayed Splenic Artery Embolization in Trauma Patients with Severe TBI	MHSRS-22-05481	CPT James Williams, USA
Two Hour Session 1100 - 1300	Research Investigations on Implementation of Novel Learning and Education Training Strategies to Improve Readiness for Battlefield Care  Michael Morris, M.D. Amber M. Mallory, Ph.D. Moderators	1100 - 1108	Session Introduction and Clinician Scientist Investigator Opportunity Network Update	MHSRS_22-NA34	Amber Mallory, Ph.D. Lt Col Joseph Maddry, USAF
		1109 - 1123	Development of a Sustainment Training Paradigm for En Route Critical Care: A Collaboration between the 59th MDW and the Texas Air National Guard	MHSRS-22-07171	Col Erik Weitzel, USAF
		1123 - 1137	Those Who Teach Can Do! Benefits to Faculty from Teaching Trauma Skills	MHSRS-22-06327	Laura Johnson, M.D.
		1137 - 1151	Simulation-based Tactical Combat Casualty Care Education Improves Military Trainees' Skill Proficiency and Self-Confidence in Tourniquet Placement: A Randomized Controlled Trial	MHSRS-22-06860	Ross Scalese, M.D.
		1151 - 1205	A Novel Curriculum to Teach Four Compartment Lower Extremity Fasciotomy to Novices	MHSRS-22-05385	COL Tyler Harris, USA
		1205 - 1219	The Perceptions of USU and HPSP Graduates Regarding Their Readiness for Their First Deployment	MHSRS-22-05594	Rebekah Cole, Ph.D.
		1219 - 1233	From Mentoring to Mastery: Transferring Trauma Surgical Skills Training to Practice	MHSRS-22-06324	COL Kirby Gross, USA
		1233 - 1247	Clinical Readiness for MASCAL Events: Outcomes from Kabul, Afghanistan	MHSRS-22-06276	MAJ Jigarkumar Patel, USA
		1247 - 1300	Development of an Enterprise Approach for Military Treatment Facility Trauma Center Designation	MHSRS-22-07762	Lt Col Valerie Sams, USAF





# Exhibitor by Booth

100.....	Borden Institute	406.....	Masimo
101.....	BlueHalo	407.....	Medical Technology Enterprise Consortium
102.....	Naval Health Research Center	412.....	KBR
103.....	Front Line Medical	413.....	Thornhill Medical
106.....	Carewear Corp.	501.....	VCOM
107.....	DTS - Diversified Technical Systems	505.....	Deloitte
108.....	Altrazeal	507.....	Advanced Technology International
109.....	PPD Development LP/ Gov't & Public Health Services	512.....	NightWare
112.....	LITES Linking Investigations in Trauma and Emergency Services	513.....	University of Pittsburgh - Center for Military Medicine Research and McGowan Institute for Regen Med
113.....	James A. Haley Veterans' Hospital-Post Deployment Rehabilitation & Evaluation Program (PREP)	600.....	Eitan Medical
114.....	Novasignal	601, 615.....	Red One Medical Devices
115.....	Elemance, LLC	602.....	4DMedical
200.....	Lactea Therapeutics	603.....	LifeFlow/Pneumeric
201.....	GE Research	603.....	Pneumeric, Inc.
202.....	Navy Entomology Center of Excellence	606.....	Delta Development Team Inc
203.....	GE Healthcare	607.....	Acumed, LLC
206.....	Eindhoven Medical	608.....	Prytime Medical Devices
207.....	Edare LLC	609.....	Cera Products, Inc.
208.....	SurgiBox, Inc.	612.....	Pinpoint Surgical
209.....	MeMed	613.....	Bloodstone Division
212.....	Teledyne Scientific & Imaging	614.....	Innovice
213.....	Paratek Pharmaceuticals	700.....	Goldbelt Frontier, LLC
214.....	Belmont Medical Technologies	701.....	Shoreland, Inc.
215.....	Aktiv Pharma Group	702.....	BrainsWay
300.....	Integrated Medcraft	703.....	Celox Medical
301.....	TVAR Solutions	706.....	NuShores Biosciences LLC
302.....	BMK Ventures, Inc./MAI	707.....	PotomacWave Consulting Inc.
302.....	Marketing Assessment, Inc.	708.....	Argentum Medical
303.....	ExThera Medical	709.....	Smith+Nephew
306.....	Defense Health Agency, Research & Engineering Directorate	712.....	Aceso Plasma
307.....	CFD Research Corporation	713.....	Baylor University
309.....	BioFabUSA	714.....	Sciperio Inc
312.....	USU Center for Biotechnology – 4D Bio3	800.....	Biohaven Pharmaceuticals
313.....	Musculoskeletal Injury Rehabilitation Research for Operational Readiness (MIRROR)	801.....	CAIRE, Inc.
315.....	The Geneva Foundation	802.....	Rheolution Inc.
400.....	Philips	803.....	Evren Technologies
401.....	Safeguard Medical	806.....	SAM Medical
		807.....	The Metis Foundation
		808.....	Coreleader Biotech
		809.....	Arcos, Inc.



# Exhibitor by Booth

812..... EPI / Alpha-Stim	1215..... Next Science
813..... Advanced Materials and Devices, Inc.	1301..... KLS Martin
814..... EMIT Corporation	1303..... Kerecis
815..... Operative Experience, Inc.	1307..... MY01, Inc
901..... US Army Medical Materiel Development Activity	1309..... Defense Intrepid Network for TBI and Brain Health (Intrepid Network)
908..... Wake Forest Institute for Regenerative Medicine	1312..... Air Force Research Laboratory/ 711th Human Performance Wing
909..... Drip Drop Hydration	1313..... Cohen Veterans Bioscience
912..... DLH Corporation	1315..... CleanSpace Technology Pty Ltd
913..... PHACON Inc	
914..... Henry Jackson Foundation for the Advancement of Military Medicine	
915..... Fujifilm Sonosite	
1008..... Naval Medical Research and Development	
1009..... U.S. Army Medical Test and Evaluation Activity	
1012..... Peli BioThermal	
1013..... Neurowave Systems	
1014..... Defender Pharmaceuticals, Inc.	
1015..... Military & Health Research Foundation	
1100..... USAMRDC Office of Regulated Activities	
1101..... Hamilton Medical	
1102..... U.S. Army Medical Research & Development Command, Office of Medical Technology Transfer	
1103..... EchoNous	
1104..... U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID)	
1107..... Butterfly Network	
1108..... USARIEM	
1109..... Naval Medical Research Unit - Dayton	
1112..... Qorvo Biotechnologies	
1113..... Aseptico	
1114..... ADS, Inc.	
1115..... Battelle	
1200..... Exact Sciences	
1201..... North American Rescue, LLC.	
1202..... JANZ Corporation	
1206..... ZOLL Medical Corporation	
1207..... Tactical Medical Solutions	
1212..... RTI International	
1213..... Perfusion Medical	
1214..... Knight Aerospace	



**Download the MHSRS mobile app  
for the latest updates.**



# Exhibitors By Category



## Blood and Coagulation Systems

Aceso Plasma  
 Aktiv Pharma Group  
 BioFabUSA  
 BMK Ventures/MAI  
 CFD Research Corporation  
 Defense Health Agency, Research & Engineering Directorate  
 Delta Development Team  
 EMIT Corporation  
 ExThera Medical  
 Integrated Medcraft  
 Marketing Assessment  
 Medical Technology Enterprise Consortium  
 Military Health Research Foundation  
 Perfusion Medical  
 Red One Medical Devices  
 Rheolution  
 Safeguard Medical  
 U.S. Army Medical Materiel Development Activity  
 University of Pittsburgh - Center for Military Medicine Research and  
 McGowan Institute for Regen Med  
 USU Center for Biotechnology – 4D Bio3

## Drug Delivery Systems

Aktiv Pharma Group  
 Altrazeal  
 Battelle  
 Baylor University  
 Defense Health Agency, Research & Engineering Directorate  
 Eitan Medical  
 GE Research  
 LifeFlow/Pneumatic  
 Medical Technology Enterprise Consortium  
 Military Health Research Foundation  
 NeuroWave Systems  
 Neurowave Systems  
 Red One Medical Devices  
 Rheolution  
 SAM Medical  
 U.S. Army Medical Materiel Development Activity  
 University of Pittsburgh - Center for Military Medicine Research and  
 McGowan Institute for Regen Med

## Education

Arcos  
 Baylor University  
 BioFabUSA  
 Borden Institute  
 Cohen Veterans Bioscience  
 Defense Intrepid Network for TBI and Brain Health (Intrepid Network)  
 DLH Corporation  
 EchoNous  
 Edare  
 Naval Health Research Center  
 Operative Experience  
 PHACON  
 U.S. Army Medical Materiel Development Activity

U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID)  
 University of Pittsburgh - Center for Military Medicine Research and  
 McGowan Institute for Regen Med  
 VCOM  
 Wake Forest Institute for Regenerative Medicine

## Emergency Medical Equipment

Aceso Plasma  
 Air Force Research Laboratory/ 711th Human Performance Wing  
 Aktiv Pharma Group  
 Aseptico  
 Baylor University  
 Belmont Medical Technologies  
 BMK Ventures/MAI  
 CAIRE  
 Delta Development Team  
 EchoNous  
 Einthoven Medical  
 EMIT Corporation  
 Fujifilm Sonosite  
 Hamilton Medical  
 Integrated Medcraft  
 JANZ Corporation  
 KLS Martin  
 LifeFlow/Pneumatic  
 Marketing Assessment  
 Masimo  
 Military Health Research Foundation  
 North American Rescue  
 Peli BioThermal  
 Philips  
 Pneumatic  
 Prytime Medical Devices  
 Red One Medical Devices  
 Safeguard Medical  
 SAM Medical  
 Thornhill Medical  
 U.S. Army Medical Materiel Development Activity  
 U.S. Army Medical Research & Development Command, Office of Medical  
 Technology Transfer

## Environmental & Occupational

Air Force Research Laboratory/ 711th Human Performance Wing  
 Battelle  
 Defense Health Agency, Research & Engineering Directorate  
 DLH Corporation  
 DTS - Diversified Technical Systems  
 Edare  
 JANZ Corporation  
 KBR  
 Marketing Assessment  
 Naval Health Research Center  
 Navy Entomology Center of Excellence  
 Naval Medical Research Unit - Dayton  
 U.S. Army Medical Materiel Development Activity  
 U.S. Army Medical Research & Development Command, Office of Medical  
 Technology Transfer

# Exhibits By Category



University of Pittsburgh - Center for Military Medicine Research and McGowan Institute for Regen Med

## Health Readiness

Advanced Technology International  
 Air Force Research Laboratory/ 711th Human Performance Wing  
 Battelle  
 Borden Institute  
 Defense Health Agency, Research & Engineering Directorate  
 Defense Intrepid Network for TBI and Brain Health (Intrepid Network)  
 Deloitte  
 DLH Corporation  
 Edare  
 Henry Jackson Foundation for the Advancement of Military Medicine  
 KBR  
 Marketing Assessment  
 Medical Technology Enterprise Consortium  
 Military Health Research Foundation  
 Musculoskeletal Injury Rehabilitation Research for Operational Readiness (MIRROR)  
 Naval Health Research Center  
 Navy Entomology Center of Excellence  
 Naval Medical Research Unit - Dayton  
 Paratek Pharmaceuticals  
 PHACON  
 Philips  
 Red One Medical Devices  
 RTI International  
 Shoreland  
 Teledyne Scientific & Imaging  
 The Geneva Foundation  
 U.S. Army Medical Materiel Development Activity  
 U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID)  
 U.S. Army Medical Test and Evaluation Activity  
 University of Pittsburgh - Center for Military Medicine Research and McGowan Institute for Regen Med  
 USU Center for Biotechnology – 4D Bio3

## Hearing & Vision

Advanced Technology International  
 Baylor University  
 Defense Health Agency, Research & Engineering Directorate  
 Defense Intrepid Network for TBI and Brain Health (Intrepid Network)  
 DTS - Diversified Technical Systems  
 Edare  
 Henry Jackson Foundation for the Advancement of Military Medicine  
 JANZ Corporation  
 Military Health Research Foundation  
 Medical Technology Enterprise Consortium  
 Naval Medical Research Unit - Dayton  
 The Geneva Foundation  
 U.S. Army Medical Materiel Development Activity  
 U.S. Army Medical Research & Development Command, Office of Medical Technology Transfer  
 University of Pittsburgh - Center for Military Medicine Research and McGowan Institute for Regen Med

## Human Performance

ADS  
 Advanced Technology International  
 Air Force Research Laboratory/ 711th Human Performance Wing  
 Battelle  
 Baylor University  
 Carewear Corp.  
 CFD Research Corporation  
 Defense Health Agency, Research & Engineering Directorate  
 Drip Drop Hydration  
 Elemance  
 Henry Jackson Foundation for the Advancement of Military Medicine  
 KBR  
 Medical Technology Enterprise Consortium  
 Military Health Research Foundation  
 Musculoskeletal Injury Rehabilitation Research for Operational Readiness (MIRROR)  
 Naval Health Research Center  
 Naval Medical Research Unit - Dayton  
 Red One Medical Devices  
 RTI International  
 Teledyne Scientific & Imaging  
 The Geneva Foundation  
 U.S. Army Medical Materiel Development Activity  
 U.S. Army Medical Research & Development Command, Office of Medical Technology Transfer  
 University of Pittsburgh - Center for Military Medicine Research and McGowan Institute for Regen Med  
 USU Center for Biotechnology – 4D Bio3

## Hydration

ADS  
 Cera Products  
 Drip Drop Hydration  
 LifeFlow/Pneumatic  
 Medical Technology Enterprise Consortium  
 Red One Medical Devices  
 U.S. Army Medical Materiel Development Activity  
 U.S. Army Medical Research & Development Command, Office of Medical Technology Transfer

## Imaging

Advanced Technology International  
 Aseptico  
 Baylor University  
 Cohen Veterans Bioscience  
 Defense Intrepid Network for TBI and Brain Health (Intrepid Network)  
 EchoNous  
 Einthoven Medical  
 Fujifilm Sonosite  
 GE Healthcare  
 JANZ Corporation  
 KBR  
 Medical Technology Enterprise Consortium  
 Philips  
 Red One Medical Devices  
 U.S. Army Medical Materiel Development Activity  
 University of Pittsburgh - Center for Military Medicine Research and McGowan Institute for Regen Med



# Exhibits By Category



## Infectious Disease - Diagnostics, Treatments

Aceso Plasma  
 Advanced Technology International  
 Battelle  
 Baylor University  
 Defense Health Agency, Research & Engineering Directorate  
 ExThera Medical  
 Henry Jackson Foundation for the Advancement of Military Medicine  
 Lactea Therapeutics  
 LifeFlow/Pneumeric  
 Medical Technology Enterprise Consortium  
 MeMed  
 Military Health Research Foundation  
 Naval Health Research Center  
 Paratek Pharmaceuticals  
 Philips  
 Qorvo Biotechnologies  
 Red One Medical Devices  
 Shoreland  
 The Geneva Foundation  
 U.S. Army Medical Materiel Development Activity  
 U.S. Army Medical Research & Development Command, Office of Medical Technology Transfer  
 U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID)  
 University of Pittsburgh - Center for Military Medicine Research and McGowan Institute for Regen Med

## Information Technology - Health

Advanced Technology International  
 Arcos  
 Battelle  
 BioFabUSA  
 Cohen Veterans Bioscience  
 Defense Intrepid Network for TBI and Brain Health (Intrepid Network)  
 Deloitte  
 DLH Corporation  
 Einthoven Medical  
 GE Healthcare  
 KBR  
 Medical Technology Enterprise Consortium  
 Military Health Research Foundation  
 Philips  
 RTI International  
 Teledyne Scientific & Imaging  
 The Geneva Foundation  
 TVAR Solutions  
 U.S. Army Medical Materiel Development Activity  
 U.S. Army Medical Research & Development Command, Office of Medical Technology Transfer  
 University of Pittsburgh - Center for Military Medicine Research and McGowan Institute for Regen Med

## Musculoskeletal Injury Prevention

Air Force Research Laboratory/ 711th Human Performance Wing  
 Carewear Corp.  
 Defense Health Agency, Research & Engineering Directorate  
 Elemance

Henry Jackson Foundation for the Advancement of Military Medicine  
 JANZ Corporation  
 KBR  
 Marketing Assessment  
 Medical Technology Enterprise Consortium  
 Military Health Research Foundation  
 Musculoskeletal Injury Rehabilitation Research for Operational Readiness (MIRROR)  
 Naval Health Research Center  
 Naval Medical Research Unit - Dayton  
 The Geneva Foundation  
 U.S. Army Medical Materiel Development Activity  
 University of Pittsburgh - Center for Military Medicine Research and McGowan Institute for Regen Med

## Nutrition

Defense Health Agency, Research & Engineering Directorate  
 Defense Intrepid Network for TBI and Brain Health (Intrepid Network)  
 Drip Drop Hydration  
 Henry Jackson Foundation for the Advancement of Military Medicine  
 Medical Technology Enterprise Consortium  
 Naval Health Research Center  
 Naval Medical Research Unit - Dayton  
 The Geneva Foundation  
 U.S. Army Medical Materiel Development Activity  
 University of Pittsburgh - Center for Military Medicine Research and McGowan Institute for Regen Med

## Osteopathy

EPI / Alpha-Stim  
 Red One Medical Devices  
 U.S. Army Medical Materiel Development Activity  
 VCOM

## Other

Arcos  
 Argentum Medical  
 BioFabUSA  
 BMK Ventures/MAI  
 BrainsWay  
 CAIRE  
 Defender Pharmaceuticals  
 DTS - Diversified Technical Systems  
 Einthoven Medical  
 Elemance  
 Fujifilm Sonosite  
 KBR  
 KLS Martin  
 Medical Technology Enterprise Consortium  
 MeMed  
 Musculoskeletal Injury Rehabilitation Research for Operational Readiness (MIRROR)  
 MY01  
 Naval Medical Research Unit - Dayton  
 Teledyne Scientific & Imaging  
 The Metis Foundation  
 TVAR Solutions  
 U.S. Army Medical Materiel Development Activity

# Exhibits By Category



Wake Forest Institute for Regenerative Medicine

## Pain Management

Biohaven Pharmaceuticals  
 Carewear Corp.  
 Defense Health Agency, Research & Engineering Directorate  
 Defense Intrepid Network for TBI and Brain Health (Intrepid Network)  
 EPI / Alpha-Stim  
 Henry Jackson Foundation for the Advancement of Military Medicine  
 Kerecis  
 Medical Technology Enterprise Consortium  
 Musculoskeletal Injury Rehabilitation Research for Operational Readiness (MIRROR)  
 Red One Medical Devices  
 The Geneva Foundation  
 U.S. Army Medical Materiel Development Activity

## Patient Transport/EnRoute Care

Aceso Plasma  
 Air Force Research Laboratory/ 711th Human Performance Wing  
 Belmont Medical Technologies  
 Defense Health Agency, Research & Engineering Directorate  
 Delta Development Team  
 Einthoven Medical  
 Hamilton Medical  
 Henry Jackson Foundation for the Advancement of Military Medicine  
 JANZ Corporation  
 KBR  
 Masimo  
 Medical Technology Enterprise Consortium  
 Military Health Research Foundation  
 Naval Health Research Center  
 Naval Medical Research Unit - Dayton  
 Philips  
 Pneumatic  
 Red One Medical Devices  
 Tactical Medical Solutions  
 The Geneva Foundation  
 Thornhill Medical  
 U.S. Army Medical Materiel Development Activity  
 U.S. Army Medical Research & Development Command, Office of Medical Technology Transfer

## Post Traumatic Stress Disorder

Advanced Materials and Devices  
 Advanced Technology International  
 Baylor University  
 Cohen Veterans Bioscience  
 Defender Pharmaceuticals  
 Defense Health Agency, Research & Engineering Directorate  
 Defense Intrepid Network for TBI and Brain Health (Intrepid Network)  
 DLH Corporation  
 EPI / Alpha-Stim  
 Evren Technologies  
 Henry Jackson Foundation for the Advancement of Military Medicine  
 James A. Haley Veterans' Hospital-Post Deployment Rehabilitation & Evaluation Program (PREP)

Medical Technology Enterprise Consortium  
 Naval Health Research Center  
 NightWare  
 Red One Medical Devices  
 The Geneva Foundation  
 U.S. Army Medical Materiel Development Activity  
 University of Pittsburgh - Center for Military Medicine Research and McGowan Institute for Regen Med

## Prosthetics

Advanced Technology International  
 Elemance  
 EPI / Alpha-Stim  
 JANZ Corporation  
 Red One Medical Devices  
 The Geneva Foundation  
 U.S. Army Medical Materiel Development Activity  
 University of Pittsburgh - Center for Military Medicine Research and McGowan Institute for Regen Med

## Psychological Health

Advanced Technology International  
 Baylor University  
 BrainsWay  
 Cohen Veterans Bioscience  
 Defense Health Agency, Research & Engineering Directorate  
 Defense Intrepid Network for TBI and Brain Health (Intrepid Network)  
 Deloitte  
 DLH Corporation  
 EPI / Alpha-Stim  
 Evren Technologies  
 Henry Jackson Foundation for the Advancement of Military Medicine  
 KBR  
 Medical Technology Enterprise Consortium  
 Naval Health Research Center  
 Naval Medical Research Unit - Dayton  
 NightWare  
 The Geneva Foundation  
 U.S. Army Medical Materiel Development Activity  
 University of Pittsburgh - Center for Military Medicine Research and McGowan Institute for Regen Med

## Radiation Health

Advanced Technology International  
 Henry Jackson Foundation for the Advancement of Military Medicine  
 U.S. Army Medical Materiel Development Activity  
 University of Pittsburgh - Center for Military Medicine Research and McGowan Institute for Regen Med  
 USU Center for Biotechnology – 4D Bio3

## Rehabilitation - Craniomaxillofacial, Limb, Neuromusculoskeletal

Advanced Technology International  
 Battelle  
 Carewear Corp.  
 Defense Health Agency, Research & Engineering Directorate  
 Defense Intrepid Network for TBI and Brain Health (Intrepid Network)

# Exhibits By Category



EPI / Alpha-Stim  
 Henry Jackson Foundation for the Advancement of Military Medicine  
 James A. Haley Veterans' Hospital-Post Deployment Rehabilitation & Evaluation Program (PREP)  
 JANZ Corporation  
 Musculoskeletal Injury Rehabilitation Research for Operational Readiness (MIRROR)  
 Naval Health Research Center  
 The Geneva Foundation  
 U.S. Army Medical Materiel Development Activity  
 University of Pittsburgh - Center for Military Medicine Research and McGowan Institute for Regen Med  
 Wake Forest Institute for Regenerative Medicine

## Simulations - Medical Training

Advanced Technology International  
 Air Force Research Laboratory/ 711th Human Performance Wing  
 BMK Ventures/MAI  
 CFD Research Corporation  
 Defense Health Agency, Research & Engineering Directorate  
 DLH Corporation  
 Elemance  
 Henry Jackson Foundation for the Advancement of Military Medicine  
 Integrated Medcraft  
 KBR  
 Marketing Assessment  
 Medical Technology Enterprise Consortium  
 Military Health Research Foundation  
 North American Rescue  
 Operative Experience  
 PHACON  
 Red One Medical Devices  
 Safeguard Medical  
 Tactical Medical Solutions  
 The Geneva Foundation  
 U.S. Army Medical Materiel Development Activity  
 University of Pittsburgh - Center for Military Medicine Research and McGowan Institute for Regen Med  
 VCOM

## Trauma Care - Point of Injury/Prehospital/ Prolonged Field Care/Forward Surgical Care

Aceso Plasma  
 Acumed  
 Advanced Materials and Devices  
 Advanced Technology International  
 Air Force Research Laboratory/ 711th Human Performance Wing  
 Aktiv Pharma Group  
 Arcos  
 Battelle  
 Baylor University  
 Belmont Medical Technologies  
 BMK Ventures/MAI  
 Borden Institute  
 CAIRE  
 Carewear Corp.  
 Celox Medical  
 Coreleader Biotech

Defense Health Agency, Research & Engineering Directorate  
 Delta Development Team  
 DLH Corporation  
 Edare  
 Einthoven Medical  
 EMIT Corporation  
 Front Line Medical  
 Hamilton Medical  
 Henry Jackson Foundation for the Advancement of Military Medicine  
 Innovice  
 Integrated Medcraft  
 JANZ Corporation  
 KBR  
 Kerecis  
 LifeFlow/Pneumeric  
 Marketing Assessment  
 Masimo  
 Medical Technology Enterprise Consortium  
 Military Health Research Foundation  
 North American Rescue  
 NuShores Biosciences  
 Operative Experience  
 Paratek Pharmaceuticals  
 Peli BioThermal  
 Perfusion Medical  
 PHACON  
 Philips  
 Pneumeric  
 Prytime Medical Devices  
 Red One Medical Devices  
 Safeguard Medical  
 Smith+Nephew  
 Tactical Medical Solutions  
 The Geneva Foundation  
 Thornhill Medical  
 U.S. Army Medical Materiel Development Activity  
 U.S. Army Medical Research & Development Command, Office of Medical Technology Transfer  
 University of Pittsburgh - Center for Military Medicine Research and McGowan Institute for Regen Med  
 USU Center for Biotechnology – 4D Bio3  
 VCOM

## Traumatic Brain Injury

Advanced Materials and Devices  
 Advanced Technology International  
 Air Force Research Laboratory/ 711th Human Performance Wing  
 Battelle  
 Baylor University  
 Belmont Medical Technologies  
 Cohen Veterans Bioscience  
 Defender Pharmaceuticals  
 Defense Health Agency, Research & Engineering Directorate  
 Defense Intrepid Network for TBI and Brain Health (Intrepid Network)  
 DLH Corporation  
 DTS - Diversified Technical Systems  
 Elemance  
 EPI / Alpha-Stim

# Exhibits By Category



Evren Technologies  
 GE Research  
 Henry Jackson Foundation for the Advancement of Military Medicine  
 Integrated Medcraft  
 James A. Haley aVeterans' Hospital-Post Deployment Rehabilitation & Evaluation Program (PREP)  
 Marketing Assessment  
 Medical Technology Enterprise Consortium  
 Military Health Research Foundation  
 Naval Health Research Center  
 PHACON  
 Philips  
 Red One Medical Devices  
 The Geneva Foundation  
 U.S. Army Medical Materiel Development Activity  
 University of Pittsburgh - Center for Military Medicine Research and McGowan Institute for Regen Med  
 VCOM

## Wound Management

Aceso Plasma  
 ADS  
 Advanced Technology International  
 Altrazeal  
 Argentum Medical  
 Battelle  
 Baylor University  
 BMK Ventures/MAI  
 Carewear Corp.  
 Coreleader Biotech  
 Defense Health Agency, Research & Engineering Directorate  
 Henry Jackson Foundation for the Advancement of Military Medicine  
 Innovice  
 Integrated Medcraft  
 JANZ Corporation  
 Kerecis  
 Lactea Therapeutics  
 Marketing Assessment  
 Medical Technology Enterprise Consortium  
 Military Health Research Foundation  
 Next Science  
 Paratek Pharmaceuticals  
 Red One Medical Devices  
 Rheolution  
 SAM Medical  
 Smith+Nephew  
 The Geneva Foundation  
 U.S. Army Medical Materiel Development Activity  
 U.S. Army Medical Research & Development Command, Office of Medical Technology Transfer  
 University of Pittsburgh - Center for Military Medicine Research and McGowan Institute for Regen Med  
 USU Center for Biotechnology – 4D Bio3



Download the MHSRS mobile app  
for the latest updates.



# Exhibits



## 4DMEDICAL | 602

[4dmedical.com/4dxvscan/](http://4dmedical.com/4dxvscan/)

4DMedical provides FDA-cleared four-dimensional lung imaging technology, to deliver insights into airflow and regional lung function during a patient's tidal breath cycle. Our XV Lung Ventilation Analysis Software (XV LVAS) is a first, as an imaging modality that quantitatively measures the regional lung function. A simple protocol using existing hospital fluoroscopy captures X-ray images and then using our proprietary flow velocity measurement technique, XV Technology provides a 4D view of lungs like never before.

## ACESO PLASMA | Booth 712

[www.acesoplasma.com](http://www.acesoplasma.com)

Aceso is a handheld portable device for wound disinfection and accelerated wound healing through the creation of high concentration, low temperature oxygen plasma

**Categories:** Blood and Coagulation Systems, Emergency Medical Equipment, Infectious Disease - Diagnostics, Treatments, Patient Transport/EnRoute Care, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care, Wound Management

## ACUMED, LLC | Booth 607

[www.acumed.net](http://www.acumed.net)

For more than 30 years, Acumed has developed innovative orthopaedic solutions designed to meet the needs of the whole health care community and improve patient outcomes.

**Categories:** Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care

## ADS, INC. | Booth 1114

[www.adsinc.com](http://www.adsinc.com)

ADS is the world's premier equipment, procurement and support solutions specialist to the military, law enforcement, first responders and the defense industry. We are focused on solving your challenges through the largest product and service selection, the broadest array of procurement and contract options, and world-class support and logistics solutions.

**Categories:** Human Performance, Hydration, Wound Management

## ADVANCED MATERIALS AND DEVICES, INC. | Booth 813

[www.amadinc.com/blastsensor](http://www.amadinc.com/blastsensor)

Advanced Materials and Devices, Inc. focuses on research and development efforts in the area of smart materials and systems. These applications includes wearable underwater and in-air blast sensors; smart material energy absorption devices for heavy military vehicle suspension systems, submarines and aerospace vehicles. Company's efforts are funded by the US Army, US Navy, Defense Health Agency, NASA, National Science foundation, and defense prime contractors.

**Categories:** Post Traumatic Stress Disorder, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care, Traumatic Brain Injury

## ADVANCED TECHNOLOGY INTERNATIONAL | Booth 507

[www.ati.org](http://www.ati.org)

When the Government needs the fastest path to disruptive technologies, it looks to the leaders in collaboration management – Advanced Technology International (ATI). ATI delivers the nation's largest innovation ecosystem and most experienced contract management teams to accelerate technology for the Government. ATI is a nonprofit based in Summerville, South Carolina.

**Categories:** Health Readiness, Hearing & Vision, Human Performance, Imaging, Infectious Disease - Diagnostics, Treatments, Information Technology - Health, Post Traumatic Stress Disorder, Prosthetics, Psychological Health, Radiation Health, Rehabilitation - Craniomaxillofacial, Limb, Neuromusculoskeletal, Simulations - Medical Training, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care, Traumatic Brain Injury, Wound Management

## AIR FORCE RESEARCH LABORATORY/ 711TH HUMAN PERFORMANCE WING | Booth 1312

[www.wpafb.af.mil/afri/711hpw/hpi](http://www.wpafb.af.mil/afri/711hpw/hpi)

**Categories:** Emergency Medical Equipment, Environmental & Occupational, Health Readiness, Human Performance, Musculoskeletal Injury Prevention, Patient Transport/EnRoute Care, Simulations - Medical Training, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care, Traumatic Brain Injury

## AKTIV PHARMA GROUP | Booth 215

[aktivpharmagroup.com](http://aktivpharmagroup.com)

Aktiv Pharma Group (Aktiv) is a specialty pharmaceutical company developing drug products in a range of glass-free proprietary prefilled delivery systems, emphasizing usability, user safety, and drug stability. Aktiv has the broadest pipeline of emergency autoinjector products for the US Government and is planning to add two additional emergency autoinjectors to the pipeline by 2023.

**Categories:** Blood and Coagulation Systems, Drug Delivery Systems, Emergency Medical Equipment, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care

## ALTRAZEAL | Booth 108

[www.altrazeal.info](http://www.altrazeal.info)

We are focused on developing innovative wound care and drug delivery systems based on its patented technology platforms. Altrazeal is a sterile, commercially available powder that transforms into a dressing upon hydration to cover and protect wounds for up to 30 days, including surgical, acute and chronic wounds and burns.

**Categories:** Drug Delivery Systems, Wound Management

## ARCOS, INC. | Booth 809

[arcosmedical.com](http://arcosmedical.com)

Arcos, Inc. makes tools to improve situational awareness during trauma massive transfusions and burn fluid resuscitations. Blood Navigator™ easily tracks blood products during massive transfusions, provides calcium reminders, coagulopathy recommendations, reports and more. Burn Navigator® provides graphs, smart alerts and protocols for fluid resuscitation of adult and pediatric severe burn patients.

**Categories:** Education, Information Technology - Health, OTHER, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care

# Exhibits



## ARGENTUM MEDICAL | Booth 708

[www.silverlon.com](http://www.silverlon.com)

Silverlon's family of advanced 7 day use silver plated antimicrobial dressing have long been considered the "Gold Standard" to the military over the last two wars to treat blast injuries, massive complex wounds and burn injuries. Silverlon dressings are effective against a broad spectrum of wound pathogens, easy to use, store and patient transport. Silverlon can be used for multiple indications and is considered a true force multiplier for both military and civilian applications.

**Categories:** OTHER, Wound Management

## ASEPTICO | Booth 1113

[www.aseptico.com](http://www.aseptico.com)

Manufacture and sales of portable Medical and Dental equipment. Aseptico strives to set the standard for excellence in the dental equipment industry, advancing dental technology with products that are unrivaled in quality and innovation. Aseptico has developed the most comprehensive line of mobile and portable dentistry equipment in the world to help deliver oral health care anywhere.

**Categories:** Emergency Medical Equipment, Imaging

## BATTELLE | Booth 1115

[www.battelle.org](http://www.battelle.org)

Battelle accelerates medical product research and development to drive injury prevention, rehabilitation, and performance optimization. We are redefining what's possible in drug delivery, usability testing, human-centric design (HCD), molecular imaging, in vitro diagnostics, medical sensor development, neurotechnology, cybersecurity, biosecurity, mobile health, and big data analytics. Our multidisciplinary, cross-industry teams advance innovation by integrating world-class expertise across a wide range of science and engineering disciplines.

**Categories:** Drug Delivery Systems, Environmental & Occupational, Health Readiness, Human Performance, Infectious Disease - Diagnostics, Treatments, Information Technology - Health, Rehabilitation - Craniomaxillofacial, Limb, Neuromusculoskeletal, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care, Traumatic Brain Injury, Wound Management

## BAYLOR UNIVERSITY | Booth 713

[www.baylor.edu/defenseresearch](http://www.baylor.edu/defenseresearch)

Baylor University has partnered with DoD in education, research and training. Service and leadership are embedded within our University mission that invigorate our long-term partnership. As Baylor pursues a bold new research vision, we are poised to build on that legacy. Baylor's commitment to preeminence as a Christian research university is an invitation to researchers and partners to solve complex challenges together. We conduct high-level research in areas like health, data, materials science and more.

**Categories:** Drug Delivery Systems, Education, Emergency Medical Equipment, Hearing & Vision, Human Performance, Imaging, Infectious Disease - Diagnostics, Treatments, Post Traumatic Stress Disorder, Psychological Health, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care, Traumatic Brain Injury, Wound Management

## BELMONT MEDICAL TECHNOLOGIES | Booth 214

[www.belmontmedtech.com](http://www.belmontmedtech.com)

Belmont Medical Technologies is a leading provider of fluid management and patient temperature management solutions for use worldwide in medical facilities, military combat fields, and EMS settings. Belmont's technology is credited with saving thousands of lives globally by infusing warm blood and fluid into patients experiencing massive blood loss. Belmont's premier products include The Belmont® Rapid Infuser RI-2 and close-to-patient, portable and battery-operated buddy lite® blood and fluid warmer.

**Categories:** Emergency Medical Equipment, Patient Transport/EnRoute Care, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care, Traumatic Brain Injury

## BIOFABUSA | Booth 309

[www.armiusa.org](http://www.armiusa.org)

The Advanced Regenerative Manufacturing Institute (ARMI), headquartered in Manchester, NH, is funded by the Department of Defense. ARMI's mission is to make practical the scalable manufacturing of engineered tissues and tissue-related technologies, to benefit existing industries and grow new ones. ARMI brings together a consortium of over 170 partners from across industry, government, academia, and the non-profit sector to develop next-generation manufacturing processes and technologies for cells, tissues, and organs. Visit: [www.armiusa.org](http://www.armiusa.org) to learn more.

**Categories:** Blood and Coagulation Systems, Education, Information Technology - Health, OTHER

## BIOHAVEN PHARMACEUTICALS | Booth 800

[www.nurtec-hcp.com](http://www.nurtec-hcp.com)

Biohaven is a unique pharmaceutical company. We are an agile and resilient team of highly skilled professionals who challenge the status quo in neuroscience to advance novel, life-changing therapies. The journeys of people living with neurological and neuropsychiatric diseases inspire us to follow scientific innovation wherever it leads and motivates our resolve for overcoming obstacles that stand in the way of medical progress. It is part of the patient-first culture we call the "Biohaven Way."

**Categories:** Pain Management

## BLOODSTONE DIVISION | Booth 613

[www.bloodstonedivision.com](http://www.bloodstonedivision.com)

Bloodstone Division utilizes our deep background of real-world experience, innovative mindset, and medical program experience to provide best in breed medical and rescue kits that meet requirements. Bloodstone is a SDVOSB located in Tampa, FL.

**Categories:** Blood and Coagulation Systems, Emergency Medical Equipment, Simulations - Medical Training, Wound Management

## BLUEHALO | Booth 101

[bluehalo.com/healthcare/](http://bluehalo.com/healthcare/)

In the area of digital health, BlueHalo provides AI-enabled smart technologies, mobile apps, connected wearables, cloud-based analytics, and integration software.

# Exhibits



## **BMK VENTURES, INC./MAI** | Booth 302

[bmkventures.com](http://bmkventures.com)

BMK Ventures, Inc. is a certified Service Disabled Veteran Owned Small Business (SDVOSB) based in Virginia Beach, VA. The company's mission is to provide our customers with innovative products, training services, and procurement options. Our goal is to provide fast, efficient and dependable service to fulfill our customers' unique needs. We look forward to Serving Those That Serve Us!

**Categories:** Blood and Coagulation Systems, Emergency Medical Equipment, OTHER, Simulations - Medical Training, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care, Wound Management

## **BORDEN INSTITUTE** | Booth 100

[www.medcoe.army.mil/borden](http://www.medcoe.army.mil/borden)

The Borden Institute publishes and maintains the Textbooks of Military Medicine. The volumes in the series constitute a comprehensive treatise on the art and science of military medicine, covering such diverse topics as biological and chemical warfare, military preventive medicine, military medical ethics, combat behavioral health, harsh environments, and care of combat injuries.

**Categories:** Education, Health Readiness, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care

## **BRAINSWAY** | Booth 702

[brainsway.com](http://brainsway.com)

BrainsWay is a global leader in advanced noninvasive neurostimulation treatments for mental health disorders. The Company is boldly advancing neuroscience with its proprietary Deep Transcranial Magnetic Stimulation (Deep TMS™) platform technology to improve health and transform lives. BrainsWay is the first and only TMS company to obtain three FDA-cleared indications backed by pivotal studies demonstrating clinically proven efficacy. Current indications include major depressive disorder, obsessive-compulsive disorder, and smoking addiction.

**Categories:** OTHER, Psychological Health

## **BUTTERFLY NETWORK** | Booth 1107

[www.butterflynetwork.com](http://www.butterflynetwork.com)

Founded by Dr. Jonathan Rothberg in 2011, Butterfly created the world's first handheld, single probe whole-body ultrasound system using semiconductor technology, the Butterfly iQ+. Butterfly's mission is to democratize medical imaging and contribute to the aspiration of global health equity, making high-quality ultrasound affordable, easy-to-use, globally accessible, and intelligently connected, including for the 4.7 billion people around the world lacking access to ultrasound. Through its proprietary Ultrasound-on-Chip™ technology, Butterfly is paving the way for earlier detection and remote management of health conditions around the world.

## **CAIRE, INC.** | Booth 801

[www.caireinc.com](http://www.caireinc.com)

For more than 50 years, CAIRE has designed and delivered industry-leading oxygen therapy technology, including robust oxygen products specifically designed to meet high military specifications. The portable SAROS Oxygen System replaces oxygen cylinders and large oxygen generation equipment used in field hospitals, casualty evacuation, en route care and on the battlefield.

**Categories:** Emergency Medical Equipment, OTHER, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care

## **CAREWEAR CORP.** | Booth 106

[www.carewear.net](http://www.carewear.net)

Carewear devices are used in the treatment of chronic and acute pain and soft tissue injury in arthritic joints, tendon, muscle, ligaments & post-op recovery. Our platform includes bacterial and viral kill including Coronavirus, and MRSA for wearable and decontamination applications. Our Digital Health App-Cloud was developed for Remote Therapeutic Monitoring (RTM) addressing post-acute and chronic treatment in Home-Health care.

**Categories:** Human Performance, Musculoskeletal Injury Prevention, Pain Management, Rehabilitation - Craniomaxillofacial, Limb, Neuromusculoskeletal, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care, Wound Management

## **CELOX MEDICAL** | Booth 703

[www.celoxmedical.com](http://www.celoxmedical.com)

The Celox Medical team of highly skilled experts has a wealth of knowledge in materials science, regulatory, quality requirements and manufacturing processes, and use this to bring to market groundbreaking innovations, that rapidly, safely and effectively treat life-threatening bleeding in pre-hospital emergency situations. The Celox range of products, first launched in 2006 with Celox Granules, has been used to save the lives of soldiers and civilians alike.

**Categories:** Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care

## **CERA PRODUCTS, INC.** | Booth 609

[www.ceraproductsinc.com](http://www.ceraproductsinc.com)

Manufacturer of Oral Rehydration Salts (ORS) and electrolyte powder drink mixes. Our team started with saving lives of cholera patients in Bangladesh. Our patented formulas were developed along with doctors from Johns Hopkins University. Peer reviewed studies show Rice-based ORS has been clinically proven superior to glucose-based ORS. Made in the USA. 5 -year shelf life. Certified Gluten Free. No Artificial Colors or Flavors. NSNs on all products. ORS meets all WHO standards.

**Categories:** Hydration

## **CFD RESEARCH CORPORATION** | Booth 307

[www.cfd-research.com](http://www.cfd-research.com)

**Categories:** Blood and Coagulation Systems, Human Performance, Simulations - Medical Training

## **CLEANSPACE TECHNOLOGY PTY LTD** | Booth 1315

[cleanspacetechnology.com/](http://cleanspacetechnology.com/)

## **COHEN VETERANS BIOSCIENCE** | Booth 1313

[www.cohenveteransbioscience.org](http://www.cohenveteransbioscience.org)

Cohen Veterans Bioscience (CVB) is a non-profit 501(c)(3) biomedical research and technology organization dedicated to advancing brain health for millions of veterans and civilians by fast-tracking diagnostics and tailored therapeutics. Our approach is to harness the power of biotechnology and advanced analytics to build platforms that enable us, with coalition partners, to execute research priorities set through the Brain Trauma Blueprint Research Roadmaps that will accelerate solutions in years, not decades.

**Categories:** Education, Imaging, Information Technology - Health, Post Traumatic Stress Disorder, Psychological Health, Traumatic Brain Injury

# Exhibits



## CORELEADER BIOTECH | Booth 808

[www.coreleaderbio.com](http://www.coreleaderbio.com)

As an MFG of bio wound dressings, we focus more on the hemostasis, from pre-hospital, trauma, dialysis to cathe theater, and burns. The efficacy of HEMO, our chitosan based woven hemostatic agent, is proven by the two gurus of USAISR. The sponge is widely used by interventional surgeons for hemostasis at femoral artery. BioSkinG, a bio-cellulose membrane, is good on burns and works amazingly well. Visit booth 808, if you would like to know more.

**Categories:** Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care, Wound Management

## DEFENDER PHARMACEUTICALS, INC. | Booth 1014

[www.defenderpharma.com](http://www.defenderpharma.com)

**Categories:** OTHER, Post Traumatic Stress Disorder, Traumatic Brain Injury

## DEFENSE HEALTH AGENCY, RESEARCH & ENGINEERING DIRECTORATE | Booth 306

The Defense Health Agency (DHA) is a joint, integrated Combat Support Agency that enables the military medical services to provide a medically ready force to Combatant Commands. The DHA supports the delivery of integrated, affordable, and high quality health services to MHS beneficiaries. The mission of the Research & Engineering Directorate is to lead the discovery of innovative medical solutions responsive to the needs of Combatant Commands, the military Services, and the Military Health System.

**Categories:** Blood and Coagulation Systems, Drug Delivery Systems, Environmental & Occupational, Health Readiness, Hearing & Vision, Human Performance, Infectious Disease - Diagnostics, Treatments, Musculoskeletal Injury Prevention, Nutrition, Pain Management, Patient Transport/EnRoute Care, Post Traumatic Stress Disorder, Psychological Health, Rehabilitation - Craniomaxillofacial, Limb, Neuromusculoskeletal, Simulations - Medical Training, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care, Traumatic Brain Injury, Wound Management

## DEFENSE INTREPID NETWORK FOR TBI AND BRAIN HEALTH (INTREPID NETWORK) | Booth 1309

**Categories:** Education, Health Readiness, Hearing & Vision, Imaging, Information Technology - Health, Nutrition, Pain Management, Post Traumatic Stress Disorder, Psychological Health, Rehabilitation - Craniomaxillofacial, Limb, Neuromusculoskeletal, Traumatic Brain Injury

## DELOITTE | Booth 505

[www2.deloitte.com](http://www2.deloitte.com)

Deloitte brings a unique blend of R&D experience across Federal Health and Commercial Life Sciences organizations, providing strategy, operations, analytics, and technology-enabling services and solutions. Our work targets R&D functions including portfolio management, operating model services, regulatory solutions, and strategy. Our support has been critical to promoting the adoption of research findings into day-to-day care delivery. We bring more than 70 years of experience, helping clients capitalize on opportunities and tackle pressing and complex challenges.

**Categories:** Health Readiness, Information Technology - Health, Psychological Health

## DELTA DEVELOPMENT TEAM INC | Booth 606

[www.deltadevteam.com](http://www.deltadevteam.com)

Battery-operated, medical refrigerator designed to store vaccines and blood products in any climate or environment.

**Categories:** Blood and Coagulation Systems, Emergency Medical Equipment, Patient Transport/EnRoute Care, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care

## DLH CORPORATION | Booth 912

[www.dlhcorp.com](http://www.dlhcorp.com)

DLH delivers improved health and readiness solutions for federal programs through research, development, and innovative care processes. The Company's experts in public health, performance evaluation, and health operations solve the complex problems faced by civilian and military customers alike, leveraging digital transformation, artificial intelligence, advanced analytics, cloud-based applications, telehealth systems, and more. DLH brings a unique combination of government sector experience, proven methodology, and unwavering commitment to public health to improve the lives of millions.

**Categories:** Education, Environmental & Occupational, Health Readiness, Information Technology - Health, Post Traumatic Stress Disorder, Psychological Health, Simulations - Medical Training, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care, Traumatic Brain Injury

## DRIP DROP HYDRATION | Booth 909

[www.dripdrop.com](http://www.dripdrop.com)

Drip Drop ORS is an Oral Rehydration Solution with excellent outcomes and efficacy unlike sport drinks to treat dehydration rapidly. It is used in burn centers and large IDN hospital systems as well as by medics. Authorized by NSN, part#s in Role 1 and 3 SKOs for TCMC, and many AMALs.

**Categories:** Human Performance, Hydration, Nutrition

## DTS - DIVERSIFIED TECHNICAL SYSTEMS | Booth 107

[www.dtsweb.com](http://www.dtsweb.com)

DTS manufactures sensors, data recorders and dosimeters for injury biomechanics, blast and high shock environments. DTS specializes in miniature, rugged, low-power systems used by researchers for laboratory and field test of human injury factors including blunt trauma, TBI, over-pressure. DTS was named the prime contractor for the US Army WIAman vertical load blast test dummy with SLICE6 in-dummy DAS and is involved in ongoing testing. DTS is an engineering company headquartered in Seal Beach, CA.

**Categories:** Environmental & Occupational, Hearing & Vision, OTHER, Traumatic Brain Injury

## ECHONOUS | Booth 1103

[kosmosplatform.com](http://kosmosplatform.com)

EchoNouS has taken the lead in creating intelligent medical tools that help medical professionals solve common everyday problems in healthcare. EchoNouS was founded in 2016 by CEO Kevin Goodwin, point-of-care ultrasound pioneer and former CEO of Sonosite, and COO Niko Pagoulatos, PhD, a highly regarded innovator in the ultrasound field. Kevin and Niko came together with the same intense passion toward combining artificial intelligence with handheld ultrasound-based tools. With the launch of KOSMOS, EchoNouS is delivering on its mission to help physicians and nurses see more, know more, and do more at the point of care.

**Categories:** Education, Emergency Medical Equipment, Imaging



# Exhibits



## EDARE LLC | Booth 207

[www.audhere.com](http://www.audhere.com)

Edare transitions innovative technologies from R&D into final products for aerospace, defense, biomedical, energy, and manufacturing applications. Edare manufactures the Wireless Automated Hearing Test System (WAHTS) which is an OSHA and ANSI-compliant boothless audiometer. The WAHTS communicates with a tablet-based application which can be used for research, hearing conservation, or diagnostic audiology. The newly released software called "audhere" can be used for multi-person hearing testing and hearing protection fit testing!

**Categories:** Education, Environmental & Occupational, Health Readiness, Hearing & Vision, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care

## EINTHOVEN MEDICAL | Booth 206

[www.einthovenmed.com](http://www.einthovenmed.com)

Portland, OR based Einthoven Medical is named after the inventor of the ECG. We provide wireless Resting ECGs, wireless Holter and Monitoring systems. We recently developed a very miniaturized Mobile Cardiac Telemetry (MCT) monitor with LTE, Wifi and Bluetooth connectivity for use in very harsh and rugged but also clinical operational environments. Our MCT can be used as a skin patch for monitoring and with our patent pending adapter for chest ECGs.

**Categories:** Emergency Medical Equipment, Imaging, Information Technology - Health, OTHER, Patient Transport/EnRoute Care, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care

## EITAN MEDICAL | Booth 600

[www.eitanmedical.com](http://www.eitanmedical.com)

Eitan Medical is reimagining drug delivery, with reliable innovations that put patients at the center of care, making drug delivery easier and safer than ever before. Patient safety and care are only the starting point, as Eitan Medical goes beyond- delivering connected, intuitive drug delivery and infusion solutions that are designed to improve patient and clinician quality of life across the continuum of care, including prehospital, hospital, ambulatory, and home care environments.

**Categories:** Drug Delivery Systems

## ELEMANCE, LLC | Booth 115

[www.elemance.com](http://www.elemance.com)

Elemance strives to provide truly human-centered design solutions to enhance the protection and quality of life. Founded in 2014, Elemance, LLC is the exclusive distributor of the GHBM finite element models. Elemance licenses a family of full body models of varying sex, size and posture. In addition to licensing, Elemance provides comprehensive customer support for licensed models, and consulting services related to biomechanics and injury biomechanics to industries including automotive, sports, military, aerospace and healthcare.

**Categories:** Human Performance, Musculoskeletal Injury Prevention, OTHER, Prosthetics, Simulations - Medical Training, Traumatic Brain Injury

## EMIT CORPORATION | Booth 814

[www.emitcorp.com](http://www.emitcorp.com)

EMIT Corporation designs, manufactures and sells products for prevention and reversal of hypothermia. HypothermX® HX100 and LG are patented, FDA-cleared, CE-marked, fast, simple, portable, compact, light, fully-disposable, and long-term use IV fluid and blood warming devices. The devices utilize a flameless/spark-free hydrocarbon combustion process, fueled with Isobutane/Propane, for heating. Our product offering is the only one capable of delivering large volumes of warm blood to your patient quickly! EMIT products are available on DLA ECAT.

**Categories:** Blood and Coagulation Systems, Emergency Medical Equipment, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care

## EPI / ALPHA-STIM | Booth 812

[www.alpha-stim.com](http://www.alpha-stim.com)

Alpha-Stim® is a handheld, prescription medical device that is FDA cleared to treat acute, post-traumatic, and chronic pain, along with anxiety, insomnia, and depression. Alpha-Stim can be used alone, along with other therapies, or as an adjunct to medication. Proven fast, safe and effective by more than 100 clinical trials over 40 years that prove the effectiveness of this low level electrical prescription brain therapy. To learn more, call 1-800-FOR-PAIN or visit [www.alpha-stim.com](http://www.alpha-stim.com).

**Categories:** Osteopathy, Pain Management, Post Traumatic Stress Disorder, Prosthetics, Psychological Health, Rehabilitation - Craniomaxillofacial, Limb, Neuromusculoskeletal, Traumatic Brain Injury

## EVREN TECHNOLOGIES | Booth 803

[www.RiseAbovePtd.com](http://www.RiseAbovePtd.com)

Evren Technologies is advancing the treatment of PTSD through a cutting-edge, personalized, easy-to-use and intelligent platform. The Phoenix – recently granted an FDA "Breakthrough Device Designation" – delivers transcutaneous auricular vagal nerve stimulation (taVNS) for the effective treatment of PTSD, without side effects. Evren also offers a user-friendly PTSD tracking app, allowing patients to document their symptoms and triggering events, and is developing a reimbursable, remote monitoring portal to improve communication with clinicians.

**Categories:** Post Traumatic Stress Disorder, Psychological Health, Traumatic Brain Injury

## EXACT SCIENCES | Booth 1200

[www.exactsciences.com](http://www.exactsciences.com)

Our vision is to eradicate cancer and the suffering it causes through tests that detect it earlier and provide guidance for successful treatment.

**Categories:** Education, Health Readiness, Infectious Disease - Diagnostics, Treatments, Information Technology - Health

## EXTHERA MEDICAL | Booth 303

[www.extheramedical.com](http://www.extheramedical.com)

ExThera Medical's Seraph® 100 Microbind® Affinity Blood Filter (Seraph 100) is the first and only commercially available pathogen agnostic adsorption therapy, CE marked for Europe and granted EUA to treat COVID-19 by the FDA in the United States. Seraph 100 has been used to treat over 1,000 patients world-wide most of whom have suffered from severe or critical illness due to COVID-19. A Prospective Multicenter RCT is now underway to demonstrate safety and efficacy.

**Categories:** Blood and Coagulation Systems, Infectious Disease - Diagnostics, Treatments

# Exhibits



## FRONT LINE MEDICAL | Booth 103

[www.frontlinemedtech.com](http://www.frontlinemedtech.com)

Front Line Medical Technologies is a medical device company passionate about our innovative technology, accountable to the critically injured and committed to the Front Lines. The COBRA-OS device is a 4Fr arterial occlusion catheter. It's the smallest on the market and can be used in various emergency situations when patients need support to maintain blood flow to their brain and heart. It can be applicable in cases of NCTH (REBOA), PPH, cardiac arrest and more!

**Categories:** Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care

## FUJIFILM SONOSITE | Booth 915

[www.sonosite.com](http://www.sonosite.com)

Sonosite provides clinicians around the world with a cost-effective tool for improving patient safety and workflow efficiency. Our device platforms are extremely dynamic and versatile, allowing your machine to evolve with you. Sonosite ultrasound systems excel with their durable design, industry-leading warranty, and comprehensive customer support. To learn how SonoSite can enhance your practice, please visit [www.sonosite.com](http://www.sonosite.com).

**Categories:** Emergency Medical Equipment, Imaging, OTHER

## GE HEALTHCARE | Booth 203

[www.gehealthcare.com](http://www.gehealthcare.com)

GE Healthcare is the \$18 billion healthcare business of GE. As a leading global medical technology, pharmaceutical diagnostics and digital solutions innovator, GE Healthcare enables clinicians to make faster, more informed decisions through intelligent devices, data analytics, applications and services, supported by its Edison intelligence platform. With over 100 years of healthcare industry experience, GE operates working toward precision health, digitizing healthcare, helping drive productivity and improving outcomes for patients, providers, health systems and researchers.

**Categories:** Imaging, Information Technology - Health

## GE RESEARCH | Booth 20

[www.ge.com/research](http://www.ge.com/research)

GE Research is GE's innovation engine. Our 1,000+ (500 Ph. Ds) researchers work across multiple technology domains and industries to deliver breakthrough technologies the world's needs today and tomorrow in health care, energy, aviation and beyond. We are a trusted partner with the Defense sector in driving an array of new technologies to improve field medicine and deliver better patient care for the warfighter. To learn more, visit us at <https://www.ge.com/research/>.

**Categories:** Drug Delivery Systems, Traumatic Brain Injury

## GOLDBELT FRONTIER, LLC | Booth 700

[www.goldbeltfrontier.com](http://www.goldbeltfrontier.com)

We support numerous services and technical expertise for research and scientific efforts. We provide the US Army Reserves with development of data visualization techniques for the disability evaluation, medical readiness, and fitness for duty process. We provide biomedical and human performance researchers responsible for identifying and preventing occupational health hazards and improving healthcare for combat Warriors. Our Health Informatics experts examine innovative solutions that address gaps in military medicine blending health information management and technologies.

## HAMILTON MEDICAL | Booth 1101

[www.hamilton-medical.com](http://www.hamilton-medical.com)

Hamilton Medical is a world-leading manufacturer of intelligent ventilation solutions, accessories, and consumables covering a wide range of patient groups, applications, and environments. Our driving vision is to provide better ventilation care to critically ill patients and unburden the people who care for them. Hamilton Medical's intelligent ventilation mode Adaptive Support Ventilation (ASV®) adapts ventilation breath by breath, 24 hours a day, from intubation to extubation, for active and passive patients.

**Categories:** Emergency Medical Equipment, Patient Transport/EnRoute Care, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care

## HENRY JACKSON FOUNDATION FOR THE ADVANCEMENT OF MILITARY MEDICINE | Booth 914

[www.hjf.org](http://www.hjf.org)

Created by Congress in 1983 to accelerate progress in military medicine, the Henry M. Jackson Foundation for the Advancement of Military Medicine (HJF) is a global nonprofit organization providing investigators and clinicians scientific, administrative and program management services. HJF serves as a trusted link between the military medical community, federal and private partners, and the millions of American service families, veterans and civilians who benefit from the medical research advances that result from this work.

**Categories:** Health Readiness, Hearing & Vision, Human Performance, Infectious Disease - Diagnostics, Treatments, Musculoskeletal Injury Prevention, Nutrition, Pain Management, Patient Transport/EnRoute Care, Post Traumatic Stress Disorder, Psychological Health, Radiation Health, Rehabilitation - Craniomaxillofacial, Limb, Neuromusculoskeletal, Simulations - Medical Training, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care, Traumatic Brain Injury, Wound Management

## INNOVICE | Booth 614

[www.innoviceusa.com](http://www.innoviceusa.com)

Innovice exclusively supplies Prontosan Wound Irrigation Solutions and Gels. Prontosan has a unique combination of safety and clinical efficacy for non-infected and infected wounds. Prontosan is available in multiple configurations to address needs in the operating room environment, traumatic injuries and wound care needs.

## INTEGRATED MEDCRAFT | Booth 300

[www.integratedmc.com](http://www.integratedmc.com)

Integrated MedCraft is Woman Owned Small Business focused on introducing cutting edge medical devices and solutions that save lives and provide better information to our caregivers. Please stop by and learn more about our brands. Our catalog can be downloaded at [integratedmc.com/pages/deployable-solutions-catalog](http://integratedmc.com/pages/deployable-solutions-catalog). Better Patient Care Forward

**Categories:** Blood and Coagulation Systems, Emergency Medical Equipment, Simulations - Medical Training, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care, Traumatic Brain Injury, Wound Management

# Exhibits



## **JAMES A. HALEY VETERANS' HOSPITAL-POST DEPLOYMENT REHABILITATION & EVALUATION PROGRAM (PREP) | Booth 113**

[www.va.gov/tampa-health-care/programs/programs/the-post-deployment-rehabilitation-and-evaluation-program-prep](http://www.va.gov/tampa-health-care/programs/programs/the-post-deployment-rehabilitation-and-evaluation-program-prep)

The Post-Deployment Rehabilitation and Evaluation Program (PREP) is a mild Traumatic Brain Injury (mTBI) inpatient program based on individualized evaluation and treatment needs. PREP includes comprehensive individualized evaluations and initiation of treatments for combat-related physical, cognitive, and mental health symptoms. Emphasis is placed on persistent post-concussive symptoms, post-deployment readjustment issues and emotional functioning. Our treatment is collaborative and facilitated by an interdisciplinary team that can address both rehabilitation and mental health needs simultaneously.

**Categories:** Post Traumatic Stress Disorder, Rehabilitation - Craniomaxillofacial, Limb, Neuromusculoskeletal, Traumatic Brain Injury

## **JANZ CORPORATION | Booth 1202**

[www.janzcorp.com](http://www.janzcorp.com)

JANZ Corporation is a healthcare-centric Service Disabled Veteran Owned Small Business (SDVOSB) focused on providing medical equipment, supplies & therapy to all care echelons of the U.S Government. In addition to providing medical equipment/supplies to the VA, DoD & Federal Agencies, JANZ also has Durable Medical Equipment (DME) stores on U.S. Military bases in 6 countries and 2 U.S Territories. The Parker Hannifin Team will display the Indego Personal Exoskeleton System at our booth.

**Categories:** Emergency Medical Equipment, Environmental & Occupational, Hearing & Vision, Imaging, Musculoskeletal Injury Prevention, Patient Transport/EnRoute Care, Prosthetics, Rehabilitation - Craniomaxillofacial, Limb, Neuromusculoskeletal, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care, Wound Management

## **KBR | Booth 412**

[www.kbr.com](http://www.kbr.com)

KBR is a global provider of differentiated professional services and solutions across the asset and program life cycle within government services and technology sectors. KBR employs approximately 28,000 people worldwide, with customers in more than 80 countries and operations in 40 countries. KBR is proud to work with its customers across the globe to provide technology, value-added services, and long-term operations and maintenance services to ensure consistent delivery with predictable results. At KBR, We Deliver.

**Categories:** Environmental & Occupational, Health Readiness, Human Performance, Imaging, Information Technology - Health, Musculoskeletal Injury Prevention, OTHER, Patient Transport/EnRoute Care, Psychological Health, Simulations - Medical Training, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care

## **KERECIS | Booth 1303**

[www.kerecis.com](http://www.kerecis.com)

Kerecis® Omega3 is intact fish skin that is homologous to human skin and is used for tissue regeneration and grafting. Kerecis Omega3 is FDA indicated for multiple clinical applications. Because there is no risk of a viral-disease transfer from Atlantic cod to humans, the fish skin needs only mild processing for medical use and maintains its natural structure and elements, including Omega3 fatty acids. When grafted onto damaged human tissue, such as a burn or a wound, the fish-skin recruits the body's own cells, supporting the body's own ability to regenerate. The fish skin is a natural microbial barrier. The superior clinical and economical performance of Kerecis Omega3 has been demonstrated in two non-industry funded, double-blind, randomized clinical trials and in numerous other clinical studies.

**Categories:** Pain Management, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care, Wound Management

## **KLS MARTIN | Booth 1301**

[www.klsmartin.com/en-na](http://www.klsmartin.com/en-na)

KLS-Martin is a company dedicated to providing innovative medical devices and power systems for craniomaxillofacial surgery. The company's rich history began with surgical instrument production in Germany and continued with miniplate production. KLS Martin has advanced the capabilities of distraction osteogenesis, and revolutionized resorbable fixation with the SonicWeld Rx system.

**Categories:** Emergency Medical Equipment, OTHER

## **KNIGHT AEROSPACE | Booth 1214**

[www.knightaerospace.com](http://www.knightaerospace.com)

Knight Aerospace proudly sets the global industry standard for mission-critical specialty air transportation. As the world's leading provider of the custom quick-change/roll-on roll-off medical module - as well as palletized systems for cargo aircraft, including the C-17 and C-130 - we offer life-saving solutions in moments of crisis and urgency.

## **LACTEA THERAPEUTICS | Booth 200**

[www.lacteatherapeutics.com](http://www.lacteatherapeutics.com)

A platform technology developing a new class of naturally-derived immune protein preventative medicine for existing and emerging viral and bacterial threats

**Categories:** Infectious Disease - Diagnostics, Treatments, Wound Management

## **LIFEFLOW/PNEUMERIC | Booth 603**

[www.410medical.com](http://www.410medical.com)

410 Medical is a medical device company based in Durham, North Carolina that distributes and manufactures innovative products designed to help medical providers resuscitate hemorrhagic shock patients during transport and in austere environments. Compact, light-weight, portable and simple to use, 410 Medical's LifeFlow PLUS infuser allows providers to deliver blood and crystalloids in minutes, even in a chaotic environment.

**Categories:** Drug Delivery Systems, Emergency Medical Equipment, Hydration, Infectious Disease - Diagnostics, Treatments, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care

# Exhibits



## LITES LINKING INVESTIGATIONS IN TRAUMA AND EMERGENCY SERVICES | Booth 112

[litesnetwork.org](http://litesnetwork.org)

LITES is a network of medical professionals, prehospital providers, and emergency medical services joining to perform injury care and outcomes research. Its goal is to inform clinical practice guidelines and update the existing standards for the care of traumatic injuries. This network carries out a variety of research projects focused on trauma, blood and whole blood, traumatic brain injury, breathing tubes, airway management, and hemorrhagic shock.

## MARKETING ASSESSMENT, INC. | Booth 302

[www.marketingassessment.com](http://www.marketingassessment.com)

Marketing Assessment has a 40-year history providing the medical soldier with the most appropriate technology to produce the best outcomes. We introduced many of the presently deployed patient care technologies, and contribute to on-going research. Our mission is to return a healthy soldier back to active duty. We provide basic splinting capability, POC laboratory devices, advanced bio-load reduction systems, and breakthrough products for successful treatment of difficult wounds. Currently introducing innovative simulation training technologies.

**Categories:** Blood and Coagulation Systems, Emergency Medical Equipment, Environmental & Occupational, Health Readiness, Musculoskeletal Injury Prevention, Simulations - Medical Training, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care, Traumatic Brain Injury, Wound Management

## MASIMO | Booth 406

[www.masimo.com](http://www.masimo.com)

Masimo is a global medical technology company that develops and produces a wide array of industry-leading monitoring technologies, including innovative measurements, sensors, patient monitors, and automation solutions. The rainbow SET™ Pulse CO-Oximetry family includes such measurements as SET® pulse oximetry, noninvasive and continuous hemoglobin (SpHb®), and acoustic respiration rate (RRa®).

**Categories:** Emergency Medical Equipment, Patient Transport/EnRoute Care, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care

## MEDICAL TECHNOLOGY ENTERPRISE CONSORTIUM

Booth 407

[www.mtec-sc.org](http://www.mtec-sc.org)

Company Description: The Medical Technology Enterprise Consortium is a biomedical technology consortium that is internationally-dispersed, collaborating with multiple government agencies under a 10-year renewable Other Transaction Agreement with the U.S. Army Medical Research and Development Command. The consortium focuses on the development of medical solutions that protect, treat, and optimize the health and performance of U.S. military personnel and civilians. To find out more about MTEC, visit [mtec-sc.org](http://mtec-sc.org).

**Categories:** Blood and Coagulation Systems, Drug Delivery Systems, Health Readiness, Hearing & Vision, Human Performance, Hydration, Imaging, Infectious Disease - Diagnostics, Treatments, Information Technology - Health, Musculoskeletal Injury Prevention, Nutrition, OTHER, Pain Management, Patient Transport/EnRoute Care, Post Traumatic Stress Disorder, Psychological Health, Simulations - Medical Training, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care, Traumatic Brain Injury, Wound Management

## MEMED | Booth 209

[www.me-med.com](http://www.me-med.com)

At MeMed, a leader in host response technologies, we decode the body's complex immune response signals into simple insights that improve people's lives. Run on the MeMed Key® platform, the MeMed BV® test measures three unique biomarker proteins and applies machine learning to accurately distinguish between bacterial and viral infections in 15 minutes.

**Categories:** Infectious Disease - Diagnostics, Treatments, OTHER

## MILITARY & HEALTH RESEARCH FOUNDATION | Booth 1015

[www.militaryhealthresearch.org](http://www.militaryhealthresearch.org)

The Military & Health Research (MHRF) Foundation provides solutions that support the full research and development lifecycle. Partnerships with MHRF are built upon our rapid responsiveness, adaptability, transparency, unrivaled customer service, and development synergies to cost effectively fill medical capability gaps. MHRF supports university/commercial partners through the complex assortment of government grants/funding. We target areas of special interest to both military and civilian sectors by staying aware and stated command objectives.

**Categories:** Blood and Coagulation Systems, Drug Delivery Systems, Emergency Medical Equipment, Health Readiness, Hearing & Vision, Human Performance, Infectious Disease - Diagnostics, Treatments, Information Technology - Health, Musculoskeletal Injury Prevention, Patient Transport/EnRoute Care, Simulations - Medical Training, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care, Traumatic Brain Injury, Wound Management

## MUSCULOSKELETAL INJURY REHABILITATION RESEARCH FOR OPERATIONAL READINESS (MIRROR) | Booth 313

[www.mirrorusuhs.org](http://www.mirrorusuhs.org)

Given the impact of musculoskeletal injuries (MSI) on combat readiness, DHA supported the creation of Musculoskeletal Injury Rehabilitation Research for Operational Readiness (MIRROR) to provide critical research support to advance the treatment and preventive care for Service Members with non-combat related MSI. Headquartered at the Uniformed Services University, MIRROR coordinates partnerships with primary military and civilian treatment facilities that experience a high volume of MSI, but lack robust infrastructure to conduct clinical studies.

**Categories:** Health Readiness, Human Performance, Musculoskeletal Injury Prevention, OTHER, Pain Management, Rehabilitation - Craniomaxillofacial, Limb, Neuromusculoskeletal

## MY01, INC | Booth 1307

MY01, Inc. is on a mission to empower healthcare professionals with the ability to pre-empt severe medical conditions thereby improving patient outcomes. We believe that adding actionable quantitative data at the bedside during these interactions is the best way to make a meaningful impact to the patient while improving the experience of providing care. We focus on delivering actionable data at the bedside to augment clinical assessments.

**Categories:** OTHER

# Exhibits



## NAVAL HEALTH RESEARCH CENTER | Booth 102

[www.med.navy.mil/naval:medical:research:center/](http://www.med.navy.mil/naval:medical:research:center/)  
[naval:health:research:center](http://naval:health:research:center)

Naval Health Research Center (NHRC) optimizes the operational readiness and health of our armed forces, by conducting research, development, testing and evaluation to inform Department of Defense policy. Our science spans the spectrum from physical readiness to joint medical planning, to wounded warrior recovery and behavioral health needs, all focusing on the health, readiness, and well-being of our nation's military members, Veterans and their families. Designated the DoD Deployment Health Research Center since 1999.

**Categories:** Education, Environmental & Occupational, Health Readiness, Human Performance, Infectious Disease - Diagnostics, Treatments, Musculoskeletal Injury Prevention, Nutrition, Patient Transport/EnRoute Care, Post Traumatic Stress Disorder, Psychological Health, Rehabilitation - Craniomaxillofacial, Limb, Neuromusculoskeletal, Traumatic Brain Injury

## NAVAL MEDICAL RESEARCH AND DEVELOPMENT | Booth 1008

[www.med.navy.mil/Naval-Medical-Research-Center/](http://www.med.navy.mil/Naval-Medical-Research-Center/)

Naval Medical Research and Development (NMR&D) is Navy Medicine's global R&D enterprise comprised of eight commands whose collective mission is to provide operationally relevant, mission readiness focused, and timely research that is agile and responsive to Navy, Marine Corps, and DoD needs.

**Categories:** Environmental & Occupational, Health Readiness, Hearing & Vision, Human Performance, Infectious Disease - Diagnostics, Treatments, Musculoskeletal Injury Prevention, Patient Transport/EnRoute Care, Post Traumatic Stress Disorder, Psychological Health, Rehabilitation - Craniomaxillofacial, Limb, Neuromusculoskeletal, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care, Traumatic Brain Injury, Wound Management

## NAVAL MEDICAL RESEARCH UNIT - DAYTON | Booth 1109

[www.med.navy.mil/sites/nmrc/Dayton](http://www.med.navy.mil/sites/nmrc/Dayton)

NAMRU-D optimizes the readiness, performance, and survivability of operational forces through environmental health effects, toxicology and aerospace medical research and development.

**Categories:** Environmental & Occupational, Health Readiness, Hearing & Vision, Human Performance, Musculoskeletal Injury Prevention, Nutrition, OTHER, Patient Transport/EnRoute Care, Psychological Health

## NAVY ENTOMOLOGY CENTER OF EXCELLENCE | Booth 202

[www.med.navy.mil/Navy-Marine-Corps-Public-Health-Center/Field-Activities/Navy-Entomology-Center-of-Excellence](http://www.med.navy.mil/Navy-Marine-Corps-Public-Health-Center/Field-Activities/Navy-Entomology-Center-of-Excellence)

Navy Entomology Center of Excellence (NECE) is the Navy and Marine Corps' Center of Excellence for operational entomology located at Naval Air Station Jacksonville, FL. NECE's unique DoD mission is to develop and evaluate novel products, pesticides, and application technologies to better protect deployed forces from vectors of disease. NECE delivers force health protection through operational vector surveillance and control to enhance warfighter readiness. NECE also provides operational medical entomology and pest management training to DOD military and civilian personnel and is the program manager for all Navy shipboard pest management. NECE plays a key role in supporting national strategic interests through engagement and exchange with foreign health and military partners.

**Categories:** Environmental & Occupational, Health Readiness, Treatments

## NEUROWAVE SYSTEMS | Booth 1013

[www.neurowavesystems.com](http://www.neurowavesystems.com)

NeuroWave is dedicated to improving patient safety, outcome and quality of life in anesthesia, sedation, critical care and military medicine with innovative monitoring and drug delivery systems using advanced neurophysiological signal processing and control system engineering. The AutoTIVA™ will provide an intravenous anesthesia "autopilot" for the military, while the AutoSED™ is being developed as a tactical en-route care intravenous sedation delivery system. NeuroWave's FDA-cleared DiscoverEEG™ is a disposable, bandage-size Point-Of-Injury brain monitor.

**Categories:** Drug Delivery Systems

## NEXT SCIENCE | Booth 1215

[www.nextscience.com](http://www.nextscience.com)

Next Science is a medical technology company headquartered in Sydney, Australia, with a research and development center based in Jacksonville, Florida. Established in 2012, the company's primary focus is on the development and continued commercialization of its proprietary XBIO® Technology to reduce the impact of biofilm-based infections in human health.

**Categories:** Wound Management

## NIGHTWARE | Booth 512

[www.nightware.com](http://www.nightware.com)

The NightWare prescription digital therapeutic system monitors a patient's sleep patterns and learns when they are experiencing a nightmare. It then delivers an intervention designed to disrupt the Nightmare without waking the patient. We designed NightWare for patients who suffer from severe nightmares that are adversely impacting their sleep. It's important to us to provide physicians with an additional product to improve sleep quality for patients experiencing nightmares associated with PTSD and trauma.

**Categories:** Post Traumatic Stress Disorder, Psychological Health

## NORTH AMERICAN RESCUE, LLC. | Booth 1201

[www.narescue.com](http://www.narescue.com)

**Categories:** Emergency Medical Equipment, Simulations - Medical Training, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care

## NOVASIGNAL | Booth 114

[www.novasignal.com](http://www.novasignal.com)

Founded in 2013, NovaSignal Corp. is a medical technology company whose mission is to save lives by unlocking the power of cerebral blood flow data. The company's FDA-cleared NovaGuide Intelligent Ultrasound combines non-invasive ultrasound, robotics, and artificial intelligence to assess cerebral hemodynamics in real time. Using cloud computing and data analytics, NovaSignal supports physicians in their clinical decision making in several neurological conditions including stroke, traumatic brain injury, and dementia.

# Exhibits



## **NUSHORES BIOSCIENCES LLC** | Booth 706

[www.nushores.com](http://www.nushores.com)

Today there is no satisfactory solution for major bone injuries caused by accidents, warfare and disease, especially complex, large segmental bone loss. NuShores NuCress(tm) bone scaffolds promote healing of bone breaks (up to 8.5 cm) tested in 400+ large and small models with no infection, inflammation, rejection or adverse bone response. NuShores has exclusive global license to patented regeneration technologies from University of Arkansas. NuShores has Class 6 cGMP facilities with first product in validation.

**Categories:** Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care

## **PERATIVE EXPERIENCE, INC.** | Booth 815

[www.operativeexperience.com](http://www.operativeexperience.com)

Operative Experience (OEI) is a leading manufacturer of high-fidelity human patient simulators for training of healthcare practitioners, first responders, and military personnel including, TCCS, a full-body, hyper-real, ruggedized and wireless simulator for comprehensive TC3 training; TCCS Plus, a high-fidelity, medical provider level simulator for prolonged field care training; and TCCS Female, the world's first high-fidelity tactical simulator for the female patient. Learn more at [operativeexperience.com](http://operativeexperience.com)

**Categories:** Education, Simulations - Medical Training, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care

## **PARATEK PHARMACEUTICALS** | Booth 213

[www.paratekpharma.com](http://www.paratekpharma.com)

Paratek Pharmaceuticals develops transformative solutions for patients, both in and out of the hospital, with infectious diseases that are difficult to treat. The company's commercial product, NUZYRA® (omadacycline), is a once-daily oral and intravenous antibiotic for the treatment of adults with community-acquired bacterial pneumonia and acute bacterial skin and skin structure infections. Joint Deployment Formulary approved, utilized in MTF's across all services, included in FDA Essential Medicine List and contracted with BARDA for bio-threat protection.

**Categories:** Health Readiness, Infectious Disease - Diagnostics, Treatments, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care, Wound Management

## **PELI BIOTHERMAL** | Booth 1012

[www.pelibiothermal.com](http://www.pelibiothermal.com)

Peli BioThermal offers the widest range of temperature-controlled packaging and service solutions to the global life sciences industry, including a complete portfolio of services and software to support end-to-end temperature-controlled packaging. From discovery to distribution, our products ensure that delicate life science materials arrive intact and effective.

**Categories:** Emergency Medical Equipment, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care

## **PERFUSION MEDICAL** | Booth 1213

[www.perfusionmedical.com](http://www.perfusionmedical.com)

Perfusion Medical is commercializing PEG-20k, a breakthrough IV solution for restoration of tissue perfusion developed at VCU. PEG-20k shows tremendous potential as a resuscitation solution for victims of hemorrhagic shock. In a recent large animal study administration of PEG-20k based solutions resulted in a 10-fold increase in the amount of time that shocked animals could remain in the low-volume state. The US Army has provided VCU with more than \$12 million to develop the solution.

**Categories:** Blood and Coagulation Systems, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care

## **PHACON INC** | Booth 913

[www.phacon.us](http://www.phacon.us)

3d printed anatomy for simulation and education. Both hard and soft tissues for a cost effective solution to human specimens. Using CT data we build anatomy for surgical cases, situations and simulations. Repeatable results using your specifications and demographics. Let us build the anatomy you want again and again

**Categories:** Education, Health Readiness, Simulations - Medical Training, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care, Traumatic Brain Injury

## **PHILIPS** | Booth 400

[www.usa.philips.com/healthcare/government](http://www.usa.philips.com/healthcare/government)

At Philips, we look beyond technology to the experiences of patients, providers & caregivers across the health continuum. Our integrated solutions combine broad & deep clinical expertise, technology & services, actionable data, consultative new business models and partnerships. Together, with our customers, we can transform how care is delivered and experienced, to deliver upon the Quadruple Aim: improved patient experience, better health outcomes, improved staff experience, and lower cost of care.

**Categories:** Emergency Medical Equipment, Health Readiness, Imaging, Infectious Disease - Diagnostics, Treatments, Information Technology - Health, Patient Transport/EnRoute Care, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care, Traumatic Brain Injury

## **PINPOINT SURGICAL** | Booth 612

[www.pinpointsurgical.com](http://www.pinpointsurgical.com)

We help our partners advance MIS Spine and Neurosurgical medicine by reducing learning curves and the high costs of technology and staffing associated with adopting advanced techniques.

## **PNEUMERIC, INC.** | Booth 603

[www.pneumeric-medical.com](http://www.pneumeric-medical.com)

Pneumeric Inc. is a medical device company developing the "gold standard" for tension pneumothorax care. Our company offers a straightforward prehospital based therapy to decompress tension pneumothorax with no ambiguity, resulting in less failures and deaths in the field.

**Categories:** Emergency Medical Equipment, Patient Transport/EnRoute Care, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care

# Exhibits



## POTOMACWAVE CONSULTING INC. | Booth 707

[www.potomacwave.com](http://www.potomacwave.com)

PotomacWave is a Woman-Owned Small Business specializing in mission-critical Management Consulting, Business and Technology, Financial Management, Technical Operations. We are recognized for our success in leading high-stakes, technically complex programs for the Department of Homeland Security, the Department of Defense, the Department of State, the Department of Justice, the Intelligence Community, and numerous civilian agencies. We are the prime contractor for over 100 competitively awarded task orders, BPAs, and IDIQ contracts throughout the Federal Government.

## PPD DEVELOPMENT LP/ GOV'T & PUBLIC HEALTH SERVICES

Booth 109

## PRYTIME MEDICAL DEVICES | Booth 608

[www.prytimemedical.com](http://www.prytimemedical.com)

At Prytime Medical Devices, The REBOA Company, we have a bold vision: No one should bleed to death, and the sooner you stop bleeding, the better. We enable trauma teams to gain control of life-threatening bleeding. We partner with the military and leading global trauma centers to enable endovascular bleeding control through innovative devices and fanatical customer support. We are advancing REBOA through our flagship product, ER-REBOA-PLUS™.

**Categories:** Emergency Medical Equipment, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care

## QORVO BIOTECHNOLOGIES | Booth 1112

[www.qorvobiotech.com](http://www.qorvobiotech.com)

Qorvo Biotechnologies, LLC is a wholly owned subsidiary of Qorvo, Inc. focused on the development of point-of-care (POC) diagnostics solutions leveraging Qorvo's innovative BAW sensor technology. Qorvo Biotechnologies brings a unique approach to the health diagnostics testing landscape. Using Bulk Acoustic Wave (BAW) technology, the Qorvo Omnia™ platform is designed to deliver rapid results for SARS-CoV-2 antigen tests.

**Categories:** Infectious Disease - Diagnostics, Treatments

## RED ONE MEDICAL DEVICES | Booth 601, 615

[www.redonemedical.com](http://www.redonemedical.com)

Red One Medical is the government's private sector partner for advanced healthcare technologies. We're a medical innovation gateway providing medical and pharmaceutical companies access to the VA and DoD. Red One is a government certified Service-Disabled Veteran Owned Small Business (SDVOSB) with over 90 combined years of experience in medical sales and government contracting. Strategic partnerships with leading medical device, pharmaceutical, and biologics manufacturers allow us to provide best-in-class medical solutions to the federal government.

**Categories:** Blood and Coagulation Systems, Drug Delivery Systems, Emergency Medical Equipment, Health Readiness, Human Performance, Hydration, Imaging, Infectious Disease - Diagnostics, Treatments, Osteopathy, Pain Management, Patient Transport/EnRoute Care, Post Traumatic Stress Disorder, Prosthetics, Simulations - Medical Training, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care, Traumatic Brain Injury, Wound Management

## RHEOLUTION INC. | Booth 802

[www.rheolution.com/life-sciences](http://www.rheolution.com/life-sciences)

Rheolution develops cutting-edge analytical instruments that reproduce real-life environments and captures the dynamic evolution of soft materials. Its latest generation of ElastoSensBio offers smart, non-invasive and patented technology that unlocks access to crucial information with its Soft Matter Analytics platform. Rheolution serves customers around the world researching and developing new biomaterials, devices and/or systems in the fields of tissue engineering, drug delivery, hemostatic agents and hydrogels.

**Categories:** Blood and Coagulation Systems, Drug Delivery Systems, Wound Management

## RTI INTERNATIONAL | Booth 1212

[www.rti.org](http://www.rti.org)

RTI International is an independent, nonprofit research institute dedicated to improving the human condition. Clients rely on us to answer questions that demand an objective and multidisciplinary approach, one that integrates expertise across the social and laboratory sciences, engineering, and international development. We believe in the promise of science, and we are inspired every day to deliver on that promise for the good of people, communities, and businesses around the world.

**Categories:** Health Readiness, Human Performance, Information Technology - Health

## SAFEGUARD MEDICAL | Booth 401

[www.safeguardmedical.com](http://www.safeguardmedical.com)

Safeguard Medical is home to the world's leading and trusted brands for emergency medical product technologies and skills training. Offering a powerful portfolio of innovative, high-quality products, simulation capabilities, training courses and consultancy programs, Safeguard Medical is dedicated to advancing its mission of equipping and enabling responders at every skill level to preserve life in any environment.

**Categories:** Blood and Coagulation Systems, Emergency Medical Equipment, Simulations - Medical Training, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care

## SAM MEDICAL | Booth 806

[www.sammedical.com](http://www.sammedical.com)

SAM Medical is the manufacturer of innovative products for military and EMS agencies around the world. We supply the DOD with SAM Splints, SAM Pelvic Sling, SAM junctional tourniquets, SAM Chest Seals, and more. Our newest innovations are the SAM IO System and the SAM ThoraSite.

**Categories:** Drug Delivery Systems, Emergency Medical Equipment, Wound Management

## SCIPERIO INC. | Booth 714

[www.sciperio.com](http://www.sciperio.com)

Sciperio is a multi-disciplined company with emphasis in engineering and biology. We use engineering practices to enhance biological development. We have developed sensor platforms for closed loop control in biological systems that enable researchers and manufactures digital control and real time feedback for cells and tissue growth.

**Categories:** OTHER

# Exhibits



## SHORELAND, INC. | Booth 701

[www.Shoreland.com](http://www.Shoreland.com)

Shoreland Travax-Æ is the premiere travel medicine clinical decision-support tool, giving clear independently researched location-specific risk mitigation recommendations that are subject-matter expert vetted and actionable. This web-based application works on all mobile and standard platforms. We've published Travax since 1986 to give health care professionals near-real-time data and recommendations for preventive and protective measures related to international health risks and location-specific medical and environmental threats. Our focus includes helping organizations to plan for and support their operations abroad. We provide data on resources available in local environments to meet the needs of traveler and expatriate populations. Developed over the past 30 years, Shoreland is an experienced team of more than 40 medical professionals, researchers, software developers, editors, customer service representatives, and executives who focus solely on maintaining and enhancing Travax, ensuring users always have the best possible experience.

**Categories:** Health Readiness, Infectious Disease - Diagnostics, Treatments

## SMITH+NEPHEW | Booth 709

[www.smith-nephew.com](http://www.smith-nephew.com)

Smith+Nephew is a global medical technology company. We design and make technology that takes the limits off living, and we help healthcare professionals achieve the same goal. Our Advanced Wound Management portfolio provides products to help healthcare professionals get CLOSER TO ZERO human and economic consequences of wounds. Orthopaedics includes innovative hip and knee implants, robotics-assisted technologies, and trauma products to stabilize severe fractures. Sports Medicine and ENT businesses offer products to repair/remove soft tissue.

**Categories:** Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care, Wound Management

## SURGIBOX, INC. | Booth 208

[www.surgibox.com](http://www.surgibox.com)

SurgiField by SurgiBox Inc is our patented technology, offering an ultra-portable environment at the point-of-need, for providing safe, clean surgery. SurgiField is comprised of a transparent enclosure that attaches to the patient with a durable adhesive drape, protecting the patient (and surgeon) from cross contamination of airborne, topical, or bloodborne pathogens as sources of infection. SurgiField is a paradigm-shifting solution that has many applications in both civilian and military settings to address the immense unmet surgical demand. It has been co-developed with military and civilian trauma surgeons from leading hospitals and humanitarian surgeons from Doctors Without Borders. We make surgeries possible where no surgical facilities exist!

## TACTICAL MEDICAL SOLUTIONS | Booth 1207

[www.tacmedsolutions.com](http://www.tacmedsolutions.com)

**Categories:** Patient Transport/EnRoute Care, Simulations - Medical Training, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care

## TELEDYNE SCIENTIFIC & IMAGING | Booth 212

[www.teledyne.com](http://www.teledyne.com)

Teledyne Scientific's Intelligent Systems Laboratory is a technology development company that focuses on neurotechnology and artificial intelligence. We partner with the Department of Defense through research agreements and technology transition aimed at developing break through technologies with DoD partners and for DoD stakeholders. Here we will be showcasing Teledyne's new neurotechnology PeakSleep. PeakSleep is a wearable device that helps you fall asleep faster and sleep more deeply using focused neurostimulation.

**Categories:** Health Readiness, Human Performance, Information Technology - Health, OTHER

## THE GENEVA FOUNDATION | Booth 315

[www.genevaUSA.org](http://www.genevaUSA.org)

The Geneva Foundation is a non-profit organization with a central purpose to ensure optimal health for service members and the communities they serve. Our mission is to advance military medicine through research, development, and education, with a vision to transform military medicine to save lives worldwide. Geneva is proud to have nearly 30 years of experience in delivering scientific, technical, and program management in the areas of federal grants, federal contracts, and industry-sponsored clinical trials.

**Categories:** Health Readiness, Hearing & Vision, Human Performance, Infectious Disease - Diagnostics, Treatments, Information Technology - Health, Musculoskeletal Injury Prevention, Nutrition, Pain Management, Patient Transport/EnRoute Care, Post Traumatic Stress Disorder, Prosthetics, Psychological Health, Rehabilitation - Craniomaxillofacial, Limb, Neuromusculoskeletal, Simulations - Medical Training, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care, Traumatic Brain Injury, Wound Management

## THE METIS FOUNDATION | Booth 807

[www.metisfoundationusa.org](http://www.metisfoundationusa.org)

The Metis Foundation strives to advance military medicine through providing scientific, education, financial and project management support in the conduct of federally and privately sponsored research, clinical trials and education.

**Categories:** OTHER

## THORNHILL MEDICAL | Booth 413

[www.thornhillmedical.com](http://www.thornhillmedical.com)

Focused on emergency mobile solutions that deliver future capabilities today, Thornhill Medical creates medical technology for extreme and rugged environments. Our innovative technologies are designed to be used by military medical teams and disaster relief responders, supporting lifesaving efforts around the world. MOVES® SLC™: a micro-integrated, mission-ready, portable life support system used for casualty damage control, prolonged field care and evacuation. MADM™: a portable in-line vapor anesthesia delivery for challenging environments.

**Categories:** Emergency Medical Equipment, Patient Transport/EnRoute Care, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care



# Exhibits



## TVAR SOLUTIONS | Booth 301

[www.tvarsolutions.com](http://www.tvarsolutions.com)

TVAR Solutions is a small business information technology solutions provider with a specialty in supporting informatics and research computing. We architect and provide end to end IT solutions enabling workloads such as Next Generation Sequencing, Artificial Intelligence/ Machine Learning, and many more. We also maintain a Top Secret facilities clearance in support of customers with sensitive data requirements.

**Categories:** Information Technology - Health, OTHER

## U.S. ARMY MEDICAL RESEARCH & DEVELOPMENT COMMAND, OFFICE OF MEDICAL TECHNOLOGY TRANSFER

Booth 1102

[mrdc.amedd.army.mil](http://mrdc.amedd.army.mil)

The U.S. Army Medical Research and Development Command (USAMRDC) is the Army's medical materiel developer, with responsibility for medical research, development, and acquisition. The Office of Medical Technology Transfer (MTT) coordinates all intellectual property licensing on behalf of all U.S. Army Medical Research and Development Command subordinate laboratories to nonfederal parties. Follow MTT on LinkedIn for product information, announcements, upcoming tradeshows, inventor interviews, and useful insights.

**Categories:** Emergency Medical Equipment, Environmental & Occupational, Hearing & Vision, Human Performance, Hydration, Infectious Disease - Diagnostics, Treatments, Information Technology - Health, Patient Transport/EnRoute Care, Trauma Care - Point of Injury/Prehospital/ Prolonged Field Care/Forward Surgical Care, Wound Management

## U.S. ARMY MEDICAL RESEARCH INSTITUTE OF INFECTIOUS DISEASES (USAMRIID) | Booth 1104

[www.usamriid.army.mil](http://www.usamriid.army.mil)

Since 1969, the U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID) has conducted research to develop medical countermeasures against biological threats and emerging diseases. USAMRIID's unique end-to-end biodefense capability contributes to vaccines, therapeutics, diagnostic tools, and training programs that benefit military and public health. USAMRIID is a National Reference Laboratory in the Laboratory Response Network and the only DoD facility designed to safely study highly hazardous viruses requiring maximum containment at Biosafety Level 4.

**Categories:** Education, Health Readiness, Infectious Disease - Diagnostics, Treatments

## U.S. ARMY MEDICAL TEST AND EVALUATION ACTIVITY

Booth 1009

[medcoe.army.mil/usamteac-test-and-evaluation](http://medcoe.army.mil/usamteac-test-and-evaluation)

Medical Test & Evaluation Activity (MTEAC) is the only independent operational test agency of medical and medical-related materiel and information technology products in support of the Army and DoD acquisition process. The leadership and test officers of the MTEAC are Acquisition Corps members who are certified experts in managing and conducting test and evaluation for program managers and materiel developers. This team must certify that the systems are ready for full-rate production and deployment.

**Categories:** Health Readiness

## UNIVERSITY OF PITTSBURGH - CENTER FOR MILITARY MEDICINE RESEARCH AND MCGOWAN INSTITUTE FOR REGEN MED | Booth 513

[www.cmmr.pitt.edu](http://www.cmmr.pitt.edu)

University of Pittsburgh is comprised of 16 schools with thriving multidisciplinary centers, and close ties to its clinical partner, UPMC, are committed to expanding human understanding, improving health, spurring innovation and entrepreneurship, and stimulating solutions to the greatest needs of modern society. Pitt research couples the research with 80+ universities, hundreds of corporate partners, government entities, and funding agencies and assures integrity, compliance and excellence to meet the needs of the DoD.

**Categories:** Blood and Coagulation Systems, Drug Delivery Systems, Education, Environmental & Occupational, Health Readiness, Hearing & Vision, Human Performance, Imaging, Infectious Disease - Diagnostics, Treatments, Information Technology - Health, Musculoskeletal Injury Prevention, Nutrition, Post Traumatic Stress Disorder, Prosthetics, Psychological Health, Radiation Health, Rehabilitation - Craniomaxillofacial, Limb, Neuromusculoskeletal, Simulations - Medical Training, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care, Traumatic Brain Injury, Wound Management

## US ARMY MEDICAL MATERIEL DEVELOPMENT ACTIVITY

Booth 901

[www.usammda.army.mil](http://www.usammda.army.mil)

The U.S. Army Medical Materiel Development Activity is the Department of Defense's (DOD) medical product development systems management and acquisition organization. USAMMDA develops new drugs, vaccines, devices and medical support equipment. and improves readiness, guarantees the highest quality medical care, maximizes survival of medical casualties.

**Categories:** Blood and Coagulation Systems, Drug Delivery Systems, Education, Emergency Medical Equipment, Environmental & Occupational, Health Readiness, Hearing & Vision, Human Performance, Hydration, Imaging, Infectious Disease - Diagnostics, Treatments, Information Technology - Health, Musculoskeletal Injury Prevention, Nutrition, Osteopathy, OTHER, Pain Management, Patient Transport/EnRoute Care, Post Traumatic Stress Disorder, Prosthetics, Psychological Health, Radiation Health, Rehabilitation - Craniomaxillofacial, Limb, Neuromusculoskeletal, Simulations - Medical Training, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care, Traumatic Brain Injury, Wound Management

## USAMRDC OFFICE OF REGULATED ACTIVITIES | Booth 1100

[USARIEM.health.mil](http://USARIEM.health.mil)

The U.S. Army Research Institute of Environmental Medicine is a subordinate command of the U.S. Army Medical Research and Development Command under the Army Futures Command. USARIEM is internationally recognized as the DOD's premier laboratory for Warfighter health and performance research and focuses on environmental medicine, physiology, physical and cognitive performance, and nutrition research. Located at the Natick Soldier Systems Center in Natick, Massachusetts, USARIEM's mission is to optimize Warfighter health and performance through medical research.

# Exhibits



## USARIEM | Booth 1108

[mrdc-intranet.health.mil/sites/ORA/sitepages/home.aspx](http://mrdc-intranet.health.mil/sites/ORA/sitepages/home.aspx)

The Office of Regulated Activities (ORA) is a multidisciplinary team of regulatory affairs and clinical compliance professionals dedicated to supporting the USAMRDC mission of developing Food and Drug Administration regulated medical products for the Warfighter. The ORA provides full-service, oversight, and consultation for regulatory, clinical, non-clinical, manufacturing, data management, and biostatistics support for FDA regulated drug, biologic, medical device, and combination products. Regulatory support begins with the initial regulatory strategy and throughout advanced development, to mitigate risk and accelerate the delivery of FDA-Regulated products to Service Members.

## USU CENTER FOR BIOTECHNOLOGY – 4D BIO3 | Booth 312

[www.usuhs.edu/4dbio3](http://www.usuhs.edu/4dbio3)

4D Bio3 is a Center for Biotechnology that develops and adapts promising new biotechnology for the benefit of Warfighter readiness and resilience. We champion a multi-disciplinary approach that combines various Department of Defense (DoD), federal and non-federal experts across traditional and emerging fields.

**Categories:** Blood and Coagulation Systems, Health Readiness, Human Performance, Radiation Health, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care, Wound Management

## VCOM | Booth 501

[www.vcom.edu](http://www.vcom.edu)

The MISSION of the Edward Via College of Osteopathic Medicine (VCOM) is to prepare globally-minded, community-focused physicians to meet the needs of rural and medically underserved populations and promote research to improve human health. The College opened its doors to the first students in Blacksburg, Virginia during the fall of 2003 and graduated its first class in 2007. Since then, VCOM has opened campuses in Spartanburg, South Carolina, and Auburn, Alabama and Monroe, Louisiana.

**Categories:** Education, Osteopathy, Simulations - Medical Training, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care, Traumatic Brain Injury

## WAKE FOREST INSTITUTE FOR REGENERATIVE MEDICINE

Booth 908

[www.wakehealth.edu/wfirm](http://www.wakehealth.edu/wfirm)

The Wake Forest Institute for Regenerative Medicine is recognized as an international leader in translating scientific discovery into clinical therapies, with many world firsts, including the development and implantation of the first engineered organ in a patient. A number of the basic principles of tissue engineering and regenerative medicine were first developed at the institute.

**Categories:** Education, OTHER, Rehabilitation - Craniomaxillofacial, Limb, Neuromusculoskeletal

## ZOLL MEDICAL CORPORATION | Booth 1206

**Categories:** Emergency Medical Equipment, Environmental & Occupational, Health Readiness, Human Performance, Musculoskeletal Injury Prevention, Patient Transport/EnRoute Care, Simulations - Medical Training, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care, Traumatic Brain Injury

*(exhibitors as of 23 August)*



**Download the MHSRS mobile app  
for the latest updates.**





**REGISTRATION**

City Hall Lobby – Ballroom/Level 2

**SPEAKER READY ROOM**

Flagler – Ballroom/Level 2

**PLENARY SESSION**

Osceola Ballroom – Ballroom/Level 2

**BREAKOUTS**

Sun A – Ballroom/Level 2

Sun B – Ballroom/Level 2

Sun C123 – Ballroom/Level 2

Sun D456 – Ballroom/Level 2

Desoto – Mezzanine Level

Lafayette – Mezzanine Level

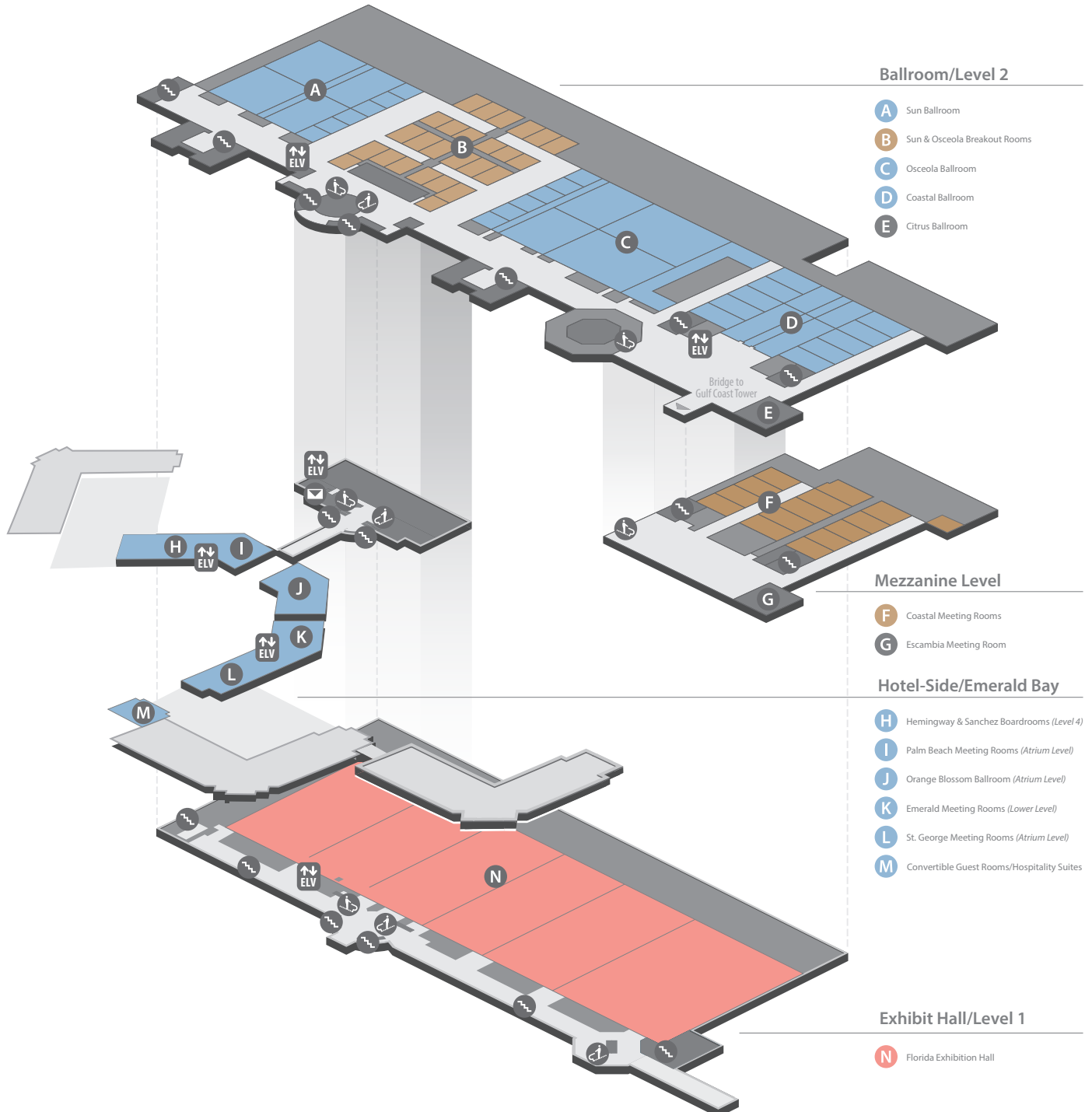
Suwannee – Mezzanine Level

**EXHIBIT HALL/POSTER SESSIONS**

Florida A-D – Exhibit Hall/Level 1

**MEALS**

Florida EF – Exhibit Hall/Level 1





**COLOR LEGEND**

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

**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**

- M1 102 St. George Meeting Room
- M2 104 St. George Meeting Room
- M3 106 St. George Meeting Room
- M4 108 St. George Meeting Room
- M5 Emerald Meeting Rooms (Lower Level)
- M6 St. George Meeting Rooms, 112 - 114
- M7 Orange Blossom Ballroom
- M8 Boardrooms (Level 4)
- M9 Palm Beach Meeting Room
- M10 Convertible Guest Rooms/Hospitality Suites
- M11 Coquina Lawn
- M12 Mangrove Point

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