

MEDICAL READINESS for the Future Fight



MILITARY HEALTH SYSTEM

MHSRS

RESEARCH SYMPOSIUM

2023

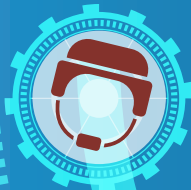


Exhibit Hall & Poster Sessions



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Exhibitors by Booth Number



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206	Advanced Materials and Devices	702	Military & Health Research Foundation
207	Delta Development Team	706	Red One Medical Devices
208	DTS - Diversified Technical Systems	708	Walter Reed Army Institute of Research
209	Philips	712	Office of Medical Technology Transfer (MTT)
212	Neurowave Systems	900	BIRCO/JTAPIC
213	Cera Products	901	Borden Institute
214	DLH Corporation	902	U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID)
215	CFD Research Corporation	903	Office of Human and Animal Research Oversight (OHARO)
300	Defense Health Agency, Research & Engineering Directorate	906	Office of Regulated Activities (ORA), USAMRDC
301	National Strategic Research Institute at the University of Nebraska	907	Hamilton Medical
306	Aseptico	908	USAMRAA
307	The Geneva Foundation	912	USARIEM
308	Immuron	913	GE Healthcare
		914	USAARL

Exhibitors by Booth Number



1000	TDA Research	1212	EMIT Corporation
1001	Wake Forest Institute for Regenerative Medicine	1213	The Metis Foundation
1002	Arcos	1214	Valneva US
1003	Argentum Medical	1215	SAM Medical
1006	Naval Health Research Center	1300	MATBOCK
1007	Naval Medical Research Command	1301	Applied Research Associates / Blast Analytics and Mitigation
1008	Naval Medical Research Unit - Dayton	1302	First Nation Group
1012	Integrated Medcraft	1303	ATCC Federal Solutions
1013	Military Traumatic Brain Injury Initiative	1306	Repurposed Therapeutics
1014	Elemance	1307	Phokus Research
1015	Henry Jackson Foundation for the Advancement of Military Medicine	1308	OXOS Medical
1100	ARMI BioFabUSA	1309	SOAR Technology
1101	NuShores Biosciences	1312	Adaptive Neural Systems Group
1102	RTI International	1313	3M Health Care
1103	Operative Experience	1314	Kerecis
1106	Lactea Therapeutics	1315	Goldbelt Frontier
1107	BlueHalo		
1108	Celox Medical		
1109	US Army Medical Test and Evaluation Activity (MTEAC)		
1112	Shoreland		
1113	Altrazeal		
1114	Rheolution		
1115	Athena GTX		
1200	Kitware		
1201	SomaLogic Operating Co.		
1202	Steadman Philippon Research Institute		
1203	Examinetics		
1206	BBC Entrepreneurial Training & Consulting (BBCetc)		
1207	Sciperio		
1208	Eitan Medical		
1209	Prytime Medical Devices		

Exhibitors by Product Category

MILITARY HEALTH SYSTEM RESEARCH SYMPOSIUM



BLOOD AND COAGULATION SYSTEMS

Belmont Medical Technologies
Delta Development Team
EMIT Corporation
LITES
MATBOCK
Military Health Research Foundation
Red One Medical Devices
Rheolution
Sciperio
U.S. Army Medical Materiel Development Activity (USAMMDA)
USU Center for Biotechnology – 4DBio3

DRUG DELIVERY SYSTEMS

Altrazeal
Battelle
BBC Entrepreneurial Training & Consulting (BBCetc)
Eitan Medical
Immuron
Integrated MedCraft
Military Health Research Foundation
Moderna
National Strategic Research Institute at the University of Nebraska
Neurowave Systems
Red One Medical Devices
Rheolution
Thornhill Medical
U.S. Army Medical Materiel Development Activity (USAMMDA)
Wake Forest Institute for Regenerative Medicine

EDUCATION

Applied Research Associates & Blast Analytics and Mitigation
ARMY | BioFabUSA
Borden Institute
DLH Corporation
Geneva Foundation, The
Henry Jackson Foundation for the Advancement of Military Medicine
Metis Foundation, The
National Strategic Research Institute at the University of Nebraska
NightWare
Office of Human and Animal Research Oversight (OHARO)
Shoreland
U.S. Army Medical Materiel Development Activity (USAMMDA)
U.S. Army Medical Research Institute of Infectious Diseases
(USAMRIID)
Wake Forest Institute for Regenerative Medicine

EMERGENCY MEDICAL EQUIPMENT

ADS
Athena GTX
BBC Entrepreneurial Training & Consulting (BBCetc)
Belmont Medical Technologies
BMK Ventures / Marketing Assessment
CFD Research Corporation
Delta Development Team
Eitan Medical
EMIT Corporation
First Nation Group
Hamilton Medical
Integrated MedCraft
Kosmos by EchoNous
Lactea Therapeutics
Marketing Assessment
Masimo
Military Health Research Foundation
National Strategic Research Institute at the University of Nebraska
North American Rescue
Operative Experience
Panakeia
Philips
Red One Medical Devices
Rheolution
SAM Medical
Soar Technology
SomaLogic Operating Co.
TacMed Solutions
TDA Research
Thornhill Medical
U.S. Army Medical Materiel Development Activity (USAMMDA)
U.S. Army Medical Research & Development Command,
Office of Medical Technology Transfer (MTT)
University of Pittsburgh (Center for Military Medicine Research &
The McGowan Institute)
ZOLL Medical Corporation

ENVIRONMENTAL & OCCUPATIONAL

AFRL/711HPW Airman Biosciences Division
Applied Research Associates & Blast Analytics and Mitigation
Battelle
CFD Research Corporation
DTS - Diversified Technical Systems
Government Scientific Source
Moderna
National Strategic Research Institute at the University of Nebraska

Exhibitors by Product Category



Naval Medical Research Unit Dayton
Red One Medical Devices
SomaLogic Operating Co.
U.S. Army Medical Materiel Development Activity (USAMMDA)
U.S. Army Medical Research & Development Command, Office of
Medical Technology Transfer (MTT)
U.S. Army Research Institute of Environmental Medicine (USARIEM)

HEALTH READINESS

Advanced Materials and Devices
AFRL/711HPW Airman Biosciences Division
Battelle
BlueHalo
Department of Health & Human Services, Biomedical Advanced
Research & Development Authority (BARDA)
DLH Corporation
Geneva Foundation, The
Goldbelt Frontier
Government Scientific Source
Immuron
KBR
Lactea Therapeutics
Medical Technology Enterprise Consortium (MTEC)
Military Health Research Foundation
Moderna
National Strategic Research Institute at the University of Nebraska
Naval Health Research Center (NHRC)
Naval Medical Research Command (NMRC)
Outpatient App
Panakeia
Program Executive Officer, Defense Healthcare Management Systems
(PEO DHMS)
RTI International
Shoreland
Soar Technology
SomaLogic Operating Co.
U.S. Army Medical Materiel Development Activity (USAMMDA)
U.S. Army Medical Research Institute of Infectious Diseases
(USAMRIID)
U.S. Army Research Institute of Environmental Medicine (USARIEM)
Valneva
Walter Reed Army Institute of Research

HEARING & VISION

BlueHalo
DTS - Diversified Technical Systems
Examinetics

Military Health Research Foundation
National Strategic Research Institute at the University of Nebraska
U.S. Army Medical Materiel Development Activity (USAMMDA)
U.S. Army Medical Research & Development Command, Office of
Medical Technology Transfer (MTT)

HUMAN PERFORMANCE

AFRL/711HPW Airman Biosciences Division
Battelle
BlueHalo
Cera Products
CFD Research Corporation
Defender Pharmaceuticals
First Nation Group
Geneva Foundation, The
Goldbelt Frontier
Lactea Therapeutics
Military Health Research Foundation
National Strategic Research Institute at the University of Nebraska
Naval Medical Research Unit Dayton
NightWare
Outpatient App
Panakeia
Red One Medical Devices
Soar Technology
SomaLogic Operating Co.
U.S. Army Medical Materiel Development Activity (USAMMDA)
U.S. Army Medical Research & Development Command,
Office of Medical Technology Transfer (MTT)
U.S. Army Research Institute of Environmental Medicine (USARIEM)
Wake Forest Institute for Regenerative Medicine

HYDRATION

Cera Products
Government Scientific Source
Panakeia
Red One Medical Devices
U.S. Army Medical Materiel Development Activity (USAMMDA)
U.S. Army Medical Research & Development Command,
Office of Medical Technology Transfer (MTT)
U.S. Army Research Institute of Environmental Medicine (USARIEM)

IMAGING

GE Healthcare
Government Scientific Source
Integrated MedCraft
Kosmos by EchoNous

Exhibitors by Product Category



NovaSignal
OXOS Medical
Panakeia
Sciperio
Soar Technology
Steadman Philippon Research Institute
U.S. Army Medical Materiel Development Activity (USAMMDA)
Wake Forest Institute for Regenerative Medicine
Infectious Disease - Diagnostics, Treatments
Immuron
U.S. Army Medical Materiel Development Activity (USAMMDA)
U.S. Army Medical Research & Development Command,
Office of Medical Technology Transfer (MTT)
U.S. Army Medical Research Institute of Infectious Diseases
(USAMRIID)

INFORMATION TECHNOLOGY - HEALTH

ARMI | BioFabUSA
Battelle
BBC Entrepreneurial Training & Consulting (BBCetc)
BlueHalo
CFD Research Corporation
Crimson Phoenix Government Solutions
DLH Corporation
Goldbelt Frontier
Kitware
Kosmos by EchoNous
Masimo
Military Health Research Foundation
Outpatient App
SomaLogic Operating Co.
U.S. Army Medical Materiel Development Activity (USAMMDA)
U.S. Army Medical Research & Development Command,
Office of Medical Technology Transfer (MTT)

MUSCULOSKELETAL INJURY PREVENTION

Borden Institute
CFD Research Corporation
Elemance
Geneva Foundation, The
James A. Haley VA Hospital - Post Deployment Rehabilitation &
Evaluation Program (PREP)
Military Health Research Foundation
Naval Health Research Center (NHRC)
Red One Medical Devices
Steadman Philippon Research Institute

U.S. Army Medical Materiel Development Activity (USAMMDA)
U.S. Army Research Institute of Environmental Medicine (USARIEM)

NUTRITION

SomaLogic Operating Co.
U.S. Army Medical Materiel Development Activity (USAMMDA)
U.S. Army Research Institute of Environmental Medicine (USARIEM)

OSTEOPATHY

Red One Medical Devices
U.S. Army Medical Materiel Development Activity (USAMMDA)

OTHER

Advanced Materials and Devices
Aseptico
ATCC Federal Solutions
Crimson Phoenix Government Solutions
Defender Pharmaceuticals
Defense Health Agency, Research & Engineering Directorate
DTS - Diversified Technical Systems
Elemance
Goldbelt Frontier
Government Scientific Source
KBR
Masimo
Metis Foundation, The
Navy Entomology Center of Excellence (NECE)
NuShores Biosciences
Office of Human and Animal Research Oversight (OHARO)
Phokus Research
Program Executive Officer, Defense Healthcare Management
Systems (PEO DHMS)
Rheolution
Steadman Philippon Research Institute
U.S. Army Medical Materiel Development Activity (USAMMDA)
U.S. Army Medical Test and Evaluation Activity (MTEAC)
University of Pittsburgh (Center for Military Medicine
Research & The McGowan Institute)
USU Center for Biotechnology - 4DBio3

PAIN MANAGEMENT

Eitan Medical
Geneva Foundation, The
Henry Jackson Foundation for the Advancement of Military Medicine
Panakeia
Red One Medical Devices

Exhibitors by Product Category

MILITARY HEALTH SYSTEM RESEARCH SYMPOSIUM



Steadman Philippon Research Institute
U.S. Army Medical Materiel Development Activity (USAMMDA)

PATIENT TRANSPORT/ENROUTE CARE

AFRL/711HPW Airman Biosciences Division
Belmont Medical Technologies
CFD Research Corporation
Integrated MedCraft
Marketing Assessment
Military Health Research Foundation
National Strategic Research Institute at the University of Nebraska
Panakeia
Red One Medical Devices
Smeed Technologies
U.S. Army Medical Materiel Development Activity (USAMMDA)
U.S. Army Medical Research & Development Command, Office of
Medical Technology Transfer (MTT)
University of Pittsburgh (Center for Military Medicine Research &
The McGowan Institute)

POST TRAUMATIC STRESS DISORDER

James A. Haley VA Hospital - Post Deployment Rehabilitation &
Evaluation Program (PREP)
National Strategic Research Institute at the University of Nebraska
NightWare
RTI International
SomaLogic Operating Co.
TDA Research
U.S. Army Medical Materiel Development Activity (USAMMDA)

PROSTHETICS

Adaptive Neural Systems Group
Panakeia
Sciperio
U.S. Army Medical Materiel Development Activity (USAMMDA)

PSYCHOLOGICAL HEALTH

BlueHalo
DLH Corporation
KBR
SomaLogic Operating Co.
U.S. Army Medical Materiel Development Activity (USAMMDA)

RADIATION HEALTH

Department of Health & Human Services, Biomedical Advanced
Research & Development Authority (BARDA)
National Strategic Research Institute at the University of Nebraska
U.S. Army Medical Materiel Development Activity (USAMMDA)

REHABILITATION - CRANIOMAXILLOFACIAL, LIMB, NEUROMUSCULOSKELETAL

U.S. Army Medical Materiel Development Activity (USAMMDA)

SIMULATIONS - MEDICAL TRAINING

ADS
BlueHalo
BMK Ventures / Marketing Assessment
Goldbelt Frontier
Kitware
Marketing Assessment
National Strategic Research Institute at the University of Nebraska
North American Rescue
Operative Experience
Phokus Research
Red One Medical Devices
Safeguard Medical
Soar Technology
U.S. Army Medical Materiel Development Activity (USAMMDA)

TRAUMA CARE - POINT OF INJURY/PREHOSPITAL/ PROLONGED FIELD CARE/FORWARD SURGICAL CARE

ADS
Arcos
Argentum Medical
ARMI | BioFabUSA
Athena GTX
Battelle
BMK Ventures / Marketing Assessment
Borden Institute
Celox Medical
CFD Research Corporation
Delta Development Team
Department of Health & Human Services, Biomedical Advanced
Research & Development Authority (BARDA)
EMIT Corporation
First Nation Group
Integrated MedCraft
Kerecis
Lactea Therapeutics

Exhibitors by Product Category

MILITARY HEALTH SYSTEM RESEARCH SYMPOSIUM



LITES

Marketing Assessment

Masimo

MATBOCK

Medical Technology Enterprise Consortium (MTEC)

Military Health Research Foundation

National Strategic Research Institute at the University of Nebraska

North American Rescue

NovaSignal

NuShores Biosciences

Operative Experience

Panakeia

Phokus Research

Prytime Medical Devices

Red One Medical Devices

SAM Medical

Smith+Nephew

TDA Research

U.S. Army Medical Materiel Development Activity (USAMMDA)

U.S. Army Medical Research & Development Command,
Office of Medical Technology Transfer (MTT)

University of Pittsburgh (Center for Military Medicine Research &
The McGowan Institute)

TRAUMATIC BRAIN INJURY

Advanced Materials and Devices

Applied Research Associates & Blast Analytics and Mitigation

Battelle

BlueHalo

CFD Research Corporation

DLH Corporation

DTS - Diversified Technical Systems

Elemance

Federal Interagency Traumatic Brain Injury Research (FITBIR)

Integrated MedCraft

James A. Haley VA Hospital - Post Deployment Rehabilitation &
Evaluation Program (PREP)

LITES

Military Health Research Foundation

Military Traumatic Brain Injury Initiative

Naval Health Research Center (NHRC)

Naval Medical Research Command (NMRC)

NovaSignal

Red One Medical Devices

RTI International

SomaLogic Operating Co.

U.S. Army Medical Materiel Development Activity (USAMMDA)

Walter Reed Army Institute of Research

WOUND MANAGEMENT

3M Health Care

Argentum Medical

Battelle

CFD Research Corporation

Integrated MedCraft

Lactea Therapeutics

MATBOCK

Metis Foundation, The

Military Health Research Foundation

Panakeia

Phokus Research

Red One Medical Devices

Rheolution

SAM Medical

Smith+Nephew

SomaLogic Operating Co.

Steadman Philippon Research Institute

U.S. Army Medical Materiel Development Activity (USAMMDA)

U.S. Army Medical Research & Development Command, Office of
Medical Technology Transfer (MTT)

Wake Forest Institute for Regenerative Medicine

Walter Reed Army Institute of Research

Exhibitor Profiles



3M HEALTH CARE | Booth# 1313

www.3m.com/medical

3M focuses on providing better care through patient-centered science. Helping transform outcomes by stewarding skin, reducing the risk of preventable complications and restoring lives. From wound and skin care to solutions for BSI and SSI risk reduction, our team is ready to partner with you to strive toward delivering the highest level of care for every patient, every time.

Categories: Wound Management

ADAPTIVE NEURAL SYSTEMS GROUP | Booth# 1312

i3r.uark.edu

Our team investigates the effects of trauma and disorders of the nervous system to replace damaged or lost functionality or to repair the nervous system using advanced adaptive devices and therapeutic techniques. The goal of our multidisciplinary team of engineers, clinicians, and scientists is to deliver advanced medical technology. The ANS Group designs and develops technology to offset the effects of: limb amputation, orthopedic injury and disease, and neurological conditions and neurodegenerative diseases. The ANS group is located in the University of Arkansas' Institute for Integrative and Innovative Research.

Categories: Prosthetics

ADS | Booth# 601

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 to enhance readiness and your acquisition strategy. Bring us your mission.

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

ADVANCED MATERIALS AND DEVICES | Booth# 206

www.amadinc.com

Advanced Materials and Devices develops wearable sensors to detect and record warfighter blast overpressure exposure. Blast overpressure exposure might be linked to Traumatic Brain Injury, and wearable sensors make it possible to develop exposure records.

Categories: Health Readiness, Other, Traumatic Brain Injury

AFRL/711HPW AIRMAN BIOSCIENCES DIVISION | Booth# 501

www.afrl.af.mil/711HPW

Discover, demonstrate, and transition knowledge products and technology solutions from the full spectrum of bioscience, biotechnology and aerospace medicine, to enable, enhance, sustain, and restore the health and performance of the multi-domain Airman and Guardian.

Categories: Environmental & Occupational, Health Readiness, Human Performance, Patient Transport/EnRoute Care

ALTRAZEAL | Booth# 1113

www.altrazeal.com

Altrazeal® is a patented powder dressing specially engineered to cover and protect the wound and to provide an ideal moist wound healing environment that supports cellular function and tissue repair. Its non-resorbable, sterile granules aggregate when hydrated with saline to form a moist, flexible, oxygen permeable film that fits and seals the wound.

Categories: Drug Delivery Systems

APPLIED RESEARCH ASSOCIATES & BLAST ANALYTICS AND MITIGATION | Booth# 1301

www.ara.com

Founded in 1979, Applied Research Associates, Inc. (ARA) offers innovative technologies and solutions to problems to improve our safety, security, and way of life. Our employee-owners, most of whom have advanced degrees in engineering and the physical sciences, have the expertise to tackle the most challenging technical problems. With offices throughout the United States and Canada, ARA is globally recognized for applying technically-excellent, in-depth and diversified research, engineering, and technical support services to provide answers to complex problems. ARA approaches every project as an opportunity to go beyond expectations by delivering solutions that accomplish objectives and lead to new possibilities.

Categories: Education, Environmental & Occupational, Traumatic Brain Injury

ARCOS | Booth# 1002

www.arcosmedical.com

Arcos, Inc. makes performance improvement tools for burn and trauma care: Burn Navigator® software implements your protocol for burn fluid resuscitation, provides graphs, projections and smart alerts and sends data to major EMRs. Multi-center data shows that following a Burn Nav protocol reduced burn shock incidence and less fluid was needed when Burn Navigator use began early in the resuscitation. Blood Navigator™ is a new trauma PI product which easily tracks blood products across pre-hospital, ER, OR and ICU, provides real-time calcium, TXA and visco-elastic goal directed therapy suggestions, sends data to major EHRs, provides PI reports and more.

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

ARGENTUM MEDICAL | Booth# 1003

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 (particularly by inexperienced personnel), easy to store and easy for patient transport.

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

ARMY | BIOFABUSA | Booth# 1100

www.armiusa.org

BioFabUSA, a program of ARMI, is a public-private partnership with more than 170 members, including companies, academic institutions and not-for profit organizations. The mission of BioFabUSA is to bring together the fundamental tenets of good manufacturing processes and the science of regenerative medicine to create regenerative manufacturing and the trained and ready workforce necessary for that manufacturing.

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

ASEPTICO | Booth# 306

www.aseptico.com

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: Other

Exhibitor Profiles



ATCC FEDERAL SOLUTIONS | Booth# 1303

www.atcc.org/federal-solutions

ATCC, a non-profit organization founded in 1925, is the world's most diverse biological resource center, supporting public health initiatives for the US government, academia, the pharmaceutical industry, and research foundations. For more than 50 years, we have supported federal agencies through contracts focused on global health and infectious diseases, biodefense, chronic diseases, clinical study support, global logistics, and biorepository establishment/maintenance - all combined with our commitment to quality and responsive management. ATCC provides federal agencies with curated, high-quality biomaterials and resources, laboratory services, and repository operations.

Categories: Treatments, Other

ATHENA GTX | Booth# 1115

www.athenagtx.com

Athena GTX is proud to design and manufacture wireless, mobile, patient-worn, multiple casualty monitors to assist in point of injury triage and treatment decisions. We serve civilian and military markets related to medical state and smart monitors for first responders. Our devices allow you to connect with patient data remotely, extending monitoring capabilities further into the field.

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

BATTELLE | Booth# 114

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, Treatments, Information Technology - Health, Limb, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care, Traumatic Brain Injury, Wound Management

BBC ENTREPRENEURIAL TRAINING & CONSULTING

(BBCETC) | Booth# 1206

www.bbcetc.com

BBC Entrepreneurial Training & Consulting, LLC (BBCetc) works with technology-based entrepreneurs and companies throughout the U.S. on strategies to advance their R&D efforts to commercialization. In particular, the BBCetc team is nationally recognized for its success in helping clients secure federal funding through the Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs. BBCetc services include research grant assistance, SBIR/STTR training and proposal development assistance, and grants and contract management. With expertise in all 11 participating federal agencies, the BBCetc team has reviewed over 3,000 proposals since 2000 and trained thousands more on how to prepare compelling SBIR/STTR proposals and integrate SBIR/STTR funding into their overall funding strategy.

Categories: Drug Delivery Systems, Emergency Medical Equipment, Information Technology - Health

BELMONT MEDICAL TECHNOLOGIES | Booth# 200

www.belmontmedtech.com

For over 35 years, Belmont Medical Technologies has been 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 premier product is The Belmont® Rapid Infuser RI-2, which utilizes electromagnetic induction heating and 100% aluminum-free disposables to provide precise control of fluid temperature and flow rate during fluid administration without the added concern of potential aluminum toxicity. Belmont's technology is credited with saving thousands of lives globally by infusing warm blood and fluid into patients experiencing massive blood loss, while exceptional air removal helps keep the patient safe from air embolism. Belmont also offers the close-to-patient, portable and battery-operated buddy lite® and buddy lite® AC for military, hospital and pre-hospital blood and fluid warming. Along with our other blood and fluid warming options, the buddy lite® also features a 100% aluminum-free disposable and built-in safety features designed to reduce transfusion complications. Belmont's advanced targeted temperature solutions include the Allon® system with ThermoWrap® patient garment, and the CitiCool® system with CureWrap® patient garment. These solutions are designed to enable healthcare providers to exercise control and management of patient body temperature.

Categories: Blood and Coagulation Systems, Emergency Medical Equipment, Patient Transport/EnRoute Care

BLAST INJURY RESEARCH COORDINATING OFFICE (BIRCO)/JOINT TRAUMA ANALYSIS AND PREVENTION OF INJURY IN COMBAT (JTAPIC) | Booth# 900

BLUEHALO | Booth# 1107

www.bluehalo.com/healthcare

BlueHalo provides AI-enabled smart technologies, mobile apps, connected wearables, cloud-based analytics, and integration software for the healthcare mission. Above all, our technologies facilitate better patient care by taking the therapeutic experience beyond the clinical setting.

Categories: Health Readiness, Hearing & Vision, Human Performance, Information Technology - Health, Psychological Health, Simulations - Medical Training, Traumatic Brain Injury

BMK VENTURES / MARKETING ASSESSMENT | Booth# 1114

www.bmkventures.com

BMK Ventures, Inc. is a certified Service Disabled Veteran Owned Small Business (SDVOSB) based in Virginia Beach, VA. Our goal is to provide fast, efficient, and dependable service to fulfill our customers' unique needs and acquisition challenges. With over 200 years of combined industry experience, BMKV excels in providing resources that meets and exceeds our customers' requirements. BMKV offers multiple procurement options and custom solutions to better serve our warfighters, first responders, and medical personnel around the world.

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

Exhibitor Profiles



BORDEN INSTITUTE | Booth# 901

www.medcoe.army.mil/borden

The Borden Institute was established in 1987 to foster and promote excellence in military academic medicine through the development and publication of military medical scholarship. 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, Musculoskeletal Injury Prevention, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care

CELOX MEDICAL | Booth# 1108

www.celoxmedical.com

Medtrade Products Ltd, is a world-leading, independent product innovator based in the UK since 1999, and in 2006, we achieved a technological breakthrough with the launch of CELOX Granules. The technology embedded in these granules was found to save lives on the battlefield by halting life-threatening bleeding. Since that time, we have developed five generations of our CELOX range of technologically advanced solutions in wound care, trauma wound care and surgical wound care which are key to saving lives in both military and civilian EMS scenarios. The highly skilled experts in our medical team have a wealth of knowledge in materials science, regulatory matters, quality requirements and manufacturing processes, and use this to bring to market ground-breaking innovations that rapidly, safely, and effectively treat life-threatening bleeding in pre-hospital emergency situations.

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

CENTER FOR NEUROSCIENCE AND REGENERATIVE MEDICINE (CNRM) | Booth# 106

www.cnrm.usuhs.edu/home

CNRM is a joint federal traumatic brain injury (TBI) research organization formed as a partnership between the Uniformed Services University (USU) and the National Institutes of Health (NIH). We study and develop precision medicine tools that'll take the guesswork out of future TBI diagnosis and treatment within the U.S. military community. We work with institutions like NIH, USU, and others to conduct interdisciplinary research across all TBI severities, at acute and subacute time points. Our rigorous science contributes to the development of objective TBI diagnostic and prognostic measures, as well as treatment solutions in austere environments - with the ultimate goal of lessening TBI's impact on U.S. service members.

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

CERA PRODUCTS | Booth# 213

www.ceraproductsinc.com

Manufacturer of clinically proven, patented rice-based Oral Rehydration Salts (ORS) and electrolyte powdered drink mixes. Our formulas were developed along with doctors from Johns Hopkins University, are used to prevent and correct severe dehydration, and can be used in place of an IV. Plant-based and clinically proven to rehydrate faster than sugar or fructose-made ORS. No added sugar, GMOs, artificial sweeteners or colors, 5-year shelf life, and Made in the USA. Certified SBA WOSB Columbus, GA.

Categories: Human Performance, Hydration

CFD RESEARCH CORPORATION | Booth# 215

www.cfd-research.com

CFD Research Corporation specializes in engineering simulations, advanced prototypes, and innovative designs for aerospace, defense, life sciences, materials, energy, and other industries. Using our software and experimental capabilities, we develop new hardware concepts, innovative designs, and superior solutions.

Categories: Emergency Medical Equipment, Environmental & Occupational, Human Performance, Treatments, Information Technology - Health, Musculoskeletal Injury Prevention, Patient Transport/EnRoute Care, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care, Traumatic Brain Injury, Wound Management

CRIMSON PHOENIX GOVERNMENT SOLUTIONS | Booth# 507

www.crimsonphoenix.com

Crimson Phoenix specializes in web development, graphic design, software engineering, system engineering, training, intelligence analysis, data science, and instructional systems design.

Categories: Information Technology - Health, Other

DEFENDER PHARMACEUTICALS | Booth# 1306

www.defenderpharma.com

Repurposed Therapeutics, Inc. (d/b/a Defender Pharmaceuticals, Inc.) was incorporated on June 17, 2014 under the laws of the state of Florida. Headquartered in St. Louis, MO, we are a clinical stage biopharmaceutical company developing intranasal scopolamine formulations with innovative intranasal delivery technology as a treatment for several promising indications, including the treatment of symptoms associated with motion sickness, depression, and chemical and biological countermeasures.

Categories: Human Performance, Other

DEFENSE HEALTH AGENCY, RESEARCH & ENGINEERING DIRECTORATE | Booth# 300

www.health.mil/Military-Health-Topics/Research-and-Innovation/DHA-Research-and-Engineering

The DHA Research and Engineering (R&E) Directorate leads the discovery of innovative medical solutions responsive to the needs of combatant commands, the military services, and the military health system by guiding research investments in military health and medicine that lead to solutions for enhancing future warfighter health and readiness.

Categories: Other

DELTA DEVELOPMENT TEAM | Booth# 207

www.deltadevteam.com

Delta Development manufactures the world's smallest portable blood refrigerator. DDT designs blood cold storage solutions for military applications.

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

Exhibitor Profiles



DEPARTMENT OF HEALTH & HUMAN SERVICES, BIOMEDICAL ADVANCED RESEARCH & DEVELOPMENT AUTHORITY (BARDA) | Booth# 115

www.medicalcountermeasures.gov

BARDA is a U.S. Government office within the Administration for Strategic Preparedness and Response (ASPR) in the U.S. Department of Health and Human Services that funds advanced research and development of vaccines, drugs, therapies, and diagnostic tools for public health medical emergencies, such as chemical, biological, and nuclear (CBRN) accidents, incidents, and attacks, pandemic influenza, and emerging infectious diseases.

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

DLH CORPORATION | Booth# 214

www.dlhcorp.com

DLH delivers improved health and national security readiness solutions for federal programs through science research and development, systems engineering and integration, and digital transformation. Our 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.

Categories: Education, Health Readiness, Information Technology - Health, Psychological Health, Traumatic Brain Injury

DTS - DIVERSIFIED TECHNICAL SYSTEMS | Booth# 208

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

EITAN MEDICAL | Booth# 1208

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 pre-acute, hospital, ambulatory, and home care environments.

Categories: Drug Delivery Systems, Emergency Medical Equipment, Pain Management

ELEMANCE | Booth# 1014

www.elemance.com

Elemance is committed to protecting human lives by developing and licensing virtual HBMs that give companies and researchers the tools to comprehensively evaluate the effects of technologies on the human body. Founded in 2014, Elemance, LLC is the exclusive distributor of the GHBM models, to both commercial and academic users. We license the complete family of human body models, encompassing both male and female, a range of postures, and varying levels of complexity. In addition to licensing, Elemance provides comprehensive maintenance, enhancement and support of licensed models, as well as consulting services related to biomechanics, injury biomechanics, and other human modeling applications.

Categories: Musculoskeletal Injury Prevention, Other, Traumatic Brain Injury

EMIT CORPORATION | Booth# 1212

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 systems are the only ones capable of delivering large volumes of warm blood to your patient quickly!

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

EXAMINETICS | Booth# 1203

www.examinetics.com

Audiometric hearing conservation company. Salux is the portable hearing solution for Readiness, Trg or Ops post incident that's deployable in every environment required.

Categories: Hearing & Vision

FEDERAL INTERAGENCY TRAUMATIC BRAIN INJURY RESEARCH (FITBIR) | Booth# 100

www.fitbir.nih.gov

The Federal Interagency Traumatic Brain Injury Research (FITBIR) informatics system was developed to share data across the entire TBI research field and to facilitate collaboration as well as interconnectivity with other informatics platforms. Sharing data, methodologies, and associated tools, rather than summaries or interpretations of this information, can accelerate research progress by allowing re-analysis of data, as well as re-aggregation, integration, and rigorous comparison with other data.

Categories: Traumatic Brain Injury

FIRST NATION GROUP | Booth# 1302

www.firstnationgroup.com

First Nation Group, the premier Service-Disabled Veteran-Owned Small Business, Women-Owned Small Business, and Small Business, is a nationwide, stocking distributor of medical-surgical equipment and supplies, generic pharmaceutical products, and remote setup solutions exclusively serving the U.S. Federal Government. Since 1992, First Nation Group has been at the forefront of the medical equipment industry delivering superior products, service, and support while giving back generously.

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

Exhibitor Profiles



GE HEALTHCARE | Booth# 913

www.gehealthcare.com

GE HealthCare is a leading global medical technology, pharmaceutical diagnostics, and digital solutions innovator dedicated to providing integrated solutions to make hospitals more efficient, clinicians more effective, therapies more precise, and patients healthier.

Categories: Imaging

THE GENEVA FOUNDATION | Booth# 307

www.mirrorusuhs.org

The Musculoskeletal Injury Rehabilitation Research for Operational Readiness (MIRROR) Program is a Defense Health Agency-funded consortium consisting of over 26 Military treatment facilities and civilian institutions. MIRROR provides critical infrastructure, operational, and research support to advance the treatment and preventive care for Service Members with non-combat related musculoskeletal injury (MSKI) for over 40+ active clinical studies. Headquartered at the Uniformed Services University of the Health Sciences (USUHS) within the Department of Physical Medicine & Rehabilitation and administered by The Geneva Foundation, MIRROR coordinates interservice partnerships with the primary military treatment facilities, as well as other sites that experience a high volume of MSKI, but lack a strong infrastructure to conduct rigorous clinical and translational studies. MIRROR's clinical infrastructure consists of over 30+ on-site research staff, a fully staffed regulatory/data management/analysis team, engineers, investigators, biostatistical support, and program management.

Categories: Education, Health Readiness, Human Performance, Musculoskeletal Injury Prevention, Pain Management

GOLDBELT FRONTIER | Booth#1315

www.goldbeltfrontier.com

Goldbelt Frontier is a subsidiary of Goldbelt, Incorporated, an Alaska Native Corporation, and a participant in the SBA's 8(a) program. Goldbelt Frontier fosters a collaborative environment where our employees are encouraged to utilize and employ their operational and leadership skills; many of our senior project managers and business analysts are recognized as Subject Matter Experts (SME) in their fields. Our employees are mission-driven and bring the skillsets necessary to operate and thrive while working in dynamic, multifaceted environments. We understand how to work with and support multiple stakeholders to aid in the development and implementation of national policies, strategies, and doctrine. Requirements we presently support include numerous services and areas of technical expertise for research and scientific efforts across a broad spectrum of solutions.

Categories: Health Readiness, Human Performance, Information Technology - Health, Other, Simulations - Medical Training

GOVERNMENT SCIENTIFIC SOURCE | Booth# 102

www.govsci.com

Government Scientific Source is a leading distributor of laboratory products and equipment dedicated to serving federal, state, and local governments.

Categories: Environmental & Occupational, Health Readiness, Hydration, Imaging, Treatments, Other

HAMILTON MEDICAL | Booth# 907

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 user-friendly ventilator portfolio covers the complete continuum of care, from ground to sky, transport to ICU, and neonates to adults.

Categories: Emergency Medical Equipment

HENRY JACKSON FOUNDATION FOR THE ADVANCEMENT OF MILITARY MEDICINE | Booth# 1015

www.hjf.org

For four decades, The Henry M. Jackson Foundation for the Advancement of Military Medicine has remained true to this singular purpose, serving as a global leader in conducting and supporting military medical research to enhance Force health, readiness, resilience, and rehabilitation. HJF performs this work through scientific, administrative, and program management services that deliver the resources investigators and clinicians need to find solutions and drive innovation efforts, often resulting in their translation to medical practices for the benefit of warfighters.

Categories: Education, Treatments, Pain Management

IMMURON | Booth#308

www.immuron.com

Immuron Ltd (ASX:IMC, NASDAQ:IMRN) is an Australian-based global biopharmaceutical company, its platform technology is to generate highly specific colostrum-derived antibodies which can prevent and/or treat enteric diseases. Immuron's flagship commercial product Travelan® is a listed medicine in Australia for prevention of traveler's diarrhea and is marketed in Canada as a natural health product and in the U.S as a dietary supplement. Current focus is to develop a dosing schedule suitable for the military deployed overseas.

Categories: Drug Delivery Systems, Health Readiness, Infectious Disease - Diagnostics, Treatments

INTEGRATED MEDCRAFT | Booth# 1012

www.integratedmc.com

Integrated MedCraft is a small woman owned company that services the U.S. Department of Defense market. We bring leading medical devices to market that are proven to work in austere environments. Our focus is to bring Better Patient Care Forward!

Categories: Drug Delivery Systems, Emergency Medical Equipment, Imaging, Patient Transport/EnRoute Care, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care, Traumatic Brain Injury, Wound Management

JAMES A. HALEY VA HOSPITAL - POST DEPLOYMENT REHABILITATION & EVALUATION PROGRAM (PREP) | Booth# 108

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.

Categories: Musculoskeletal Injury Prevention, Post Traumatic Stress Disorder, Traumatic Brain Injury

KBR | Booth# 400

www.kbr.com

KBR Government Solutions ensures mission success on land, at sea, in the air, in space and in cyberspace. We create value and drive innovation by combining engineering, technical and scientific expertise with full life cycle capabilities, mission knowledge and future-focused technologies. KBR is engineering solutions for the needs of today and tomorrow, safely and efficiently. We are the future, designed and delivered.

Categories: Health Readiness, Other, Psychological Health

Exhibitor Profiles



KERECIS | Booth# 1314

www.kerecis.com

In-tact fish skin (North Atlantic Cod) used for soft tissue regeneration. When grafted onto damaged human tissue such as a burn or a diabetic wound, the material recruits the body's own cells and is ultimately converted into living tissue.

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

KITWARE | Booth# 1200

www.kitware.com

Kitware delivers innovation to its customers. As a software research and development company, Kitware solves the world's most complex scientific challenges using custom software solutions built on open source technology. In addition to custom software development, the company also offers technical support and training services to anyone using its open source tools. Since its founding in 1998, Kitware has developed a reputation for its unparalleled technical expertise and excellent customer service.

Categories: Information Technology - Health, Simulations - Medical Training

KOSMOS BY ECHONOUS | Booth# 103

www.echonous.com

Kosmos by EchoNouS develops point-of-care ultrasound solutions that make expert insights accessible to every user. Our handheld ultrasound machines are redefining the handheld ultrasound category because we don't believe that increased portability should mean decreased capabilities. We are the only dedicated handheld ultrasound company to make cart-based capabilities available in the palm of your hand.

Categories: Emergency Medical Equipment, Imaging, Information Technology - Health

LACTEA THERAPEUTICS | Booth# 1106

www.lacteatherapeutics.com

Lactea Therapeutics, an affiliate of the Agrilogics Group, has harnessed our endemic, early-life innate immune system components to provide broad, non-adaptive prophylaxis to combat existing and emerging infectious disease. The Agrilogics Group novel, patent-pending biopurification platform technology overcomes the key clinical drug development barriers to isolating and purifying naturally-derived compounds as medically efficacious countermeasures by assuring the retention of their native bioactivity to pharmaceutical-grade. The current portfolio includes an oral bacteriostat gum (in clinical use), a prophylactic viral inhibiting nasal spray (under review by USAMRIID for biodefense) and an enteric coated tablet to treat or prevent viral and bacterial diarrhea (prototype).

Categories: Emergency Medical Equipment, Health Readiness, Human Performance, Treatments, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care, Wound Management

LITES | Booth# 203

www.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.

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

MARKETING ASSESSMENT | Booth# 201

www.bmkventures.com

Marketing Assessment, Inc. and BMK Ventures, Inc. (certified SDVOSB based in Virginia Beach) are Supplier/Distribution partners focused on Serving Those That Serve Us! Our mission is to offer multiple procurement options and custom solutions to better serve our warfighters, first responders, and medical personnel by providing innovative products and training services. We have introduced many of the currently deployed patient care technologies and contribute to on-going research.

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

MASIMO | Booth# 700

www.masimo.com

Masimo is a global leader in innovative noninvasive monitoring technologies, including medical devices, a wide array of sensors, and connectivity solutions. In 1995, Masimo debuted SET® Measure-through Motion and Low Perfusion™ pulse oximetry, estimated to be used on more than 100 million patients annually. In 2005, Masimo introduced rainbow® Pulse CO-Oximetry, allowing noninvasive and continuous monitoring of additional physiologic parameters that previously could only be measured invasively, such as total hemoglobin (SpHb®). We continue to advance noninvasive monitoring with innovations like Root®, Radius-7®, and Rad-97™, while expanding into new markets with SedLine® brain monitoring, O3® regional oximetry, NomoLine™ capnography, and automation and connectivity solutions such as Patient SafetyNet™.

Categories: Emergency Medical Equipment, Information Technology - Health, Other, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care

MATBOCK | Booth# 1300

www.acesoplasma.com

Aceso creates high concentration, low temperature oxygen plasma for disinfection, wound healing and rapid hemostasis

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

Exhibitor Profiles



MEDICAL TECHNOLOGY ENTERPRISE CONSORTIUM

(MTEC) | Booth# 513

mtec-sc.org

The Medical Technology Enterprise Consortium is a 501(c)(3) 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.

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

MILITARY & HEALTH RESEARCH FOUNDATION | Booth# 702

www.militaryhealthresearch.org

The Military & Health Research Foundation (MHRF) is a 501(c)(3) nonprofit foundation dedicated to discovering and transitioning lasting solutions for troops on the battlefield and across civilian healthcare settings. Since 2015, our driving factor has been to work side by side with our government customers to ensure technologies match all requirements, there are defined regulatory pathways, and to offer a more rapid turn around for medical solutions. The Foundation works with our research partners to identify and market multiple applications for technologies across a variety of user settings and specialties.

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

MILITARY TRAUMATIC BRAIN INJURY INITIATIVE | Booth# 1013

mtbi2.usuhs.edu

MTBI2 is a federal research organization on a mission to minimize the destructive effects TBIs have on U.S. service members.

Categories: Traumatic Brain Injury

MODERNA | Booth# 109

www.modernatx.com

Our mission is to deliver the greatest possible impact to people through mRNA medicines.

Categories: Drug Delivery Systems, Environmental & Occupational, Health Readiness

NATIONAL STRATEGIC RESEARCH INSTITUTE AT THE UNIVERSITY OF NEBRASKA | Booth# 301

nsri.nebraska.edu

The National Strategic Research Institute (NSRI) at the University of Nebraska assists the Department of Defense and other federal agencies in solving national security challenges across multiple domains through scientific and technical research, training and support. A non-profit University Affiliated Research Center designated by the Department of Defense, NSRI serves as a trusted agent to the DoD. NSRI and the University of Nebraska provide direct, broad support to operational elements and end-users across the Department of Defense and the federal government within medical countermeasures and response. It is the unique relationship between NSRI, NU and end-users that allows the results of these efforts to have immediate and substantial impacts to the capability and safety of those responsible for protecting the country and its citizens from national security threats and highly infectious disease.

Categories: Drug Delivery Systems, Education, Emergency Medical Equipment, Environmental & Occupational, Health Readiness, Hearing & Vision, Human Performance, Treatments, Patient Transport/EnRoute Care, Post Traumatic Stress Disorder, Radiation Health, Simulations - Medical Training, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care

NAVAL HEALTH RESEARCH CENTER (NHRC) | Booth# 1006

www.med.navy.mil/sites/nhrc

The Naval Health Research Center (NHRC) is a Naval command made up of 3 research directorates and a research service support directorate, whose mission is to optimize the operational readiness and health of our armed forces and families by conducting research, development, testing, and evaluation informing DoD policy. NHRC's team of distinguished scientists and researchers consists of active-duty service members, federal civil service employees and contractors, whose expertise includes physiology, microbiology, psychology, epidemiology, and biomedical engineering. **Categories:** Health Readiness, Musculoskeletal Injury Prevention, Traumatic Brain Injury

NAVAL MEDICAL RESEARCH COMMAND (NMRC) | Booth# 1007

www.med.navy.mil/Naval-Medical-Research-Command

Naval Medical Research Command, formerly known as Naval Medical Research Center, focuses on solutions to operational medical problems such as battlefield neurotrauma and wound infections, decompression sickness, naturally occurring infectious diseases, and biological threat agents; and is home to the DoD bone marrow registry.

Categories: Health Readiness, Treatments, Traumatic Brain Injury

NAVAL MEDICAL RESEARCH UNIT DAYTON | Booth# 1008

www.med.navy.mil/Naval-Medical-Research-Command/R-D-Commands/Naval-Medical-Research-Unit-Dayton-OH

To optimize the readiness, performance, and survivability of operational forces through environmental health effects, toxicology and aerospace medical research and development.

Categories: Environmental & Occupational, Human Performance

Exhibitor Profiles



NAVY ENTOMOLOGY CENTER OF EXCELLENCE (NECE) | Booth# 113

www.med.navy.mil/Navy-Marine-Corps-Public-Health-Center/Field-Activities/Navy-Entomology-Center-of-Excellence

The 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: Other

NEUROWAVE SYSTEMS | Booth# 212

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. We are also developing a general purpose, remotely controllable, 2-channel infusion pump system—the AccuPump—for use in higher echelons of care.

Categories: Drug Delivery Systems

NIGHTWARE | Booth# 412

www.nightware.com

NightWare is an all-in-one digital therapeutic system designed and indicated to treat nightmares associated with PTSD. It is the first and only digital therapeutic developed to specially treat nightmares that is cleared by the U.S. Food and Drug Administration (FDA). Using artificial intelligence and other cutting-edge, smart technology, NightWare continually evaluates a user's stress index (level of sleep disturbance) during sleep by tracking the heart rate and body movements. This highly detailed information is monitored in real time. When a nightmare is detected, the system rapidly delivers short vibrations to interrupt nightmares without waking the patient.

Categories: Education, Human Performance, Post Traumatic Stress Disorder

NORTH AMERICAN RESCUE | Booth# 413

www.narescue.com

Since 1996, North American Rescue has focused on increasing survivability on both the battlefield and the homefront. With our innovative medical/rescue equipment, NAR continues to lead the way by delivering the tailored, mission-enabling healthcare solutions needed by today's warfighters to counter the rapidly evolving threats of the 21st century.

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

NOVASIGNAL | Booth# 202

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.

Categories: Imaging, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care, Traumatic Brain Injury

NUSHORES BIOSCIENCES | Booth# 1101

www.nushores.com

Today there is no satisfactory solution for major bone injuries caused by accidents, warfare and cancer, especially complex and large segmental bone loss. Our NuCress™ bone scaffold technology has been shown to promote healing of large segmental bone breaks (>2.5 cm) tested in large and small animals (goats, mice) - with no infections, inflammation, rejection or adverse bone response. NuShores Biosciences, LLC (NuShores), founded in 2014, was formed to commercialize patented bone and tissue regeneration technologies developed at the University of Arkansas at Little Rock.

Categories: Other, Limb, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care

OFFICE OF HUMAN AND ANIMAL RESEARCH OVERSIGHT (OHARO) | Booth# 903

mrhc.health.mil/index.cfm/collaborate/research_protections

The Office of Human and Animal Research Oversight (OHARO) ensures that USAMRDC conducted, contracted, sponsored, supported or managed research and U.S. Army Medical Command investigations involving human subjects, human anatomical substances or animals are conducted in accordance with Federal, DoD, Army, USAMRDC, and international regulatory requirements.

Categories: Education, Other

OPERATIVE EXPERIENCE | Booth# 1103

operativeexperience.com

Operative Experience (OEI) is a leading manufacturer of high-fidelity human patient simulators for healthcare practitioner, first responder, and military personnel training including, TCCS Plus Pro, a full-body, hyper-real, ruggedized and wireless simulator for comprehensive TC3 training, PCCS Pro, a high-fidelity, medical provider level simulator for prolonged casualty care training; and THCT Pro for rapid assessment and hemorrhage control. The PCCS, TCCS and THCT Pro are a suite of the world's most lifelike and anatomically accurate, fully-modular, high-fidelity, male and female simulators for comprehensive TCCC and PCC training.

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

Exhibitor Profiles



ORA - OFFICE OF REGULATED ACTIVITIES, USAMRDC | Booth# 906 www.mrdc.health.mil

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.

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

OUTPATIENT APP | Booth# 106 www.outpatient.ai

Outpatient App is a Digital Health Workflow Automation Platform for Military Health Systems and commercial health systems. The core technology is an intelligent coordination and collaboration system to track, schedule, notify and report on any type of medical task or healthcare process. It enables an array of features built with a dynamic checklist structure that can be adapted to any health tracking category - including Medical Readiness (IMR) and PHA, Virtual Health Consult and Coordination, and all related Scheduling. It's available on any phone, mobile device, tablet, or desktop browser. The system leverages advanced software technology (AI, NLP, ML) to simplify and improve the health logistics of health process management.

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

OXOS MEDICA | Booth# 1308 www.oxos.com

OXOS® Medical is driving innovation in delivering and distributing medical imaging and radiographic diagnostics. With a low radiation profile, the OXOS smart devices provide outstanding image sharpness and clarity in the smallest form factor, making X-ray available anywhere it is needed. The cloud-based OXOS® Platform offers growing capabilities for on-demand image management, telehealth collaboration, and delivery of AI diagnostics. Micro C®, the first portable Dynamic Digital Radiographic X-ray system from OXOS Medical, is faster, safer, and smarter than conventional X-ray solutions and has received U.S. Food and Drug Administration 510(K) clearance for radiographic imaging and DDR of the distal extremity in adults and children.

Categories: Imaging

PANAKEIA | Booth# 112 www.panakeiausa.com

Panakeia markets and distributes innovative medical devices and solutions to the Department of Defense, EMS and Fire, Veterans Administration and hospitals across the country.

Categories: Emergency Medical Equipment, Health Readiness, Human Performance, Hydration, Imaging, Pain Management, Patient Transport/EnRoute Care, Prosthetics, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care, Wound Management

PHILIPS | Booth# 209 www.usa.philips.com/a-w/government/homepage.html

Philips is a leading health technology company focused on improving people's health and enabling better outcomes across the health continuum - from healthy living and prevention, to diagnosis, treatment and home care.

Categories: Emergency Medical Equipment

PHOKUS RESEARCH | Booth# 1307 www.phokusresearch.com

For more than 10 years, Phokus has been serving America and its allies by manufacturing innovative, high quality products, developed by our Nations Heroes for our Hero Citizens. The company principally operates through its three primary segments: Medical Kitting, Wound Simulation, and Third-Party Logistics.

Categories: Other, Simulations - Medical Training, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care, Wound Management

PROGRAM EXECUTIVE OFFICER, DEFENSE HEALTHCARE MANAGEMENT SYSTEMS (PEO DHMS) | Booth# 101 health.mil/Military-Health-Topics/Technology/PEO-DHMS

The Program Executive Office, Defense Healthcare Management Systems (PEO DHMS) is an acquisition organization that oversees three program management offices. These offices acquire, deliver and support information technology and services that enable data sharing and modernization of the electronic health record (EHR). PEO DHMS oversees DoD Healthcare Management System Modernization (DHMSM®), Joint Operational Medicine Information Systems (JOMIS) and Enterprise Intelligence and Data Solutions (EIDS).

Categories: Health Readiness, Other

PRYTIME MEDICAL DEVICES | Booth# 1209 www.prytimemedical.com

At Prytime Medical Devices, we have a bold vision: to revolutionize the care of severely injured patients by enabling trauma teams to gain control of life-threatening bleeding as a bridge to definitive repair. We are an innovative medical device company that designs, develops, and commercializes minimally invasive solutions for hemorrhage control & resuscitation. We partner with leading trauma centers to enable endovascular bleeding control through innovative devices and fanatical customer support.

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

RED ONE MEDICAL DEVICES | Booth# 706 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.

Categories: Blood and Coagulation Systems, Drug Delivery Systems, Emergency Medical Equipment, Environmental & Occupational, Human Performance, Hydration, Treatments, Musculoskeletal Injury Prevention, Osteopathy, Pain Management, Patient Transport/EnRoute Care, Simulations - Medical Training, Trauma Care - Point of Injury/Prehospital/Prolonged Field Care/Forward Surgical Care, Traumatic Brain Injury, Wound Management

Exhibitor Profiles



RHEOLUTION | Booth# 1114

www.rheolution.com

Rheolution develops IoT-based optical and mechanical instruments. These smart, modular, and scalable technologies were designed to meet today's needs for data-driven research. They respectively capture the evolving turbidity of a solution in real time (ex. pharmaceuticals) or unlock access to crucial viscoelasticity information of soft biomaterials for R&D, product development and QC for medical devices (ex. hemostatic agents, blood clots, hydrogels for engineered tissues, 3D bioprinting, wound healing, drug delivery and more).

Categories: Blood and Coagulation Systems, Drug Delivery Systems, Emergency Medical Equipment, Other, Wound Management

RTI INTERNATIONAL | Booth# 1102

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 bridges the divide between science and practice, allowing us to initiate and deliver solutions quickly by using proven procedures, efficient scientific methods, and a deep understanding of the military culture and unique challenges that Service members face.

Categories: Health Readiness, Post Traumatic Stress Disorder, Traumatic Brain Injury

SAFEGUARD MEDICAL | Booth# 407

www.safeguardmedical.com

We are a global alliance of medical specialists, with a common goal of better emergency care. We educate and empower medics all over the world. We bring together life-saving knowledge of emergency medicine with world-class equipment, to help first responders improve patient outcome and reduce preventable deaths.

Categories: Simulations - Medical Training

SAM MEDICAL | Booth# 1215

sammedical.com

Since the inception of the globally recognized SAM Splint almost 40 years ago, SAM Medical has developed several life preserving trauma devices—designed, developed, tested, manufactured, and shipped out of our Tualatin, Oregon headquarters. SAM Medical products are trusted by doctors, fireman, soldiers, medics, EMTs, and other every day heroes, who either by choice or by chance are first on scene when tragedy happens.

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

SCIPERIO | Booth# 1207

www.sciperio.com

Sciperio is research and development company offering services in the mechanical, chemical, electrical, and biological sciences. With an experienced staff of scientists and engineers, having expertise in a variety of disciplines, Sciperio is engaged in cutting-edge R&D projects to develop technologies for the future. Our core capabilities include direct digital manufacturing, additively manufactured electronics (AME), printed RF electronics, and bioprinting. Started in 1996, Sciperio has steadily grown in revenue, employees, and scope of research.

Categories: Blood and Coagulation Systems, Imaging, Prosthetics

SHORELAND | Booth# 1112

www.travax.com

Travax (www.travax.com) is an internet-based clinical decision support tool used by medical professionals to prepare deployers and travelers for health threats and other concerns that come with international travel. Travax information is relevant in all phases of operational medicine (readiness, planning, execution, and redeployment) as well as for the traditional global traveler. Current DOD immunization and Force Health Protection requirements are integrated throughout Travax, and Travax supplements DOD medical information with data gathered from more than 100 sources, including CDC and WHO, and Shoreland's network of trusted collaborators in key locations around the globe.

Categories: Education, Health Readiness, Treatments

SMEED TECHNOLOGIES | Booth# 107

www.smeedtechnologies.com

Design and manufacture medical device mounting solutions for the military sphere.

Categories: Patient Transport/EnRoute Care

SMITH+NEPHEW | Booth# 406

www.smith-nephew.com

Smith+Nephew is a portfolio medical technology company focused on the repair, regeneration and replacement of soft and hard tissue. Our Advanced Wound Management portfolio provides a comprehensive set of products to meet broad and complex clinical needs, to help healthcare professionals reduce the human and economic consequences of wounds.

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

SOAR TECHNOLOGY | Booth# 1309

www.soartech.com

SoarTech - AI you can trust. SoarTech's mission is to develop human-centered artificial intelligence (AI) solutions for the military's toughest problems. We have over 20 years of expertise developing innovative AI and machine learning capabilities for our customers and we are now transitioning to create revolutionary solutions for future operational impact.

Categories: Emergency Medical Equipment, Health Readiness, Human Performance, Imaging, Simulations - Medical Training

SOMALOGIC OPERATING CO. | Booth# 1201

www.somalologic.com

SomaLogic is fostering the discovery of effective and safer treatments for patients while empowering more accurate diagnosis, prevention, and treatment of disease through the next generation of proteomics.

Categories: Emergency Medical Equipment, Environmental & Occupational, Health Readiness, Human Performance, Treatments, Information Technology - Health, Nutrition, Post Traumatic Stress Disorder, Psychological Health, Traumatic Brain Injury, Wound Management

Exhibitor Profiles



STEADMAN PHILIPPON RESEARCH INSTITUTE |

Booth# 1202

www.sprivail.org

Building on our legacy of excellence in orthopaedic sports medicine, SPRI is unlocking the secrets of healing, finding cures and enhancing lives through global leadership in regenerative medicine, scientific research, innovation and education. Founded by orthopaedic surgeon Dr. J. Richard Steadman, the Steadman Philippon Research Institute is an independent, tax-exempt (IRS code 501(c)(3)) charitable organization, employing scientists, researchers, fellows, visiting scholars, and interns. Steadman Philippon Research Institute is known throughout the world for our research into the causes, prevention and treatment of orthopaedic disorders. We are committed to solving orthopaedic problems that limit an individual's ability to maintain an active life. Our perspective is based on clinical relevance, with a goal of improving the care of the patient. Recognizing that the body's innate healing powers can be harnessed and manipulated to improve the healing process has led to exciting advances in surgical techniques.

Categories: Imaging, Musculoskeletal Injury Prevention, Other, Pain Management, Wound Management

TACMED SOLUTIONS | Booth# 401

www.tacmedsolutions.com

Tactical Medical Solutions, Inc. ("TacMed") is a leading supplier of proprietary medical solutions for emergency trauma care across the global military, law enforcement, fire and emergency, medical service (EMS), and civilian markets. TacMed uniquely fills a critical void for pre-hospital emergency trauma care to dramatically improve medical outcomes. Additionally, TacMed provides state-of-the-art medical simulation and training solutions such as high-fidelity K9 and human simulators, combat casualty care training, field care training, and more.

Categories: Emergency Medical Equipment

TDA RESEARCH | Booth# 1000

www.tda.com

TDA is a technology company that specializes in the development of advanced materials and devices. TDA has 130 employees, 34 of them has advanced degrees in engineering and chemistry. In the conference, we plan to exhibit several of our medical oxygen concentrators that can deliver 4, 10 and 20 LPM of USP grade O2 and our bio-sensors.

Categories: Emergency Medical Equipment, Post Traumatic Stress Disorder, Trauma Care - Point of Injury

THE METIS FOUNDATION | Booth# 1213

www.metisfoundationusa.org

The Metis Foundation is a 501(c)(3) specifically organized to advance clinically relevant scientific research to the medical community, especially within the US Department of Defense. We provide scientific, educational, financial, and project management support in the conduct of federally and privately sponsored research, clinical trials, and education.

Categories: Education, Other, Wound Management

THORNHILL MEDICAL | Booth# 312

www.thornhillmedical.com/military

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

Categories: Drug Delivery Systems, Emergency Medical Equipment

U.S. ARMY AEROMEDICAL RESEARCH LABORATORY

(USAARL) | Booth# 914

U.S. ARMY MEDICAL MATERIEL DEVELOPMENT ACTIVITY

(USAMMDA) | Booth# 701

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

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

(MTT) | Booth# 712

mrhc.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 tradeshow, 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

Exhibitor Profiles



U.S. ARMY MEDICAL RESEARCH ACQUISITION ACTIVITY (USAMRAA) | Booth# 908

usamraa.health.mil/Pages/Main01.aspx

The United States Army Medical Research Acquisition Activity (USAMRAA) is the contracting and assistance agreement element of the United States Army Medical Research and Development Command (USAMRDC) and provides support to the Command headquarters and its worldwide network of laboratories and medical logistics organizations as well as other non-USAMRDC customers.

U.S. ARMY MEDICAL RESEARCH INSTITUTE OF INFECTIOUS DISEASES (USAMRIID) | Booth# 902

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 (MTEAC) | Booth# 1109

medcoe.army.mil/usamteac-test-and-evaluation

The U.S. Army Medical Test and Evaluation Activity (MTEAC) provides independent operational test and evaluation (T&E) of medical and medical-related materiel and information technology products in support of readiness; it provides assessments of emerging concepts, doctrine, and advanced technology used to provide healthcare on and off the battlefield. Also, MTEAC is responsible for medical support of operational testing, provides centralized T&E management, and provides representation to T&E forums. The MTEAC contributes to the Army's success by conducting independent, realistic and objective testing, evaluation, and assessment, performed by a cadre of military and civilian experts, who are dedicated to excellence, and committed to our nation's Soldiers.

Categories: Other

U.S. ARMY RESEARCH INSTITUTE OF ENVIRONMENTAL MEDICINE (USARIEM) | Booth# 912

www.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 the Army's lead research component for transformative Warfighter initiatives focused on optimizing and enhancing Warfighter physical and cognitive performance in all environments. For more than 60 years, we have conducted research on Warfighter health and performance using basic science, applied laboratory, and field-based approaches. USARIEM supports Warfighter readiness, physical and cognitive performance, and lethality, establishing competitive overmatch with peer/near-peer adversaries. USARIEM is co-located with Soldier Systems Center in Natick, Massachusetts. Located a short distance from Boston, the institute has unique facilities and is in close proximity to many of the finest universities and medical research centers, enabling collaborative efforts.

Categories: Environmental & Occupational, Health Readiness, Human Performance, Hydration, Musculoskeletal Injury Prevention, Nutrition

UNIVERSITY OF PITTSBURGH (CENTER FOR MILITARY MEDICINE RESEARCH & THE MCGOWAN INSTITUTE) | Booth# 613

www.cmmr.pitt.edu

Center for Military Medicine Research explores applications of regenerative and reconstructive medicine, transplantation immunology, and neuroscience, including traumatic brain injury and neuroprosthetics, with the aim of getting innovative therapies to injured service members.

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

USU CENTER FOR BIOTECHNOLOGY – 4DBIO3 | Booth# 313

www.usuhs.edu/4D-Bio3

The Uniformed Services University of the Health Sciences (USU) Center for Biotechnology (4D Bio3) was established to fast-track the development, application and operational translation of promising advanced biotechnologies to meet DoD operational priorities and requirements. Through intra- and extra-mural partnerships, 4D Bio3 facilitates the adaptation of novel biotechnology for optimization to warfighter health, readiness and lethality. 4D Bio3 by design, is capable of investigating biotechnology solutions at any Technology Readiness Level (TRL) or Manufacturing Readiness Level (MRL). The Center champions a multi-disciplinary approach that combines various DoD, Federal and non-Federal experts across healthcare and bioengineering. Our Center consists of three main mission domains: 1) research, scholarship, and technology development, 2) operational support and translation, and 3) education and training.

Categories: Blood and Coagulation Systems, Treatments, Other

VALNEVA | Booth# 1214

www.valneva.com

Valneva is a specialty vaccine company focused on the development, manufacturing, and commercialization of prophylactic vaccines for infectious diseases. Our vision is to contribute to a world in which no one dies or suffers from a vaccine-preventable disease. Valneva USA, Inc. is focused on the marketing and distribution of Valneva's Japanese encephalitis vaccine, IXIARO®, and a Chikungunya vaccine candidate pending FDA approval.

Categories: Health Readiness

WAKE FOREST INSTITUTE FOR REGENERATIVE MEDICINE | Booth# 1001

www.wfirm.org

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. Over 400 people at the institute, the largest in the world, work on more than 40 different tissues and organs. WFIRM researchers have successfully engineered replacement tissues and organs in all four categories – flat structures, tubular tissues, hollow organs and solid organs – and 16 different applications of cell/tissue therapy technologies, such as skin, urethras, cartilage, bladders, muscle, kidney, and vaginal organs, have been successfully used in human patients. The institute, which is part of Wake Forest School of Medicine, is located in the Innovation Quarter in downtown Winston-Salem, NC, and is driven by the urgent needs of patients. The institute is making a global difference in regenerative medicine through collaborations with over 400 entities and institutions worldwide, through its government, academic and industry partnerships, its start-up entities, and through major initiatives in breakthrough technologies, such as tissue engineering, cell therapies, diagnostics, drug discovery, biomanufacturing, nanotechnology, gene editing and 3D printing.

Categories: Drug Delivery Systems, Education, Human Performance, Imaging, Treatments, Limb, Wound Management

Exhibitor Profiles



WALTER REED ARMY INSTITUTE OF RESEARCH | Booth# 708

www.wrair.health.mil

The Walter Reed Army Institute of Research is the largest biomedical research facility administered by the DOD and the oldest research institution in the Army. Since 1893, WRAIR has been a global leader in solving significant threats to Soldier readiness and lethality such as infectious diseases and battlefield injury. WRAIR provides unique research capabilities and innovative medical solutions to a range of Force Health Protection and Readiness challenges currently facing U.S. Service Members, along with threats anticipated during future operations. WRAIR's research network, includes the Center for Infectious Disease Research, the Center for Military Psychiatry and Neuroscience, the Center for Enabling Capabilities and four expeditionary medical research directorates in Africa, Southeast Asia, the Republic of Georgia and the state of Washington. The unit functions in concert to afford Warfighters the best medical protection and support possible before, during, and after deployment.

Categories: Health Readiness, Treatments, Traumatic Brain Injury, Wound Management

ZOLL MEDICAL CORPORATION | Booth# 607

www.zoll.com

ZOLL® Medical Corporation, a leader in medical devices and software solutions, helps military professionals manage, treat, and save lives while also increasing operational efficiency. With innovative products for defibrillation, circulation, pacing, temperature management, and ventilation, ZOLL provides a comprehensive set of technologies, including Real CPR Help® and See-Thru CPR®, that help improve patient outcomes. All ZOLL products provide the ruggedness, durability, and advanced functionality that military professionals require across the continuum of care.

Categories: Emergency Medical Equipment

Poster Session 1



MILITARY HEALTH SYSTEM

MHSRS

RESEARCH SYMPOSIUM

August 14 – 17, 2023

Poster Session 1



Advances in Prolonged Care

MHSRS-23-07899 - SESSION 1 - #1

Validation of Combat Anesthesia Care Equipment: Best Use and Capabilities

Presentation Author: Dr. Brian Benham

MHSRS-23-07926 - SESSION 1 - #2

Technology for a Portable Dialysate Generator

Presentation Author: Dr. Girish Srinivas

MHSRS-23-07927 - SESSION 1 - #3

Technology for Sterile Water Generator

Presentation Author: Dr. Girish Srinivas

MHSRS-23-08013 - SESSION 1 - #4

The NIRSense Argus Oximetry System, Wearable Brain and Muscle Monitoring for Performance Optimization and Casualty Care

Presentation Author: Dr. Casey Boutwell

MHSRS-23-08052 - SESSION 1 - #5

Design of a Sensor Probe to Measure Skin Properties for Assessments of Traumatic Injury in Cold Environment

Presentation Author: Dr. Daniel Sim

MHSRS-23-08111 - SESSION 1 - #6

Holding Anticoagulation in Traumatically Injured Veno-Venous Extracorporeal Membrane Oxygenation Patients Does Not Affect Outcomes

Presentation Author: Lt Col Tyler Reynolds

MHSRS-23-08136 - SESSION 1 - #7

Donaldson Decompression Needle™ (DDN™) for the Rapid Treatment of Tension Pneumothorax

Presentation Author: Dr. Ross Donaldson

MHSRS-23-08217 - SESSION 1 - #8

Assessment of Violet-Blue Light-Emitting Diode Technology for Portable Decontamination of Surgical Instruments in Austere or Resource-Limited Environments

Presentation Author: Capt Bradley Pierce

MHSRS-23-08226 - SESSION 1 - #9

Towards "Smarter" Pre-Hospital Care: Real-Time, Continuous Monitoring of Biomarkers with Minimally Invasive Wearable Microneedle Patch Sensors

Presentation Author: Ms. Sarah Swisher

MHSRS-23-08617 - SESSION 1 - #10

Cerebral Hemodynamics Monitoring of Military Aircrew at High G: Towards In-Flight Event Detection

Presentation Author: Dr. Thibault Roumengous

MHSRS-23-08644 - SESSION 1 - #11

Building a Supervisory Algorithm for Harmonizing Multiple Closed-Loop Controllers for Combat Casualty Care

Presentation Author: Dr. Eric Snider

MHSRS-23-08653 - SESSION 1 - #12

Implications for Future Humanitarian Aid Missions: Lessons from Point-of-Injury and Hospital Care for Syrian Refugees

Presentation Author: CPT Tomer Talmi

MHSRS-23-08753 - SESSION 1 - #13

Force Sensing Toolkit for Optimal Tourniquet Application: Development of the Tourniquet Integrated Monitor (TiMon)

Presentation Author: Ms. Anna Wiatrowski

MHSRS-23-08780 - SESSION 1 - #14

Materials Available to Tactical Medical Personnel for Constructing Field Improvised Exoskeletons

Presentation Author: Mr. Garrett Flores

MHSRS-23-08787 - SESSION 1 - #15

Retrospective Analysis of Point-of-Care Lactate Pro Meter in Preclinical Trauma Models

Presentation Author: Dr. Randy Stone

MHSRS-23-08860 - SESSION 1 - #16

Analytical Characterization of an Encapsulated-Based, Self-Healing Dental Composite System Using Liquid Chromatography with Tandem Mass Spectrometry

Presentation Author: Dr. Wen Chen

MHSRS-23-08886 - SESSION 1 - #17

Formulation of a Novel Self-Healing Dental Resin and Testing Its Performance

Presentation Author: Dr. Amer Tiba

MHSRS-23-08952 - SESSION 1 - #18

Development of a Mobile, Real-Time Coagulopathy Monitor Capable of 30-Second Assay Times and Its Adaptation to an Integrated Point-of-Care Testing Platform for Prolonged Field Care in Austere and Far-Forward Environments

Presentation Author: Dr. Zachary Rengert

MHSRS-23-08997 - SESSION 1 - #19

Case Report of a Combat Casualty-Transfused 334-Units of Blood Product in 24 Hours Post-Injury: There Is No Upper Limit

Presentation Author: Mrs. Jennifer Trevino

Poster Session 1



MHSRS-23-09065 - SESSION 1 - #20

Comparison of the Effects of Normothermic Machine Perfusion and Cold Storage Preservation on Porcine Intestinal Allograft Regenerative Potential and Viability
Presentation Author: Dr. Elsa Ludwig

MHSRS-23-09085 - SESSION 1 - #21

Frequency-Domain Diffuse Optics for Detection and Localization of Subdural Hemorrhage
Presentation Author: Dr. Carissa Rodriguez

MHSRS-23-09137 - SESSION 1 - #22

Managing Traumatic Brain Injuries in the Prolonged Casualty Care Setting: Development of an Anesthesia Resuscitation Kit
Presentation Author: Capt Jessie Ho

MHSRS-23-09166 - SESSION 1 - #23

Anti-Thrombogenic Liquid-Impregnated Surface Coatings for Biologically Compatible Organ Support Applications
Presentation Author: Dr. Zheng Zhang

MHSRS-23-09167 - SESSION 1 - #24

The Addition of Free Radical Scavenger PrC-210 to UW Solution Confers Significant Benefits to Preservation of Rat Hind Limbs for Vascularized Composite Allotransplantation
Presentation Author: Dr. Aaron Dingle

MHSRS-23-09171 - SESSION 1 - #25

Phosphodiesterase 4 Inhibitor Decreases Thrombosis in Simulated ECMO Model
Presentation Author: Dr. Andrew Meyer

MHSRS-23-09201 - SESSION 1 - #26

Extracorporeal Membrane Oxygenation for Respiratory Failure in Complex Burns: A Single Center Experience
Presentation Author: MAJ Danny Lammers

MHSRS-23-09227 - SESSION 1 - #27

Development and Evaluation of the Advanced Joint Airway Management System (AJAMS) for Educational Utility in Endotracheal Intubation, as Assessed by Expert Paramedic Instructors
Presentation Author: Dr. Victoria Roach

MHSRS-23-09319 - SESSION 1 - #28

Ex Vivo Workbench Evaluation of Novel Wireless Endoscopic Camera System and Application to Battlefield Use
Presentation Author: Dr. Phil Zhao

MHSRS-23-09334 - SESSION 1 - #29

Non-Contact Laser Ultrasound Imager for Rapid Triage of Injured Warfighters
Presentation Author: Dr. Feng Jin

MHSRS-23-09341 - SESSION 1 - #30

Medical Countermeasures Autoinjector Strategy in the Department of Defense
Presentation Author: Mr. David Booth

MHSRS-23-09382 - SESSION 1 - #31

Development of Microstructured Mechanical Adhesives for Rapid and Reliable Adhesion to Soft Tissue
Presentation Author: Dr. Corin Williams

MHSRS-23-09587 - SESSION 1 - #32

Critical Care Medical Modules Which Are Hard-Shelled, Semi-Permanent, Reusable and Redeployable in Remote Settings Offering Immediate Point-of-Care and Prolonged Care in a Clinical and Surgical Care Setting
Presentation Author: Mrs. Sabrina Fiorellino

MHSRS-23-09612 - SESSION 1 - #33

Design of Non-Battery Powered Hypothermia Prevention Device for Battlefield Medical Support: A Safe and Effective Solution for Pre-Transfusion Warming of Refrigerated Blood Units
Presentation Author: Mr. Murthy Lakshmi Narasimha Doddasomayajula

MHSRS-23-09632 - SESSION 1 - #34

Point-of-Need Additive Manufacturing in Austere Arctic Environments to Improve Medical Care in Contested Logistics Environments
Presentation Author: Dr. Nicholas Chartrain

MHSRS-23-09637 - SESSION 1 - #35

Design and Evaluation of Non-Battery Powered In Situ Thermoregulated Packaging for Warming Freeze Dried Plasma
Presentation Author: Dr. Dylan Gary

MHSRS-23-09645 - SESSION 1 - #36

Development of an Ex Vivo Limb-Kidney Perfusion Protocol as a Platform to Develop a Traumatic Injury and Haemorrhagic Shock Model
Presentation Author: LCDR Laura Cottey

MHSRS-23-09669 - SESSION 1 - #37

Advancement of a Tissue Oxygenation Measurement Device and Evaluation of Galectin-3 as Novel Noninvasive Prognostic Biomarkers for Monitoring Vascularized Composite Allograft Rejection: Development of the Porcine Model
Presentation Author: Ms. Zari Dumanian

MHSRS-23-09700 - SESSION 1 - #38

Unconventional Resilience Amidst Mass Casualty Triage: Tactical Development of Medical-martial Creativity in Support of Military Medical Decision Making
Presentation Author: Dr. Erika Ann Jeschke

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MHSRS-23-09788 - SESSION 1 - #39

In Vivo and Ex Vivo Models to Study Ischemia / Reperfusion Injury, Endothelial Cell Protection and Limb Preservation in a Prolonged Field Care Scenario

Presentation Author: Mr. Robert Rieben

MHSRS-23-09862 - SESSION 1 - #40

Uncrewed Aerial System (UAS) for Long-Distance, Just-in-Time Medical Material Delivery

Presentation Author: Dr. Sanjiv Singh

MHSRS-23-09908 - SESSION 1 - #41

Development of Ceramic Membrane Based Portable Oxygen Generator (CEMPOG) to Support Operations of Forward Surgical Teams with Ultra-Pure Oxygen

Presentation Author: Dr. Xiao Wang

MHSRS-23-09958 - SESSION 1 - #42

Feasibility of Cricothyrotomy Under Low-Light Conditions Using Headlamp, Night Vision Goggles, and Night Vision Goggles with Focusing Adaptors

Presentation Author: Lt Jin Kim

MHSRS-23-09992 - SESSION 1 - #43

Development of a Miniaturized Wearable Diffuse Optical Spectroscopy (DOS) Monitor for Enhanced Far Forward and Prolonged Critical Care

Presentation Author: Dr. Michael Green

MHSRS-23-10108 - SESSION 1 - #44

TXA Auto Injectors, the Next Technology Leap in Non Compressible Hemorrhage

Presentation Author: COL Sean Hollonbeck

MHSRS-23-10120 - SESSION 1 - #45

Utilizing Dashboards for Improved Battlefield Prehospital Care - The Combat Casualty Care Quality Improvement (C3QIP) Project

Presentation Author: Mr. Keith Fischer

MHSRS-23-10202 - SESSION 1 - #46

Light-Enhanced Ultrasound for Accurate Endotracheal Intubation in Prehospital Settings

Presentation Author: Dr. Hinnerk Schulz-Hildebrandt

MHSRS-23-10211 - SESSION 1 - #47

Recommended Interventions for U.S. Special Operations Command Fatalities with Survivable and Potentially Survivable Battle Injuries

Presentation Author: Lt Col Andrew Rohrer

MHSRS-23-10220 - SESSION 1 - #48

Hypertonic β -hydroxybutyrate (BHB) Resuscitation Following Acute Traumatic Brain Injury and Hemorrhage

Presentation Author: Dr. Jennifer McGuire

MHSRS-23-10226 - SESSION 1 - #49

Combat Wound Treatment and Management in Large-Scale Combat Operations

Presentation Author: Mr. Brian Coyne

MHSRS-23-10256 - SESSION 1 - #50

Utilizing Virtual Reality to Improve Recognition and Treatment of Pediatric Hemorrhagic Shock

Presentation Author: ENS Kaitlyn Yeh

MHSRS-23-10298 - SESSION 1 - #51

Continuous Multi-Analyte Sensor for Prolonged Field Care: Enabling Continuous Lactate, Glucose, Oxygen, and Ketone Monitoring on a Wearable Sensor

Presentation Author: Ms. Toni Wilkinson

MHSRS-23-10329 - SESSION 1 - #52

Analysis of the Impact of the Main System Parameters of a Novel Laser Speckle-Based Imaging Device on Its Ability to Detect Blood Vessels in the Upper Limbs

Presentation Author: Dr. Giulia Mansutti

MHSRS-23-10385 - SESSION 1 - #53

Are the Suction Devices Prone to Backflow? An Investigative Study on Liquid Flowrates of Suction Devices

Presentation Author: Mr. Saketh Ram Peri

MHSRS-23-10648 - SESSION 1 - #54

An Orientation Independent Suction Device to Improve Usability by Combat Medics and Civilian Prehospital Providers

Presentation Author: Mr. Saketh Ram Peri

MHSRS-23-10433 - SESSION 1 - #55

Assessment of Surface Modification of Polymethylpentene with a Catalytically Active Metal-Organic Framework

Presentation Author: Ms. Andrea Selkow

MHSRS-23-10448 - SESSION 1 - #56

Assessing a Foreign Closed-Loop Control Anesthesia System for U.S. Military Care Using a Novel, Interoperability Platform-Based Testing Methodology

Presentation Author: Dr. Julian Goldman

MHSRS-23-10660 - SESSION 1 - #57

Testing the Validity of Various Viscosity Values for a Versatile Oxygenating Perfusion System

Presentation Author: Ms. Anjelyka Fasci

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MHSRS-23-10690 - SESSION 1 - #58

Development of Absorbable Hemostatic and Antibacterial Coating for Single-Use, Sterile, Pre-Packaged, Self-Illuminating Surgical Retractor for the Forward Surgical Environment
Presentation Author: Mr. Vincent Proffitt

MHSRS-23-08931 - SESSION 1 - #59

Evaluation of a Ruggedized, Wearable, Regional, Oxygen Monitoring Sensor for Continuous Hemodynamic Monitoring in Swine (*Sus scrofa*) Models of Hemorrhage Shock and Moderate Traumatic Brain Injury
Presentation Author: MAJ William Davis

MHSRS-23-10609 - SESSION 1 - #60

Comparison of Blood Collection Techniques Used in Valkyrie Emergency Whole Blood Transfusion During Austere Battlefield Resuscitation: Valkyrie Volume Validation (V3) Study
Presentation Author: LCDR Duncan Carlton

Clinical Studies to Advance Combat Casualty Care

MHSRS-23-08962 - SESSION 1 - #61

Impact of En Route Critical Care Provider Experience on Lung Protective Ventilation Compliance During Air Transport of Combat Wounded
Presentation Author: MAJ William Davis

MHSRS-23-10485 - SESSION 1 - #62

Ballistic Axilla Injury Patterns and Effect of Armor Coverage: Case Series from the Ranger Regimental Archives
Presentation Author: LCDR Duncan Carlton

MHSRS-23-07894 - SESSION 1 - #63

Novel Medication Reconciliation for Tri-Service Role 1 Care
Presentation Author: CDR Darshan Thota

MHSRS-23-07944 - SESSION 1 - #64

Surgical Capability Utilization Time for Military Casualties at Role 2 and Role 3 Facilities
Presentation Author: Lt Col Andrew Hall

MHSRS-23-07968 - SESSION 1 - #65

Phase I Study on the Safety of Locally Delivered Allogeneic Mesenchymal Stem Cells for Promoting Corneal Repair
Presentation Author: Grace Tu

MHSRS-23-08131 - SESSION 1 - #66

Treatment of the Relative Hypovolemia of Septic Shock Using Phospholipid Nanoparticles
Presentation Author: Dr. Cuthbert Simpkins

MHSRS-23-08145 - SESSION 1 - #67

A Successful Research Strategy in Combat Casualty Burn Care: A 34-Year Analysis of the Contributions of COL Basil A. Pruitt, Jr., 1964-1998
Presentation Author: Dr. Leopoldo Cancio

MHSRS-23-08153 - SESSION 1 - #68

Use of Fish Skin Graft in Management of Combat Injuries Following Military Drone Assaults in Field-Like Hospital Conditions
Presentation Author: Lt Col Steven Jeffery

MHSRS-23-08350 - SESSION 1 - #69

Benchmark Compliance of Acute Concussion Care Three-Day Follow-Up Rates
Presentation Author: Ms. Lauren Earyes

MHSRS-23-08508 - SESSION 1 - #70

Study Design, Rational and Implementation for the Linking Investigators in Trauma and Emergency Services (LITES) Cold Stored Platelet (CriSP) for Hemorrhage and Brain Injury Trials
Presentation Author: Dr. Jason Sperry

MHSRS-23-08597 - SESSION 1 - #71

Enhanced Lung Rest with Early Initiation of CytoSorb and ECMO in Critically Ill COVID-19 Patients Is Associated with High 90-Day Survival: Lessons Learned from the U.S. CytoSorb® Therapy in COVID-19 (CTC) Registry
Presentation Author: Karl-Gustav Rüggeberg

MHSRS-23-08688 - SESSION 1 - #72

Study Design and Implementation of the Prehospital Airway Control Trial (PACT)
Presentation Author: Dr. Francis Guyette

MHSRS-23-08830 - SESSION 1 - #73

Study Design and Rational for the Linking Investigators in Trauma and Emergency Services (LITES) Prehospital Analgesia Intervention trial (PAIN)
Presentation Author: Dr. Francis Guyette

MHSRS-23-08757 - SESSION 1 - #74

Look or Listen? Combat Medic-Performed Auscultation vs. Thoracic Ultrasound Image Interpretation for Pneumothorax Detection
Presentation Author: CPT Seth Brown

MHSRS-23-08791 - SESSION 1 - #75

Continuous Monitoring of Respiratory Rate Using Touchless Technology
Presentation Author: Mr. Ulf Borg

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MHSRS-23-08981 - SESSION 1 - #76

Common Causes of Complications Leading to Mortality in Battlefield Emergent Airway Procedures
Presentation Author: 2ndLt Baily Nagle

MHSRS-23-09095 - SESSION 1 - #77

Building Tele-Operative Surgical Trust: Non-Inferiority Study with a Telerobotic Surgical Assistive Platform in Animal Vascular Repair Surgeries
Presentation Author: Mr. Wesley Huff

MHSRS-23-09157 - SESSION 1 - #78

A Prospective Trial of Low-Dose, High Frequency, On-Site Training to Improve En Route Combat Casualty Care Education of Emergency Physicians
Presentation Author: Arianna Moreno

MHSRS-23-09173 - SESSION 1 - #79

Pressure Injury Mitigation in Prolonged Care: A Randomized Noninferiority and Superiority Trial
Presentation Author: Dr. Elizabeth Bridges

MHSRS-23-09213 - SESSION 1 - #80

Potential Operational Impact of Development of an Oral Antidote for Snakebite Envenoming
Presentation Author: Dr. Rebecca Carter

MHSRS-23-09214 - SESSION 1 - #81

Oral Varespladib vs. Placebo for the Treatment of Snakebite Envenoming: A Multinational Randomized Trial
Presentation Author: Dr. Rebecca Carter

MHSRS-23-09239 - SESSION 1 - #82

Impact of Surgeon Experience on Major Complications After Ring Fixator Treatment of Severe Open Tibia Fractures
Presentation Author: Lt Conor McCarthy

MHSRS-23-09252 - SESSION 1 - #83

Retention of En Route Cricothyrotomy Skills Following a Simulation-Based Mastery Learning Curriculum for Novice Providers
Presentation Author: Lt Laura Kraemer

MHSRS-23-09522 - SESSION 1 - #84

Comparison of Adult and Child Endotracheal Administration of Epinephrine in a Hypovolemic, Cardiac Arrest Model
Presentation Author: Dr. Arthur Johnson

MHSRS-23-10196 - SESSION 1 - #85

Comparison of Adult and Child ET Administration of Epinephrine in a Normovolemic Cardiac Arrest Model
Presentation Author: Dr. Arthur Johnson

MHSRS-23-09535 - SESSION 1 - #86

A Retrospective Study of the Correlation Between Donor Specific Antibody and C4d Tissue Deposition in Vascularized Composite Allotransplantation
Presentation Author: Dr. Lioba Huelsboemer

MHSRS-23-09559 - SESSION 1 - #87

Polyethylene Glycol-Mediated Axonal Fusion Promotes Early Return of Sensation Following Digital Nerve Injury: Preliminary Findings from a Randomized Clinical Trial
Presentation Author: Ms. Sriya Nemani

MHSRS-23-09565 - SESSION 1 - #88

New Trauma Training Method Prepares Nurses and Medics for Prolonged Care
Presentation Author: MAJ Sandy Snyder

MHSRS-23-09604 - SESSION 1 - #89

A Novel Intranasal Pharmaceutical for the Treatment of mild Traumatic Brain Injury in the Field
Presentation Author: Dr. Jacob VanLandingham

MHSRS-23-09745 - SESSION 1 - #90

Improving Combat Survival through Innovation in Advanced Resuscitative Care
Presentation Author: Dr. Mark Piehl

MHSRS-23-09771 - SESSION 1 - #91

Time-Dependent Domains of the OTA Open Fracture Classification Predict Decision to Amputate after Severe Ankle and Hindfoot Injuries
Presentation Author: Dr. Christopher Stewart

MHSRS-23-09810 - SESSION 1 - #92

Hypothermia and Military Trauma, 18 Years of Minimal Progress
Presentation Author: MAJ James Williams

MHSRS-23-09826 - SESSION 1 - #93

Exception from Informed Consent Trials and Community Consultation / Public Disclosure: Behind the Times
Presentation Author: Ms. Laura Vincent

MHSRS-23-09865 - SESSION 1 - #94

Associations Between Body Composition and Hemorrhage Tolerance and Extent in a Lower Body Negative Pressure Model
Presentation Author: Dr. Kate Flickinger

MHSRS-23-09951 - SESSION 1 - #95

Patient Handoffs in Austere Environments: Training Evaluation in a Field Exercise
Presentation Author: Dr. Camilla Knott

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MHSRS-23-09984 - SESSION 1 - #96

Prehospital Needle Decompressions: Evaluation of Prehospital Protocols to Determine Appropriateness of Procedure

Presentation Author: Mrs. Elizabeth Lacy

MHSRS-23-09986 - SESSION 1 - #97

Development of ENA-001, a Novel Respiratory Stimulant, for the Management of Battlefield-Related Respiratory Depression

Presentation Author: Dr. Errol Gould

MHSRS-23-10112 - SESSION 1 - #98

Improving Manual Ventilation with a New Device (Sotair®) and Educational Intervention

Presentation Author: Dr. Frederick Varone

MHSRS-23-10154 - SESSION 1 - #99

Associations Between Heart Rate Variability and Need for Lifesaving Intervention and Mortality in a Large Helicopter EMS Service

Presentation Author: Mr. Dylan Defilippi

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Perceived Efficacy of In-Flight CCATT Training Exercises

Presentation Author: Steven Weeks

MHSRS-23-10251 - SESSION 1 - #101

Comparison of Paramedic Point-of-Care Lung Ultrasound to Chest X-ray and Computerized Tomography Findings on Patients Presenting with COVID-19 Symptoms

Presentation Author: 2LT Emma Curtis

MHSRS-23-10254 - SESSION 1 - #102

Force Health Protection Saves Lives: Provision of Antivenom to Dispersed Warfighters

Presentation Author: Ms. Coral Cruey

MHSRS-23-10269 - SESSION 1 - #103

Does Patient Sex Influence TCCC Care: Is This Still a Problem?

Presentation Author: Ms. Jasmine Proctor

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The Use of Enteral Naloxone and Achieving Energy Goals in Patients with Severe Burns

Presentation Author: Ms. Beth Shields

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Adjusting Body Weight for Edema in Severely Burned Patients

Presentation Author: Ms. Beth Shields

MHSRS-23-10483 - SESSION 1 - #106

Less Is More: Angioembolization vs. Total Splenectomy in Unstable Patients with Isolated High-Grade Blunt Splenic Trauma

Presentation Author: Dr. Hamidreza Hosseinpour

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Intraosseous Sternal Access and the Sternal Anatomy in Military-Age Males: A Retrospective Review

Presentation Author: Lt Jared Edwards

MHSRS-23-10570 - SESSION 1 - #108

Characterization of Audiometric Profiles and Treatment Efficacy in Noise-Induced Hearing Loss

Presentation Author: Capt Ronit Malka

MHSRS-23-10639 - SESSION 1 - #109

Clinical Experiences Observed and Performed at the Navy Trauma Training Center

Presentation Author: CDR Tony Torres

MHSRS-23-10733 - SESSION 1 - #110

The Association Between Experience and Tactical Combat Casualty Care Outcomes Using High-Fidelity Simulation

Presentation Author: CDR Tony Torres

MHSRS-23-10726 - SESSION 1 - #111

A Nationwide Analysis on Major Upper Extremity Amputations and Replantations

Presentation Author: Dr. Viola Stoegner

Novel Strategies for Treatment of Shock or Blood Failure: Blood and Blood Products

MHSRS-23-08184 - SESSION 1 - #112

A Prospective Assessment of the Skills Required to Obtain One Unit of Fresh Whole Blood by Civilian Phlebotomists and Army Laboratory Technicians (68K)

Presentation Author: Jessica Mendez

MHSRS-23-08449 - SESSION 1 - #113

Hemostatic Function of CPDA-1 Whole Blood Stored Refrigerated for 42 Days

Presentation Author: Dr. Kristin Reddoch-Cardenas

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MHSRS-23-08450 - SESSION 1 - #114

Biophysical Analysis and Preclinical Pharmacokinetics-
Pharmacodynamics of Tangential Flow Filtration Facilitated
Fractionated Polymerized Human Hemoglobin as a Red Blood
Cell Substitute

Presentation Author: Ms. Alisyn Greenfield

MHSRS-23-08455 - SESSION 1 - #115

Pre-Hospital Limited Volume of Fluid Resuscitation for
Decompensated Hemorrhagic Shock

Presentation Author: Dr. Xiaowu Wu

MHSRS-23-08716 - SESSION 1 - #116

Development of a Ruggedized Device for the Removal of Anti-A
and Anti-B Blood Group Antibodies from Plasma

Presentation Author: Dr. Evan Phillips

MHSRS-23-08748 - SESSION 1 - #117

Composition of Platelet Additive Solution Impacts Bioenergetic
Status of Platelets Following Cold Storage: Role of pH and Fuel
Substrates

Presentation Author: Dr. Evan Ross

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Zeolitic Imidazolate Framework - 8 Encapsulated Human
Hemoglobin as a Red Blood Cell Substitute

Presentation Author: Mr. Tanmay Salvi

MHSRS-23-08824 - SESSION 1 - #119

OxyBridge Shows Minimal Protein Extravasation in Topload and
Prolonged Survival as a Resuscitant

Presentation Author: Dr. William Nugent

MHSRS-23-08829 - SESSION 1 - #120

Novel PEGylated HBOC Bridges Circulatory Function and Oxygen
Delivery in Rat Exchange Transfusion

Presentation Author: Dr. William Nugent

MHSRS-23-08839 - SESSION 1 - #121

Impact of Controlled and Uncontrolled Hemorrhage (Two-Hit
Model) and Resuscitation of OxyBridge and/or Plasma on
Coagulopathy and Hemostasis in Rats

Presentation Author: Dr. William Nugent

MHSRS-23-08828 - SESSION 1 - #122

Comparison of Flow Rates, Infusion Pressure, Catheter
Placement and Clinical Complications Among Four Pressurized
Intraosseous Blood Infusion Strategies in a High Bone Density
Swine Model of Hemorrhagic Shock

Presentation Author: CDR Jonathan Auten

MHSRS-23-09023 - SESSION 1 - #123

Solvent Detergent Frozen Plasma Restores Cerebral Oxygenation
and Hemodynamics in a Nonhuman Primate Polytrauma Model

Presentation Author: Ms. Alejandra Lorenzen

MHSRS-23-09040 - SESSION 1 - #124

Pre-Hospital Plasma Is Non-Inferior to Whole Blood for
Restoration of Cerebral Oxygenation in a Rhesus Macaque
Model of Traumatic Shock and Hemorrhage

Presentation Author: Dr. Clifford Morgan

MHSRS-23-09048 - SESSION 1 - #125

Evaluation of Shelf Stable Blood Products for Resuscitation in a
Canine Model of Hemorrhagic Shock

Presentation Author: Ms. Rebekah Ford

MHSRS-23-09106 - SESSION 1 - #126

Early Evaluation of the Potential of a Novel Engineered
Recombinant Hemoglobin Based Oxygen Carrier as an Adjunct in
Pre-Hospital Resuscitation

Presentation Author: Maj Gen Michael von Bertele

MHSRS-23-09183 - SESSION 1 - #127

A Narrative Review of Prehospital Hemorrhagic Shock Treatment
with Non-Blood Product Medications

Presentation Author: CAPT Caleb Knight

MHSRS-23-09194 - SESSION 1 - #128

Canine Freeze Dried Plasma (cFDP)

Presentation Author: Dr. Robert Buntz

MHSRS-23-09294 - SESSION 1 - #129

4D Bio3 On-Demand Blood: Making Manufactured Red Blood
Cells a Reality for Warfighters and Civilians

Presentation Author: Dr. Robert Thomas

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A High-Throughput In Vitro Method for Assessing Oxygen Binding
in Native Red Blood Cell Suspensions

Presentation Author: Dr. Orion Furmanski

MHSRS-23-09366 - SESSION 1 - #131

Comparative Analysis of Impact of Storage on Donated and
Manufactured Blood

Presentation Author: Dr. Armando Estrada

MHSRS-23-09470 - SESSION 1 - #132

Effect of Increasing Force on Indicators of Hemodynamics
During Circumferential Constriction Cardiopulmonary
Resuscitation

Presentation Author: Mr. Aidan Paradis

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MHSRS-23-09557 - SESSION 1 - #133

Improved Physiology and Low Hospital Mortality After a Prehospital Advanced Resuscitative Care Bundle
Presentation Author: Mr. Jacob Broome

MHSRS-23-09573 - SESSION 1 - #134

Comparison of Platelet Quality and Hemostatic Function Across Apheresis Collection Platforms
Presentation Author: Dr. Susan Shea

MHSRS-23-09634 - SESSION 1 - #135

Approaches to Maintain Red Blood Cell Functions after Freeze-Drying and Rehydration
Presentation Author: Mr. Charles Elder

MHSRS-23-09683 - SESSION 1 - #136

In Vivo Efficacy of Platelets Modified to Express New Proteins Using mRNA-Lipid Nanoparticles
Presentation Author: Dr. Katherine Badior

MHSRS-23-09714 - SESSION 1 - #137

Traumatized Immunometabolopathy and Immunological Damage Control Resuscitation to Create a Pro-Survival Phenotype via Attenuating Acute Cardiomyopathy
Presentation Author: Dr. Yansheng Feng

MHSRS-23-09795 - SESSION 1 - #138

From Brothers to Heroes in Arms: Expanding Walking Blood Banks to Include Women Leading to More Lives Saved
Presentation Author: Capt Kelly Harrell

MHSRS-23-09936 - SESSION 1 - #139

Coagulation Function of Never Frozen Liquid Plasma Stored for 75 Days
Presentation Author: CAPT Caleb McClary

MHSRS-23-10176 - SESSION 1 - #140

Lyophilization and Rapid Reconstitution of a Field-Deployable Artificial Red Blood Cell (ErythroMer)
Presentation Author: Ms. Rasa Ghaffarian

MHSRS-23-10405 - SESSION 1 - #141

Field-Deployable Artificial Red Blood Cell (ErythroMer): Pharmacokinetics and Biocompatibility
Presentation Author: Ms. Rasa Ghaffarian

MHSRS-23-10359 - SESSION 1 - #142

Characterization and Transfusion of Trehalose-Loaded Red Blood Cells after Lyophilization and Rehydration
Presentation Author: Dr. Jonathan Kopechek

MHSRS-23-10386 - SESSION 1 - #143

"Break-It-to-Make-It" Pliable Therapeutic Packaging for Rapid Rehydration in the Far-Forward Setting
Presentation Author: Mr. James Welch

MHSRS-23-10557 - SESSION 1 - #144

Targeted Mutation of Recombinant Heme-Containing Proteins to Engineer the Next-Generation Artificial Oxygen Carrier
Presentation Author: Dr. Jason Rose

MHSRS-23-10601 - SESSION 1 - #145

Multifunctional, Near-Patient Platform for Measurement of Coagulopathy Markers
Presentation Author: Dr. Vamsee Pamula

MHSRS-23-10764 - SESSION 1 - #146

Resuscitation: Is There an Approach to Decrease Pre-hospital Mortality?
Presentation Author: Dr. Olga Bockeria

MHSRS-23-08130 - SESSION 1 - #147

A Field-Deployable Dielectric Blood Coagulometer for Point-of-Care Assessment of Trauma-Induced Coagulopathy: Evaluation in High-Vibration Environment of a MH-60S Knighthawk Helicopter
Presentation Author: Dr. Michael Suster

MHSRS-23-08661- SESSION 1 - #148

Characteristics of Casualties Receiving Low-Titer Group O Whole-Blood in the Israel Defense Forces
Presentation Author: CPT Tomer Talmy

MHSRS-23-08264 - SESSION 1 - #149

Plasma Levels of Syndecan, Thrombomodulin, and Angiotensin-2/Angiotensin-1 Are Significantly Impacted as Early as 4-6 Minutes Following 65% Hemorrhage in a Rat Model of Lethal Hemorrhage
Presentation Author: Xiaowu Wu

Hemorrhage Control and Vascular Dysfunction

MHSRS-23-08265 - SESSION 1 - #150

Histamine-, Plasmin-, and Bradykinin-induced Endothelial Junctional Integrity Changes as a Model of Trauma-Induced Vascular Dysfunction
Presentation Author: Xiaowu Wu

MHSRS-23-08266 - SESSION 1 - #151

Transepithelial/ Transendothelial Electrical Resistance (TEER) as a Reliable Method to Model Changes in Endothelial Cell Junctional Integrity
Presentation Author: Xiaowu Wu

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MHSRS-23-09853 - SESSION 1 - #152

Detection of TIC-Relevant Phenotypes with a Multichannel Miniaturized Dielectric Blood Coagulometer Incorporating Bioactive Reagent-Functionalized Electrodes
Presentation Author: Dr. Michael Suster

MHSRS-23-08651 - SESSION 1 - #153

Hemorrhagic Shock in Pelvic Fracture Casualties: Implications for Prehospital Management
Presentation Author: CPT Tomer Talmy

MHSRS-23-08665 - SESSION 1 - #154

Injury Characteristics and Factors Associated with Pursuing Intraosseous Access
Presentation Author: CPT Tomer Talmy

MHSRS-23-08666 - SESSION 1 - #155

Success Rates and Factors Associated with Failure of Intraosseous Access in Prehospital Trauma Treatment Administered by Military Providers
Presentation Author: CPT Tomer Talmy

MHSRS-23-08668 - SESSION 1 - #156

Risk Factors for Failure in Tourniquet Application in Military Settings
Presentation Author: CPT Tomer Talmy

MHSRS-23-08670 - SESSION 1 - #157

Prehospital Tranexamic Acid Administration: A Ten-Year Analysis of the Israel Defense Forces Trauma Registry
Presentation Author: CPT Tomer Talmy

MHSRS-23-07930 - SESSION 1 - #158

3D-Printed Antithrombogenic Sutureless Device for Vascular Anastomosis
Presentation Author: Mr. Xiaowei Li

MHSRS-23-08105 - SESSION 1 - #159

Hemolysate Mixed with Crystalloid Resuscitation Reduces Fluid Requirements but May Increase Acute Decompensation After Severe Hemorrhage Unless Also Combined with Colloid
Presentation Author: Dr. Alexander Penn

MHSRS-23-08165 - SESSION 1 - #160

Validation of Preload Assessment Technologies at Altitude in a Porcine Model of Hemorrhage
Presentation Author: Dr. Adam Price

MHSRS-23-08167 - SESSION 1 - #161

Portable Technology for the Treatment of Gunshot Victims and Other Forms of Hemorrhage -Turmeric Golden Gauze™
Presentation Author: Dr. Krishnaswami Raja

MHSRS-23-08179 - SESSION 1 - #162

Biocompatible DERT (Dispersible Emergency Response Treatment) for Effective Hemostasis in a Rat Model of Lethal Liver Injury
Presentation Author: Dr. Joanne Ebesu

MHSRS-23-08187 - SESSION 1 - #163

Comparing Administration Routes of Tranexamic Acid for En Route Care Using a Translational Swine Model of Hemorrhagic Shock and Hyperfibrinolysis
Presentation Author: Mr. Walker West

MHSRS-23-08274 - SESSION 1 - #164

Feasibility of Endovascular Localization of Non-Compressible Torso Hemorrhage Using Swine (*Sus scrofa*): A Pilot Study
Presentation Author: Micaela Cuneo

MHSRS-23-08679 - SESSION 1 - #165

Long-Term Implications of Tourniquet Application for Non-major Extremity Injuries
Presentation Author: LTC Roy Nadler

MHSRS-23-08702 - SESSION 1 - #166

Evaluation of an Intramuscular Autoinjector Using Fluoroscopic Imaging
Presentation Author: Kelly Mottet

MHSRS-23-08887 - SESSION 1 - #167

Reducing Hemorrhage with Functionalized Nanoparticles
Presentation Author: Dr. Kyle Ploense

MHSRS-23-08990 - SESSION 1 - #168

Ex Vivo Evaluation of Whole Blood Surrogate Combination Technology for Far Forward Hemorrhage Control
Presentation Author: Dr. Michael Bruckman

MHSRS-23-09009 - SESSION 1 - #169

Ex Vivo and In Vivo Evaluation of Hemostatically Enhanced Lyophilized Plasma for Far Forward Hemorrhage Control
Presentation Author: Dr. Ujjal Didar Singh Sekhon

MHSRS-23-09019 - SESSION 1 - #170

Lyophilizable Field-Deployable Intravenous Platelet Surrogate Nanotechnology Evaluation in Rabbit Models of Bleeding
Presentation Author: Dr. Anirban Sen Gupta

MHSRS-23-09071 - SESSION 1 - #171

The Use of Celox Rapid in Extreme Cold Environments
Presentation Author: Mr. Andrew Hoggarth

MHSRS-23-09205 - SESSION 1 - #172

Development of a Bioabsorbable Hemostatic Wound Dressing
Presentation Author: Dr. Hua Xie

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MHSRS-23-09236 - SESSION 1 - #173

Targeting Low 45 – 55 mmHg Mean Arterial Blood Pressure after Cardiac Arrest and Resuscitation Improves Cerebral Perfusion
Presentation Author: CDR Andreas Garcia Bardon

MHSRS-23-09570 - SESSION 1 - #174

Injectable Hemostatic Agents for Minimally Invasive Delivery into the Abdomen to Manage Non-Compressible Truncal Hemorrhage
Presentation Author: Samuel Duckworth

MHSRS-23-09578 - SESSION 1 - #175

Advancing an Optimized Formulation of CounterFlow Self-Dispersing Hemostatic Powder for Managing Non-Compressible Abdominal Hemorrhage
Presentation Author: Mr. Massimo Cau

MHSRS-23-09617 - SESSION 1 - #176

Biodegradable Tissue-Adhesive Polyester Mats and Polyester Coacervates for Hemorrhage Control
Presentation Author: Dr. Abraham Joy

MHSRS-23-09650 - SESSION 1 - #177

Development and Evaluation of a Pneumatic Automated Tourniquet for Combat Casualty Care
Presentation Author: Mr. David Berard

MHSRS-23-09694 - SESSION 1 - #178

Intra-Colon Cooling Increases Survival Rate by Six-Fold in the Rat Model of Lethal Hemorrhage
Presentation Author: Dr. Bingren Hu Hu

MHSRS-23-09702 - SESSION 1 - #179

Blood-Based Biomarkers and Coagulation Factors after REBOA Management of Lethal Hemorrhage in Rats
Presentation Author: Dr. Bingren Hu Hu

MHSRS-23-09737 - SESSION 1 - #180

Correlation of Esophageal Oxyhemoglobin Saturation with Mixed Venous Oxygen Saturation and Mortality During Hemorrhagic Shock
Presentation Author: Michelle Balcarcel-Monzon

MHSRS-23-09995 - SESSION 1 - #181

A Proprietary Glass-Based Solution to Traumatic Bleed Out
Presentation Author: Dr. Mark Towler

MHSRS-23-10007 - SESSION 1 - #182

Modelling the Change in Vascular Resistance on Mean Arterial Pressure with Varying Positive End-Expiratory Pressure in Simulated Hemorrhagic Shock
Presentation Author: Mr. Frency Varghese

MHSRS-23-10088 - SESSION 1 - #183

Preliminary Evaluation of Hemostatic Dressings under Prolonged Field Care Conditions
Presentation Author: Ms. Irasema Terrazas

MHSRS-23-10147 - SESSION 1 - #184

Evaluation of Staining Properties in Simulated Blood Products
Presentation Author: Mr. Conner Parsey

MHSRS-23-10177 - SESSION 1 - #185

An Overview of Development Work on the Acute Care Cover for Severely Injured Limbs (ACCSIL)
Presentation Author: Dr. Erik Edwards

MHSRS-23-10275 - SESSION 1 - #186

Extracellular Vesicles in Hemorrhage Control
Presentation Author: Dr. Raghavan Raju

MHSRS-23-10297 - SESSION 1 - #187

Effects of Ethynylestradiol-3-sulfate on Oxygen Metabolism in Pigs with Traumatic Hemorrhage
Presentation Author: Dr. Wenjun Martini

MHSRS-23-10309 - SESSION 1 - #188

Sex-Dependent Blood-Brain Barrier Alterations Following Repeated mild Blast Traumatic Brain Injury at Varying Inter-injury Intervals
Presentation Author: Dr. Brad Hubbard

MHSRS-23-10401 - SESSION 1 - #189

Control of Life-Threatening Hemorrhage in the Prehospital Setting: Is There a Role for an External Neck Occlusive Device?
Presentation Author: 2ndLt Lauren Edmonson

MHSRS-23-10647 - SESSION 1 - #190

Expandable and Injectable Shape-Memory Hemostatic for Treatment of Non-Compressible Hemorrhage
Presentation Author: Dr. Akhilesh Gaharwar

MHSRS-23-10652 - SESSION 1 - #191

Alpha-Alpha Hemoglobin/ Diaspirin-Crosslinked Hemoglobin (DCLHb) Benefits from Treatment Using Apohemoglobin Haptoglobin Complex to Improve Microhemodynamics and Reduce Peripheral Vasoconstriction
Presentation Author: Mr. Carlos Munoz

MHSRS-23-10657 - SESSION 1 - #192

Crosslinked Polymerized Hemoglobin Brings Revived Confidence to the Field of Hemoglobin-based Oxygen Carriers
Presentation Author: Mr. Carlos Munoz

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MHSRS-23-10659 - SESSION 1 - #193

Resuscitation from Severe Shock with Low Volume Resuscitation Using Hypertonic Saline and Hemoglobin-based Oxygen Carriers
Presentation Author: Ms. Daniela Lucas

MHSRS-23-10662 - SESSION 1 - #194

Recombinant Lectin Conjugated Liposomes for Targeted Drug Delivery to Treat Infective Endocarditis
Presentation Author: Dr. Michael Super

MHSRS-23-10664 - SESSION 1 - #195

Pharmacokinetics of Tranexamic Acid Administered Using a Novel High-Volume Intramuscular Autoinjector
Presentation Author: Ms. Sara Bohnert

Cellular Therapeutics for Treatment of Shock and Trauma

MHSRS-23-08549 - SESSION 1 - #196

Mesenchymal Stromal Cells as a Potential Cell-Therapeutic Option for Endothelial Dysfunction Caused by Exposure to Ionizing Radiation
Presentation Author: Mr. Christopher Delavan

MHSRS-23-08936 - SESSION 1 - #197

Delayed Administration of Bone Marrow Derived Mesenchymal Stem Cells for Bone Healing in a Rat (*Rattus norvegicus*) Calvarial Critical Defect Model
Presentation Author: Dr. Meghan Wally

MHSRS-23-09028 - SESSION 1 - #198

Delivering Mitochondria to the Spinal Cord via Engineered Erodible Hydrogels
Presentation Author: Dr. Alexander Rabchevsky

MHSRS-23-09439 - SESSION 1 - #199

Mesenchymal Stem Cell-Derived Exosomes for Treatment of Sepsis
Presentation Author: Dr. Perenlei Enkhbaatar

MHSRS-23-09574 - SESSION 1 - #200

Manufacturing GMP-Compliant Induced Pluripotent Stem Cells (iPSCs) and Endothelial Cells for Military Applications
Presentation Author: Mr. Jonathan Rodriguez

MHSRS-23-09765 - SESSION 1 - #201

Mechanical Conditioning Rejuvenates Mesenchymal Stem Cells from Aged Patients
Presentation Author: Dr. Aaron Baker

MHSRS-23-09869 - SESSION 1 - #202

Expanded Human Umbilical Cord Blood Stem Cells as Cellular Therapy to Protect from Morbidity and Mortality of Acute Radiation Exposure in Mice
Presentation Author: Dr. Larry Denner

MHSRS-23-10316 - SESSION 1 - #203

Evaluation of the Safety and Efficacy of the Autologous, Adipose Stem Cell-Derived 3D Osteogenic Implant in the Treatment of Recalcitrant Long Bone Non-Union Following Severe Trauma
Presentation Author: Judy Ashworth

MHSRS-23-09284 - SESSION 1 - #204

Apoptotic Cells-Based Therapy Modifies the Inflammatory Response to Hemorrhagic Shock
Presentation Author: Dr. Dean Nachman

Emerging Technologies for Treatment of Non-compressible Torso Hemorrhage

MHSRS-23-08425 - SESSION 1 - #205

Pre-Clinical Feasibility and Pharmacokinetic Assessment of an Auto Injector-Based Delivery of Tranexamic Acid in a Swine Model of Uncontrolled Hemorrhage
Presentation Author: Dr. Dean Nachman

MHSRS-23-08811 - SESSION 1 - #206

Who Says You Can't Go FAST at Night? Use of a Novel Ultrasound-Capable Night Vision Device for Prehospital Medical Personnel to Identify Noncompressible Truncal Hemorrhage
Presentation Author: MAJ James Williams

MHSRS-23-08812 - SESSION 1 - #207

The Fog Has Not Lifted: No Reduction in Complications for Partial REBOA in the AAST Aorta Registry
Presentation Author: Dr. Lucas Neff

MHSRS-23-09006 - SESSION 1 - #208

Evaluation of a TNF- α Inhibitor in Mitigating Acute Kidney Injury Following REBOA Intervention in a Porcine Model (*Sus scrofa domestica*)
Presentation Author: Dr. Erica Molina

MHSRS-23-09061 - SESSION 1 - #209

H12-(ADP)-Liposomes Effectively Promote Hemostasis and Improve Survival Rates in Experimental Animal Model of Non-Compressible Torso Hemorrhage with Thrombocytopenia
Presentation Author: Dr. Manabu Kinoshita

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MHSRS-23-09585 - SESSION 1 - #210

Rapid Action Injectable Siloxane-Based Sponges for In Situ Hemostatic Treatment

Presentation Author: Ms. Pritha Sarkar

MHSRS-23-10157 - SESSION 1 - #211

LifeDust: Self-Expanding Powder for Treatment of Non-compressible Torso Hemorrhage

Presentation Author: Dr. Matthew Dowling

MHSRS-23-10221 - SESSION 1 - #212

Localization of Non-Compressible Torso Hemorrhage with Endovascular Measurements

Presentation Author: Dr. Brian Telfer

MHSRS-23-10233 - SESSION 1 - #213

Advanced Product Development Process for Non-Compressible Hemorrhage Control Family of Systems

Presentation Author: Ms. Amy Wingerd

MHSRS-23-10513 - SESSION 1 - #214

When Every Minute Counts: REBOA Before Surgery is Independently Associated with a 15-Minute Delay in Time to Definitive Hemorrhage Control

Presentation Author: Dr. Christina Colosimo

MHSRS-23-10526 - SESSION 1 - #215

Intervention and Monitoring to Reduce the Incidence of AKI Following Non-Compressible Torso Hemorrhage

Presentation Author: Mr. Lars Lofgren

Enabling Medical Mobility and CASEVAC during Future Large Scale Combat Operations

MHSRS-23-08043 - SESSION 1 - #216

Improvement of Severe Sepsis Diagnosis Novel Techniques through Free Hemoglobin Assessment Can Enhance Warfighters Survival Ability in CASEVAC

Presentation Author: Dr. Luis A Martinez

MHSRS-23-08685 - SESSION 1 - #217

A Systematic Review of the Effects of the Aeromedical Environment on Critically Injured Warfighters

Presentation Author: Lt Carolyn Judge

MHSRS-23-08866 - SESSION 1 - #218

Identifying and Reducing Insulin Errors in the Simulated En Route Critical Care Environment: A Human Factors Approach

Presentation Author: MAJ Mark Alderman

MHSRS-23-08949 - SESSION 1 - #219

Reliability of Continuous Noninvasive Hemoglobin Monitoring in Healthy Participants During En Route Care Training

Presentation Author: MAJ William Davis

MHSRS-23-09081 - SESSION 1 - #220

Error Recovery Training for Hemorrhage Control

Presentation Author: Ms. Laura Militello

MHSRS-23-09215 - SESSION 1 - #221

Design and Evaluation of the Tactical Anesthesia Workstation-Mobile Prototype: A Field-Ready Collapsible Medical Station

Presentation Author: 1st Lt Stevan Gallegos

MHSRS-23-09259 - SESSION 1 - #222

Foam Splinting Reduces Segmental Acceleration and Rotation Relative to SAM Splints in Cadavers with Acute Tibia Fracture

Presentation Author: Dr. Nathaniel Bates

MHSRS-23-09371 - SESSION 1 - #223

The "LETT" Device for Endotracheal Tube Securement and Precise Adjustment

Presentation Author: Dr. Daniel Stromberg

MHSRS-23-09691 - SESSION 1 - #224

Impacts of a Common Data Standard for Supporting Medical Device Interoperability for Enhancing Prolonged Field Care and Casualty Evacuation

Presentation Author: Ms. Nicole Sieling-Mondora

MHSRS-23-10033 - SESSION 1 - #225

Enhancing En Route Care Training through Immersive Virtual Reality Medical Simulation

Presentation Author: Dr. Karthik Sarma

MHSRS-23-10136 - SESSION 1 - #226

Evaluation of Teledentistry Cases in Active Duty Personnel on the Global Teleconsultation Portal from 2015 to 2020

Presentation Author: Dr. Yoon Hwang

MHSRS-23-10169 - SESSION 1 - #227

Comparison of the Most Common Dental Emergencies Seen at Dental Treatment Facilities and the Most Common Oral-Facial Disease Requiring Medical Evacuations of U.S. Army Personnel in Deployed Theaters Since 2000

Presentation Author: Mr. Zachary McIntosh

MHSRS-23-10487 - SESSION 1 - #228

Modeling the Navy's En Route Care System

Presentation Author: Mr. Michael Obringer

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MHSRS-23-10627 - SESSION 1 - #229

eFAST to OR: Determining the Quality of Paramedic Conduction and Interpretation of eFAST Exams in Prehospital Settings
Presentation Author: 2LT Alexa Carboni

MHSRS-23-10666 - SESSION 1 - #230

POCUS on PAR: Point-of-Care Ultrasounds Obtained by Novice Physician Assistant Residents
Presentation Author: Seshidar Tekmal

Advanced Battlefield Care of Severe Burn Casualties at the Point of Need: Prehospital to Definitive Care

MHSRS-23-08176 - SESSION 1 - #231

Sprayable Bioactive Supramolecular Polymers for Enhanced Tissue Regeneration Following Burn Injury
Presentation Author: Dr. Tristan Clemons

MHSRS-23-08233 - SESSION 1 - #232

3D Printed Glass-Hydrogel Dressings: Continuous Hydrating System for Burn Wound Healing
Presentation Author: Dr. Fateme Fayyazbakhsh

MHSRS-23-08263 - SESSION 1 - #233

Activating the HIF-1 α Pathway with the Prolyl-Hydroxylase Inhibitor MK-8617 to Treat Burn Shock in Swine: A Prospective, Randomized, Blinded, Placebo-Controlled, Pre-Clinical Pilot Study
Presentation Author: Dr. Evan Ross

MHSRS-23-08284 - SESSION 1 - #234

Multi-Spectral SWIR Imaging in Humans Reveals Correlations with Distinct Skin Burn Depths
Presentation Author: Dr. Johanna Nunez

MHSRS-23-08314 - SESSION 1 - #235

Topical Treatment with Non-Euphoric Phyto Cannabinoid Elixir 14 (NEPE14) Reduces Inflammation and Mitigates Burn Wound Progression
Presentation Author: Dr. Kristo Nuutila

MHSRS-23-08330 - SESSION 1 - #236

Evaluation of Topical Off-the-Shelf Therapies to Reduce the Need to Autograft of Burn-Injured Service Members in a Prolonged Field Care Setting
Presentation Author: Mr. David Larson

MHSRS-23-08418 - SESSION 1 - #237

Evaluation of Subcutaneous Combination Ibuprofen and Resolvin D2 Therapy to Mitigate Burn Progression
Presentation Author: Dr. Marc Thompson

MHSRS-23-08507 - SESSION 1 - #238

PCL/PLGA Coaxial Electrospun Mat Infused with Mafenide Acetate for Treatment of Invasive Wound Infection after Burn Injuries
Presentation Author: Dr. Mia Mae Kiamco

MHSRS-23-08706 - SESSION 1 - #239

Snapshot Hyperspectral Imager for Burn Wound Assessment
Presentation Author: Dr. Jim Daly

MHSRS-23-08865 - SESSION 1 - #240

Reduction of Inflammation and Fibrosis of Red Duroc Porcine Deep Partial-Thickness Dermal Burn Wounds by Pirfenidone Drug-in-Matrix Patch Treatment
Presentation Author: Dr. Jesse Nguyen

MHSRS-23-08890 - SESSION 1 - #241

Burned at Sea: Critical Care Rehabilitation for Two Sailors Injured in the INDOPACOM Region
Presentation Author: Dr. Jill Cancio

MHSRS-23-09244 - SESSION 1 - #242

An Inhalable Ultrasound Contrast Agent for Rapid Identification and Risk Stratification of Burn Inhalation Injuries in Battlefield Settings
Presentation Author: Dr. Melissa Caughey

MHSRS-23-09355 - SESSION 1 - #243

Evaluation of Field Shield Wound Dressing for Improved Prolonged Field Care Management and Healing Outcomes for Large Burn Wounds Contaminated with Multi-Drug Resistant Bacteria in a Swine Model
Presentation Author: Dr. Kerriann Greenhalgh

MHSRS-23-09606 - SESSION 1 - #244

Time Until Definitive Grafting of Battlefield-Related Burn Injuries Is Associated with Burn Wound Infection
Presentation Author: CAPT Connor Wakefield

MHSRS-23-09661 - SESSION 1 - #245

4-aminopyridine Accelerates Wound Healing through Re-Epithelialization, Hair Follicle Neogenesis, Myofibroblast Differentiation, Angiogenesis, and Reinnervation Following Full-Thickness Dorsal Skin Wounds
Presentation Author: Dr. John Elfart



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MHSRS-23-09796 - SESSION 1 - #246

Classifying Severity of Burn Wounds in a Porcine Model Resulting from Microwave Energy Exposure Using Multispectral Spatial Frequency Domain Imaging and Machine Learning
Presentation Author: Mr. Gordon Kennedy

MHSRS-23-10009 - SESSION 1 - #247

Adapting a Successful Supervised Machine Learning Model to a New Spatial Frequency Domain Imaging Device for Porcine Burn Severity Classification
Presentation Author: Dr. Chris Campbell

MHSRS-23-10079 - SESSION 1 - #248

Towards a Compact Field-Deployable Surgical Device for Debridement of Complex Soft Tissue Wounds: A Study Using Semiconductor-Based Lasers
Presentation Author: Dr. Nitesh Katta

MHSRS-23-10086 - SESSION 1 - #249

Endothelial Dysfunction in Major Burn Patients: Preliminary Results from Randomized Trial of Colloids in Burn Resuscitation
Presentation Author: Dr. Arek Wiktor

MHSRS-23-10124 - SESSION 1 - #250

The Burn Treatment Skin Repair Acquisition Program: Working to Push Burn Treatments Farther Forward
Presentation Author: Ms. Kristin Jones Maia

MHSRS-23-10222 - SESSION 1 - #251

The Use of Therapeutic Peptides in Combination with Full-Thickness Skin Columns to Improve Healing of Excisional Wounds
Presentation Author: Dr. Anders Carlsson

MHSRS-23-10255 - SESSION 1 - #252

Healing Outcomes Using "Donor-Free" Skin Replacement with Full-Thickness Skin Micro-Columns within a Dermal Matrix - Case Review
Presentation Author: Dr. Noor Obaidi

MHSRS-23-10582 - SESSION 1 - #253

Early Plasma Inclusive Resuscitation Reduces Crystalloid Requirement after Major Thermal Burn Injury and Is Not Associated with Transfusion Reactions
Presentation Author: Dr. Edward Kelly

MHSRS-23-10742 - SESSION 1 - #254

Translation, Implementation, and Evaluation of best-practice burn First aid in prolonged Field Care and pre-hospital environments (TIER EFFECT)
Presentation Author: Dr. Bronwyn Griffin

Polytrauma and Multi-Organ Dysfunction

MHSRS-23-08417 - SESSION 1 - #255

LiBoD - Liquid Biopsy in Organ Damage - ExoView Small Extracellular Vesicle Chip-Based Assessment of Polytrauma
Presentation Author: MAJ Aliona Woehler

MHSRS-23-08539 - SESSION 1 - #256

Inhibiting HMGB1-TLR4 Signal Activation Reduces Acute Respiratory Distress Syndrome Development in a Swine Model of Smoke Inhalation and Burn Injury
Presentation Author: Dr. Zhangsheng Yang

MHSRS-23-08604 - SESSION 1 - #257

Novel Cannula Development to Facilitate Durable Venovenous Extracorporeal Membrane Oxygenation
Presentation Author: Dr. Carl Johnson Jr.

MHSRS-23-08740 - SESSION 1 - #258

Extracorporeal Membrane Oxygenation Circulation Decreases Platelet Energy Metabolites
Presentation Author: MAJ Maximilian Feth

MHSRS-23-08759 - SESSION 1 - #259

Neutrophil Gelatinase-Associated Lipocalin Expression and Incidence of Acute Kidney Injury in Swine Undergoing 72-Hour Veno-Venous Extracorporeal CO2 Removal With and Without Systemic Anticoagulation
Presentation Author: Mr. Aboozar Ali

MHSRS-23-08762 - SESSION 1 - #260

Prolonged Field Care (72 hour) Evaluation of von Willebrand Factor Activity in the Setting of Polytrauma and Artificial Organ Support
Presentation Author: Dr. Teryn Roberts

MHSRS-23-08884 - SESSION 1 - #261

Inhaled Nitric Oxide without the Cylinders at Altitude
Presentation Author: Mr. Thomas Blakeman

MHSRS-23-09531 - SESSION 1 - #262

Preclinical Validation of a Physiologic Closed-Loop Controlled (PCLC) Integrated Portable O2 Concentrator (POC) and Ventilator at Operational Altitudes
Presentation Author: Mr. Thomas Blakeman

MHSRS-23-09013 - SESSION 1 - #263

Development of a Translatable Porcine Model of Hemorrhagic Shock and Trauma Associated Sepsis
Presentation Author: Ms. Melissa Romero

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MHSRS-23-09025 - SESSION 1 - #264

A Dexamethasone Prodrug Effectively Attenuated Symptoms of Focal Segmental Glomerulosclerosis (FSGS) in an Adriamycin-Induced Mouse Model with Minimal Adverse Effects
Presentation Author: Ms. Haochen Jiang

MHSRS-23-09435 - SESSION 1 - #265

Comprehensive Comparison of Organotypic Differences in Mitochondrial Function in a Swine Model: Novel Reference Targets for TBI and Polytrauma
Presentation Author: Dr. Jignesh Pandya

MHSRS-23-09594 - SESSION 1 - #266

Computationally Directed Mechanical Ventilation in a Porcine Model of ARDS
Presentation Author: Mr. Joshua Satalin

MHSRS-23-09654 - SESSION 1 - #267

Assessment of Immunopathy, Coagulopathy and Multiple-Organ Dysfunction in a Porcine Model of Controlled and Uncontrolled Hemorrhage
Presentation Author: Mr. Gabriel Jeppson

MHSRS-23-09730 - SESSION 1 - #268

Optimal Dose and Timing of Cilastatin Sodium for Crush Syndrome in Mice
Presentation Author: Ms. Mahaba Eiwaz

MHSRS-23-09761 - SESSION 1 - #269

Evaluation of a Model of Blast Trauma for Combined Acute Lung Injury and Hemorrhagic Shock
Presentation Author: Ms. Kristen Sack

MHSRS-23-09872 - SESSION 1 - #270

Mechanical Characteristics of the Acutely Injured Lung: A Quantitative CT Imaging Assessment
Presentation Author: Mr. Emmanuel Akor

MHSRS-23-09893 - SESSION 1 - #271

Effects of Multi-Frequency Ventilation on Gas Exchange and Mechanics in a Porcine Model of Acute Respiratory Distress Syndrome: Improved Oxygenation at Lower Distending Pressures
Presentation Author: Dr. Andrea Cruz

MHSRS-23-10282 - SESSION 1 - #272

Implementing a Novel Orthopedic Polytraumatic Injury Model in Laboratory Mice
Presentation Author: Larry Chen

MHSRS-23-10502 - SESSION 1 - #273

Hemodynamics and Metabolomics Differences Between Hemorrhagic Shock and Traumatic Brain Injury Alone or Combined
Presentation Author: Dr. Cynthia Rodrigues Muller

MHSRS-23-10518 - SESSION 1 - #274

Influence of Murine Coronavirus Virus on Systemic Inflammatory Response after Femur Fracture
Presentation Author: Dr. Ramkumar Tiruvannamalai Annamalai

MHSRS-23-10551 - SESSION 1 - #275

Optimization of a Lethal, Combat-Relevant Model of Sterile Inflammation in Mice for Drug Candidate Screening
Presentation Author: Dr. Alexander Bobrov

MHSRS-23-10769 - SESSION 1 - #276

Retrospective Review of Hyperphosphatemia and 30-Day Mortality in Major Trauma
Presentation Author: LCDR Rebecca Rausa

Advanced Decision Support and Automation Technologies to Support Combat Casualty Care During Multi-Domain Operations, Large Scale Combat Operations, and Prolonged Care

MHSRS-23-08099 - SESSION 1 - #277

Exploring Usability of an Immersive Virtual Reality Simulator for Medication Administration Safety
Presentation Author: Dr. Kelly Rossler

MHSRS-23-08171 - SESSION 1 - #278

Hemodynamic Monitoring via Sequential Inference for Safety Assurance of Physiological Closed-Loop Controllers: Fluid Resuscitation and IV Sedation Case Study
Presentation Author: Dr. Jin Oh Hahn

MHSRS-23-08352 - SESSION 1 - #279

Smartphone-Based Diagnosis and Longitudinal Tracking of Skin Conditions of Warfighters in a No-Communications Environment
Presentation Author: Dr. Sridhar Ramakrishnan

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MHSRS-23-08397 - SESSION 1 - #280

Machine Learning-Assisted Computer Vision to Support Healthcare in Resource Constrained Settings

Presentation Author: Dr. Christopher Nemeth

MHSRS-23-08522 - SESSION 1 - #281

ADvanced Virtual Support for OpeRational Forces (ADVISOR) Use in Austere Caregivers

Presentation Author: Dr. Caryn Stern

MHSRS-23-08896 - SESSION 1 - #282

ADvanced Virtual Support for OpeRational Forces (ADVISOR) Customer Feedback

Presentation Author: Dr. Caryn Stern

MHSRS-23-08615 - SESSION 1 - #283

Wearable, Deep Tissue Oxygenation Tracking with a Flexible Patch for Casualty Monitoring

Presentation Author: Dr. Tanner Songkakul

MHSRS-23-08726 - SESSION 1 - #284

Machine Learning Model and Smartphone Application for Clinical Documentation and Medical Inventory Management

Presentation Author: Dr. Thomas Boziuk

MHSRS-23-08731 - SESSION 1 - #285

Man vs. Machine: Provider Directed vs. Partially Automated Critical Care Management (PACC-MAN) in a Porcine Model of Distributive Shock

Presentation Author: Elizabeth Wood

MHSRS-23-08868 - SESSION 1 - #286

Feasibility Assessment of a Transdisciplinary, Multiscale Computational Framework for Simulating Human-Robot Interaction in Casualty Evacuation Scenarios

Presentation Author: Dr. Nathaniel Pickle

MHSRS-23-08876 - SESSION 1 - #287

Digital Health Technologies and Regulatory Involvement Throughout the Total Product Lifecycle of Medical Devices

Presentation Author: LTC Stuart Hobbs

MHSRS-23-08911 - SESSION 1 - #288

Developing a Sensor-Assisted Portable Pneumothorax Detection and Treatment Device

Presentation Author: 1LT Nianyu Jiang

MHSRS-23-08915 - SESSION 1 - #289

AI/ML on Augmented Reality Headsets: Machine Learning-Based Identification of Warfighter Body Poses

Presentation Author: Mr. Alexander Pavloff

MHSRS-23-08928 - SESSION 1 - #290

Natural Language Processing of Commands on an Augmented Reality Headset to Control the Medic's Anatomy Visualization Tool

Presentation Author: Mrs. Danielle Johnson

MHSRS-23-08939 - SESSION 1 - #291

A Pneumothorax Tissue Phantom for Evaluating Technology to Automate Ultrasound Imaging

Presentation Author: Ms. Sofia Hernandez Torres

MHSRS-23-09092 - SESSION 1 - #292

Casualty Identification and Consciousness Determination from sUAS for Fully Integrated Standoff Casualty Assessment System

Presentation Author: Dr. Jonathan Chambers

MHSRS-23-09093 - SESSION 1 - #293

Enabling Safe Robot-Human Interaction for Casualty Extraction: Perception Technologies for Body Mapping and Mass Estimation

Presentation Author: Dr. Jaeyeon Lee

MHSRS-23-09094 - SESSION 1 - #294

Evaluating the Impact and Effectiveness of Physiological Closed Loop Control and Remote Management for Enhanced Casualty Care

Presentation Author: Ms. Alix Gondringer

MHSRS-23-09113 - SESSION 1 - #295

Design and Development of an Augmented Reality Application to Guide Surgical Interventions with Usability Heuristics

Presentation Author: Ms. Sena Veazey

MHSRS-23-09146 - SESSION 1 - #296

Novel Autonomous, Modular, and Portable Ventilation System (AMP-Vent) for Treatment at Point-of-Injury, Austere Environments, and Prolonged Care

Presentation Author: Mrs. Mary Weeks

MHSRS-23-09164 - SESSION 1 - #297

A Mathematical Model for Replication of Simulated Vasoplegia and Vasopressor Therapy

Presentation Author: Mr. Yi-Ming Kao

MHSRS-23-09250 - SESSION 1 - #298

Development and Validation of a Mathematical Model for Simulation of Hemorrhagic Shock and Fluid Resuscitation

Presentation Author: Mr. Yekanth Ram Chalumuri

MHSRS-23-09460 - SESSION 1 - #299

AI Algorithm to Aid in the Detection of Hemoperitoneum During the FAST Exam

Presentation Author: Dr. Nikolai Schnitke

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MHSRS-23-09553 - SESSION 1 - #300

Holographic Trauma Wound Generation and Visualization with Fast Physics Models

Presentation Author: Dr. Xianlian Zhou

MHSRS-23-09563 - SESSION 1 - #301

Evaluation of Adaptive Closed Loop Hemorrhagic Shock Resuscitation Controllers

Presentation Author: Eric Snider

MHSRS-23-09690 - SESSION 1 - #302

A Systems Engineering Approach to Mature Autonomous and Remotely Managed En Route Care Concepts and Technologies

Presentation Author: Mr. Nicole Sieling-Mondora

MHSRS-23-09859 - SESSION 1 - #303

Point-of-Care Brain MRI: Update on Preliminary Results from a Single-Center Retrospective Study in the Neurocritical Care Setting

Presentation Author: CAPT Kavitha Prasanna

MHSRS-23-09881 - SESSION 1 - #304

The Association Between Eye-Tracking Metrics and Non-Technical Skills in Acute Care Trauma Simulations

Presentation Author: Mr. Nicholas Anton

MHSRS-23-09927 - SESSION 1 - #305

Optical Oxygen and Carbon Dioxide Sensors for Continuous Monitoring of Perfused Vascularized Composite Allografts

Presentation Author: Dr. Emmanouil Rousakis

MHSRS-23-10074 - SESSION 1 - #306

Semi-Automated Tracheotomy Assist Device (SATAD) for Prehospital Setting

Presentation Author: Dr. Laura Brattain

MHSRS-23-10158 - SESSION 1 - #307

Augmented Semiautonomous Training Systems for Personalized Medical Training

Presentation Author: Dr. Tiffany Jastrzembski Myers

MHSRS-23-10217 - SESSION 1 - #308

Joint Trauma Education and Training Delivery Program (JTETDP)

Presentation Author: Mr. Harold Montgomery

MHSRS-23-10246 - SESSION 1 - #309

ARGUS: An Open-Source Platform for Ultrasound Video AI That Supports Multiple Point-of-Care Applications

Presentation Author: Dr. Stephen Aylward

MHSRS-23-10323 - SESSION 1 - #310

No-Power, Rapid, Colorimetric On-Site In Vitro Diagnostic for Pharmacogenetics

Presentation Author: Dr. David Gaddes

MHSRS-23-10384 - SESSION 1 - #311

TeleVent - A Compact, Teleoperable, and Semi-Autonomous Ventilator for the Management of Lung Injury in Far-Forward Settings

Presentation Author: Dr. Howie Choset

MHSRS-23-10404 - SESSION 1 - #312

Wearables-Based Analytics for Detection of Respiratory Infection and Continuous Monitoring of COVID-19 Severity

Presentation Author: Dr. Stephan Wegerich

MHSRS-23-10412 - SESSION 1 - #313

Systematic Testing of a Ventilator Remote Control System Towards Safe Use in Tele-Critical Care

Presentation Author: Dr. Yi Zhang

MHSRS-23-10453 - SESSION 1 - #314

Introducing Surrogate Devices to Insert Medical Training within Live Force on Force Exercises

Presentation Author: Mr. Mark Mazzeo

MHSRS-23-10519 - SESSION 1 - #315

TeleHelper for Operational Medical Procedure Support and Offline Network: Trauma THOMPSON

Presentation Author: Jonah Beck

MHSRS-23-10527 - SESSION 1 - #316

Advanced Machine Learning Computer Vision Object Detection Application: Intelligent Tracking and Tasking of Medical Resources in Multi-Domain Operations

Presentation Author: Mr. Mark Espinoza

MHSRS-23-10545 - SESSION 1 - #317

Mission Oriented Protective Posture (MOPP) Level Virtual Reality (VR): Usability Assessment of a Hybrid VR Simulation Training Platform for Chemical, Biological, Radiological and Nuclear Explosives (CBRNE) Preparedness

Presentation Author: Scott Brown

MHSRS-23-10562 - SESSION 1 - #318

Mass Casualty Incident (MCI) Management in Virtual Reality (VR): Development and Usability of an Instructorless MCI Training Scenario in VR

Presentation Author: DeAnna DeVane

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MHSRS-23-10575 - SESSION 1 - #319

Real-Time Objective Dyspnea Assessment Using Forehead Wearable Sensor

Presentation Author: Dr. Marcus Orzabal

MHSRS-23-10589 - SESSION 1 - #320

Déjà Vu: Virtual Reality In Situ Training in an Unfamiliar Environment and Trauma Resuscitation Performance

Presentation Author: Oanh Tran

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Development of a Data Environment for Clinical Decision Support in Austere Environments

Presentation Author: Dr. Danielle Clark

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Non-Contact Methods of Measuring Heart and Respiratory Activity in Far-Forward Conditions Using Cameras and Radar

Presentation Author: Mr. Justin Peel

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Development, Clearance, and Deployment of Autonomous Healthcare Systems for Military and Mass Casualty Operations

Presentation Author: Dr. Joshua Lampe

Battlefield Analgesia Pipeline: Novel Therapeutics from the Benchtop to the Battlefield

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Longitudinal Shift of Cortical Gene Functions Linked to Pain Management Post Fentanyl Administration

Presentation Author: Mr. Nabarun Chakraborty

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Evaluation of Arylepoxamides for Antinociceptive Effect in a Rat Model of Thermal Injury

Presentation Author: Dr. Bopaiah Cheppudira

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Effects of Low-Dose Opioid Analgesics (Morphine, Fentanyl, and Sufentanil) on Cardiovascular Compensatory Responses and Survival Time After Traumatic Hemorrhage in Rats

Presentation Author: CPT Stephanie Marshall

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Association Between Early Analgesia and Post-Traumatic Stress Disorder in Injured Military Personnel: A Registry-based Study

Presentation Author: CPT Tomer Talmy

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Analyzing Effectiveness of Nanoparticle-Based Therapeutics in an In Vitro Model of Inflammatory Pain

Presentation Author: Ms. Michaela Priess

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Cryoneurolysis with Topically Applied Ice Slurry

Presentation Author: Dr. Sara Moradi Tuchayi

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In Vitro and Ex Vivo Peripheral Nerve Block Training Platforms

Presentation Author: Mr. Carlos Bedolla Avalos

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Force Health Protection Directorate Saves Lives: Providing a Medical Countermeasure Against Life-Threatening Opioid Exposure to U.S. Special Operations Command (USSOCOM) Personnel

Presentation Author: Mrs. Marianne Erlichman

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Towards Real-Time Visualization of Smart Needle Location in the Lumbar Puncture

Presentation Author: Dr. Danielle Harper

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Duality of Non-Opioid Analgesic Lipid Nanoparticles in Alleviating Tumor Progression

Presentation Author: Ms. Sowmya Ramesh

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Development of a Self-Contained, Wearable Infusion Device for Non-Opioid Pain Management in the Golden Hour and for Prolonged Field Care

Presentation Author: Mr. Gregg Peterson

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Battlefield Analgesia Auto-Injectors, A Safer, Faster, More Accurate Way to Deploy Medications

Presentation Author: COL Sean Hollonbeck

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Evaluation of Non-Euphoric Cannabinoid Extract (NEPE14) Formulations for Analgesic Efficacy in an Experimental Burn Pain Model

Presentation Author: Michael Urban

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Integrative Medicine Across Operational Environments: Getting Warriors Back to the Fight without Drugs

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A Case of Head and Neck Pain in an Active-Duty Service Member Successfully Treated with Temporary Peripheral Nerve Stimulation of the Occipital Nerves
Presentation Author: MAJ Gregory Horn

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Health Risks and Utilization Associated with Opioid Use in the TRICARE Population
Presentation Author: Mrs. Heather Michael

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A Functional Restoration Program for Active-Duty Sailors and Marines with Chronic Pain: An Examination of the Impact of Co-occurring PTSD on Treatment Response
Presentation Author: Dr. Emmanuel Espejo

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The Combined Effects of Coping and Pain Interference on Army Readiness
Presentation Author: Kyung Kwon

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Digital Capture of Self-Reported Pain Scores at Outpatient Encounters in the U.S. Military Health System
Presentation Author: Dr. D. Alan Nelson

Advances in AI/ML In Military Medicine: Supporting Readiness, Prevention and Return to Duty

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Presentation Author: Dr. D. Alan Nelson

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Brain-Inspired Hyperdimensional Cognitive Learning for Real-Time, Robust, and Transparent Mental Health Monitoring
Presentation Author: Dr. Mohsen Imani

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Using Machine Learning with Mechanophenotyping to Identify Disease Risk in Active Service Members
Presentation Author: Dr. Mark LaBarge

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MilCanEpi: Increased Capability for Cancer Care Research in the Department of Defense
Presentation Author: Dr. Yvonne Eaglehouse

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AI-Enabled Prediction of Bleeding in Children Supported with Extracorporeal Membrane Oxygenation
Presentation Author: Mr. Jeffrey Geppert

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Using Machine Learning with Spatial Frequency Domain Imaging Data to Predict Graft Failure Under the Influence of Varying Debridement States in Burn Wounds
Presentation Author: Dr. Robert Wilson

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Presentation Author: Dr. Robert Wilson

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Presentation Author: Dr. Robert Wilson

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Presentation Author: Dr. Yuan-Chiao Lu

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Identifying Biosignatures for the Diagnosis of Major Depressive Disorder Using Passive Physiological Data
Presentation Author: Dr. Nicolas Ricka

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Presentation Author: Mr. William Patino

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Tissue Repository Modernization and Digital Transformation at The Joint Pathology Center: Accomplishments and Current Status

Presentation Author: Dr. Frank Rentas

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Methods and Approaches to Evaluate Military Administrative and Medical Record Musculoskeletal Injury Encounters: Survival Analyses

Presentation Author: Dr. Matthew Bird

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Human-in-the-Loop AI-Based Surgery Prediction Model for Chronic Rhinosinusitis

Presentation Author: Dr. Vijay Ramakrishnan

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Robust QRS Detection in 24-Hour Ambulatory Single-lead ECG

Presentation Author: Mr. Tom Arnold

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Behavioral Analysis of Neuropathic Pain in Mice via Machine Learning

Presentation Author: Shiming Yang

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Vital Sign Dynamics Based Machine Learning Algorithm to Predict Red Blood Cell Transfusion in Severely Injured Trauma Subjects

Presentation Author: Dr. Mathangi Gopalakrishnan

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Machine Learning Algorithms Developed with Joint Pathology Center and Center for Prostate Disease Research Data Predict Prognosis of Prostate Cancer

Presentation Author: COL Joel Moncur

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Optimization and Data Visualization of Applied Proteogenomics Organizational Learning and Outcomes (APOLLO) Pathology Data

Presentation Author: Mr. Alex Seagal

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Utilizing Real Time Surveillance to Analyze the Impact of the Opioid Epidemic on Veterans of Washington State

Presentation Author: SGT Melissa Swain

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Mobile Cluster Computing

Presentation Author: Mr. Jafar Al-Gharaibeh

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Detection of Common Mistakes During Remote Vestibular Rehabilitation Exercises Using Machine Learning

Presentation Author: Dr. Paulien Roos

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Incorporating Novel Deep Learning Models and Multiple Social Determinants of Health Parameters to Predict Alcohol and Substance Use Disorder Risk in Post-Traumatic Stress Disorder Patients Using Electronic Medical Records

Presentation Author: Ms. Oshin Miranda

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Using the Visión Machine Learning Platform to Predict and Manage Acute Clinical Events and Disease Progression in Military and Veteran Service Members

Presentation Author: Mr. Gary Velasquez

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Expeditionary Genetic Characterization and Polymerase Chain Reaction Assay Development Capability for Mobile Biodefense Laboratories

Presentation Author: Regina Cer

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Assessing the Utility of Knowledge Graph Technology in Bio-Surveillance Applications

Presentation Author: Mr. Mark Poe

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Extracting and Assessing Environmental Exposures and Substance Use from Clinical Notes for Veterans with Lymphoid Malignancies Using Natural Language Processing (NLP)

Presentation Author: Ms. Lu He

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Effect of Human Head Shape on the Risk of Traumatic Brain Injury: A Gaussian Process Regression-Based Machine Learning Approach

Presentation Author: Dr. Kshitiz Upadhyay

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Defining a Theoretical Model: Operationalizing "Soldier-Centered Design" for an Optimized Approach to Technology Requirements in Military Medicine

Presentation Author: Patricia Schmidt

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A Template for Translational Bioinformatics: Facilitating Multimodal Data Analyses in Preclinical Models of Neurological Injury

Presentation Author: Dr. Tiffany Ko

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Leveraging Interpretable Machine Learning Algorithms to Reveal Determinant Proposal Characteristics in Support of Medical Readiness, Disease Prevention and Return to Duty

Presentation Author: Ms. Holly Pavliscsak

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Predicting Physiologic Instability in Swine ECMO Model Using Machine Learning Methods

Presentation Author: William Teeter

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Genomic and Transcriptomic Analysis of Matched Metastatic Breast Cancer in a Multi-Network Cohort

Presentation Author: Dr. Mariano Russo

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Presentation Author: Dr. Shawn Rhind

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Compensatory Reserve Measurement for Tracking Hemorrhage in Canines

Presentation Author: Mr. Jose Gonzalez

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Novel Data Augmentation Method for Enhancing the Performance of Deep Learning Models on the Burn and Inhalational Injuries Dataset

Presentation Author: Ms. Yifan Li

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Syndromic Management of CBRN Casualties as a Clinical Framework to Drive Threat Agnostic Solutions: A Focus on the Biological Space

Presentation Author: Dr. Anthony Cardile

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Physician Effort Availability Across the Military Health System from FY2016 through FY2019

Presentation Author: Dr. Michael Sayegh

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Deep Learning Text Classification of Medic Prehospital Chief Complaint for Prediction of the Need for Lifesaving Intervention and Post-Transport Mortality

Presentation Author: Mr. Chase Zikmund

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A High-Accuracy Non-Invasive and Portable Method to Measure Cerebrospinal Fluid Flow in the Cerebral Aqueduct

Presentation Author: Mr. Anton Banta

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Elevated Ambient Temperature Associated with Excess Testing for COVID-19

Presentation Author: Dr. Nicholas Kwok

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RNA-Targeted Drug Discovery and Repurposing Using Machine Learning

Presentation Author: Dr. Bianca Cerqueira

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Using Natural Language Processing to Detect Patient Safety Events in Free Text Clinical Notes

Presentation Author: Dr. Harry Burke

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AI Based Automated Error Detection for Medical Training

Presentation Author: Mr. Travis Eliason

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A Machine Learning Surrogate Model for Risk Assessment Associated with Electronic Nicotine Delivery Systems

Presentation Author: Dr. Rachel Clipp

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Deep Learning Based Assessment of Acute Respiratory Distress Syndrome (ARDS) Using Optical Coherence Tomography (OCT)

Presentation Author: Ms. Raksha Sreeramachandra Murthy

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Application of the Machine Learning Methodology of Optimal Classification Trees to the Assessment of Surgical Outcomes and the Identification of Quality Improvement Imperatives in the Military Health System

Presentation Author: CDR Roger Boodoo

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A Novel Machine Learning Framework on Dual-Task Turning Measures for Return-to-Duty Assessment after mTBI

Presentation Author: Mr. Santosh Srinivasaiah

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Modeling Impact of a New Health Readiness Intervention on the Military Health System

Presentation Author: CDR Denise Boggs-Wilkerson

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Rapid Generation of Natural Language Processing Model for High Precision Information Extraction from Progress Notes

Presentation Author: CDR Denise Boggs-Wilkerson

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Neural Networks for Wound Detection and Characterization in Automated Stand-Off Triage and Monitoring Systems: Lessons Learned and Results

Presentation Author: Ms. Kelly Roman

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A Deep Learning Approach to Deformable Registration in Ultrasound Images for Robotic Vascular Access

Presentation Author: Dr. Howie Choset

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An Artificial Intelligent Wearable Augmented Reality System to E-Train & E-Evaluate Tactical Combat Casualty Care (TC3) Competency During Prolonged Care

Presentation Author: Dr. Jayfus Doswell

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Presentation Author: Mabel Cummins

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Remote Physiological Monitoring through Thermal Imaging Under Non-Ideal Visual Conditions

Presentation Author: Emily Mills

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Wearable Artificial Intelligence System for Brain, Visual, and Heart Health Monitoring

Presentation Author: Dr. David Lai

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Managing DoD Clinical Trials and Research Using Custom Developed Standardized Informatics Tools: Lessons Learnt and Best Practices

Presentation Author: Dr. Dominic Nathan

Leveraging Big Data/Predictive Analytics for Military Health System Decision Making: Considerations for Assessment, Treatment, and Policy

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Exploring Predictive Analytics of Post-Traumatic Stress Outcomes in Chronic mTBI Subjects Using Machine Learning: Implications for Treatment

Presentation Author: Dr. Dominic Nathan

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The Use of Machine Learning for Traumatic Brain Injury Research: Strengths, Limitations and Future Directions

Presentation Author: Dr. Dominic Nathan

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Racial Differences in Inflammatory Bowel Disease Care in a Single Payer Healthcare System: The Military Health System Experience

Presentation Author: CAPT Michael Craig

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Predicting COVID-19 and Respiratory Illness: Results of the 2022-2023 AFHSD Forecasting Season

Presentation Author: Mr. Mark Bova

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Presentation Author: COL Jeremy Kilburn

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Ask cPeople: Leveraging a DoD Data Repository to Support Accessible, Time-Sensitive, Quantitative Analysis for Army Leadership Decisions

Presentation Author: Dr. Kerry Whittaker

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Gender Equity: Exploring Gender in Military Medicine Specialties

Presentation Author: CAPT John Melton

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Proof-of-Concept Machine Learning Model Using EEG Biomarkers to Predict Placebo Response for Depression

Presentation Author: Ms. Mariam Khayretdinova

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Themes in Retention Sentiments Among Active Duty Army Medical Officers

Presentation Author: Dr. Loryana Vie

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Military Health Services Research and the Use of Big Data to Transform the MHS into a Ready Reliable Care Organization

Presentation Author: Dr. Richard Shoge

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Survey of Medical Simulation Training in MARCH/PAWS Skills in the U.S. Military

Presentation Author: Mr. Adam Bacik

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Qualitative Exploration of the Military Nursing Practice Environment Survey

Presentation Author: MAJ Melissa Miller

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Learning Predictive Microbial Representations of Military-Relevant Microbiomes with Hilbert Curve Visualizations and Machine Learning

Presentation Author: Dr. Camilo Valdes

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Geographic Variation in Cancer Screening and Catchment Area Associated Factors within the Military Health System

Presentation Author: Dr. Joel Segel

Responding to a Nuclear Event and CBRN Exposure with Resource Limitations

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YK-4-250, A Novel Angiotensin Receptor Blocker Mitigates GI-ARS

Presentation Author: Dr. Vidya Kumar

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BBT-059, a Promising Medical Countermeasure, Protects Multi-Organ Systems from Acute and Delayed Effects of Radiation Exposure in Pre-Clinical Animal Model

Presentation Author: Mrs. Sanchita Ghosh

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Biomarkers of Endothelial Activation Detected After Blast and Radiation Exposure

Presentation Author: Dr. Whitney Greene

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Challenges of Sex Differences in a Mouse Model for Manganese Chloride as a Novel Prophylactic Radiation Countermeasure Against Acute Radiation Sickness

Presentation Author: Dr. Maureen Hood

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Early to Sustained Effects of Lethal Radiation: Circulating miRNA and Metabolite Markers Using Minipig Model

Presentation Author: Mr. Nabarun Chakraborty

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Delayed Impact of Radiation on Meta-Organism Depends on Gender: Metageomics and Metabolomics Analysis of Mouse Fecal Samples

Presentation Author: Mr. Nabarun Chakraborty

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A Threat Agnostic Approach to Treating Injuries with Host Directed Therapeutics

Presentation Author: Dr. Julie Bergmann

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Advanced Development of Radiological and Nuclear Medical Countermeasures at the Biomedical Advanced Research and Development Authority (BARDA)

Presentation Author: Julie Bergmann

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Development of RadioDefender as a Prophylactic Medical Countermeasure for Hematopoietic Acute Radiation Syndrome

Presentation Author: Dr. Xu Li

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The Effects of Intramuscular Dimethyl Trisulfide on Improving Survival from Oral Cyanide Poisoning

Presentation Author: Dr. Jae-Hyek Choi

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The Strategic Positioning of Safe Drugs Against Broad Threats within the Countering Emerging Threats - Rapid Acquisition and Investigation of Drugs for Repurposing (CET RAIDR) Program

Presentation Author: Dr. Lauren Quattrochi

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Non-Lethal Radiation Exposure During Nuclear Event Can Compromise Warfighter Cognition, Risk Aversion, and Resilience: In Vivo Studies

Presentation Author: Dr. Alexandra Miller

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Impact of Low-Dose Radiation on the Mice Gut Microbiome and Modulatory Effects of Soluble Curcumin Loaded Nanolipid Particles

Presentation Author: Dr. Car Reen Kok

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Ciprofloxacin Enhances Neulasta Efficacy in Mitigating the Radiation-Induced Brain, Bone Marrow, Ileum and Spleen Injury and Mortality: Increases in P-akt and Tight Junction, and Decreases in P-p38, C3/IL-18, and MiR-34a

Presentation Author: Dr. Juliann Kiang

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Navy Personnel Mission Impact in Chem-Bio and High Heat Environments

Presentation Author: Dr. Valarie Schroeder

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rmuGM-CSF as a New Countermeasure Candidate to Treat Radiation Combined Injury in a Mouse Model

Presentation Author: Dr. Mang Xiao

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Unrelated Donor Registry HLA Match Likelihoods in the Mismatched Setting - Towards Universal Donor Coverage for the Warfighter in Support of Radiation and Marrow Toxic Contingency Events

Presentation Author: Martin Maiers

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A Novel Ex Vivo Human Fascio cutaneous Flap Perfusion Model to Investigate Radiation and/or Chemicals-Induced Injuries

Presentation Author: Dr. Asim Ejaz

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CNP-miR146a Improves Survival after Sulfur Mustard Inhalational Exposure without Toxicity

Presentation Author: David Jackson

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Development of a Wearable Physiologic Monitor for Remote Monitoring and Early Detection of Chemical Exposures

Presentation Author: Mrs. Tara Hendry-Hofer

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Development and Characterization of a Combined Traumatic Injury with Pharmaceutical Based Agent Fentanyl Exposure in a Large, Translational Swine Model

Presentation Author: Ms. Carter Severance

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Engineered Butyrylcholinesterase Fusion Proteins for Prophylaxis and Treatment of Organophosphate Poisoning

Presentation Author: Dr. Jeffrey Way

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Colorimetric Indicating Chemical Agent Detection Array (CICADA) as a Wearable Monitor for CWA Detection to Minimize Exposure

Presentation Author: Dr. Deborah Hunka

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Preparing for the Radioactive Catastrophe: Lessons Learned from COVID-19 Pandemic That Can Help Us Prepare and Respond to a Large-Scale Radiation Event

Presentation Author: COL Mark Ervin

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Development of a Reproducible and Military Relevant Yorkshire Swine Model of Radiation Burns for Evaluation of Medical Countermeasures (MCMs)

Presentation Author: Dr. Carissa James

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Acute Radiation Injury Increases Mortality in a Combat-Relevant Model of Orthopedic Trauma and Hemorrhage in Rats

Presentation Author: Mrs. Jennifer Ybarra

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Dose-Dependent Effects of Radiation on Mitochondrial Morphology and Function and Clonogenic Cell Survival in Human Microvascular Endothelial Cells

Presentation Author: Dr. Li Wang

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Highly Sorptive, Non-Shedding Dry Wipe for Very Rapid CWA Decomposition

Presentation Author: Dr. Alfred Zinn



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Update on Wearables in the Deployed Environment

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High-Resolution 3D Printing of Piezoelectric Structures for Self-Powered Wearable Sensors

Presentation Author: Dr. Xiangfan Chen

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Environmental Sensors in Training Technologies at Project Convergence 2022: Demonstration of Wearable Sensors for Head Acceleration Monitoring Connected to Military Health System

Presentation Author: Mr. Tyler Rooks

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E-Textile Enabled Active Monitoring System (E-TEAMS)

Presentation Author: Dr. Michele Pierro

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Microneedle Bio-Patch for Monitoring and Augmentation of Human Health and Performance

Presentation Author: Dr. Irina Drachuk

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A Real-Time Wearable Miniaturized Transcutaneous Oxygen Tension Monitor

Presentation Author: Dr. Ulkuhan Guler

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HsPro[®] Transition into Production of an Innovative Multi-Parameter Wearable Sensing Platform for Physiological Status Monitoring (PSM) in Highly Dynamic Aviation Scenarios

Presentation Author: Dr. Mark Darrah

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Edge-Based Artificial Intelligence for Real-Time Holistic Health and Performance Monitoring in ATAK

Presentation Author: Ms. Catherine Ashley

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Development of a Portable Ultrasound Pulser-Receiver for Hand-Held Automated Pneumothorax Detection

Presentation Author: Dr. Bhaskara Rao Chintada

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The "Sensorized Soldier" - Soldier Performance Optimization Using Wearables

Presentation Author: MAJ Itay Ketko

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Wearable Device for In-Flight Hydration Monitoring of Pilots

Presentation Author: Mr. David Remer

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Experiences of Clinicians Caring for Patients Receiving Continuous Physiological Monitoring in a Remote Location

Presentation Author: Lt Col Stephanie Raps

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Prometheus 2.0: Identification of Digital and Physiologic Biomarkers for Detection and Monitoring of Infection and Dehydration in a Deployed Population

Presentation Author: CAPT Jamie Dombach

Health and Readiness Unique to the Female Active Duty Service Woman

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A Multi-Omic Signature of Homologous Recombination Deficiency in High-Grade Serous Ovarian Cancer

Presentation Author: Dr. George L. Maxwell

MHSRS-23-09162 - SESSION 1 - #456

Women's Health in the Military Requires Significant Attention and Advanced Quantitative Diagnostic Techniques

Presentation Author: Mr. Vladimir Egorov

MHSRS-23-09405 - SESSION 1 - #457

Trends in Contraception Accessibility and Care Quality: Military Health System (MHS) Medical Treatment Facilities Launch of Walk-in Contraceptive Services (WiCS)

Presentation Author: Dr. Faye Curran

MHSRS-23-09407 - SESSION 1 - #458

Leveraging Implementation Science to Standardize Evidence-Based Clinical Solutions for Recognition and Response to Postpartum Hemorrhage (PPH) Cases Across the Military Health System (MHS)

Presentation Author: Dr. Faye Curran

MHSRS-23-09792 - SESSION 1 - #459

Rhabdomyolysis-Induced Acute Kidney Injury in Reproductive Age Females Causes Future Pregnancy Complications

Presentation Author: Dr. Jessica Hebert

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Maternal and Fetal Outcomes after Pelvic Fracture in Gravid Patients

Presentation Author: Dr. Meghan Wally

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Use of Machine Learning to Evaluate Embryo Health Can Improve Pregnancy Outcomes of In Vitro Fertilization and Optimize Fertility Services

Presentation Author: Dr. Cara Wells

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Injectable and Therapeutic Hemostatic Material for Treatment of Postpartum Hemorrhage

Presentation Author: Ms. Sarah Hargett

MHSRS-23-10315 - SESSION 1 - #463

Achieving Tactical and Strategic Synergy in Optimizing Reproductive Health Care for Active-Duty Service Women: The Military Active-Duty Reproductive + Sexual Health (MARSH) Research Program and the Multiphase Optimization Strategy (MOST)

Presentation Author: MAJ Ryan Landoll

Female Warfighter Health & Performance

MHSRS-23-08016 - SESSION 1 - #464

Female Students' Initial mild Traumatic Brain Injury Characteristics and Recovery Patterns Across the Military Service Academies: Findings from the NCAA-DoD CARE Consortium

Presentation Author: Dr. Landon Lempke

MHSRS-23-08024 - SESSION 1 - #465

Advanced Cervical Neoplasia Rates in Young Service Members; Implications of Primary HPV Screening for Military Readiness

Presentation Author: CPT Madison Crum

MHSRS-23-08081 - SESSION 1 - #466

In-Person Female Performance Multivitamin Briefing Improves Compliance and Reduces Injuries at USAF Basic Military Training

Presentation Author: Dr. Korey Kasper

MHSRS-23-09204 - SESSION 1 - #467

Fitness Training and Performance at U.S. Air Force Basic Military Training in 2021

Presentation Author: Dr. Korey Kasper

MHSRS-23-08438 - SESSION 1 - #468

Influence of Combatives Training on Secretory Immunoglobulin A (an Immune Biomarker) in U.S. Military Academy Cadets

Presentation Author: Dr. Tracey Smith

MHSRS-23-08906 - SESSION 1 - #469

Association Between Weight Cycling in Soldiers and Passing Army Body Fat Standards

Presentation Author: Mrs. Leila Walker

MHSRS-23-09306 - SESSION 1 - #470

Occupational Well-Being of Women in the Military Medicine

Presentation Author: Dr. Ting-Lan Ma

MHSRS-23-09791 - SESSION 1 - #471

Sex-Differences in Cognitive Performance of Deployed Veterans with Chronic Unexplained Illness

Presentation Author: Dr. Gladys Veltkamp

MHSRS-23-09874 - SESSION 1 - #472

Development of a High-Fidelity DoD 5th Percentile Female Finite Element Model

Presentation Author: Dr. Kevin Lister

MHSRS-23-10438 - SESSION 1 - #473

Parenthood and Health: Gender Differences in the Impact of a First Birth

Presentation Author: Dr. Jennifer Heissel

MHSRS-23-10505 - SESSION 1 - #474

Pilot Study Results of 1991 Gulf War-Related Toxicant Exposures on Women Veterans Health During Pregnancy

Presentation Author: Ms. Dylan Keating

Poster Session 2



MILITARY HEALTH SYSTEM

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RESEARCH SYMPOSIUM

August 14 – 17, 2023



Poster Session 2

Battlefield Biomarkers for TBI: Diagnostic and Prognostic Indicators

MHSRS-23-08195 - SESSION 2 - #1

Traumatic Brain Injury On-a-Chip: A Novel Microfluidic Compression Impact Device for the Real-Time Detection of TBI-Relevant Biomarkers in Cortical Spheroids

Presentation Author: Dr. Alexander Mcghee

MHSRS-23-08445 - SESSION 2 - #2

Mitochondrial Targeted Rapid Blood-Based Dipstick Test and Pyruvate Treatment in Combined Blast TBI and Hemorrhagic Shock in Rats

Presentation Author: Dr. Pushpa Sharma

MHSRS-23-08581 - SESSION 2 - #3

Machine Learning-Based Detection of mild Traumatic Brain Injury with Scalp EEG Achieves Clinically Useful Performance

Presentation Author: Mr. Anderson Roy Phillips

MHSRS-23-08616 - SESSION 2 - #4

Introducing the 2023 American Congress of Rehabilitation Medicine Diagnostic Criteria for mild Traumatic Brain Injury

Presentation Author: Dr. Karen L. McCulloch

MHSRS-23-08951 - SESSION 2 - #5

Handheld Brain Hemorrhage Detection Project Update

Presentation Author: Dr. Baruch Ben Dor

MHSRS-23-08968 - SESSION 2 - #6

Analysis of Traumatic Brain Hemorrhage Studies for the Assessment of Infrascanner Point-of-Care Hematoma Detection Devices

Presentation Author: Dr. Baruch Ben Dor

MHSRS-23-08998 - SESSION 2 - #7

Hyperconnectivity of the Aversion Network with Greater Psychiatric Symptoms in U.S. Service Members and Veterans

Presentation Author: Dr. Emily Dennis

MHSRS-23-09098 - SESSION 2 - #8

Sub-Acute Serum Tau, NFL, GFAP and UHCL-1 Concentrations Are Associated with the Deterioration of Neurobehavioral Symptoms into the Chronic Phase of Recovery Following Traumatic Brain Injury: A Longitudinal Study

Presentation Author: Dr. Louis French

MHSRS-23-09143 - SESSION 2 - #9

Altered EEG Microstates in mild Traumatic Brain Injury Patients

Presentation Author: Weimin Zheng

MHSRS-23-09182 - SESSION 2 - #10

Non-Invasive Diagnosis of Intracranial Hypertension with an Optical Spectroscopy System

Presentation Author: Dr. Wesley Baker

MHSRS-23-09192 - SESSION 2 - #11

Detection of Circulating cfDNA Methylation for Diagnosis of Traumatic Brain Injury

Presentation Author: Dr. Shih-Han Kao

MHSRS-23-09271 - SESSION 2 - #12

Application of Saliva RNAs for Diagnosis of mild Traumatic Brain Injury – A Comparison with Standardized Symptom Reports

Presentation Author: Mr. Andrew Brindle

MHSRS-23-09330 - SESSION 2 - #13

Prognosticating Real-World Mobility and Battle Readiness After mild Traumatic Brain Injury: Which Clinical Tests and Measures Are Useful?

Presentation Author: Dr. Peter Fino

MHSRS-23-09350 - SESSION 2 - #14

Noninvasive Neuromonitoring with Rheoencephalography (REG)

Presentation Author: Dr. Michael Bodo

MHSRS-23-09423 - SESSION 2 - #15

S100B and Total Tau/p-Tau Brain Biomarker Levels in Burn Patients With and Without Traumatic Brain Injury

Presentation Author: Dr. Nam Tran

MHSRS-23-09474 - SESSION 2 - #16

Angiopoietins as Biomarkers of Traumatic Brain Injury

Presentation Author: Liliana Ladner

MHSRS-23-09516 - SESSION 2 - #17

Association of Military Occupational Risk Blast Exposure with Serum Biomarkers in Service Members and Veterans with Traumatic Brain Injury: A Preliminary Analysis

Presentation Author: Dr. Katie Edwards

MHSRS-23-09569 - SESSION 2 - #18

Test-Retest Reliability of the Brain Gauge and Its Impact on Assessing Recovery Following Acute mild Traumatic Brain Injury in U.S. Military Service Members

Presentation Author: Mr. Brian Ivins

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MHSRS-23-09666 - SESSION 2 - #19

A Possible Method of Noninvasively Diagnosing mild Traumatic Brain Injury via Detection of CSF Flow Abnormalities Using Phase Contrast MRI

Presentation Author: Dr. Mark Quigley

MHSRS-23-09723 - SESSION 2 - #20

Comparative Performance of Three Eye-Tracking Devices in Detection of mild Traumatic Brain Injury (mTBI) in Acute versus Chronic Subject Populations

Presentation Author: Dr. John King

MHSRS-23-09943 - SESSION 2 - #21

An Imaging Biomarker for Identifying Edema in Acute Traumatic Brain Injury Patients Based on Ventricular Volume Change

Presentation Author: Dr. Yuan-Chiao Lu

MHSRS-23-09948 - SESSION 2 - #22

TBI Point-of-Care Assessment Tool Using Fingerstick Whole Blood

Presentation Author: Dr. Rahul Ganguli

MHSRS-23-10008 - SESSION 2 - #23

A Portable 3D Transcranial Ultrasound Brain Imaging Instrument for Diagnosis of Intracranial Hematomas During Early Stages of Evacuation and Management of Traumatic Brain Injuries

Presentation Author: Dr. Kiyanoosh Shapoori

MHSRS-23-10017 - SESSION 2 - #24

Transcranial Brain Perfusion Imaging and Quantification for the Point-of-Care Diagnosis of Stroke Associated with Traumatic Brain Injury

Presentation Author: Dr. Juri Gelovani

MHSRS-23-10023 - SESSION 2 - #25

Performance Evaluation of GFAP and UCH-L1 Biomarkers for Traumatic Brain Injury in the Alinity i TBI Test

Presentation Author: Dr. Saul Datwyler

MHSRS-23-10087 - SESSION 2 - #26

Alinity i TBI Clinical Performance of Biomarkers for Traumatic Brain Injury

Presentation Author: Dr. Saul Datwyler

MHSRS-23-10129 - SESSION 2 - #27

Lifetime Blast Exposure Is Not Associated with White Matter Integrity in U.S. Service Members and Veterans With and Without mild Traumatic Brain Injury

Presentation Author: Dr. Sara Lippa

MHSRS-23-10189 - SESSION 2 - #28

Non-Invasive Assessment of Cerebral Edema, Cerebral Hemorrhage and Cerebral Metabolic Impairments After Traumatic Brain Injury with an Optical Spectroscopy System

Presentation Author: Dr. Rodrigo Menezes Forti

MHSRS-23-10234 - SESSION 2 - #29

PRECISE-TBI Develops Community Resources for Advanced Translational of Preclinical TBI Models

Presentation Author: Dr. Pamela VandeVord

MHSRS-23-10258 - SESSION 2 - #30

Comparison of Different Cutoff Values for the Vestibular/Ocular Motor Screening (VOMS) to Identify 6-Hour Post-Injury from Healthy Baseline Scores: An NCAA-DoD CARE Consortium Study

Presentation Author: Dr. Anthony Kontos

MHSRS-23-10278 - SESSION 2 - #31

Concurrent and Predictive Validity of the Vestibular Ocular Motor Screening (VOMS) Tool and the Neurologix Dx_100 (eye tracking) Among Military Service Members and Civilians with mTBI and Healthy Controls

Presentation Author: Dr. Anthony Kontos

MHSRS-23-10308 - SESSION 2 - #32

Quantitative Improvement of Convergent Eye and Pupil Movements After Acute mild Traumatic Brain Injury (mTBI)

Presentation Author: Dr. Carey Balaban

MHSRS-23-10342 - SESSION 2 - #33

Plasma Damage-Associated Molecular Patterns in a Ferret Model of Primary Blast

Presentation Author: Dr. V Sujith Sajja

MHSRS-23-10396 - SESSION 2 - #34

Retinal Structural Integrity and Visual Field Function in Patients with mild Traumatic Brain Injury (mTBI)

Presentation Author: MAJ Toan Trinh

MHSRS-23-10477 - SESSION 2 - #35

mTBI Predict: A Prospective Biomarker Study to Predict Outcomes in mild Traumatic Brain Injury

Presentation Author: MAJ James Mitchell

MHSRS-23-10510 - SESSION 2 - #36

Brain White Matter Alterations in Military Service Members After a Remote mild Traumatic Brain Injury

Presentation Author: Dr. Ping-Hong Yeh

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MHSRS-23-10678 - SESSION 2 - #37

A Noninvasive Method for Triaging Intracranial Hypertension Following Traumatic Brain Injury

Presentation Author: Dr. Ryan Myers

MHSRS-23-10712 - SESSION 2 - #38

Changes in Retinal Opsins Reflect Neurological Abnormalities in Multiple Rodent Traumatic Brain Injury Models

Presentation Author: Dr. Jiepei Zhu

MHSRS-23-10713 - SESSION 2 - #39

Optic Nerve Sheath Diameter for Automated Point of Care Testing of Increased Intra-Cranial Pressure by Sonography (OPTICS)

Presentation Author: Capt Ashley Barasa

MHSRS-23-10778 - SESSION 2 - #40

Transcranial Doppler Ultrasound for Assessing Brain Bleeds: Precision Intracranial Bleed Triage and Monitoring Study Interim Analysis and Simulation Investigation

Presentation Author: Dr. Corey Thibeault

MHSRS-23-08574 - SESSION 2 - #41

Distinct Biomarker Profile Changes Following Rotational and Contusional Models of TBI in Pigs

Presentation Author: Dr. Samuel Shin

Traumatic Brain Injury Treatment for Early Combat, In-theater Administration

MHSRS-23-08941 - SESSION 2 - #42

Exploring Therapeutic Potential of Cis p-Tau Antibody in a Pig Model of Traumatic Brain Injury

Presentation Author: Dr. Samuel Shin

MHSRS-23-08948 - SESSION 2 - #43

Brain Targeted Xenon Protects Cerebral Vasculature After Traumatic Brain Injury

Presentation Author: Dr. Samuel Shin

MHSRS-23-08001 - SESSION 2 - #44

Extracellular Vesicles Derived from Mesenchymal Stromal Cells Enhance Recovery of Motor Function in a Monkey Model of Cortical Injury

Presentation Author: Dr. Tara Moore

MHSRS-23-08210 - SESSION 2 - #45

Therapeutic Intervention Following Traumatic Brain Injury in a Large Animal Model

Presentation Author: Dr. Vanessa Mazandi

MHSRS-23-08607 - SESSION 2 - #46

Time-Course Evaluation of Mitochondrial Oxidative Stress and Antioxidants Markers in a Preclinical Model of Severe Penetrating TBI

Presentation Author: Dr. Sudeep Musyaju

MHSRS-23-08697 - SESSION 2 - #48

Prophylactic Administration of Metformin to Evaluate Its Potential Neuroprotective Effects on Moderate Traumatic Brain Injury in a Swine (*Sus scrofa*) Model

Presentation Author: Dr. Madelaine Paredes

MHSRS-23-08729 - SESSION 2 - #49

Patterns of Concomitant Ocular Trauma with Traumatic Brain Injury in U.S. Service Members

Presentation Author: Dr. Weidong Gu

MHSRS-23-08778 - SESSION 2 - #50

Pre-Clinical Demonstration of a Portable Intranasal Brain Cooling Device for Rapid and Focal Traumatic Brain Injury Treatment

Presentation Author: Ms. Michaelina Dupnik

MHSRS-23-08801 - SESSION 2 - #51

Pharmacological Increase of K⁺ "M-current" through Kv7.2-5 Channels, but Not Kv7.2-3 Only, Prevents Blood-Brain Barrier Breakdown Acutely After Traumatic Brain Injury Reducing Short-Term and Long-Term Impairment

Presentation Author: Dr. Fabio Antonio Borges Vigil

MHSRS-23-09049 - SESSION 2 - #52

Treatment with GM-CSF Reverses TBI-Induced Immune Suppression in a Combined Injury Model

Presentation Author: Dr. Eric Sribnick

MHSRS-23-09057 - SESSION 2 - #53

Itaconate Alleviates Brain Injury and Secondary Cognitive Deficits After Traumatic Brain Injury Followed by Hemorrhage

Presentation Author: Mr. Pedro Cabrales

MHSRS-23-09067 - SESSION 2 - #54

Modulation of Brain Transcriptome Following Valproic Acid Treatment in a Swine Model of Combined Traumatic Brain Injury and Hemorrhagic Shock

Presentation Author: Dr. Hasan Alam

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MHSRS-23-09432 - SESSION 2 - #55

Targeted Antioxidants Therapy Rescued Acute Mitochondrial Pathogenesis Following Experimental Penetrating Traumatic Brain Injury
Presentation Author: Dr. Jignesh Pandya

MHSRS-23-09447 - SESSION 2 - #56

Time-Course Evaluation of Mitochondrial Calcium Dynamics, Membrane Integrity and Apoptosis Markers in a Preclinical Model of Severe Penetrating TBI
Presentation Author: Dr. Hiren Modi

MHSRS-23-09514 - SESSION 2 - #57

Functional and Neuropathological Evaluation of Intravenous Anti-CD47 Antibodies in a Rat Model of Penetrating Traumatic Brain Injury
Presentation Author: Dr. Ping Wang

MHSRS-23-09649 - SESSION 2 - #58

Nyrada Develops a Novel Canonical Transient Receptor Potential (TRPC) Ion Channel Small Molecule Blocker for Treatment of Secondary Brain Injury Following Head Trauma
Presentation Author: Dr. Jasneet Parmar

MHSRS-23-09670 - SESSION 2 - #59

Endocannabinoid System Potentiation by Monoacylglycerol Lipase Inhibition Using ABX-1431 Attenuates Cerebral Ischemia Early After Traumatic Brain Injury
Presentation Author: Dr. Denis Bragin

MHSRS-23-09673 - SESSION 2 - #60

Rapid Uptake of a Proprietary Cell-Penetrating Human HSP72 into Neural Tissue After a Blast or Kinetic Impact to the Brain
Presentation Author: Dr. Missag Parseghian

MHSRS-23-09802 - SESSION 2 - #61

Subcellular First Respondents of an Airblast Traumatic Brain Injury
Presentation Author: Dr. Pratheepa kumari Rasiah

MHSRS-23-10055 - SESSION 2 - #62

Noninvasive Vagus Nerve Stimulation for Treatment of Brain Injury in Rats
Presentation Author: Dr. Afshin Divani

MHSRS-23-10167 - SESSION 2 - #63

Morphometric Analysis of Synaptic Plasticity in Higher Cortical Centers
Presentation Author: Mr. Ignacio Novoa Cornejo

MHSRS-23-10272 - SESSION 2 - #64

The Dose Effect of Dexamethasone as Delivered by Hydrogel for Acute Traumatic Brain Injury Treatment in Rats
Presentation Author: Dr. Starlyn Okada-Rising

MHSRS-23-10286 - SESSION 2 - #65

Targeting Mitochondrial Dysfunction and Behavioral Impairments with a Mitochondrial Uncoupling Prodrug Following Repeated mild Blast Traumatic Brain Injury
Presentation Author: Dr. Brad Hubbard

MHSRS-23-10468 - SESSION 2 - #66

ALPHA-1062 Reduces Phospho-Tau Deposition, Is Neuroprotective and Enhances Restoration of Sensory, Motor and Cognitive Performance in a Preclinical Model of Moderate Traumatic Brain Injury
Presentation Author: Dr. Denis Kay

MHSRS-23-10472 - SESSION 2 - #67

Development of a Therapeutic for Early Combat, In-Theater Traumatic Brain Injury: Synergistic Anti-Inflammatory Activity of Levocetirizine and Montelukast
Presentation Author: Dr. B Chandler May

Mental Health and Traumatic Brain Injury

MHSRS-23-07947 - SESSION 2 - #68

The Mental Health Evacuation Rate in USCENTCOM
Presentation Author: Lt Col Andrew Hall

MHSRS-23-07983 - SESSION 2 - #69

Assessment of Health Disparities in Affective and Somatosensory Neurobehavioral Symptoms Among Service Members in Interdisciplinary TBI Programs
Presentation Author: Dr. Rosemay Remigio-Baker

MHSRS-23-08008 - SESSION 2 - #70

Male Soldiers Use of Alcohol and Dating Apps
Presentation Author: Dr. Cristobal Berry-Caban

MHSRS-23-08061 - SESSION 2 - #71

Management of Chronic Pain and PTSD in Veterans with tDCS+Prolonged Exposure: A Pilot Study
Presentation Author: Dr. Melba Hernandez-Tejada

MHSRS-23-08146 - SESSION 2 - #72

Provider Perspectives on Job Development for Veterans with Traumatic Brain Injury Enrolled in Supported Employment
Presentation Author: Mr. Andrew Hwang

MHSRS-23-08202 - SESSION 2 - #73

Predictors of Brain Age Gap Among Patients with Traumatic Brain Injuries and Healthy Controls
Presentation Author: Dr. Maheen Adamson

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MHSRS-23-08712 - SESSION 2 - #74

Virtual Reality Treatment for Frequent Health Complaints in Veterans at the Polytrauma Department

Presentation Author: Dr. Maheen Adamson

MHSRS-23-08717 - SESSION 2 - #75

Repetitive Transcranial Magnetic Stimulation for Executive Functioning in Veterans with TBI and PTSD: Clinical Outcomes and Connectivity Changes in a Pilot Randomized Clinical Trial

Presentation Author: Dr. Maheen Adamson

MHSRS-23-08499 - SESSION 2 - #76

Factors Contributing to Long-Term Disability Among Israel Defense Forces Soldiers with Traumatic Brain Injuries

Presentation Author: CPT Tomer Talmy

MHSRS-23-08698 - SESSION 2 - #77

Methodology of a Pilot Trial of Intramuscular Ketamine and Crisis Response Planning for Suicidality in the Emergency Department

Presentation Author: Mr. Alexander Hood

MHSRS-23-08711 - SESSION 2 - #78

Sex Differences in Early/Unplanned Separation Among U.S. Service Members with a History of mild Traumatic Brain Injury

Presentation Author: Ms. Isabelle Wal

MHSRS-23-08739 - SESSION 2 - #79

Low Intensity Focused Ultrasound (LIFU) as a Novel Treatment for Post-Traumatic Headache (PTH): A Pilot Study

Presentation Author: Dr. Byung Yoon

MHSRS-23-08744 - SESSION 2 - #80

High Exposure Sport Participation and Concussion Do Not Independently Drive Symptom Reports: A CARE Consortium Study

Presentation Author: Dr. Steven Broglio

MHSRS-23-08786 - SESSION 2 - #81

Comparing Self-Reported Cognitive Symptom Changes of Service Members with mild Traumatic Brain Injury After Participation in a Computer-Based Cognitive Training Platform

Presentation Author: Ms. Melinda Tung

MHSRS-23-10522 - SESSION 2 - #82

An Evaluation of Headache Treatment and Clinical Improvement Among Service Members at Outpatient Traumatic Brain Injury Clinics within the Military Health System

Presentation Author: Ms. Melinda Tung

MHSRS-23-10540 - SESSION 2 - #83

Examining Clinical Improvement on the Neurobehavioral Symptom Inventory Among Service Members Treated for mild Traumatic Brain Injury in the MHS

Presentation Author: Ms. Melinda Tung

MHSRS-23-08805 - SESSION 2 - #85

Knowledge and Skills for Sexual Assault and Harassment Prevention within a U.S. Army Installation

Presentation Author: Dr. Justin Benzer

MHSRS-23-08807 - SESSION 2 - #86

Psychological Comorbidities and Symptom Clusters within Non-Clinical Sample of Service Members with a History of mild Traumatic Brain Injury

Presentation Author: Dr. Jamie Hershaw-Velasquez

MHSRS-23-08837 - SESSION 2 - #87

Pitolisant for Excessive Daytime Sleepiness and Cognition in TBI: An Exploratory Randomized, Double-Blind, Placebo-Controlled Crossover Study Design

Presentation Author: 2LT Emamoke Odafe

MHSRS-23-08976 - SESSION 2 - #88

Exploring the Associations of Physical Activity and Combat-Related mild Traumatic Brain Injury with Subcortical Brain Volumes Among Active Duty and Veteran Service Members: A LIMBIC-CENC Study

Presentation Author: Dr. Samuel Walton

MHSRS-23-09036 - SESSION 2 - #89

Traumatic Brain Injury and Rapid Eye Movement Sleep Behavior Disorder Symptoms in OEF/OIF Veterans

Presentation Author: Mrs. Dakota Broadway

MHSRS-23-09070 - SESSION 2 - #90

Military Health System Large Data Analysis of mild Traumatic Brain Injury and Its Association with Sleep, PTSD and Cardiovascular Risk Factors

Presentation Author: Lt Keen Seong Liew

MHSRS-23-09075 - SESSION 2 - #91

The Relationship Between Migraine Headache Symptoms and Visual Vertigo in Military Service Members and Civilians with mTBI: A T-REV Preliminary Study

Presentation Author: Dr. Susan Whitney

MHSRS-23-09088 - SESSION 2 - #92

Care Patterns for Service Members with Exposures to Concussive Blast Events (2010-2013)

Presentation Author: Mr. Conor Skelton

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Risk Factors for the Presence and Persistence of Post-Traumatic Stress Symptoms Following Traumatic Brain Injury and Polytrauma in U.S. Service Members and Veterans: A Cross-Sectional and Longitudinal Study

Presentation Author: Dr. Rael Lange

MHSRS-23-09108 - SESSION 2 - #94

Unhealthy Family Functioning Is Strongly Associated with Warfighter Brain Health Following mild Traumatic Brain Injury in U.S. Service Members and Veterans

Presentation Author: Dr. Tracey Brickell

MHSRS-23-09179 - SESSION 2 - #95

A Description of the Joint Trauma System's Traumatic Brain Injury Registry: Future Use to Inform Battlefield Care

Presentation Author: Dr. Caryn Stern

MHSRS-23-09212 - SESSION 2 - #96

Identifying Predictors: Multivariate Analysis of OCONUS Airborne BCT Suicide-Related Serious Incident Reports

Presentation Author: MAJ Benjamin Paul

MHSRS-23-09349 - SESSION 2 - #97

Traumatic Brain Injury Mobile App Selection for Symptom Management and Rehabilitation: A Practical Framework for Clinicians, Care Givers and Patients

Presentation Author: Dr. Dominic Nathan

MHSRS-23-09398 - SESSION 2 - #98

Utility of the Vestibular/Ocular Motor Screening in Military Medicine: A Systematic Review In-Progress

Presentation Author: Mr. Tomas Garcia de la Huerta

MHSRS-23-09417 - SESSION 2 - #99

Exercise Intolerance After mild Traumatic Brain Injury: Subtypes and Rehabilitation

Presentation Author: Dr. Prokopios Antonellis

MHSRS-23-09422 - SESSION 2 - #100

Reconsidering Vestibular/Ocular Motor Screening Cutoff Scores for Adult Concussion

Presentation Author: LTC Carrie Hoppes

MHSRS-23-10661 - SESSION 2 - #101

Post-Concussion Return to Shooting Progression for Service Members: A Scoping Review and Conceptual Framework

Presentation Author: LTC Carrie Hoppes

MHSRS-23-09428 - SESSION 2 - #102

Screening of Autoantigens in Post-Traumatic Stress Disorder Biotypes

Presentation Author: CPT Kevin Swift

MHSRS-23-09458 - SESSION 2 - #103

Comparing Ambulatory Care Utilization by Active-Duty Service Members Diagnosed with Traumatic Brain Injury

Presentation Author: Dr. M Victoria Ingram

MHSRS-23-09461 - SESSION 2 - #104

Establishing the TBI Risk and Outcome Assessment within the Medical Readiness Assessment System (TBI-ROAM) Dataset

Presentation Author: Dr. M Victoria Ingram

MHSRS-23-09463 - SESSION 2 - #105

Assessing Polygenic Risk Scores for Explaining Variability Between Individuals in Psychological Response to Traumatic Events

Presentation Author: Dr. Donna Millington

MHSRS-23-09560 - SESSION 2 - #107

The Utility of the PTSD Checklist Crosswalk in Service Members and Veterans with Traumatic Brain Injury

Presentation Author: Dr. Shannon Miles

MHSRS-23-09567 - SESSION 2 - #108

TBI and PTSD Affect Long-Term Symptom Outcomes through Distinct Neurological and Psychological Pathways in Combat Veterans

Presentation Author: Dr. Jared Rowland

MHSRS-23-09616 - SESSION 2 - #109

Challenges While Recruiting Service Members and Veterans for a Digital Therapeutic App to Combat Symptoms of Depression

Presentation Author: Ms. Olivia Shaw

MHSRS-23-09625 - SESSION 2 - #110

MEG Source Imaging Reveals Neuronal Changes in Combat-Related mild Traumatic Brain Injury After Transcranial Electrical Stimulation Using Nexalin

Presentation Author: Dr. Mingxiong Huang

MHSRS-23-09648 - SESSION 2 - #111

Latent Onset of Emotional Dysregulation and Sleep Quality at Differing Stages of mTBI

Presentation Author: Ms. Melissa Reich-Fuehrer

MHSRS-23-09680 - SESSION 2 - #112

Development of Substance Use Disorder Among Active Duty Service Members and Post-9/11 Veterans Following Traumatic Brain Injury: A Descriptive Study

Presentation Author: Dr. Kangwon Song

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MHSRS-23-09681 - SESSION 2 - #113

Using Sensor-Captured Patient-Generated Data to Support Clinical Decision-Making in PTSD Therapy

Presentation Author: Dr. Rosa Arriaga

MHSRS-23-09868 - SESSION 2 - #114

Service Dog Training Program Improves the Serum Cortisol and Brain Derived Neurotrophic Factor (BDNF) in Service Members with Post-Concussive Symptoms and Post Traumatic Stress

Presentation Author: Dr. Manish Bhomia

MHSRS-23-09876 - SESSION 2 - #115

The Economic Impact of Cannabis Use Disorder and Early-Onset Dementia in Veterans Diagnosed with Traumatic Brain Injury

Presentation Author: Dr. Aryan Esmaeili

MHSRS-23-09897 - SESSION 2 - #116

Cannabis Use Disorder: A Contributor to Early-Onset Dementia Progression in Veterans Diagnosed with TBI?

Presentation Author: Dr. Aryan Esmaeili

MHSRS-23-09884 - SESSION 2 - #117

Qualitative Perceptions of Suicide, Domestic Violence, and Child Access as Areas of Concern for Firearm Injury/Death Among Service Members and Their Families

Presentation Author: Ms. Rachel Kennedy

MHSRS-23-09938 - SESSION 2 - #118

Concussion History Is Significantly Associated with Gamified Neurocognitive Performance in Collegiate Athletes

Presentation Author: Ms. Caitlin Gallo

MHSRS-23-09945 - SESSION 2 - #119

Symptom Validity Failure Among Post-9/11 Veterans with mild Traumatic Brain Injury: The Impact of Comorbidity and Central Nervous System (CNS) Polypharmacy

Presentation Author: Dr. Alicia Swan

MHSRS-23-09953 - SESSION 2 - #120

Impact of Education Levels on Patient Compliance: Characteristics of Service Members with Traumatic Brain Injury at a Cognitive Rehabilitation Center

Presentation Author: Mrs. Megan Tsui

MHSRS-23-09976 - SESSION 2 - #121

Predictors of Neurobehavioral Symptom Change in SOF vs. Conventional Forces Following mild TBI Treatment: Evidence from the VA Post Deployment Rehabilitation and Evaluation Program (PREP)

Presentation Author: Dr. Amanda Garcia

MHSRS-23-09978 - SESSION 2 - #122

Personal Experience of COVID-19, Training Related Stress, and PTSD in National Guard Members

Presentation Author: Mr. Aaron Weingrad

MHSRS-23-10084 - SESSION 2 - #123

Control-Network Neuromodulation to Enhance Cognitive Training in Complex TBI (The CONNECT-TBI Study): fMRI Evidence of Improved Neural Efficiency with APT-3

Presentation Author: Dr. Davin Quinn

MHSRS-23-10113 - SESSION 2 - #124

Differences in Reaction Time Variability on the Senaptec Sensory System by Concussion Status in Special Operations Forces Service Members

Presentation Author: Dr. Wesley Cole

MHSRS-23-10115 - SESSION 2 - #125

Post-Traumatic Stress Disorder Causes Greater Neurochemical Dysregulation in Women than Men

Presentation Author: Dr. Carolyn Mountford

MHSRS-23-10125 - SESSION 2 - #126

Developing a Randomized, Sham-Procedure-Controlled Blinded Study to Test the Efficacy of Unilateral Stellate Ganglion Block on Acute Symptomatology of PTSD in a TBI Population

Presentation Author: Mario Oyola

MHSRS-23-10135 - SESSION 2 - #127

Improvement in Mental Health Attributable to the Implementation of Behavioral Health Parity for TRICARE Beneficiaries

Presentation Author: Dr. Jangho Yoon

MHSRS-23-10168 - SESSION 2 - #128

Time of Day Variation in Post-Traumatic Stress Symptoms in Service Members: Results from an Ecological Momentary Assessment Study

Presentation Author: Catherine Dempsey

MHSRS-23-10210 - SESSION 2 - #129

Exploring Practice Variation in Department of Defense Rehabilitation Care for mild Traumatic Brain Injury

Presentation Author: Dr. Jacob Kean

MHSRS-23-10213 - SESSION 2 - #130

Sociodemographic and Health Characteristics Profile of Veteran Patients with Traumatic Brain Injury (TBI) Residing in Rural Areas of the U.S. Territories and Its Association to Increased Mortality: A Rehabilitation Challenge

Presentation Author: Ms. Valeria Cacho

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MHSRS-23-10240 - SESSION 2 - #131

Predictors of Psychological Health Issues in Military Service Members and Civilians Following mTBI: A T-REV Study

Presentation Author: Dr. Anthony Kontos

MHSRS-23-10288 - SESSION 2 - #132

Compliance with Prescribed Multidomain Interventions Following mTBI: A T-MD Study

Presentation Author: Dr. Anthony Kontos

MHSRS-23-10290 - SESSION 2 - #133

Poloxamer 188 Attenuated Acute and Chronic Anxiety-Like Behavior and Short-Term Memory Deficits Induced by Repeated Low-Level Blast Injuries

Presentation Author: Dr. Ying Li

MHSRS-23-10295 - SESSION 2 - #134

Enhancing/ Expanding Access: Traumatic Brain Injury (TBI) Assessment in Rural Areas Using Appropriate English and Spanish Instruments via Telehealth and Veterans Video Connect (VVC) Interventions

Presentation Author: Ms. Camila Canales-Emanueli

MHSRS-23-10326 - SESSION 2 - #135

Heart Rate Variability During Wake and Sleep in Veterans with Comorbid Traumatic Brain Injury, Post-Traumatic Stress Disorder, and REM Sleep Behavior Disorder

Presentation Author: Dr. Jonathan Elliott

MHSRS-23-10333 - SESSION 2 - #136

Morning Bright Light Therapy to Improve Sleep Quality in Veterans with Traumatic Brain Injury: An Interim Analysis of a Randomized, Placebo-Controlled Clinical Trial

Presentation Author: Dr. Jonathan Elliott

MHSRS-23-10390 - SESSION 2 - #137

Examining Alexithymia as a Predictor of Psychological Health and as a Treatment Target for Improving Outcomes in Veterans, Service Members, and Civilians with Traumatic Brain Injury

Presentation Author: Dr. Dawn Neumann

MHSRS-23-10400 - SESSION 2 - #138

Description of the National Intrepid Center of Excellence Traumatic Brain Injury History Assessment Process

Presentation Author: Dr. Treven Pickett

MHSRS-23-10440 - SESSION 2 - #139

Introduction of a Standardised Interview to Identify Post-Traumatic Headache, mTBI Predict Study

Presentation Author: Dr. Hannah Lyons

MHSRS-23-10496 - SESSION 2 - #140

Increased Photosensitivity and Chronic Pain After Traumatic Brain Injury: Correlation with Activation of the Right Posterior Insula and Right Amygdala

Presentation Author: Dr. Mary Heinricher

MHSRS-23-10534 - SESSION 2 - #141

The Purple Heart and Suicide Risk in Post-9/11 U.S. Army Combat Veterans with a Combat-Related Traumatic Brain Injury: A Mixed Methods Study

Presentation Author: Dr. Jayna Mocerri-Brooks

MHSRS-23-10593 - SESSION 2 - #142

Delivery of Therapeutic Plant-Derived Exosomes to the Brain for the Treatment of Mental Health Disorders and CNS Injuries

Presentation Author: Dr. Nasser Nassiri Koopaei

MHSRS-23-10635 - SESSION 2 - #143

Quantifying Symptom and Recovery Time Variability Across Repeat Concussions

Presentation Author: Mr. Daniel Rosenblum

MHSRS-23-10642 - SESSION 2 - #144

Lifetime Psychotropic Medication Use Among Veterans With and Without mild Traumatic Brain Injury History: A Pilot Study

Presentation Author: Dr. Kathleen Carlson

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Human Brain Microvascular Transcriptional Responses to African Trypanosomes Under Physiologic Flow

Presentation Author: Dr. Dennis Grab

MHSRS-23-10716 - SESSION 2 - #146

A Conceptual Overview of the NeuroImmunoEndocrine Interface: A Focused Program Project Exploring a Unifying Axis for Precision Care in Psychological Health & TBI (NEXUS)

Presentation Author: Dr. Amy Wagner

MHSRS-23-10731 - SESSION 2 - #147

Subjective Cognitive Symptom Complaints Among Post-9/11 SOCOM Operators with mild Traumatic Brain Injury: Effectiveness of a Holistic Clinical Approach and Associations with Mental Health Distress

Presentation Author: Dr. Kirstine Carter

MHSRS-23-10735 - SESSION 2 - #148

Longitudinal Effects of Cognitive Training on Working Memory and Quality of Life in OEF/OIF/OND Veterans with mild Traumatic Brain Injury: A Preliminary Analysis

Presentation Author: Ms. Cassandra Nelson

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Comprehensive Strategy and Action Plan for Warfighter Brain Health - Way Forward LOE4 (Late/Long Term Effects)

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Progression of White Matter Atrophy Depends on the Interplay of Traumatic Brain Injury and Neuronal Tau Pathology in Transgenic Mice
Presentation Author: Dr. Regina Armstrong

MHSRS-23-08426 - SESSION 2 - #150

Innate and Adaptive Immune Response Profiles in Military Breachers and Snipers with Long-Term Occupational Exposure to Repetitive Blast Overpressure
Presentation Author: Dr. Alex Di Battista

MHSRS-23-08678 - SESSION 2 - #151

Engineering a pH-sensitive Mouse Transferrin Receptor Binding Nanobody for Blood Brain Barrier Transcytosis of Macromolecular Cargos: A Tool for Molecular Contrast Brain Imaging and Therapeutics for Military-Relevant TBI and Other Brain Diseases
Presentation Author: Dr. David Brody

MHSRS-23-08755 - SESSION 2 - #152

Biomarkers of Brain Injury in United States Special Operations Forces Personnel with Repeated Blast Exposure
Presentation Author: Dr. Natalie Gilmore

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Quantification of Visual and Auditory Deficits in Chronic, mild TBI Subjects
Presentation Author: Dr. Tonia Rex

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Blast Overpressure Surveillance Pilot (BOS-P): Lessons Learned and Recommendations
Presentation Author: Mr. Steve Jones

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Longitudinal Assessment of Postconcussion Symptoms from Entrance to Exit in U.S. Military Service Academy Cadets: A CARE Consortium Study
Presentation Author: Dr. Paul Pasquina

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Interdisciplinary Care Associated with Sustained Recovery of Combat and Mission Related TBI and Behavioral Health Conditions
Presentation Author: Dr. Thomas DeGraba

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Prolonged High Altitude and mild Traumatic Brain Injury Results in Discrete Neuropathological and Cognitive Impairment
Presentation Author: Dr. Caroline Browne

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Symptoms Cluster in mTBI: Initial Characterization and Changes Over Time
Presentation Author: Dr. Carey Balaban

MHSRS-23-10514 - SESSION 2 - #159

Investigating Brain and Blood Biomarkers of Tauopathy in Canadian Armed Forces Breachers and Snipers with Occupational Exposure to Repetitive Blast Overpressure - Initial [18F] Flortaucipir Positron Emission Tomography and Molecular Biomarker Findings
Presentation Author: Dr. Shawn Rhind

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Persistent mTBI Related Neural Function Impairments Are in a Fatigued State
Presentation Author: Dr. Nicholas Murray

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Sub-Acute Cutoff Scores for the Clinical Profiles Screen in Military-Aged Civilians with mild Traumatic Brain Injury
Presentation Author: Dr. RJ Elbin

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Insulin and Insulin-Like Growth Factor Signaling Disturbances in Neurodegenerative Disease: A Newly Identified Regulator of Insulin/IGF Signaling Could Lead to Preventative Strategies for High-Risk Military Populations
Presentation Author: LTC Lisa Post

Computational Modeling of Human Lethality, Injury, and Impairment from Blast Threats in All Environments

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Biofluid-Biostructure Interactions Inside the Human Body Exposed to an Explosive Device Blast
Presentation Author: Dr. Milan Toma

MHSRS-23-08058 - SESSION 2 - #164

Coupled Acoustic Shock Modeling of Diver Lung UNDEX Response
Presentation Author: Dr. Daniel Hammerand

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MHSRS-23-08129 - SESSION 2 - #165

A Computational Framework for Multiphysics Modeling of Underwater Explosions and Their Impact on Biomechanics and Physiology of Human Lungs

Presentation Author: Dr. Satish Chimakurthi

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Assessment of the Effects of Impulse Noise from Blasts Using Modeling and Simulation

Presentation Author: Dr. Gary Tan

MHSRS-23-08500 - SESSION 2 - #167

Finite Element Modeling Framework for Evaluating the Effectiveness of Ballistic Protective Plates in Minimizing Tissue Damage Resulting from a Blast Wave Impact

Presentation Author: LTC Yoram Epstein

MHSRS-23-09582 - SESSION 2 - #168

Development of a Novel Mouse Model for the Study of Blast Injuries During Special Operations Forces Training

Presentation Author: SFC Cory McEvoy

MHSRS-23-09941 - SESSION 2 - #169

Computational Model for Tertiary Blast Injury Characterization After Nuclear Detonation

Presentation Author: Dr. Tim Walilko

MHSRS-23-09971 - SESSION 2 - #170

Quantification of Repeated Low-Level Blast Exposures for Safer Weapons Training

Presentation Author: Dr. Teja Garimella

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Nonhuman Primate Head and Torso Primary Blast Biomechanics

Presentation Author: Dr. Elizabeth McNeil

MHSRS-23-10241 - SESSION 2 - #172

Stochastic Trauma Generation – A Novel Approach to Military Medical Simulations with Enhanced Variety and Optimized Realism for Skill Transfer

Presentation Author: Dr. Thomas Talbot

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Computationally Efficient Framework to Quantify Head Kinematics Induced Brain Injury from Open-Field Blast

Presentation Author: Dr. Manik Bansal

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Interoperability and Computational Model of Hybrid Weapon Systems on Trauma Pathophysiology: Leveraging the NATO Vigorous Warrior Live Exercise Series and Experimentation to Maximize Medical Planning and Response

Presentation Author: Dr. John Quinn

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Investigating Internal Stress Wave Mechanics in the Lung Following Blunt Impact

Presentation Author: Dr. Rohan Banton

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Development of a Computational Model for Underwater Blast Experiments on Surrogate Lung Models

Presentation Author: Mr. Joe Magallanes

Impact and Assessment of Blast Exposure on Psychiatric Symptoms

MHSRS-23-08291 - SESSION 2 - #177

Self-Reported Single and Repeated High-Level Blast Exposure, Occupational Risk of Low-Level Blast, and PTSD: A Millennium Cohort Study Investigation

Presentation Author: Dr. Jennifer Belding

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Repeated Sub-Concussive Events Heightens the Vulnerability of Brain to Blast Exposure

Presentation Author: Dr. Peethambaran Arun

MHSRS-23-08413 - SESSION 2 - #179

Blast Impacts on Neurobehavioral and Psychiatric Symptom Reporting in Active Duty Service Members in Treatment for mild Traumatic Brain Injury

Presentation Author: Dr. Lars Hungerford

MHSRS-23-08475 - SESSION 2 - #180

The Development of Chronic Pain Symptoms in a Preclinical Model of Blast Neurotrauma

Presentation Author: Ms. Amirah Wright

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Stress and Directional Blast Effects on Acute Craniofacial and Extracranial Pain

Presentation Author: Dr. Michael Urban

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MHSRS-23-09161 - SESSION 2 - #182

High-Resolution Spatial Analysis of Chromatin Accessibility of Brain Tissue from mild Multimodal Traumatic Brain Injury Reveals Chronic Changes in Gene Expression Associated with Neuropsychiatric Impairment

Presentation Author: Dr. Edwin Vazquez-Rosa

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Use of the Neurobehavioral Symptoms Inventory to Track Symptoms of Repeated Blast Exposure Effects Over Time

Presentation Author: CPT Neil Whitehead

MHSRS-23-10293 - SESSION 2 - #184

Using Acute Unpredictable Stress Prior to a Blast-Induced Traumatic Brain Injury to Develop a Clinically Relevant Model of Combat-Related Traumatic Brain Injury

Presentation Author: Dr. Jessica Strickler

Development and Validation of Sensors and PPE for Blast Polytrauma

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Estimation of Blast Directionality Based on Body-Worn Blast Dosimeter Data from a Single Device

Presentation Author: Dr. Jean Philippe Dionne

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Tracking and Categorization of Loud Sound Exposures through a Body-Worn Blast Dosimeter

Presentation Author: Dr. Jean Philippe Dionne

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Developmental Efforts of Wearable Dosimeters

Presentation Author: Mr. Kyvory Henderson

MHSRS-23-09337 - SESSION 2 - #188

Blood-Brain Barrier Permeability as a Scalable Injury Outcome in Gyrencephalic and Lissencephalic Animal Models Following Different Blast Overpressure Exposures

Presentation Author: Dr. Venkata Rama Rao Kakulavarapu

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Development of a Low-Cost Biofidelic Test Surrogate for Evaluation of Blast and Ballistic PPE

Presentation Author: Mr. Jed Wilbur

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A Cost-Effective Modular Blast Test Surrogate

Presentation Author: Dr. Barkan Kavlicoglu

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Wearable Underwater 3-D Blast Sensor Equipped with a Wireless Software Analyzer

Presentation Author: Dr. Barkan Kavlicoglu

MHSRS-23-09878 - SESSION 2 - #192

Recording and Mitigating Blast Exposure Using BlackBox Biometrics Blast Gauges During Training through Modification of Stand-Off Distances and Body Positioning

Presentation Author: Dr. Suthee Wiri

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Dynamic Monitoring of Service Members to Quantify Blast Exposure Levels During Combat Training Using BlackBox Biometrics Blast Gauges: Explosive Breaching, Shoulder-Fired Weapons, Artillery, Mortars, and .50 Caliber Guns

Presentation Author: Dr. Suthee Wiri

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The Effects of Gauge Mounting on Blast Overpressure Measurements Using Blackbox Biometrics (B3) Blast Gauges

Presentation Author: Dr. Suthee Wiri

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Automated Software to Generate Commander Reports and DOEHRSH Files Including Quality Control of Data from Body-Mounted Blast Overpressure Sensors

Presentation Author: Dr. Suthee Wiri

MHSRS-23-10287 - SESSION 2 - #196

Evaluation of Wearable Blast Monitoring Devices During Heavy Weapons Training

Presentation Author: Mr. Jonathan Salib

MHSRS-23-10372 - SESSION 2 - #197

Neurovascular and Hematopathologic Alterations in a Non-Human Primate Model of Blast Overpressure Exposure

Presentation Author: Ms. Micaela Fleetwood

MHSRS-23-10531 - SESSION 2 - #198

Development of Optimal Helmet Technology Using of Finite Element Analysis

Presentation Author: Mr. Andrew Bagnoli

MHSRS-23-10568 - SESSION 2 - #199

The Accuracy of the Wearable Blast Overpressure Sensors Evaluated in the Real-World Weapon Training Environments

Presentation Author: Dr. Maciej Skotak

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Understanding Blast Overpressure Exposure from Small Arms Fire: The Small Arms Blast Exposure (SABE) Project
Presentation Author: Dr. James Engall

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An End User Evaluation of Blast-Overpressure and Accelerative Impact Dosimeters
Presentation Author: MAJ Carl Smith

Warfighter Operational Resilience: Current and Future Directions in the Development and Implementation of Programs to Maintain “Resilience Under Fire”

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Impact of Mindfulness Training and Yoga on Injury and Pain-Related Impairment: A Group Randomized Trial in Basic Combat Training
Presentation Author: MAJ Carl Smith

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Preliminary Exploration of the Yerkes-Dodson Manifold (YDM) to Select and Train Warfighters for Resilient Performance
Presentation Author: Dr. Justin Brooks

MHSRS-23-09831 - SESSION 2 - #205

The Neurochemical and Anatomical Profile of Resilience
Presentation Author: 2LT Gabriel Vargas

Psychological Health Research Translation - Current Status and Future Directions

MHSRS-23-08076 - SESSION 2 - #206

Perceived Health Status, Medical Conditions and Risk Behaviors Among U.S. Active Duty Service Members
Presentation Author: Dr. Bolanle Olapeju

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Translating a Novel Neuromodulation Therapy to Treat PTSD
Presentation Author: Dr. Seth Hays

MHSRS-23-08473 - SESSION 2 - #208

Can a Community-Based Well-Being Program Improve the People, Culture and Mission Outcomes of a Military Unit? A Pilot Study of the Well-Being Ultimatum Leadership Training Program
Presentation Author: Lt Col Kieran Dhillon

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Multiple Sclerosis-Related Fatigue and Alterations in Functional Connectivity of the Brain
Presentation Author: Ms. Carla Batista

MHSRS-23-09033 - SESSION 2 - #210

Utilization, Barriers to Care, and Perceive Effectiveness of Tele-Behavioral Health Services within the U.S. Military Health System During COVID-19
Presentation Author: Ms. Kristiana Carrasquillo

MHSRS-23-09080 - SESSION 2 - #211

Mental Health Related Factors and Military Attrition in U.S. Navy and Marine Corps Personnel
Presentation Author: Amn Yong Hee Lee

MHSRS-23-09116 - SESSION 2 - #212

How Biomarkers of Stress Relate to Exposure to Nightmares During Treatment Visits: Results from a Pilot Trial of Nightmare Deconstruction of Reprocessing
Presentation Author: Dr. Patricia Spangler

MHSRS-23-09301 - SESSION 2 - #213

Prevalence and Incidence of Eating Disorders in United States Military Service Members and Military Dependent Youth
Presentation Author: Dr. Katherine Thompson

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Agreement Between Documented Behavioral Health Diagnoses and Stated Reason for Behavioral Health Duty Limitation Profiles
Presentation Author: SGT Alfred Luga

MHSRS-23-09376 - SESSION 2 - #215

Optimizing Soldier Counseling: Multi-Source, Mixed-Method Evaluation of a Developmental Counseling Training for Mid-Grade Leaders
Presentation Author: Capt John Eric M Novosel-Lingat

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The Experiences of Lesbian, Gay, Bisexual, Transgender Queer (LGBTQ) Individuals and/or Families in the Military
Presentation Author: MAJ Ricardo Aldahondo

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MHSRS-23-09471 - SESSION 2 - #217

Can Nonverbal IQ Function as a Predictor of Working Memory Under Different Conditions of Stress?

Presentation Author: Mr. Leandro Ledesma

MHSRS-23-09655 - SESSION 2 - #218

Efficacy of Cognitive Training for Military Populations through Scalable Delivery

Presentation Author: Ms. Katie Hinds

MHSRS-23-09801 - SESSION 2 - #219

Exploring Active-Duty Men's Social Norms Related to Sexual Misconduct

Presentation Author: Dr. Yajaira V. Arroyo

MHSRS-23-09866 - SESSION 2 - #220

Using Human-Centered Design to Co-Develop Decision Support Tools for Mental Health Policy

Presentation Author: Dr. Georges Potworowski

MHSRS-23-09962 - SESSION 2 - #221

Altered Long-Range Functional Connectivity in PTSD: Low Synchronization of the Amplitude Envelopes of Beta-Band Cortical Activity

Presentation Author: Dr. Thomas DeGraba

MHSRS-23-09982 - SESSION 2 - #222

Implementation of a Novel Sleep Telehealth Platform in the U.S. Military

Presentation Author: Dr. Emerson Wickwire

MHSRS-23-10365 - SESSION 2 - #223

A Mixed Methods Study to Examine Attitudes Toward Suicide Among Military Leaders

Presentation Author: 1LT Erika Gray

MHSRS-23-10476 - SESSION 2 - #224

Adaptive Leadership and Burnout in Military Healthcare Workers

Presentation Author: Col Renee Matos

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Implementation of Written Exposure Therapy for Post-Traumatic Stress Disorder Pilot in the Military Health System

Presentation Author: Dr. Salvatore Libretto

MHSRS-23-10517 - SESSION 2 - #226

Enhancing Warfighter Combat Readiness through a Fully Scalable Platform for Measuring, Tracking, and Improving Cognitive Performance and Psychological Health

Presentation Author: Mr. Aaron Tate

MHSRS-23-10549 - SESSION 2 - #227

Prevalence of Compassion Fatigue and Compassion Satisfaction in Air Reserve Component En Route Combat Casualty Care Service Members

Presentation Author: Mr. James Eazor

MHSRS-23-10743 - SESSION 2 - #228

Does Mindfulness Training Impact Compassion Among Individuals With and Without PTSD?

Presentation Author: Dr. Valerie Rice

MHSRS-23-09387 - SESSION 2 - #229

Developing a Military Physician Moral Injury Training for Military Leadership: Needs Assessment Results and Future Directions

Presentation Author: Dr. Rebekah Cole

MHSRS-23-09420 - SESSION 2 - #230

Soldier Feedback on Mindfulness Training During Basic Combat Training

Presentation Author: MAJ Thomas Nassif

Military Transitions - Advances in Early Interventions for Promoting and Strengthening Psychological Readiness of Service Members

MHSRS-23-07943 - SESSION 2 - #231

Defining and Enhancing Military Spouse Resiliency During Stressful Transitions

Presentation Author: Dr. Rebekah Cole

MHSRS-23-10427 - SESSION 2 - #232

Bolstering Soldier Mental Health in Basic Combat Training with Mindfulness and Yoga: A Randomized Controlled Trial

Presentation Author: MAJ Thomas Nassif

MHSRS-23-08118 - SESSION 2 - #233

Client-Directed Service Coordination for Military Family Readiness System

Presentation Author: Ms. Moon Kim

MHSRS-23-08370 - SESSION 2 - #234

Development of a Text Messaging Intervention to Prevent Excessive Drinking in Air Force Trainees

Presentation Author: MAJ Chase Aycock

MHSRS-23-08510 - SESSION 2 - #235

The Efficacy of Service Dog Training in Treating Service Members with Post-Traumatic Stress and Anxiety

Presentation Author: Ms. Shannon Fichter

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MHSRS-23-08583 - SESSION 2 - #236

Do Successful Combat Control School Graduates Have Greater Resilience to Emotional Damage from Killing? A Mendelian Randomization Study to Assess Causes of Psychological Resilience
Presentation Author: Dr. Richard Chapleau

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How Role Ambiguity Is Effecting Military Nurses Ability to Enact Their Roles and What That Means for Readiness
Presentation Author: MAJ Allison Ferro

MHSRS-23-09072 - SESSION 2 - #238

The Moderating Effect of Burnout and Team Support on the Relationship Between Perceived Leader Effectiveness and Career Intentions
Presentation Author: Ms. Katrina Conen

MHSRS-23-09254 - SESSION 2 - #239

Transition into the Exceptional Family Member Program: Understanding Enrollment Processes
Presentation Author: Dr. Marisa Nihill

MHSRS-23-09296 - SESSION 2 - #240

Perceived Burdensomeness and Chronic Pain Acceptance: A Moderated Mediation Model of Pain Severity and Suicidal Cognitions
Presentation Author: Ms. Sarah Vacek

MHSRS-23-09544 - SESSION 2 - #241

Emotion Dysregulation as a Moderator of the Association Between Perceived Stress and Emotional Eating in Adolescent Military Dependents with Higher Weight
Presentation Author: Ms. Holly Spinner

MHSRS-23-09652 - SESSION 2 - #242

Emotional Intelligence as a Foundational Component of Coping with Stress
Presentation Author: Ms. Melissa Reich-Fuehrer

MHSRS-23-09727 - SESSION 2 - #243

The Influence of the Practice Environment on Military Nurse Managers' Job Satisfaction and Intent to Leave
Presentation Author: LTC Anne Daniele

MHSRS-23-09849 - SESSION 2 - #244

A Novel Mentoring Model to Increase Fidelity of Suicide Prevention Gatekeeper Training: A Pilot Evaluation Study of safeTALK in the United States Coast Guard
Presentation Author: Dr. Adam Walsh

MHSRS-23-10078 - SESSION 2 - #245

Facial Feminization with Breast Augmentation for Gender Affirmation: A Case Series and Review of the Literature
Presentation Author: Lt Kelsey Grolig

MHSRS-23-10119 - SESSION 2 - #246

The Military Spouse Resiliency Group (MSRG) Peer Support Program: Equipping Families for Resiliency with Tools (EFFRT)
Presentation Author: Dr. Elisa Borah

MHSRS-23-10156 - SESSION 2 - #247

Relationship Between Soldier-Reported Work-Stress, Behavioral Health, Perceptions of Disinformation Problems in Units and Career Intentions
Presentation Author: Dr. Farifteh Duffy

MHSRS-23-10411 - SESSION 2 - #248

Moral Identity Strengthens the Positive Relationship Between Self-Directed Moral Injury and Increased Post-Traumatic Stress Disorder Symptom Severity During a Military Deployment
Presentation Author: LTC Walter Sowden

MHSRS-23-08444 - SESSION 2 - #249

A Critical Gap in Addressing the Impact of U.S. Pilot Healthcare Avoidance on Medical Readiness: A Study of U.S. Aircraft Pilot Health Literacy
Presentation Author: Capt William Hoffman

Military-Centric Interventions for Battlefield Psychological Injuries

MHSRS-23-08126 - SESSION 2 - #250

Qualitative Study of Barriers USAF Pilots Face When Seeking Medical Care
Presentation Author: Capt William Hoffman

MHSRS-23-08623 - SESSION 2 - #251

Neuropsychological Assessment—The Next Generation: Preliminary Development of a Virtual Reality Military Operational Neuropsychological Assessment System
Presentation Author: COL William Killgore

MHSRS-23-09292 - SESSION 2 - #252

Identifying Predictors of Positive and Negative Affect at Mid-Deployment Among Military Medical Personnel
Presentation Author: Ms. Kimberly Gomes

MHSRS-23-09416 - SESSION 2 - #253

The Use of Smart Phone-Based Highly Realistic MCI Training as an Adjunct to Traditional Training Methods
Presentation Author: Mr. Benjamin Bauchwitz

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MHSRS-23-09484 - SESSION 2 - #254

Adjustment Disorders in the U.S. Military: Results To-Date Regarding Providers' and Service Members' Views on this Diagnosis

Presentation Author: Dr. Jouhayna Bajjani-Gebara

MHSRS-23-09747 - SESSION 2 - #255

Analysis of Combat Medics' Readiness to Serve as Behavioral Health Extenders in Forward Environments

Presentation Author: CPT George Mesias

MHSRS-23-10260 - SESSION 2 - #256

Medics' Capacity for Delivering Behavioral Healthcare in Future Operating Environments: Is Burnout a Factor?

Presentation Author: Mrs. Kristina Clarke-Walper

MHSRS-23-10441 - SESSION 2 - #257

Evaluation of Behavioral and Physiological Responses to Acute Traumatic Psychological Stress: A Rat Model Study

Presentation Author: Dr. James DeMar

MHSRS-23-10537 - SESSION 2 - #258

A Digital Prescription Therapeutic Device to Treat Nightmare Disorders: A Case Series

Presentation Author: Dr. Brian Robertson

MHSRS-23-10598 - SESSION 2 - #259

Combating the Nursing Shortage through Technological Engagement

Presentation Author: MAJ Enesha Hicks

Longitudinal Studies of Service Member, Veteran, and/or Military Family Member Health and Well-Being

MHSRS-23-08040 - SESSION 2 - #260

Bariatric Surgery Should Be Offered to Active-Duty Military Personnel: A Retrospective Study of the Canadian Armed Forces' Experience

Presentation Author: Maj Olivier Mailoux

MHSRS-23-08078 - SESSION 2 - #261

Mental Health of Siblings of Children with Medical Complexity in Military Connected Families

Presentation Author: Ms. Megana Ramya

MHSRS-23-08113 - SESSION 2 - #262

How Long Is Long-COVID? Symptomatic Improvement Between 12 and 18 Months in a Prospective Cohort Study

Presentation Author: Dr. Robert Barker-Davies

MHSRS-23-08273 - SESSION 2 - #263

Racial, Ethnic, and Sex Disparities in Cardiovascular Risk Factors and Mental Health Among Service Members and Veterans in the Millennium Cohort Study

Presentation Author: Dr. Neika Sharifian

MHSRS-23-08309 - SESSION 2 - #264

Survey Response Over 15 Years of Follow-Up in the Millennium Cohort Study

Presentation Author: Ms. Claire Kolaja

MHSRS-23-08325 - SESSION 2 - #265

Risk Factors and Comorbidities for Eating Disorders Among Military Service Members and Their Spouses

Presentation Author: Ms. Isabel Jacobson

MHSRS-23-08456 - SESSION 2 - #266

Longitudinal Association of Health Behaviors and Health-Related Quality of Life with Military Spouse Readiness

Presentation Author: Dr. Sharmini Radakrishnan

MHSRS-23-08573 - SESSION 2 - #267

The Millennium Cohort Family Study: The First Decade of Research Dedicated to Understanding the Long-Term Impact of Military Life on Families

Presentation Author: Dr. Sabrina Richardson

MHSRS-23-08710 - SESSION 2 - #268

A Prospective Examination of Family Separation from Military Service and Children's Externalizing Symptoms: Moderation by Spouse Employment and the Parenting Alliance

Presentation Author: Dr. Sabrina Richardson

MHSRS-23-08600 - SESSION 2 - #269

Traumatic Brain Injury Increases the Subsequent Risk of Brain Cancer

Presentation Author: Lt Col Ian Stewart

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External Causes of Injury for Traumatic Brain Injury Among U.S. Service Members Before and During the COVID-19 Pandemic

Presentation Author: Ms. Tajrina Hai

MHSRS-23-08669 - SESSION 2 - #271

Factors Influencing Postdeployment Reintegration Adjustment for U.S. Service Members and Their Spouses by Spouse Gender

Presentation Author: Jesse Wood

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Exposome Signatures of Metabolic Syndrome

Presentation Author: Dr. Carlos Maldonado

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MHSRS-23-09105 - SESSION 2 - #273

Comparison of Longitudinal Health Outcomes in Caregivers of Service Members and Caregivers of Veterans

Presentation Author: Dr. Tracey Brickell

MHSRS-23-09281 - SESSION 2 - #274

Traumatic Brain Injury Exposure and Racial and Ethnic Mortality Disparities in U.S. Military Veterans and the Total U.S. Population

Presentation Author: Dr. Jeffrey Howard

MHSRS-23-09367 - SESSION 2 - #275

Association of Neuropsychiatric Diseases with Bowel and Bladder Dysfunction

Presentation Author: Ms. Karen Tannenbaum

MHSRS-23-09556 - SESSION 2 - #276

Smoking Prevalence in the Military Health System (MHS)

Presentation Author: Lt Steven Patrick

MHSRS-23-09636 - SESSION 2 - #277

Permanent Change of Station and Geographic Variation in Cancer Screening in the Military Health System

Presentation Author: Dr. Joel Segel

MHSRS-23-09665 - SESSION 2 - #278

Association Between TBI Exposure and Parkinson's Disease Among Veterans Deployed in Post 9/11 U.S. Conflicts: A Unique Opportunity to Understand Young Onset PD

Presentation Author: Dr. Krista Ocier

MHSRS-23-09861 - SESSION 2 - #279

Military Physician Retirement: A Population-Based Longitudinal Study

Presentation Author: CAPT John Melton

MHSRS-23-09920 - SESSION 2 - #280

BRACE Study Suggests No Association Between SARS-CoV-2 Infection and Impaired Neurocognitive Function

Presentation Author: Dr. Liana Andronescu

MHSRS-23-09925 - SESSION 2 - #281

Clinically Guided Health Coaching as an Intervention for Veterans with Complex, Medically Unexplained Post-Deployment Health Concerns

Presentation Author: Mr. Walter Jachimowicz

MHSRS-23-09947 - SESSION 2 - #282

Accession Medical Standards for Mental Health – Are We Optimally Balancing the Need for More Service Members with the Need to Minimize Adverse Outcomes?

Presentation Author: Mr. Timothy Powers

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ADHD Among Recruits: Understanding the Prevalence and Assessing Risk of Early Discharge

Presentation Author: Mrs. Caitlin Rushin

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Preliminary Findings from a Prospective Cohort Study of Stellate Ganglion Block for Treatment of Post-Traumatic Stress Disorder and Other Non-Pain Conditions

Presentation Author: Ms. Kristine Rae Olmsted

MHSRS-23-10148 - SESSION 2 - #285

Chronic Pain and Economic Burden for Healthcare Services for U.S. Veterans

Presentation Author: Dr. Jangho Yoon

MHSRS-23-10301 - SESSION 2 - #286

Racial/Ethnic and Geographic Determinants of TBI Service-Connected Disability and Compensation in U.S. Veterans

Presentation Author: Dr. Clara Dismuke-Greer

MHSRS-23-10317 - SESSION 2 - #287

Military Veterans with Chronic TBI Symptoms Improve at a Similar Rate Compared to Civilians with Chronic TBI Following Targeted Intervention: A TEAM-TBI Study

Presentation Author: Ms. Olivia Raymond

MHSRS-23-10339 - SESSION 2 - #288

Plasma Biomarkers as Potential Predictors of Sleep Outcome and Treatment Response in mild Traumatic Brain Injury Patients: A TEAM-TBI Study

Presentation Author: Ms. Peyton McIntyre

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Influence of Adverse Childhood Experiences on Grief Adaptation in Bereaved Military Family Members

Presentation Author: Dr. Joscelyn Fisher

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Perceptions of Organizational Anger Are Related to Increased Psychological Well-Being During and After a Military Deployment

Presentation Author: LTC Walter Sowden

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Evaluation of the Efficacy, Retention, and Potential for Continued Longevity of the Walter Reed National Military Medical Center Pain Registry Biobank

Presentation Author: Dr. Peter Bedocs



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Initiation of Oral Tofacitinib May Help Facilitate Early Treatment of Ulcerative Colitis and Continued Military Readiness

Presentation Author: Capt Cody Ashcroft

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Sociodemographic and Health Trends Among Marine Recruits Who Participated in Recruit Assessment Program (RAP) from 2003-2021

Presentation Author: Jennifer McAnany

Interrupting Behavioral Health Trajectories to Sustain the Force

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Pre-Service and Early Career Predictors of New-Onset Alcohol Misuse in Male U.S. Marines

Presentation Author: Dr. Jennifer McAnany

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Introduction of Pharmacogenomic Testing in a Behavioral Health Outpatient Military Population: Initial Findings

Presentation Author: MAJ Joseph Mansfield

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Additive and Interactive Effects of Trust in Leaders and Leadership Effectiveness Ratings on Behavioral Health Status of Soldiers

Presentation Author: CPT Gerald McDonnell

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The Impact of Traumatic Stress Exposure on Behavior and Brain Activity in a Rodent Model

Presentation Author: Dr. Emily Lowery-Gionta

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Electrochemical Aptamer-Based Sensing for Behavioral Health Diagnostics to Promote Warfighter Resilience

Presentation Author: Mrs. Alyssa Cramer

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Differential Post-Traumatic Stress Disorder Symptom Cluster Response to Stellate Ganglion Block: Secondary Analysis of a Randomized Controlled Trial

Presentation Author: Dr. Shannon Blakey

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T Cell Receptor Signatures Associated with Post-Traumatic Stress Disorder in Military Personnel

Presentation Author: Dr. Ruoting Yang

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Behavioral Performance Characterization of the Putative Neuroinflammation Inhibitor 1-Methyl-Tryptophan Following Acute Traumatic Stress in Rats

Presentation Author: Ichori Kobayashi

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Identifying Dysregulated Chemokines as Biomarkers for PTSD: A Protein-Protein Interaction Analysis

Presentation Author: Dr. Lei Zhang

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Soldiers Enrolled in the Army Body Composition Program Report Higher Rates of Probable Eating Disorder than the General Active-Duty Population

Presentation Author: CPT Maria Stukenborg

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Identifying Candidate Pharmacotherapies for Opioid Use Disorder by Leveraging Multi-Omic Data Integration and Multiple Drug Repurposing Databases

Presentation Author: Ms. Caryn Willis

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Service Member Anxiety Moderates the Indirect Effect of Gender and Depression via Electronic Health Literacy

Presentation Author: LTC Teresa Murray

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Resilience Partially Mediates the Relationship Between Alexithymia and Post-Traumatic Stress Disorder Symptoms

Presentation Author: COL William Killgore

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Cognitive Reappraisal Fully Mediates the Relationship Between Emotional Awareness and Dispositional Resilience: A Potential Therapeutic Target for Building Resilience in Service Members

Presentation Author: COL William Killgore

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Machine Learning Algorithm for Nightmare Detection in Veteran PTSD Population

Presentation Author: Ms. Rebecca Kwasinski

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The Impact of Mindfulness Training Delivered In-Person and via a Virtual World on Self-Compassion and Symptoms of Post-Traumatic Stress

Presentation Author: Dr. Paul Schroeder

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Pharmacological Inhibition of ACSS2 Is a Novel Target in PTSD and Stress-Related Disorders

Presentation Author: Thomas Kim

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RECONsolidation of Traumatic memories to ResOLve Post-Traumatic Stress Disorder (RECONTROL): Preliminary Results

Presentation Author: Dr. Michael Roy

Innovative Technologies to Optimize Warfighters' Performance, and Return to Duty: Individual Wearables, and Neuromodulation

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Randomized, Controlled Clinical Trials of Acoustic and Electrical Scalp Stimulation Neurotechnology to Reduce Postconcussive Symptoms After mild Traumatic Brain Injury

Presentation Author: Dr. Michael Roy

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Evaluating the Relationship Between Fitbit Sleep Data and Self-Reported Mood, Sleep, and Environmental Contextual Factors in Healthy Adults: Pilot Observational Cohort Study

Presentation Author: CDR Darshan Thota

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Development of a Transcutaneous Auricular Neurostimulation System to Restore Performance After Acute Stress Reaction

Presentation Author: Dr. Melanie McWade

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Multi-Modal Wearable-Compatible Physiological Signal Responses to Mental Stress

Presentation Author: Dr. Jin Oh Hahn

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Wearable-Enabled Continuous Mental Stress Tracking via Multi-Modal Physiological Sensing

Presentation Author: Dr. Jin Oh Hahn

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Development of Semi-Specific Transcription Factor Arrays for Biosignature Sensing

Presentation Author: Dr. Jorge Chavez

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Wearable Multimodal System for Aircrew Monitoring and Augmentation

Presentation Author: Dr. Thibault Roumengous

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Wearable Technologies for Assessing Blast Overpressure Exposure and Physiological Response During Training

Presentation Author: Dr. Hrishikesh Rao

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Biosymbiotic Electronics - Chronic Biointerfaces for Continuous Collection of Clinical Grade Biosignals

Presentation Author: Dr. Philipp Gutruf

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A GABA-Producing Probiotic for the Control of Neuroinflammation, Anxiety and Related Disorders

Presentation Author: Dr. Javier Ochoa-Reparaz

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Construct Validity and Responsiveness of the Sway Mobile Balance Application in Patients Recovering from Ankle Sprain

Presentation Author: LTC Michael Crowell

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Flexible-Hybrid Electronic Circuitry to Enable a Light-Weight Helmet Mounted Head-Kinematic Monitoring System That Detects Potentially Injurious Events

Presentation Author: Mr. Jeneel Pravin Kachhadiya

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The Use of a Commercial Performance App as a Virtual Recruiting Management Tool: Initial Health and Nutrition Related Behaviors in Future Sailors

Presentation Author: Dr. Michael Stone

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Health Behavior Tracking and Perceived Mental & Physical Health, Fitness Activity, and Health Literacy Among Active-Duty Air Force Personnel

Presentation Author: Lt Col Cubby Gardner

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Use of the Non-Invasive, Time-Varying Brainstem Stimulator in Patients with Impaired Consciousness: A Safety and Feasibility Study

Presentation Author: Dr. Robert Black

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Trigeminal Transcutaneous Electrical Nerve Stimulation to Enhance the Acquisition of Marksmanship Proficiency

Presentation Author: Ms. Andrea Taylor

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Assessment of Interpersonal Performance During an Augmented Reality Room Breaching and Clearing Scenario

Presentation Author: Dr. Ryan Kaya

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A Closed-Loop Human-Neurofeedback Platform for Training Auditory Attention

Presentation Author: Dr. Christine Beauchene

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Towards a Generalized Model of Predicting Sleep Deprivation with Wearable Technologies

Presentation Author: Mr. Matthew Daley

MHSRS-23-09180 - SESSION 2 - #332

Accelerating Relief from Dysphoria (Depression, Anxiety, PTSD, and/or Chronic Pain) Using a Stepwise Progression of Virtual Reality and Brain Stimulation

Presentation Author: Dr. F Andrew Kozel

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Direct Digitizing Frontend for Artifact-Tolerant Physiological Monitoring

Presentation Author: Dr. Yaoyao Jia

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An End User Evaluation of Objective Behavioral Health Devices, Capability Areas, and Behavioral Health Concerns

Presentation Author: Dr. Madhavi Reddy

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Head Sensor System for Determining the Acceleration Field of Occupants in a Fuselage Drop Test

Presentation Author: Mr. Yang Wan

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Revolutionizing Brain Monitoring: Non-Invasive Detection of Brain Activities through Synthetic Biomarkers Released from Brain to Blood

Presentation Author: Mr. Sangsin Lee

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Sensing Cortisol at the Tip of Microneedles in Human Skin

Presentation Author: Dr. Trevor Tilly

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Validity, Reliability, and Feasibility of Electrocardiography Indices as Psychophysiological Indicators of Operator Cognitive State

Presentation Author: CPT Samantha Wolf

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Altering the Burst Period in Peripheral Neuromodulation Can Be Used to Perform a Matching Task

Presentation Author: Mr. Tommaso Benigni

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Wearable Respiration and ECG Sensing Patch for Real-Time Continuous Monitoring

Presentation Author: Sameer Sonkusale

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Evaluating the Suitability for Eye Tracking in Simulated Rotary-Wing Flight

Presentation Author: Mr. Christopher Aura

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Leveraging Cloud Computing for the Automation of Data and Predictive Analytics to Improve Warfighter Brain Health and Performance

Presentation Author: Mr. Mark Espinoza

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Engaging Brain Fitness from the Bottom Up to Improve Processing Speed, Memory, Performance and Mental Health

Presentation Author: Dr. Thomas Van Vleet

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Individual Differences in Cognitive Control and Learning Optimal Task Strategies

Presentation Author: Dr. Jarrod Moss

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Functional Near-Infrared Spectroscopy for Operator State Monitoring in the Army's Future Vertical Lift Aircraft: A Survey of Subject Matter Expert Opinion

Presentation Author: Dr. Kharananda Sharma

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Modernization of the Department of Defense's Computerized Cognitive Testing Program: Implications for Normative Data and Clinical Interpretation

Presentation Author: Mr. Jacques Arrieux

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MHSRS-23-09952 - SESSION 2 - #347

Wearable Technology for Stress Assessment in Dynamic Environments: Continuous Monitoring of Acute Physiological Reactions and Recovery from Critical Work Events

Presentation Author: Dr. Insoo Kim

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Site-Specific Brain Therapeutics

Presentation Author: Dr. Zhimin Huang

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Development of a Self-Contained, Wearable Infusion Device for Prevention of Opioid Toxicity from Ultra-Potent Weaponized Opioids

Presentation Author: Mr. Kevin Bruhn

MHSRS-23-10027 - SESSION 2 - #350

Personalized Repetitive Magnetic Stimulation (PrTMS®) and Spectral EEG Analysis in the Treatment of Concussion

Presentation Author: Dr. Milan Makale

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The Effects of Neurofeedback Training on the Neurocognitive Performance of a U.S. Marine Forces Special Operations Cohort

Presentation Author: LCDR Ryan Sheppard

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Efficacy of Intranasal Scopolamine HBr (INSCOP, DPI-386) for the Prevention of Vomiting or the Need for Rescue Medication Associated with Motion

Presentation Author: Dr. Barry Feinberg

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Praxis: A Portable Mixed Reality Platform for Multisensory Rehabilitation to Inform Return-to-Duty (RTD) Decision Making After mild Traumatic Brain Injury (mTBI)

Presentation Author: Dr. Pedram Hovareshti

MHSRS-23-10235 - SESSION 2 - #354

Efficacy of the Vest Aid Device to Help with Vestibular-Ocular Exercise Prescription in Patients with Dizziness

Presentation Author: Ms. Susan Whitney

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Reaction Times After mild Traumatic Brain Injury: A Comparison Across Multiple Domains

Presentation Author: Dr. Kody Campbell

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Identifying the Neurobiology of Performance and Training Retention in Pilots via Task-Based Functional Magnetic Resonance Imaging

Presentation Author: Dr. Bianca Cerqueira

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Effects of Cognitive Training on Student Fighter Aviators

Presentation Author: Dr. John Gassaway

MHSRS-23-10532 - SESSION 2 - #358

Impact of Video Game Playing and Perceptual-Cognitive Scores on Proprietary Workstation

Presentation Author: Dr. John Gassaway

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Design of a Wearable, Low Skin-Impedance and Stable Electroencephalography Electrodes for Sleep Applications

Presentation Author: Dr. Huiliang Wang

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Embedding Dry Electrode EEG Sensors into a Flight Helmet

Presentation Author: Dr. Walid Soussou

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WhisperCom: Enabling Silent, Non-verbal Communications via Helmet-Integrated Multimodal Interface and Computational Gesture Identification

Presentation Author: Dr. Paul Cherukuri

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Validation of Cognitive Enhancement Treatment for Management of Cognitive Complaints Following mild Traumatic Brain Injury

Presentation Author: Dr. Jason Bailie

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Wearable Neuromodulation for the Warfighter

Presentation Author: Dr. David Lai

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Standardizing Attention Process Training - 3 for a Multi-Site Clinical Trial of Neuromodulation

Presentation Author: Dr. Jessica Richardson

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Changes in Motor Control and Function After Utilizing UE Myoelectric Powered Wearable Orthotics in Persons with Acute SCI

Presentation Author: Dr. Ghaith Androwis



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Implementation of Interventions for Prevention of Suicide and Other Harmful Behaviors

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Analysis of the Propensity to Seek Mental Health Care When Community Psychiatric Capacity Changes for U.S. Military Personnel
Presentation Author: Dr. Yu-Chu Shen

MHSRS-23-07933 - SESSION 2 - #367

Hazing in the Military: Attitudes, Beliefs, and Behaviors Among Service Members
Presentation Author: Dr. Cristóbal Berry-Cabán

MHSRS-23-08745 - SESSION 2 - #369

Routine Emergency Department Screening to Decrease Subsequent, Severe, Physical Abuse
Presentation Author: Dr. Daniel Lindberg

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Firearm Behavioral Practices and Suicidal Behaviors Among U.S. Army Service Members: Implications for Suicide Prevention
Presentation Author: Dr. Catherine Dempsey

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Drivers of Burnout in Military Medical Staff: Differences Between Civilian and Military Staff
Presentation Author: Dr. Joshua Wilk

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The Potential Curvilinear Effect of Team Cohesion in Reporting Hazing and Bullying in a DoD Sample
Presentation Author: Lt Jayson Rhoton

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Cross-Cutting Prevention Model to Decrease Negative Behaviors and Increase Signature Behaviors within the Military
Presentation Author: Dr. Rachel Larson

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Associations Between Soldiers' Perceptions of and Witnessing Racism/Extremism with Perceptions of Unit Support and Behavioral Health Problems
Presentation Author: Jose Rodriguez Morales

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Context Matters: The Development of Navy-Specific Measures of Destructive Behavior
Presentation Author: Dr. Nathan Bowling

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Risk Behavior Profiles and Association with Mental Health Status Among U.S. Active Duty Service Members
Presentation Author: Dr. Bolanle Olapeju

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Analysis of Risk Factors for Suicide-Related Behaviors in the U.S. Naval Surface Forces
Presentation Author: Ms. Shing Lai Cheng

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Golden Triangle Calls Are Associated with Greater Trust in Leadership and Willingness to Report and Lower Risk for Behavioral Health Problems and Suicide Ideation
Presentation Author: Ms. Stephanie Bricault

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Peer Adaptation of an Evidence Based Approach to Firearm Safe Storage: A Formative Evaluation of Four Training Sites in the National Guard
Presentation Author: Dr. Adam Walsh

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Initial Evaluation of a Tailored Sexual Assault Prevention Program at the United States Air Force Academy
Presentation Author: Dr. Shannon Blakey

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Testing a Novel Treatment for Anger and Aggression Following Military-Related Betrayal: Design and Methodology of a Clinical Trial
Presentation Author: Dr. Vanessa Jacoby

MHSRS-23-10718 - SESSION 2 - #382

Domestic Violence Related Brain Injury: Self-Assessment of Psychological Challenges and Harmful Behaviors During COVID-19 Pandemic
Presentation Author: Dr. Bridget Hawkins

MHSRS-23-10426 - SESSION 2 - #383

Enhancing Mindfulness, Interoceptive and Emotional Awareness, Emotion Regulation, and Inter-Personal Emotion Management with an Online Military Emotional Skills Training Program
Presentation Author: COL William Killgore



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Role of Sleep in Performance and Recovery

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Cut the (Brain) Chatter! Enhancing Sleep by Suppressing the Default Mode Network with Continuous Theta Burst Stimulation
Presentation Author: COL William Killgore

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Outpatient Medication Prescriptions for Insomnia During the First Year Following Combat-Related Amputations
Presentation Author: Dr. Ted Melcer

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A Longitudinal Assessment of Sleep in Surface Warfare Officers During Training and Fleet Assignments: Preliminary Results of a Pilot Study
Presentation Author: Dr. Nita Shattuck

MHSRS-23-08301 - SESSION 2 - #388

Effects of Testosterone and Sleep Deprivation on Exercise Heart Rate Variability During Simulated Operational Stress
Presentation Author: Dr. Adam Lowe

MHSRS-23-08469 - SESSION 2 - #389

Advanced Development Status of the SleepTank® App: Impact of Real-Time Feedback on Sleep Behavior in Royal Australian Navy Shift Workers
Presentation Author: Dr. Jaime Devine

MHSRS-23-08601 - SESSION 2 - #390

Sleep Quality and Life Satisfaction in Severely Depressed Individuals
Presentation Author: Ms. Brianna Zahorecz

MHSRS-23-08634 - SESSION 2 - #391

Effects of Operational Fatigue on Attention Control Performance During Marine Corps Infantry Mountain Warfare Training
Presentation Author: Dr. Max Smith

MHSRS-23-08715 - SESSION 2 - #392

Continuous Theta Burst Transcranial Magnetic Stimulation Treatment for Insomnia and Effects on Cognitive Performance
Presentation Author: CPT Lindsey Hildebrand

MHSRS-23-08810 - SESSION 2 - #393

Immediate and Late Effects of mild TBI on Sleep Outcomes Up to Three Months Following Injury
Presentation Author: Dr. Jamie Hershaw-Velasquez

MHSRS-23-08833 - SESSION 2 - #394

Validation of Contrast-Free MRI Measures of Glymphatic Function Against Contrast-Enhanced MRI in Human Participants Exposed to Acute Sleep Deprivation
Presentation Author: Dr. Swati Rane Levendovszky

MHSRS-23-08969 - SESSION 2 - #395

Efficacy and Feasibility of Two Novel Lighting Interventions for Shiftworkers on a Submarine Watchfloor
Presentation Author: Ms. Sara Bessman

MHSRS-23-09076 - SESSION 2 - #396

Impact of a Digital Sleep Intervention Platform as Part of Embedded Health Services on Airmen Sleep Health: Preliminary Findings
Presentation Author: Ms. Megan Wolfson

MHSRS-23-09181 - SESSION 2 - #397

A Randomized, Controlled, Blinded Study of Internet-Guided Cognitive Behavioral Therapy for Insomnia in Military Service Members and Veterans with History of Traumatic Brain Injury
Presentation Author: Martin Cota

MHSRS-23-09329 - SESSION 2 - #398

Optimizing Circadian Transcriptional Machinery Output to Augment Cellular Resiliency in Military Relevant Extreme Environments
Presentation Author: Ms. Cora Cox

MHSRS-23-09489 - SESSION 2 - #399

Reduction in Pre-Sleep Intrusive Thoughts with Repetitive Transcranial Magnetic Stimulation of the Default Mode Network
Presentation Author: Ms. Melissa Reich-Fuehrer

MHSRS-23-09504 - SESSION 2 - #400

The Impact of Sleep-Focused Therapy on Sleep, Fatigue, Resilience and Psychological Health in Military Women and Men with Insomnia, OSA and COMISA
Presentation Author: COL Vincent Mysliwiec

MHSRS-23-09641 - SESSION 2 - #401

Trait, Sleep, and Nutrition Factors Associated with Psychomotor Resilience to Total Sleep Deprivation
Presentation Author: Ms. Alisa Huskey

MHSRS-23-09671 - SESSION 2 - #402

Synergistic Sleep and Multi-Modal Motion-Assisted Memory Desensitization and Reconsolidation (3MDR) Therapy for Post-Traumatic Stress Disorder: A Case Study
Presentation Author: Dr. Emmanuel Espejo

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Exploring Mechanisms of Acute to Chronic Low Back Pain, Part 3: Does Sleep Disturbance Enhance and Maintain Pain in Rats with Either Lumbar Disc Injuries or Chronic Nerve Constriction Injury?
Presentation Author: Dr. Mary Barbe

MHSRS-23-09830 - SESSION 2 - #404

Sleep Improvement Device with Integrated Electrocutaneous Stimulation Capabilities
Presentation Author: Mr. Connor Palin

MHSRS-23-09917 - SESSION 2 - #405

Can a Behavioral Intervention Class Improve Adherence to Positive Airway Pressure Therapy for Active-Duty Military Personnel?
Presentation Author: Dr. Juliana Ee

MHSRS-23-09937 - SESSION 2 - #406

Predictors of Positive Airway Pressure Therapy Adherence Among Active-Duty Military Personnel Newly Diagnosed with Obstructive Sleep Apnea
Presentation Author: CPT Javier Saldana

MHSRS-23-10175 - SESSION 2 - #407

Overnight Brain Parenchymal Resistance Measured by Impedance Spectroscopy Predicts MRI Measures of Sleep-Active Glymphatic Function
Presentation Author: Dr. Jeffrey Iliff

MHSRS-23-10307 - SESSION 2 - #408

Electrical Synchronization of Slow Oscillations to Enhance Restricted Sleep
Presentation Author: Dr. Dawn Kernagis

MHSRS-23-10382 - SESSION 2 - #409

PTSD, Sleep, and Perceptions of Health: What Is the Impact on Cognitive Functioning?
Presentation Author: Ms. Mary Sampson

MHSRS-23-10394 - SESSION 2 - #410

Psychomotor Vigilance Test Performance Declines Related to Illness Severity, Not Sleep
Presentation Author: Dr. Tracy Jill Doty

MHSRS-23-10464 - SESSION 2 - #411

Targeted Transcranial Magnetic Stimulation of the Default Mode Network Reduces Daytime Sleepiness
Presentation Author: Ms. Gabriela Franca

MHSRS-23-10600 - SESSION 2 - #412

Trait Emotion Regulation Ability Predicts Changes in Subjective Mood and Sleepiness During Total Sleep Deprivation
Presentation Author: Dr. Courtney Kurinec

MHSRS-23-10646 - SESSION 2 - #413

Sleep Disturbance as a Predictor of Trauma-Focused Psychotherapy Outcomes Among Adults with Post-Traumatic Stress Disorder: A Systematic Review
Presentation Author: Ms. Sarah Bottari

MHSRS-23-10721 - SESSION 2 - #414

Performance Degradation on a Prediction Motion Task During Total Sleep Deprivation
Presentation Author: Ms. Emily Moslener

MHSRS-23-10758 - SESSION 2 - #415

Assessing the Effect of Sleep Deprivation on Cognition through Verbal Performance: Propositional Idea Density and Other Linguistic Metrics
Presentation Author: Mr. Ilia Markov

Surviving and Thriving in a Distributed Operations Environment: Military Health Challenges and Solutions

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Surge Capacity Analysis of the Armed Services Blood Program
Presentation Author: Dr. Christine Jachetta

MHSRS-23-10345 - SESSION 2 - #418

Medical Supply Chain Management in Modern Combat Operations
Presentation Author: CPT Grace Pak

MHSRS-23-10467 - SESSION 2 - #419

Prescreened Whole O Blood Group Walking Blood Bank Capabilities for Non-Traditional Maritime Casualty Receiving Platforms: A Case Series
Presentation Author: Lt Raymond Chang

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Undersea Operational Research Panel

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Effects of Hyperoxia and Hypercapnia on the Vestibulo-Ocular Reflex

Presentation Author: Lucille Papile

MHSRS-23-08335 - SESSION 2 - #421

Exhaled Breath Condensate Metabolomic Profiles of U.S. Navy Divers Following Prolonged Hyperbaric Oxygen Exposures

Presentation Author: Dr. David Fothergill

MHSRS-23-08504 - SESSION 2 - #422

Risks for Enlisted Navy Divers Compared to Other Enlisted Sailors: An Examination of Illnesses That May Be Associated with Exposure to Contaminated Water Diving

Presentation Author: Dr. Brian Maguire

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Preliminary Findings Regarding Performance During a Task That Simulates Passive Sonar Operator Duties Under Conditions of Varying Workloads

Presentation Author: Dr. Jeffrey Bolkhovsky

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Training Respiratory Muscles to Improve Military Diving Performance

Presentation Author: Lt Brian Williams

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An Approach to Reduce the Incidence of Submarine Medical Evacuations

Presentation Author: Ms. Linda Hughes

MHSRS-23-08756 - SESSION 2 - #426

Stress Reactivity with Repeat Diving

Presentation Author: Dr. Karen Kelly

MHSRS-23-08946 - SESSION 2 - #427

The Effects of Deafferentation on Pulmonary Function in Rats Exposed to Hyperbaric Oxygen Conditions

Presentation Author: Dr. Aaron Hall

MHSRS-23-09824 - SESSION 2 - #428

Rapid Serial Visual Presentation: Mechanisms and Effects on Visual Search Performance in Complex Scenes

Presentation Author: Ms. Krystina Diaz

MHSRS-23-10054 - SESSION 2 - #429

Dose Response Impact of Carbon Dioxide on Human Glymphatic Function

Presentation Author: Dr. Rachael Seidler

Medicine and Performance Optimization in the Arctic

MHSRS-23-08029 - SESSION 2 - #430

Development of a Lightweight Portable Bio-Heater for Extreme Cold Missions

Presentation Author: Mrs. Veronica Williams

MHSRS-23-08531 - SESSION 2 - #431

Sleep, Health, and Readiness: U.S. Soldiers in an Arctic Area of Operations

Presentation Author: CPT Rachell Jones

MHSRS-23-08639 - SESSION 2 - #432

Essential Amino Acid-Enriched Diets Alter Perceived Appetite and Fullness without Diminishing Energy Intake During Arctic Military Training

Presentation Author: Ms. Jillian Allen

MHSRS-23-08859 - SESSION 2 - #434

Modeling Drug Delivery to the Lungs of Humans and Rats to Treat High Altitude Pulmonary Edema (HAPE)

Presentation Author: Dr. Bahman Asgharian

MHSRS-23-09660 - SESSION 2 - #435

High Altitude Preparation: A New Comprehensive Clinical Practice Guideline (2023 Update)

Presentation Author: SFC Paul Rajan, HM1 Joshua Cuestas

MHSRS-23-10289 - SESSION 2 - #436

Combat Casualty Care in Cold Weather: Empirically Deducing a Doctrine from Historical Examples

Presentation Author: Dr. John Kragh

Hearing Loss, Tinnitus, and Balance: Whole-Life Warfighter Performance

MHSRS-23-07897 - SESSION 2 - #437

Bio-Inspired Artificial Hearing through Neural-Domain Hyperdimensional Computing

Presentation Author: Dr. Mohsen Imani

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MHSRS-23-08253 - SESSION 2 - #438

Cochlear Hair Cell Regeneration in Adult Mice by Chemical Reprogramming

Presentation Author: Dr. Yizhou Quan

MHSRS-23-08441 - SESSION 2 - #439

Measurement of Light Delivery to the Cochlea Using a Trans-Tympanic Fiber-Based Approach

Presentation Author: Lillian Wang

MHSRS-23-08579 - SESSION 2 - #440

Mild Hypoxia Increases Vestibular Perceptual Thresholds

Presentation Author: Kyle Pettijohn

MHSRS-23-08598 - SESSION 2 - #441

The U.S. Army Aeromedical Research Laboratory Virtual Reality Vection System

Presentation Author: Dr. Leonard Temme

MHSRS-23-08630 - SESSION 2 - #442

The Response Slider: An Inexpensive, Microprocessor Controlled Linear Potentiometer for Acquiring Multivariate Magnitude Estimation Data

Presentation Author: Mr. Ryan Nagy

MHSRS-23-08808 - SESSION 2 - #443

Swine Model of Noise-Induced Hearing Loss

Presentation Author: Dr. Ying Wang

MHSRS-23-09062 - SESSION 2 - #444

Outpatient Aminoglycoside Use and Vestibulocochlear Disorder Risk

Presentation Author: Dr. D. Alan Nelson

MHSRS-23-09232 - SESSION 2 - #445

Sudden Hearing Loss in the Active-Duty Population: An Epidemiological Study

Presentation Author: CPT John Sommerfeldt

MHSRS-23-09241 - SESSION 2 - #446

Therapeutic Function of Liraglutide for Mitigation of Blast-Induced Hearing Damage – An Initial Investigation in Animal Model of Chinchilla

Presentation Author: Dr. Rong Gan

MHSRS-23-09311 - SESSION 2 - #447

Evaluation of Effects of Centrally Acting Medicines, Caffeine, and Nicotine on Vestibular Assessment Results in Patients with mild Traumatic Brain Injury and Concurrent Behavioral Health Involvement

Presentation Author: Dr. John King

MHSRS-23-09530 - SESSION 2 - #448

The Effects of Hearing Loss on Aviator Performance and Cognitive Workload During Simulated Flight

Presentation Author: Dr. Heath Jones

MHSRS-23-09608 - SESSION 2 - #449

Magnetographic Evidence of Alpha Increase in the Presence of a JND Tinnitus Reduction Paradigm

Presentation Author: Dr. Leslie Dalton

MHSRS-23-09812 - SESSION 2 - #450

Multimodal Objective Measurement of Tinnitus

Presentation Author: Dr. James Fallon

MHSRS-23-10040 - SESSION 2 - #451

Changes in Tinnitus Perception in Post-9/11 Service Members and Veterans: A Five-Year Markov Analysis

Presentation Author: Dr. Kelly Reavis

MHSRS-23-10080 - SESSION 2 - #452

Neurotrophin Delivery Using Supraparticles Preserves Bioactivity and Promotes Retention in the Mammalian Cochlea

Presentation Author: Dr. Andrew Wise

MHSRS-23-10102 - SESSION 2 - #453

Hearing Impairment at Enlistment Among Israel Air Force Flight Course Candidates

Presentation Author: Capt Mor Rittblat

MHSRS-23-10103 - SESSION 2 - #454

The Effectiveness of Using Earplugs – The Israeli Air Force Experience

Presentation Author: Capt Mor Rittblat

MHSRS-23-10439 - SESSION 2 - #455

The Protective Effects of Liraglutide on Auditory Injury After Repeated mild Blast TBI in Chinchilla

Presentation Author: Dr. Bryan Pfister

MHSRS-23-10475 - SESSION 2 - #456

Quantifying Impacts of Hearing Protection Devices on Sound Localization in Azimuth and Elevation: Toward Predictors of Performance

Presentation Author: Dr. Andrew Brown

MHSRS-23-10508 - SESSION 2 - #457

Photobiomodulation Therapy Protects Against Noise-Induced Hearing Loss in Mice

Presentation Author: Dr. Stephen McInturff

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MHSRS-23-10634 - SESSION 2 - #458

A Mixed Methods Study on the Impact of Tinnitus During Military Service

Presentation Author: Kathleen Carlson

MHSRS-23-10750 - SESSION 2 - #459

The Effect of Vestibular Injuries on Peripheral and Central Vestibular Function

Presentation Author: Mr. Danial Naqvi

Expeditionary Diagnostics and Treatment of Vision Injury

MHSRS-23-08543 - SESSION 2 - #460

Protection of Retinal Pigment Epithelial and Müller Glial Cells as Preventative Against Post-Traumatic Proliferative Vitreoretinopathy

Presentation Author: Ms. Megan Allyn

MHSRS-23-08624 - SESSION 2 - #461

Post-Concussion/mild Traumatic Brain Injury (mTBI) Assessment and Management of Vision and Oculomotor Dysfunctions: A Practice Recommendation for a Primary Eye Care Provider

Presentation Author: Dr. Natalya Merezhinskaya

MHSRS-23-08626 - SESSION 2 - #462

Characterization of Traumatic Brain Injury Cohort with Photophobia from the Defense and Veterans Eye Injury Vision Registry (DVEIVR)

Presentation Author: Dr. Natalya Merezhinskaya

MHSRS-23-08652 - SESSION 2 - #463

Epidemiology and Disability Burden of Military-Related Eye Injuries in the Israel Defense Forces: Importance of Protective Goggles

Presentation Author: CPT Tomer Talmy

MHSRS-23-08803 - SESSION 2 - #464

Prophylactic Treatment with the Secretome of Cultured Amnion-Derived Multipotent Progenitor Cells Reduces the Consequence of Traumatic Optic Neuropathy

Presentation Author: Mr. Benoit Mouzon

MHSRS-23-09412 - SESSION 2 - #465

Cataract after Ophthalmic Trauma Exposure and Visual Acuity Outcomes Before and After Cataract Surgery in Service Members, U.S. Armed Forces

Presentation Author: CPT Brian Baur

MHSRS-23-09520 - SESSION 2 - #466

Retinal Signaling Networks: Stress and Diet Effects Using Rodent Models

Presentation Author: Dr. Mital Patel

MHSRS-23-09724 - SESSION 2 - #467

Ophthalmic Trauma and Disease Encountered at Walter Reed National Military Medical Center During Operation Allies Refuge and Operation Allies Welcome

Presentation Author: CPT Anthony Cox

MHSRS-23-09816 - SESSION 2 - #468

Timing of Vitrectomy for Open-Globe Injuries: A Systematic Review

Presentation Author: Dr. Sophia Halliday

MHSRS-23-10002 - SESSION 2 - #469

Pirfenidone Loaded Polyurethane Nanocapsules to Reduce Fibrosis and Scarring

Presentation Author: Dr. Heuy-Ching Wang

MHSRS-23-10072 - SESSION 2 - #470

Assessing Visual Photosensitivity in Subjects With and Without a Traumatic Brain Injury Using the Ocular Photosensitivity Analyzer

Presentation Author: Dr. Mariela Aguilar

MHSRS-23-10265 - SESSION 2 - #471

Enabling Prolonged Ocular Irrigation in Austere and Resource-Constrained Environments

Presentation Author: Dr. Cate Wisdom

MHSRS-23-10381 - SESSION 2 - #472

Results of Rabbit Trial of Intraocular Projector Implant for Corneal Blindness

Presentation Author: Dr. Charles Yu

MHSRS-23-10482 - SESSION 2 - #473

Scalable, Modular, Automated, and Closed Manufacturing of Allogeneic Bioengineered Cellular Implants to Treat Dry Age-Related Macular Degeneration

Presentation Author: Ms. Sarah Boermeester

MHSRS-23-10757 - SESSION 2 - #474

Peripheral Inflammatory Cytokines in a Murine Model of TBI-Associated Traumatic Optic Neuropathy

Presentation Author: Dr. Nathan Evanson

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How SARS-CoV-2 Investments have Improved Medical Readiness for other Emerging Infectious Diseases

MHSRS-23-07999 - SESSION 3 - #1

Immune-Modulating mRNA Vaccines Induce Robust Immunogenicity and Protective Capacity In Vivo Against SARS-CoV-2 and Its Variants

Presentation Author: Ms. Alexandria Dickson

MHSRS-23-08294 - SESSION 3 - #2

Development of Antiviral Hygiene Products Against Emerging Viral Infections

Presentation Author: Mr. Duwoon Kim

MHSRS-23-08642 - SESSION 3 - #3

Different Immune Responses and Cytokine Profiles in SARS-CoV-2 mRNA Vaccination and Viral Infection

Presentation Author: Dr. Suizhao Wang

MHSRS-23-08904 - SESSION 3 - #4

Pre-Pandemic Comorbidities Enhance COVID-19 Prevalence in Male Black Military Populations - A Retrospective Study

Presentation Author: Dr. Pramod Sukumaran Pillai

MHSRS-23-08937 - SESSION 3 - #5

Assessment of the Accula System for Upper Respiratory Tract Infections

Presentation Author: Dr. Pramod Sukumaran Pillai

MHSRS-23-09163 - SESSION 3 - #7

Neutralizing Antibody Responses Are Significantly Altered Between SARS-CoV-2 Variants of Concern in COVID-19 Convalescents

Presentation Author: Dr. Alexander Burdette

MHSRS-23-09326 - SESSION 3 - #8

Evaluation of Self-Collected Saliva Samples Without Viral Transport Media for SARS-CoV-2 Testing via RT-PCR and Comparison of Amplicon Sequences Against Commonly Used Primers in Diagnostic Assays

Presentation Author: Capt Andrew Garcia

MHSRS-23-09468 - SESSION 3 - #9

A Comparison of Ocular Microbiomes Before and During the COVID-19 Pandemic

Presentation Author: CAPT Benjamin Kuhar

MHSRS-23-09517 - SESSION 3 - #10

An Automated, Virus Variant-Programmable, Surrogate Neutralization Test Is Qualitatively Comparable to the Gold Standard SARS-CoV-2 Cell-Based Neutralization Assay

Presentation Author: Ms. Danielle Ali

MHSRS-23-09586 - SESSION 3 - #11

Development of Antibody-Protein Conjugates as Pan-Variant Decoy Therapeutics to Address Potential Viral Outbreaks

Presentation Author: Dr. Brian Farrer

MHSRS-23-09590 - SESSION 3 - #12

Impact of SARS-CoV-2 Infection on Physical Fitness in Air Force Basic Trainees

Presentation Author: Capt Elena Crouch

MHSRS-23-09627 - SESSION 3 - #13

Evaluation of the Performance of Rapid Antigen Tests to Detect Emerging SARS-CoV-2 Variants and Correlation with Viral Culture Positivity

Presentation Author: Dr. Heather Goux

MHSRS-23-09768 - SESSION 3 - #14

Development of a Host Response Point-of-Care Assay for Quantifying Protein Biomarkers Relevant to COVID-19 and Sepsis

Presentation Author: Dr. Josh Chenoweth

MHSRS-23-09787 - SESSION 3 - #15

Direct Comparison of the Respiratory Tract Pharmacokinetics of a Therapeutic mAb Delivered by Nebulization vs. Intravenous Infusion

Presentation Author: Dr. Thomas Moench

MHSRS-23-09799 - SESSION 3 - #16

Antibodies to S2 Domain of SARS-CoV-2 Spike Protein in Moderna mRNA Vaccinated Subjects Sustain Antibody-Dependent Natural-Killer Cell-Mediated Cell Cytotoxicity Against Omicron

Presentation Author: LCDR Robert Hontz

MHSRS-23-09820 - SESSION 3 - #17

Non-Workplace SARS-CoV-2 Exposure Risk is Associated with Incident COVID-19 Among Vaccinated Healthcare Workers in a Tertiary-Level Military Treatment Facility

Presentation Author: Dr. Simon Pollett Pollett

MHSRS-23-10034 - SESSION 3 - #18

Overview of the Department of Defense Global Respiratory Pathogen Surveillance Program: 2022-2023 Influenza Season

Presentation Author: Mr. Jeffrey Therwill

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MHSRS-23-10067 - SESSION 3 - #19

Development of Intranasal Therapeutics for the Treatment and Prevention of Covid-19 and Other Viral Respiratory Infections of Military Importance

Presentation Author: Dr. Carl Mason

MHSRS-23-10101 - SESSION 3 - #20

Military Medical Research Against the COVID-19 Pandemic – Ad Hoc Research Programme of the Bundeswehr Medical Service

Presentation Author: Lt Col Martina Schilha

MHSRS-23-10116 - SESSION 3 - #21

Comparison of Symptom Collection Methods Near Time of First SARS-CoV-2 Breakthrough Infection in a Cohort of Vaccinated Active-Duty U.S. Military Personnel (VIRAMP) to Inform Trial Design for Future Outbreaks

Presentation Author: Col Jessica Cowden

MHSRS-23-10122 - SESSION 3 - #22

A Novel Self-Assembling Vaccine, VTX-067, Targeting the E6/E7 Proteins of Human Papilloma Virus Induces Viral Antigen Specific T Cell Mediated Immune Responses and Inhibits HPV E6/E7 Expressing Tumor Growth in a C57/B6 Mouse Model

Presentation Author: Mr. Patrick Gallagher

MHSRS-23-10172 - SESSION 3 - #24

Comparison Between Reverse Transcription Droplet Digital and Quantitative PCRs for Determination of Viral RNA Copy Numbers in COVID-19 Patient Plasma

Presentation Author: Dr. Hua-Wei Chen

MHSRS-23-10284 - SESSION 3 - #25

Clinical, Radiographic, and Physiological Correlates of Post-COVID-19 Dyspnea in Military Health System Beneficiaries: Results from the Chronic Impairment with Pulmonary Symptoms (ChIPS) Sub-Study

Presentation Author: CAPT Stephen Goertzen

MHSRS-23-10332 - SESSION 3 - #26

Endothelial Cell Activation Triggered by SARS-CoV-2 Pseudotyped Spike Protein Viral-Like Particles and Soluble Spike Protein

Presentation Author: 1LT Connor Perry

MHSRS-23-10363 - SESSION 3 - #27

Non-Invasive Vagus Nerve Stimulation (nVNS) for the Prophylaxis and Treatment of Acute Respiratory Distress Syndrome in COVID-19 Patients

Presentation Author: Mr. Praveer Vyas

MHSRS-23-10375 - SESSION 3 - #28

A Randomized, Double-Blinded, Placebo-Controlled, Phase-2 Trial of Vadadustat in COVID-19 Patients with Hypoxia

Presentation Author: Dr. Holger Eltzhig

MHSRS-23-10377 - SESSION 3 - #29

Nasal Wash Aspirate Specimens Collected Using the CLEARinse™ CTS Pro Have a Higher Viral Load than Nasal Swab Specimens

Presentation Author: Dr. Andre Gvozden

MHSRS-23-10393 - SESSION 3 - #30

Human Induced Pluripotent Stem Cell Derived Lung Organoids as a Model for High-Throughput Screening to Evaluate Therapeutics Against Emerging Viral Infectious Diseases

Presentation Author: Dr. Geetaram Sahu

MHSRS-23-10525 - SESSION 3 - #31

Antimicrobial Efficacy Testing of a Rechargeable Antimicrobial Technology

Presentation Author: Dr. Mina Izadjoo

MHSRS-23-10536 - SESSION 3 - #32

A Modular Tactical Immunization Kit (MTIK) for Prophylactic and Therapeutic Vaccination in Pandemics, Remote Field Trauma and Bio Threat Conditions

Presentation Author: Dr. Michael Super

MHSRS-23-10580 - SESSION 3 - #33

Tracking Vaccine Effectiveness During the Rapid Emergence of SARS-CoV-2 Variants in the INDOPACOM Region 2021-2023

Presentation Author: Dr. Catherine Uyehara Yamauchi

MHSRS-23-10620 - SESSION 3 - #34

Real-Time, Non-Contact Optical Screening of Infectious Viruses

Presentation Author: Dr. Wangcun Jia

MHSRS-23-10724 - SESSION 3 - #35

Colorimetric Loop Mediated Isothermal Amplification (LAMP) for Rapid Detection and Diagnosis of Infections in the Pre-Hospital Environment

Presentation Author: Dr. Olivia Tran

MHSRS-23-10729 - SESSION 3 - #36

Outcomes of COVID-19 Pneumonia in Active-Duty Military Personnel

Presentation Author: Capt Anita Pechenko

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Antimicrobial Countermeasures for Wound Infections in Military Personnel

MHSRS-23-07925 - SESSION 3 - #37

Fluoxetine as a Potential Wound Therapeutic: A Novel, Non-Antibiotic Approach to Wound Infection

Presentation Author: Dr. Roslyn Isseroff

MHSRS-23-07941 - SESSION 3 - #38

PEG-BPEI Loaded Sponges Neutralize Pathogen Virulence Factors That Inhibit Wound Healing

Presentation Author: Dr. Charles Rice

MHSRS-23-08163 - SESSION 3 - #39

Characterization of the Biofilm from enteroaggregative Escherichia coli isolates with Different Fimbrial Types

Presentation Author: Ms. Viktoria Van Nederveen

MHSRS-23-08178 - SESSION 3 - #40

First-in-Human Clinical Study Investigating the Safety and Antimicrobial Efficacy of Stabilized Hypochlorous Acid in Patients with Chronic Leg Ulcers

Presentation Author: Dr. Magnus Mustafa Fazli

MHSRS-23-08199 - SESSION 3 - #41

Systematic Review of the Effect of Loop Diuretics on Antibiotic Pharmacokinetics

Presentation Author: MAJ Daniel Selig

MHSRS-23-08831 - SESSION 3 - #42

Antibiotic Clearance by the Seraph 100 Microbind Affinity Blood Filter

Presentation Author: MAJ Daniel Selig

MHSRS-23-08241 - SESSION 3 - #43

Novel Janus-Type Dressings Consisting of Microneedle Arrays and Nanofiber Aerogels for Biomimetic Delivery of Multiple Therapeutic Agents

Presentation Author: Dr. Jingwei Xie

MHSRS-23-08377 - SESSION 3 - #44

Host CD3+ T-Cells Can Significantly Modulate Phage Treatment Effects on Bacterial Bioburden in Mouse Models

Presentation Author: Dr. Renhua Li

MHSRS-23-08387 - SESSION 3 - #45

A Step Towards the Field: Validating the Analytical Performance of MeMed BV, a Host-Based Test for Differentiating Between Bacterial and Viral Infection, in Whole Blood Specimen

Presentation Author: Dr. Tanya Gottlieb

MHSRS-23-08400 - SESSION 3 - #46

Using Endotoxin Preconditioning and MyD88-Independent Signaling to Ameliorate Lethal Sepsis

Presentation Author: Dr. Takeshi Ono

MHSRS-23-08453 - SESSION 3 - #47

Rapid Disassembly of Bacterial Biofilms by a Blue Light-Ferric Modality

Presentation Author: Dr. Yongli Li

MHSRS-23-08457 - SESSION 3 - #48

MEPicides to Combat Multidrug-Resistant Wound Infections

Presentation Author: Dr. Allyson Dailey

MHSRS-23-08476 - SESSION 3 - #49

Wound Disinfection with aPDT on the Battlefield

Presentation Author: Ms. Yanfang Feng

MHSRS-23-08495 - SESSION 3 - #50

Fighting Resistance – Antibiotic Stewardship as Interdisciplinary Approach to Enhance Efficiency of Anti-Infective Treatment at the Bundeswehr Central Hospital in Koblenz

Presentation Author: MAJ David Zeidler

MHSRS-23-08501 - SESSION 3 - #51

RAPID-iNose: Cutting-Edge Wearable for Real-Time Pathogen Detection and Infection Prediction

Presentation Author: Dr. Xiaonao Liu

MHSRS-23-08503 - SESSION 3 - #52

AMPGPT, Novel Antimicrobial Peptide Production Using a Generative Pretrained Transformer

Presentation Author: Dr. Scott Dean

MHSRS-23-08585 - SESSION 3 - #53

Deployable RAPID System for Multidrug-Resistant Bacteria Detection in Infected Combat-Related Wounds

Presentation Author: Dr. Melissa Chen

MHSRS-23-08593 - SESSION 3 - #54

Polyproline Peptides for the Treatment of Wound Infections Caused by Hypervirulent Klebsiella pneumoniae

Presentation Author: Dr. Renee Fleeman

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MHSRS-23-08728 - SESSION 3 - #55

Combination Therapy with Phage and Wireless Electroceutical Dressing (WED) to Overcome Biofilm Infected Wounds

Presentation Author: Dr. Biswajit Biswas

MHSRS-23-08781 - SESSION 3 - #56

Development of a Stringent Ex Vivo–Burned Porcine Skin Wound Model to Study the Effectiveness of Various Antibacterial Treatments for Burn Wounded

Presentation Author: Dr. Ping Chen

MHSRS-23-08789 - SESSION 3 - #57

Novel Polyammonium Bisulfate Clusters: A Potential Antimicrobial Agent for Treating Wounds

Presentation Author: Ms. Brooke Pierson

MHSRS-23-08792 - SESSION 3 - #58

Development of Therapeutic Antibodies Against Quorum Sensing Receptor of Methicillin Resistant Staphylococcus aureus (MRSA-252): A New Approach to Stop Bacteria and Bacterial Resistance to Antibiotic

Presentation Author: Dr. Shamim Mohammad

MHSRS-23-08842 - SESSION 3 - #59

Advanced Development of Adaptive Phage Therapy - A Novel Approach to Addressing Antimicrobial Resistant Bacterial Infections

Presentation Author: Michael Billard

MHSRS-23-08851 - SESSION 3 - #60

Zymicidin – A Novel Antibiotic Family with Activity Against ESKAPEE Pathogens

Presentation Author: Mr. Michael Liu

MHSRS-23-08880 - SESSION 3 - #61

Efficacy of EBL-1003 Prophylaxis and Therapy in an Inhalational Mouse Model of Plague

Presentation Author: Ms. Annette Gray

MHSRS-23-08944 - SESSION 3 - #62

Directed Evolution Expands the Activity of Therapeutic Phages Against Drug-Resistant Pseudomonas aeruginosa and Klebsiella pneumoniae

Presentation Author: Mikeljon Nikolich

MHSRS-23-08974 - SESSION 3 - #63

Discovery of a Novel Inhibitor Targeting the Allosteric Site of DsbA, a Thiol-disulfide Oxidoreductase in Multidrug-Resistant Acinetobacter baumannii

Presentation Author: Dr. Iwarduth Soojhawon

MHSRS-23-08980 - SESSION 3 - #64

Field Storage and Transit Conditions for Anesthetics and Antibiotics in Simulated Austere Hot and Humid Climate

Presentation Author: Dr. Daniel Thompson

MHSRS-23-09021 - SESSION 3 - #65

A Novel Rapid Drug Discovery Model for Sepsis

Presentation Author: Mr. Mark Widder

MHSRS-23-09078 - SESSION 3 - #66

A New Multi-Dimensional Paradigm for Evaluating Newly Approved Drugs to Fill Force Health Protection Gaps: Presentation of a Use Case for Repurposing Approved Antibiotics for Treating Combat Wound Infections

Presentation Author: LTC Jesse DeLuca

MHSRS-23-09096 - SESSION 3 - #67

Effects of a Novel Non-Biologic Desiccant to Remove Dermatophytes Using a Deep Partial Thickness Wound Porcine Model

Presentation Author: Mr. Joel Gil

MHSRS-23-09103 - SESSION 3 - #68

The Antimicrobial and Wound Healing Effects of a Novel Hydrogel Combat Gauze with Copper on Third-Degree Burns Using a Porcine Model

Presentation Author: Mr. Michael Solis

MHSRS-23-09107 - SESSION 3 - #69

Evidence on the Barrier Properties of a PHMB-Impregnated Acellular Biologic Grafts for Treatment of Third-Degree Burns

Presentation Author: SGT Alexander Higa

MHSRS-23-09109 - SESSION 3 - #70

The Prevalence of Leukemoid Reaction in Patients Undergoing Extracorporeal Membrane Oxygenation

Presentation Author: CPT Christian Wells

MHSRS-23-09112 - SESSION 3 - #71

Evaluation of a Copper-Coated Hydrogel Wound Dressing Using Viable Human Skin: Tracking Infection Control and Wound Healing Markers, Ex Vivo

Presentation Author: Dr. Aaron Strickland

MHSRS-23-09126 - SESSION 3 - #72

Intranasal Phage Therapy with the WRAIR_PAM3 Cocktail Shows Efficacy Against Pseudomonas aeruginosa Lung Infection in Mice

Presentation Author: Dr. Nino Mzhavia

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MHSRS-23-09267 - SESSION 3 - #73

Lavage Solutions Mixed by Hand May Eradicate Biofilms Better than Commercial Lavage Products in an Ex Vivo Model of Gravity-Driven Wound Lavage

Presentation Author: Mr. Robert Falconer

MHSRS-23-09369 - SESSION 3 - #74

Efficacy of EBL-1003 Treatment in an Inhalational Mouse Model of Tularemia

Presentation Author: MAJ Mary K. Hourihan

MHSRS-23-09498 - SESSION 3 - #75

Novel Stabilized Hypochlorous Acid Formulations with Potential Multi-Purpose Use Against Skin and Soft-Tissue Biofilm Infections

Presentation Author: Ms. Aina Kristin Pham

MHSRS-23-09599 - SESSION 3 - #76

BioSabre: An Orthogonal Weapon to Combat Multi-Drug Resistant ESKAPEE Pathogens

Presentation Author: Mr. Zachary Rivas

MHSRS-23-09674 - SESSION 3 - #77

A Synthetic Antimicrobial Peptide Inspired by American Alligator Combats MDR Acinetobacter baumannii

Presentation Author: Dr. Monique van Hoek

MHSRS-23-09708 - SESSION 3 - #78

Flexible Microfluidic Process Technology for Biopharmaceutical Purification of Bacteriophages

Presentation Author: Dr. Lap Man Lee

MHSRS-23-09740 - SESSION 3 - #79

A Drug Releasing Chest Tube for Infection Prevention in the Far Forward Environment

Presentation Author: Dr. Daniel Stromberg

MHSRS-23-09833 - SESSION 3 - #80

Development of Synthetic Phages with Therapeutic Potential through the Genome Mining of Multidrug-Resistant Pathogens

Presentation Author: Dr. Yoann Le Breton

MHSRS-23-09843 - SESSION 3 - #81

A Pipeline for Early Development and Preclinical Evaluation of Novel Antimicrobials for Combat Wound Infections

Presentation Author: Dr. Yoann Le Breton

MHSRS-23-09860 - SESSION 3 - #82

The Application of a Mouse Sepsis Model for the Development and Preclinical Evaluation of Antibiotics and Non-Antibiotic Therapeutics Targeting Multiple Drug-Resistant Staphylococcus aureus

Presentation Author: Mr. John Vitucci

MHSRS-23-09873 - SESSION 3 - #83

The Development and Evaluation of a Novel Anti-Microbial Peptides for Further Progression through the Combat Wound Infection Division Preclinical Pipeline

Presentation Author: Mr. John Vitucci

MHSRS-23-09882 - SESSION 3 - #84

Translational Development of Antimicrobial Blue Light-Coupled Negative-Pressure Wound Patch

Presentation Author: Dr. Jie Hui

MHSRS-23-10041 - SESSION 3 - #85

Translating the In Vitro Anti-Biofilm Potential of Bovine Lactoferrin to Applications as an In Vivo Anti-Infective in Battlefield-Relevant Open Fractures

Presentation Author: Dr. Jillian Cornish

MHSRS-23-10081 - SESSION 3 - #86

RECCE[®]327: A Novel Synthetic Anti-Infective for the Treatment of Antimicrobial-Resistant Bacterial Sepsis Infections

Presentation Author: Mr. John Prendergast

MHSRS-23-10092 - SESSION 3 - #87

Wound Healing Promoted by Broad-Spectrum, Phage Structure Mimicking, Synthetic Antibacterial Nanoparticles as a Topical or an Intravenous Formulation, Which Cleared MDR ESKAPE Pathogens Induced Infections in Wound Models

Presentation Author: Dr. Prakash Nallathambiy

MHSRS-23-10110 - SESSION 3 - #88

Management of Dog-Bite Injuries in a Military Working Dog Unit: Injury Characteristics, Complications and Protocols

Presentation Author: Dr. Ziv Izahki

MHSRS-23-10270 - SESSION 3 - #89

GelATA Wound Care Dressing to Combat Hostile Wound Biofilm and Promote Functional Wound Closure

Presentation Author: Dr. Mohamed El Masry

MHSRS-23-10277 - SESSION 3 - #90

Development of 405nm Antibacterial Phototherapy Wound Irradiators

Presentation Author: Mr. Robert Ireland

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MHSRS-23-10322 - SESSION 3 - #91

The Development of Durable Fixed Bacteriophage Cocktails for Combination with Standard of Care as a Medical Solution for Multidrug-Resistant Bacterial Infections

Presentation Author: Dr. Mikeljon Nikolich

MHSRS-23-10337 - SESSION 3 - #92

Investigating Safety, Tolerability and Efficacy of Topically Applied Pravabismane in Subjects with Moderate Diabetic Foot Infection: Phase 2 Randomized, Open Label, Controlled, Multi-Center Study

Presentation Author: Dr. Brett Baker

MHSRS-23-10344 - SESSION 3 - #93

A Monoclonal Antibody Platform Yields a Series of Products That Prevent Pulmonary Infections and Wound Infections Caused by ESKAPEE Pathogens

Presentation Author: Dr. Daniel Zurawski

MHSRS-23-10361 - SESSION 3 - #94

In Situ Formed Biodegradable Microneedles for the Prevention and Treatment of Battlefield Injury Infections

Presentation Author: Dr. Ali Tamayol

MHSRS-23-10388 - SESSION 3 - #95

The Department of Defense Combating Antibiotic-Resistant Bacteria (CARB) Small Molecule Drug Development Platform and Pipeline for Developing New Therapeutics for Combat Wound Infections and Sepsis

Presentation Author: LTC Charlotte Lanteri

MHSRS-23-10420 - SESSION 3 - #96

A Novel Method for the Acylation of Electrospun Chitosan Nanofibers Using an Antimicrobial Fatty Acid

Presentation Author: Mr. Ezzuddin Abuhussein

MHSRS-23-10431 - SESSION 3 - #97

Portable Device for Rapid Identification of Locally Sourced Phage for Use in Phage Therapy Applications

Presentation Author: Dr. Scott Angus

MHSRS-23-10460 - SESSION 3 - #98

Improved Sepsis Prognostic Assays Achieved with Multi-Modal Data Streams

Presentation Author: Ms. Elizabeth Chiyka

MHSRS-23-10473 - SESSION 3 - #99

Research and Development of Hyperimmune Bovine Colostrum Products for the Prevention of Travelers' Diarrhea

Presentation Author: Dr. Renee Laird

MHSRS-23-10506 - SESSION 3 - #100

In Vivo Analysis of a Lactoferrin/Ceftazidime-Based Combination Powder to Manage Biofilm Implant-Related Infection

Presentation Author: Mr. Tyler Smith

MHSRS-23-10539 - SESSION 3 - #101

Amicidin-alpha Prolonged Field Care (PFC) to Prevent Infection of Injured Warfighters Up to 72 Hours

Presentation Author: Dr. Eric Roche

MHSRS-23-10563 - SESSION 3 - #102

Development of a Wound Bandage System That Utilizes Photodynamic Inactivation to Treat Multi-Drug Resistant Bacterial Infections

Presentation Author: Dr. Joel Cooper

MHSRS-23-10566 - SESSION 3 - #103

Antibiofilm Efficacy of a Wound Protectant Gel Tested in a Sheep Model of Blast-Related Trauma and Long Bone Open Fracture Infection

Presentation Author: Ms. Annika Hylan

MHSRS-23-10590 - SESSION 3 - #104

Evaluation of GENESYS: A Silver Electrode Intervention to Treat Bloodstream Infection in the Warfighter

Presentation Author: Dr. Alexander Bobrov

MHSRS-23-10734 - SESSION 3 - #105

Repurposing Metronidazole for Targeting the Core of the Bacterial Biofilm

Presentation Author: Mr. Nicholas Ashton

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Tissue Wound Management for Prolonged Care Environments

MHSRS-23-07978 - SESSION 3 - #106

The Influence of Adequate Debridement and Placental-Derived Allografts on Diabetic Foot Ulcers

Presentation Author: Dr. William Tettelbach

MHSRS-23-08282 - SESSION 3 - #107

Spaceflight Has an Acute Adverse Impact on Dorsal Wound Healing-Relevant Gene Expression Networks: A Transcriptomic Study Using a Mouse Model

Presentation Author: Ms. Allison Hoke

MHSRS-23-08319 - SESSION 3 - #108

A Large Animal Injury-Based Model of Extremity Compartment Syndrome

Presentation Author: Dr. Robert Moritz

MHSRS-23-08321 - SESSION 3 - #109

Ratiometric Imaging of Intracellular Oxygen Levels to Study Aberrant Wound Healing

Presentation Author: Dr. Fei Peng

MHSRS-23-08339 - SESSION 3 - #110

Vitamin K3 (menadione) Acts as a Photosensitizer with Antimicrobial Blue Light (aBL) to Kill Drug-Resistant Bacteria in Biofilms, Including a Porcine Skin Explant Wound Model

Presentation Author: Mrs. Laisa Bonafim Negri

MHSRS-23-08468 - SESSION 3 - #111

Localized Deep Tissue Drug Delivery of Nucleic Acids by Droplet Micromist Technology Device (DMTD) - A Paradigm Shift in Treating Chronic Pressure Ulcers

Presentation Author: Dr. Lakshmi Pulakat

MHSRS-23-08496 - SESSION 3 - #112

An Adaptive Study Concept to Investigate the Efficacy of ILP100-Topical on Complication-Free Healing in Surgical Wounds in Obese and Pre-/Diabetic Patients with Increased Risk for Delayed Healing and Wound Complications

Presentation Author: Dr. Andreas Fasth

MHSRS-23-08682 - SESSION 3 - #113

A Robust Biocompatible Hydrogel Material as Coating for Oxygen-Sensing Films Used within Extracorporeal Perfusion Systems

Presentation Author: Dr. Badri Parshad

MHSRS-23-08856 - SESSION 3 - #114

Autologous Volar Fibroblasts Injection into the Stump Site of Amputees

Presentation Author: Dr. Nina Rossa Haddad

MHSRS-23-08891 - SESSION 3 - #115

The Effect of Regenerative Debridement Technology (RDT*) on Wound Bed Preparation with Respect to pH Modulation and Normalization

Presentation Author: Dr. Steven Kavros

MHSRS-23-08943 - SESSION 3 - #116

BCX: A Novel Strategy to Counter Antibiotic Resistance in MDROs

Presentation Author: Dr. Maya Farha

MHSRS-23-09016 - SESSION 3 - #117

Pre-Clinical Validation of a Novel Alginate-Based Sealant for Rapid Treatment of Tracheal Injuries

Presentation Author: Mrs. Joanne Walker

MHSRS-23-09083 - SESSION 3 - #118

Deploying Bioactive Peptides in Bioprinted Dermal-Epidermal Composites for Improved Skin Regeneration

Presentation Author: Dr. Donald Aduba Jr.

MHSRS-23-09177 - SESSION 3 - #119

Effect of Inoculation Amount and Timing to Treatment on Antibiotic Tolerance: Implications on Treatment and Extremity Injury Research

Presentation Author: Dr. Stefanie Shiels

MHSRS-23-09178 - SESSION 3 - #120

Selenium Bandages and Cotton Cloth That Kill Microorganisms in Wounds

Presentation Author: Dr. Ted Reid

MHSRS-23-09238 - SESSION 3 - #121

Topical Senolytics: A Novel Pulse-Dose Intervention Targeting of Cellular Senescence to Optimize Wound Healing in Combat Wound Care

Presentation Author: Grace Yu

MHSRS-23-09282 - SESSION 3 - #122

Burn and Blast Injuries in Connection with the Military Operations in the Ukraine: The Impact of Acellular Fish Skin and Other Techniques on Wound Healing

Presentation Author: Petra Kotzbeck

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MHSRS-23-09297 - SESSION 3 - #123

Use of Next Generation Bioactive Peptides in Skin Substitutes to Promote Wound Healing and Skin Regeneration

Presentation Author: Dr. Sandhya Xavier

MHSRS-23-09441 - SESSION 3 - #124

Cold Atmospheric Pressure Plasma: A Multi-Purpose Medical Technology

Presentation Author: Ms. Esha Sharika Kaul

MHSRS-23-09457 - SESSION 3 - #125

Use of Novel Alginate-Based Sealants for the Treatment of Pleural Injuries: Safety and Efficacy in Small (Rat) and Large (Pig) Pre-Clinical Models

Presentation Author: Dr. Daniel Weiss

MHSRS-23-09491 - SESSION 3 - #126

Development of a Cryopreservation System for Cell-Seeded Tissue Engineered Constructs

Presentation Author: Dr. Young Min Ju

MHSRS-23-09676 - SESSION 3 - #127

Develop a New Type of Nanoparticles with Acellular Porcine Bone for Orthopedic Regeneration and Imaging

Presentation Author: Dr. Bo Wang

MHSRS-23-09779 - SESSION 3 - #128

Therapeutic Smart Wound Care Bandage with Integrated Biosensors for Continuous Healing and Monitoring of Lacerations, Diabetic Ulcers and Burn Wounds

Presentation Author: Mr. Marc Lindsay

MHSRS-23-09867 - SESSION 3 - #129

Evaluation of a Combination Antimicrobial Wound Cleanser and Gel to Treat Infections in a Porcine Combined Hemorrhage/Full Thickness Wound Model

Presentation Author: Dr. Kameel Zuniga

MHSRS-23-09871 - SESSION 3 - #130

Stable Formulations of Doxycycline Hyclate (DH) for Intramuscular (IM) Administration in the Case of Battlefield Infectious Emergencies and in Bioterrorism Situations

Presentation Author: Dr. Madhav Kamat

MHSRS-23-09933 - SESSION 3 - #131

Improving Efficacy of Growth Factor-Based Therapies by Inclusion into Novel Cyclodextrin Hydrogels to Accelerate Cutaneous Wound Closure

Presentation Author: Dr. Ivan Jozic

MHSRS-23-10015 - SESSION 3 - #132

Enhancement of Wound Healing and Revascularization with Engineered Proteoglycan Therapy

Presentation Author: Dr. Aaron Baker

MHSRS-23-10180 - SESSION 3 - #133

In Vitro Skin-Microbiota Wound Healing Testbed

Presentation Author: Dr. Andrea Timm

MHSRS-23-10215 - SESSION 3 - #134

Local Immunomodulatory Patch (LIP) for the Management of Chronic Wounds

Presentation Author: Dr. Bruna Corradetti

MHSRS-23-10252 - SESSION 3 - #135

Patterning of Hair Follicles in Bioengineered Skin Tissue Constructs for Improved Wound Healing

Presentation Author: Dr. Cate Wisdom

MHSRS-23-10362 - SESSION 3 - #136

Earlier May Be Better: Surgical Debridement Practices and Associated Outcomes Among Open Long-Bone Fracture Patients

Presentation Author: Dr. Qaidar Alizai

MHSRS-23-10410 - SESSION 3 - #137

Tissue Sealants and Dressings for Rapid Wound Healing

Presentation Author: Dr. Kaushal Rege

MHSRS-23-10578 - SESSION 3 - #138

Nonthermal Plasma Directed Electron Beam (NT-PDEB™) as a Treatment Modality for Wound Healing in Combat Casualty Care and Military Operational Medicine

Presentation Author: Dr. Joseph Bauer

MHSRS-23-10595 - SESSION 3 - #139

Rules of Engagement: NSTI Outcomes for Patients Transferred to Civilian vs. Military Healthcare Centers

Presentation Author: Dr. Hector Mejia

MHSRS-23-10645 - SESSION 3 - #140

Shear-Thinning Biomaterials Capable of Prolonged Delivery of Proangiogenic Factors for Combat Wound Management

Presentation Author: Mr. Giriraj Kailas Lokhande

MHSRS-23-10650 - SESSION 3 - #141

Wearable Sensor Technology to Prevent Pressure Injuries

Presentation Author: LCDR Alaina Crotty

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MHSRS-23-10671 - SESSION 3 - #142

Enhancing Infected Wound Healing Using Self-Loomotive, Antimicrobial Microrobots (SLAM)

Presentation Author: Mr. Yujin An

Addressing Military Vaccine Hesitancy: A Crucial Barrier to Force Health Protection and Pandemic Preparedness

MHSRS-23-09373 - SESSION 3 - #143

Impact of Route of Administration on Side Effects of Jynneos Vaccination

Presentation Author: CAPT Julia Switzer

MHSRS-23-10576 - SESSION 3 - #144

Intradermal Delivery of Adjuvanted Recombinant Subunit SARS-CoV-2-S Protein Vaccines via VaxiPatch

Presentation Author: Mr. George Talbott

Microbiome and Pathogenesis: Implications for Systemic Immunity and Wound Healing

MHSRS-23-08235 - SESSION 3 - #145

Influence of *Lactobacillus reuteri*, *Bifidobacterium animalis* subsp. *lactis*, and Prebiotic Inulin on Dysbiotic Dental Biofilm Composition Ex Vivo

Presentation Author: CPT Aaron Colamarino

MHSRS-23-08995 - SESSION 3 - #146

Fracture Related Infections After Low-Velocity Ballistic Tibia Fractures: What Do Cultures Show?

Presentation Author: Dr. Meghan Wally

MHSRS-23-09607 - SESSION 3 - #147

A Human-Origin Probiotic Cocktail Protecting the Brain by Ameliorating Leaky Gut and Blood-Brain Barriers

Presentation Author: Dr. Santosh Kumar Prajapati

MHSRS-23-10094 - SESSION 3 - #148

Clinical Evaluation of Travelan® an Oral Prophylactic for Prevention of Traveler's Diarrhea in Active Duty Military Service Assigned Abroad

Presentation Author: Dr. Joanne Casey

Medical Countermeasure Assessment for Flaviviruses and other Vector-borne Viral Pathogens of Military Importance

MHSRS-23-08208 - SESSION 3 - #149

The Role of Gamma-delta ($\gamma\delta$) T Cells and Natural Killer (NK) Cells During Acute HIV-1 Infection on the Development of Neutralization Breadth

Presentation Author: MAJ Gina Griffith

MHSRS-23-08248 - SESSION 3 - #150

Development of a Hamster Model of Yellow Fever Hemorrhagic Disease for Coagulation-Based Countermeasure Development

Presentation Author: Dr. Adam Bailey

MHSRS-23-08790 - SESSION 3 - #151

Small Molecule Therapeutics Targeting Members of the Bunyavirales Order

Presentation Author: Dr. Fang Liu

MHSRS-23-09017 - SESSION 3 - #152

Flavivirus RT-qPCR Validation for Rapid Screening Detection in Human Sera

Presentation Author: Mr. Julio Evangelista

MHSRS-23-09074 - SESSION 3 - #153

Novel Echarate Virus Variant Isolated from a Human Case of Febrile Illness in Chanchamayo-Peru

Presentation Author: Mrs. Gilda Troncos

MHSRS-23-09642 - SESSION 3 - #154

Force Health Protection Saves Lives: Provision of Tecovirimat for Treatment of Mpox Infection

Presentation Author: Mrs. Christa Madock

MHSRS-23-09880 - SESSION 3 - #155

Development and Characterization of a Sublethal-sequelae Mouse Model of EEEV Infection

Presentation Author: Dr. Kylene Kehn-Hall

MHSRS-23-09956 - SESSION 3 - #156

Characterization of Dengue Live Virus Human Challenge (LVHC) Strains in Primary Human Cell Lines

Presentation Author: Dr. Sandra Mayer

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Surveillance of Operationally Relevant Viral Hemorrhagic Fever and Rickettsial Vector Borne Infectious Disease Threats, Insecticide Resistance, and Assessment of Vaccine Efficacy to Predicted T Cell Epitopes and B Cell Antigens in AFRICOM

Presentation Author: Lt Daniel Silberger

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The USAMRIID Special Pathogens Laboratory: Detecting the Next Clinical and Environmental Threat

Presentation Author: Dr. Jeffrey Koehler

MHSRS-23-10564 - SESSION 3 - #159

Generation of Therapeutic Human Monoclonal Antibodies Against Hantaviruses from Human-Immune-System Humanized DRAGA Mice

Presentation Author: Dr. Ahmad Faisal Karim

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Field-Enabled Biological Warfare Countermeasures through Ultra-High Concentration (500+ mg/mL) Monoclonal Antibody Reformulations

Presentation Author: Dr. Daniel Dadon

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Comparative Analysis of Molecular Pathogenic Mechanisms and Antiviral Development Targeting Old and New World Hantaviruses

Presentation Author: Mr. Nikhil Chakravarty

Advances in Regenerative Medicine for the Treatment of Neuromusculoskeletal Injuries from Point of Injury to Definitive Care and Beyond

MHSRS-23-07938 - SESSION 3 - #162

Novel Regenerative Medicine Approaches to Mitigate Sexual Dysfunction Following Combat Related Pelvic Trauma

Presentation Author: CPT Ross Luther

MHSRS-23-07940 - SESSION 3 - #163

Mesenchymal Stem Cell Therapy to Promote Tissue Regeneration and Functional Outcomes in Neuromusculoskeletal Injuries

Presentation Author: Dr. Shashikumar Salgar

MHSRS-23-08033 - SESSION 3 - #164

Long-Term Post-Transplant Coping and Mental Health in Eight Vascularized Composite Face Transplant (fvCA) Patients

Presentation Author: Dr. Lioba Huelsboemer

MHSRS-23-08169 - SESSION 3 - #165

3D Printed Bioelectronic Scaffolds Towards Accelerating Nerve Regeneration: A Study of Fabrication and Biocompatibility in Rodents

Presentation Author: Dr. Alexandra Rutz

MHSRS-23-08198 - SESSION 3 - #166

Hybrid Nanosomes as Therapeutic Agents to Treat Neuromusculoskeletal Injuries

Presentation Author: Dr. Anil Kumar

MHSRS-23-08225 - SESSION 3 - #167

Contactless Magnetically Responsive Injectable Hydrogel for the Treatment of Neuromusculoskeletal Injuries

Presentation Author: Dr. Silvia Panserì

MHSRS-23-08393 - SESSION 3 - #169

Large Segmental Bone Defects in Sheep Treated with 3D Printed Scaffolds and Autologous Adipose Derived Stem Cells Demonstrates Increased Stiffness Following Hardware Removal

Presentation Author: Dr. David Margolis

MHSRS-23-08410 - SESSION 3 - #170

Tissue Nanotransfection Based Endothelial-Targeted Epigenetic Gene Editing In Vivo to Rescue Diabetic Ischemic Wounds

Presentation Author: Dr. Kanhaiya Singh

MHSRS-23-08421 - SESSION 3 - #171

Phase 1 Normal Subjects Trial of Palmo-Plantar Fibroblasts Injection into the Distal Limb of Amputees to Reprogram to Palmo-Plantar Skin and Enhance Prosthetic Use

Presentation Author: Dr. Luis Garza

MHSRS-23-08437 - SESSION 3 - #172

Evaluation of Bone Healing of Calvarial Defect Utilizing a Novel Carbon Scaffold with Bone Morphogenetic Protein-2 and Mesenchymal Stem Cells

Presentation Author: Dr. Arezoo Mohammadipoor

MHSRS-23-08595 - SESSION 3 - #173

SP16 Attenuates Inflammation but Does Not Enhance Functional Outcomes in a Rat Model of a Volumetric Muscle Loss Injury

Presentation Author: Dr. Connor Dolan

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MHSRS-23-08718 - SESSION 3 - #174

Intra-articular Injections of Liposomal Adenosine Provides Significant Pain Relief and Gain in Function, Improves Comfortable Range of Motion and Slows Radiologic Progression in a Preclinical Canine Model of Osteoarthritis

Presentation Author: Dr. Siddhesh Angle

MHSRS-23-08771 - SESSION 3 - #175

Cell Death Induced in Rat Skeletal Muscle Cells Subjected to Cold Storage and Rewarming Can Be Prevented by a Cocktail of a Pan Caspase Inhibitor, Necrostatin-1 and Minocycline

Presentation Author: Dr. Swati Jain

MHSRS-23-09896 - SESSION 3 - #176

Cell Death Induced in Rat Skin Fibroblast Subjected to Cold Storage and Rewarming Can Be Prevented by a Cocktail of a Pan Caspase Inhibitor, Necrostatin-1 and Minocycline

Presentation Author: Dr. Swati Jain

MHSRS-23-08802 - SESSION 3 - #177

Sustained Dynamic Compression Device Provides Continuous Compression in the Setting of Bone Resorption Following Arthrodesis in an Ovine Model

Presentation Author: Dr. David Safranski

MHSRS-23-08815 - SESSION 3 - #178

Electrical and Chemical Stimulation Using Ionically Conductive Polymeric Implants for Soft Tissue and Wound Healing

Presentation Author: Dr. Sama Abdulmalik

MHSRS-23-08907 - SESSION 3 - #179

Evaluation of Acute and Delayed Effects of the Novel Stromal-Cell Based Therapeutic, Thera-101, in Craniomaxillofacial Regenerative Healing and Angiogenesis in Rattus Norvegicus Critical Size Bone Defects

Presentation Author: Dr. Annette Rodriguez

MHSRS-23-08930 - SESSION 3 - #180

ETV2 is a Pioneer Factor which Reprograms Fibroblasts to Endothelium and ETV2 Null Pig Embryos Serve as a Platform for Exogenic Organ Production

Presentation Author: Dr. Daniel Garry

MHSRS-23-08938 - SESSION 3 - #181

Characterization of the MYF5/MYOD/MYF6 Null Pig

Presentation Author: Dr. Mary Garry

MHSRS-23-08945 - SESSION 3 - #182

Initial Assessment of Pirfenidone as an Antifibrotic Treatment for Volumetric Muscle Loss

Presentation Author: Dr. Jessica Motherwell

MHSRS-23-09003 - SESSION 3 - #183

ReLive - A Novel Neuromodulation Device for Limb Reanimation After Spinal Cord Injury

Presentation Author: CDR Joseph Ciacci

MHSRS-23-09010 - SESSION 3 - #184

Anti-Inflammatory Zwitterionic Hydrogels for Improved Wound Healing and Sustained Therapeutic Protein Delivery

Presentation Author: Dr. Adam Rocker

MHSRS-23-09038 - SESSION 3 - #185

New Functions for the Collagen Receptor, Discoidin Domain Receptor 2, in Bone Regeneration: Potentials for Engineering Skeletal Tissues

Presentation Author: Dr. Renny Franceschi

MHSRS-23-09104 - SESSION 3 - #186

Critical-Sized Bone Defect Regeneration Promoted by Porous Nanofibrous Scaffold with Covalent Peptide Attachment

Presentation Author: Dr. Peter Ma

MHSRS-23-09118 - SESSION 3 - #187

Effect of 1,4-DPCA/PEG, a Metabolic Modulator, on Nerve Regeneration Post-Transection in the Rat Forelimb

Presentation Author: Dr. Ellen Heber-Katz

MHSRS-23-09368 - SESSION 3 - #188

In Vivo Assessment of AMP2, a Novel Ceramic-Binding BMP-2 in a Sheep Interbody Fusion Model

Presentation Author: Dr. David Stewart

MHSRS-23-09396 - SESSION 3 - #189

Engineering a Bioactive Medical Device for Large Bone Defect Repair

Presentation Author: Dr. Yunzhi Yang

MHSRS-23-09415 - SESSION 3 - #190

Using 3D Extrusion Bioprinting for Cartilage Repair

Presentation Author: Dr. Eva Mueller

MHSRS-23-09630 - SESSION 3 - #191

3D Bioprinted Osteochondral Plugs as a Potential Novel Treatment for Osteochondral Injuries

Presentation Author: Dr. Nicholas Chartrain

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MHSRS-23-09698 - SESSION 3 - #192

Evaluation of an Immunoregenerative Treatment Strategy for Mitigating Post-Traumatic Osteoarthritis in a Rat Intra-Articular Fracture Model

Presentation Author: Dr. Michael Valerio

MHSRS-23-09710 - SESSION 3 - #193

Evaluation of Porcine Peripheral Nerves with Magnetic Resonance Neurography to Monitor Nerve Injuries and Repairs Following PEG Fusion

Presentation Author: 2LT David Carmack Jr

MHSRS-23-09729 - SESSION 3 - #194

Translation of a Novel Tendon Lubricant for the Prevention and/or Treatment of Adhesions

Presentation Author: Dr. Alan Miller II

MHSRS-23-09793 - SESSION 3 - #195

Evaluation of a Semisynthetic Hyaluronic Acid-Based Hydrogel for the Treatment of Volumetric Muscle Loss

Presentation Author: Dr. Stephen Goldman

MHSRS-23-09819 - SESSION 3 - #196

Custom Zirconia Devices for Multi-Dimensional Alveolar Ridge Augmentation in Patients with History of Trauma

Presentation Author: MAJ Joseph Retrum

MHSRS-23-09923 - SESSION 3 - #197

Evaluating Effects of Combination of Osteoanabolic Agents on Bone Defect Healing

Presentation Author: Dr. Ivo Kalajzic

MHSRS-23-09932 - SESSION 3 - #198

Successful Extension of Vascularized Composite Allograft Perfusion Cold Storage to 24 Hours in a Rat Hind Limb Transplant Model

Presentation Author: Mr. Po'okela Ng

MHSRS-23-09967 - SESSION 3 - #199

Comparing Laboratory Grade Tendon Lubrication with Manufactured Grade Using Indentation

Presentation Author: Mrs. Ramona Reisdorf

MHSRS-23-09968 - SESSION 3 - #200

The Influence of Schwann Cells and Schwann Cell-Derived Exosomes on Pain and Sensation Outcomes After Repair of a Long-Segmental Peripheral Nerve Defect in the Rat

Presentation Author: Mr. Joseph Yunga Tigre

MHSRS-23-10030 - SESSION 3 - #201

Regenerative Tracheal Implants from 3D-Printed Advanced Biomaterials with Integrated Decellularized Extracellular Matrix

Presentation Author: Mr. Brad Young

MHSRS-23-10032 - SESSION 3 - #202

Macrophage Targeted Nanoemulsions and Nanoemulgels for Local Immuno-Modulation, Analgesia and Neuroregeneration Support

Presentation Author: Mr. Lu Liu

MHSRS-23-10089 - SESSION 3 - #203

Macrophage Targeted Nanoimaging Strategies for Non-Invasive Monitoring of VCA Rejection

Presentation Author: Dr. Jelena Janjic

MHSRS-23-10182 - SESSION 3 - #204

Neurorrhaphy Augmented with Light-Bonded Autologous Tissue

Presentation Author: Dr. Robert Redmond

MHSRS-23-10225 - SESSION 3 - #205

A Non-Invasive Imaging Technique to Evaluate Biomechanical Properties in Native and Engineered Cartilage

Presentation Author: Dr. Fernando Guastaldi

MHSRS-23-10247 - SESSION 3 - #206

Fracture Biomarker to Endochondral Phase of Healing Distinguishes Patients with Early Healing

Presentation Author: Dr. Chelsea Bahney

MHSRS-23-10267 - SESSION 3 - #207

Fibrous Biomimetic Basement Membranes for Enhanced Wound Healing

Presentation Author: Dr. Dina Gadalla

MHSRS-23-10280 - SESSION 3 - #208

In Vivo Efficacy of a Novel Nerve Coaptation Device as a Suture-Less Alternative for Repairing Peripheral Nerve Defects

Presentation Author: Dr. Geetanjali Bendale

MHSRS-23-10300 - SESSION 3 - #209

The Mohawk Homeobox Gene Identifies Calvarial Suture Stem Cells Required for Bone Repair

Presentation Author: Dr. Qizhi Qin

MHSRS-23-10330 - SESSION 3 - #210

Near-Infrared Fluorescent Nanoemulsion-Based Imaging of Inflammation and Association with Pain in a Mouse Model of Lower Limb Neuromuscular Polytrauma

Presentation Author: Mr. Andrew Shepherd

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MHSRS-23-10331 - SESSION 3 - #211

Developing a Scalable, Modular, Automated and Closed Process for Manufacturing Patient-Specific Bone Grafts
Presentation Author: Ms. Alexandra Plankey

MHSRS-23-10368 - SESSION 3 - #212

Clinical Applications of Intraneural Peripheral Nerve Morphology in Peripheral Nerve Repair
Presentation Author: Dr. Kelly Santos Roballo

MHSRS-23-10378 - SESSION 3 - #213

Detection of Senescent Peripheral Blood Mononuclear Cells Using C12FDG Predicts Chronological Age
Presentation Author: Dr. Johnny Huard

MHSRS-23-10436 - SESSION 3 - #214

Immunomodulation Associated with Neural Progenitor Cells and Muscle Progenitor Cells Allows Long Lasting and Effective Reconstruction of Complete and Chronic Spinal Cord Injury and Severe Muscular Atrophy. 4 to 7 Years of Clinical Follow-Up
Presentation Author: Dr. Gustavo A Moviglia

MHSRS-23-10447 - SESSION 3 - #215

In Vivo Validation of a Novel Biodevice to Treat Tendon Adhesions
Presentation Author: Dr. Peter Amadio

MHSRS-23-10466 - SESSION 3 - #216

MIRROR - Photobiomodulation Research Portfolio to Enhance Military Readiness
Presentation Author: Ms. Elizabeth Metzger

MHSRS-23-10498 - SESSION 3 - #217

Photobiomodulation Therapy for Plantar Fasciitis: A Single-Blind Randomized Control Trial
Presentation Author: Ms. Honey Cin

MHSRS-23-10554 - SESSION 3 - #218

Conductive DNA-Based Hydrogels for Rational Design of Tissue Engineering Scaffolds
Presentation Author: Mr. Dylan Scarton

MHSRS-23-10640 - SESSION 3 - #219

Defining Windows of Therapeutic Efficacy for N-Acetyl Cysteine to Combat Post-Traumatic Osteoarthritis After Battlefield Injury
Presentation Author: 1st Lt Austin Jenk

MHSRS-23-10761 - SESSION 3 - #220

Hybrid Autonomous Manufacturing: A Novel Strategy for Point-of-Care Manufacturing
Presentation Author: Dr. David Dean

MHSRS-23-10775 - SESSION 3 - #221

Tissue Nano-Transfection (TNT) Drives Improved Outcomes Following Peripheral Nerve Injury
Presentation Author: Ms. Ana Salazar Puerta

From Sockets to Osseointegration: Human Interface Solutions for Assistive Device Technology

MHSRS-23-08395 - SESSION 3 - #222

Prosthetic Attachment via Electromagnetic Attraction Across the Tissue Gap
Presentation Author: Mr. Will Flanagan

MHSRS-23-09462 - SESSION 3 - #223

Socket Fit, Comfort, and Pain During Military Specific Tasks with an Adaptable Transtibial Socket
Presentation Author: Ms. Alyssa Salazar

MHSRS-23-09579 - SESSION 3 - #224

Transforming Anthropomorphic Passive Free-Flow Foot (FFF) Prosthesis to the Powered Foot Prosthesis with Intuitive Control and Sensation (Bionic FFF)
Presentation Author: Dr. Mark Pitkin

MHSRS-23-09581 - SESSION 3 - #225

Establishing Bionic Prosthetic Control in Individuals Receiving Targeted Muscle Reinnervation for Pain Prevention
Presentation Author: Jonathon Schofield

MHSRS-23-09901 - SESSION 3 - #226

Experience to Date with Elective Above Knee Amputations Incorporating Agonist-Antagonist Myoneural Interface (AMI) Design
Presentation Author: Ms. Rachael Chiao

MHSRS-23-09918 - SESSION 3 - #227

Patient Reported Outcome Measures (PROMs) in Lower Extremity Agonist-Antagonist Myoneural Interface (AMI) Amputees
Presentation Author: Ms. Rachael Chiao

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MHSRS-23-09904 - SESSION 3 - #228

Experience to Date with Lower Limb Revision Amputations Incorporating Agonist-Antagonist Myoneural Interface (AMI) Design

Presentation Author: Mr. Corey Sullivan

MHSRS-23-09924 - SESSION 3 - #229

Transfemoral Amputation Incorporating eOPRA and Agonist-Antagonist Myoneural Interface (AMI) Design: Surgical Technique and Perioperative Care

Presentation Author: Mr. Corey Sullivan

MHSRS-23-10052 - SESSION 3 - #230

Balance Confidence and Walking Margins of Stability After Lower-Extremity Prosthesis Osseointegration: A Case Series

Presentation Author: Dr. Brecca Gaffney

MHSRS-23-10099 - SESSION 3 - #231

Laser Embedding of Antibacterial Silicon Nitride on Titanium Alloy Surfaces

Presentation Author: Dr. Ryan Bock

MHSRS-23-10263 - SESSION 3 - #232

Durability and Structural Integrity of Custom Designed 3D Printed Sockets Compared to Laminated and Diagnostic Thermoplastic Sockets

Presentation Author: Mr. Sai Yalla

MHSRS-23-10408 - SESSION 3 - #233

Osseointegrated Bone Cap to Reduce Bony Overgrowth, Heterotopic Ossification, and Stump Pain Following Amputation

Presentation Author: Dr. Dustin Williams

MHSRS-23-08846 - SESSION 3 - #234

Biomechanical Deficits and Minimal Detectable Change During Gait in Unilateral Transfemoral Amputees

Presentation Author: Dr. Payam Zandiyeh

From Laboratory to Clinic: Progress of Orthotic and Prosthetic Technologies and Outcomes

MHSRS-23-08848 - SESSION 3 - #235

Interlimb Load Asymmetry and Minimal Detectable Change in Unilateral Transfemoral Amputees During Sit-to-Stand

Presentation Author: Dr. Payam Zandiyeh

MHSRS-23-08822 - SESSION 3 - #236

Continuous Inter-Limb Gait Coordination and Stability in Veterans and Service Members with Transtibial Limb Loss: Influences of Prosthetic Ankle-Foot Devices

Presentation Author: David Herlihy

MHSRS-23-09390 - SESSION 3 - #237

Design and Development of a Powered Elbow Exoskeleton for Neuromuscular Injuries

Presentation Author: Dr. Sandesh Bhat

MHSRS-23-09602 - SESSION 3 - #238

Clinical Outcomes Associated with Microprocessor-Controlled Prosthetic Knees (MPKs) and Powered Prosthetic Knees in Active Individuals with Transfemoral Amputation

Presentation Author: Ms. Brianna Rozell

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Design of a Universal Prosthesis Interface for Delivering Haptic Sensation to People with Transradial Amputation

Presentation Author: Mr. Srikanth Chavali

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Clinical Outcome Measures of IDEO Users with Lower Limb Musculoskeletal Injury

Presentation Author: Dr. Michelle Lockwood

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Comparative Biomechanics Analysis of Powered and Unpowered Prosthetic Feet in Individuals with Transfemoral Amputation

Presentation Author: Mr. John Chomack

MHSRS-23-10560 - SESSION 3 - #242

An Implanted Ankle-Foot Prosthesis to Return Service Members to Duty

Presentation Author: Mr. Brandon Peterson

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Emulating Prosthetic Pylon Properties to Systematically Evaluate Effects on Locomotion Performance

Presentation Author: Dr. Kota Takahashi

MHSRS-23-10725 - SESSION 3 - #244

Wearable Ultrasound System for Controlling Upper-Limb Prosthetics

Presentation Author: Ms. Afsana Hossain Rima

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Solutions to Optimize and Accelerate Recovery from Neuromusculoskeletal Injury

MHSRS-23-07991 - SESSION 3 - #245

Application of a Novel Biomimetic Bone Adhesive to Promote Healing of Bone Fractures and Soft Tissues

Presentation Author: Dr. James Wang

MHSRS-23-08094 - SESSION 3 - #246

Enhancing Recovery After Spinal Cord Injury with Closed-Loop Vagus Nerve Stimulation

Presentation Author: Dr. Seth Hays

MHSRS-23-08214 - SESSION 3 - #247

Healing Trajectory of Critical Sized Tibial Bone Defect Demonstrated Divergent Etiologies in Bone and Muscle Tissues Under Polytrauma Condition

Presentation Author: Mr. Nabarun Chakraborty

MHSRS-23-08258 - SESSION 3 - #248

Leveraging Wearable Sensor Technology, Feature Engineering, and Machine Learning Techniques to Monitor Upper Extremity Function and Activity After Cervical Spinal Cord Injury

Presentation Author: Ms. Tessa Johnson

MHSRS-23-08326 - SESSION 3 - #249

In Vitro C2C12 Muscle Cell Model Evaluation of Probiotics on Wound Healing and Fatigue Amelioration Properties

Presentation Author: Dr. Camilla Mauzy

MHSRS-23-08340 - SESSION 3 - #250

Design and Fabrication of Micro Saw for Osteochondral Autograft Transplantation

Presentation Author: Dr. Pawan Pathak

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Carpal Tunnel Release Using Ultrasound Guidance (CTR-US): Outcomes of a Pragmatic Randomized Controlled Feasibility Trial within the Military Health System (MHS)

Presentation Author: Dr. Marin Smith

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Treatment with Near Infrared Light Prevents Muscular Fatigue After Intense Exercise in Mouse Models

Presentation Author: Joshua Tam

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The Use of TSPO PET as a Biomarker of Response to Anti-Inflammatory Therapy in a Rat Contusion Spinal Cord Injury Model

Presentation Author: Mr. Chaoqi Mu

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Clinically Applicable Structural and Molecular MRI Biomarkers of Injury and Recovery in a Rat Model of Spinal Cord Contusion Injury

Presentation Author: Dr. Jamie Reed

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Design and Evaluation of an Actuated, Soft Exosuit Functional Knee Brace for Improved ACL Rehabilitation

Presentation Author: Dr. Thomas Libby

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Effects of Different Types of Interdisciplinary Treatment Hours on Pain Impact in a Military Population with Chronic Pain

Presentation Author: MAJ Jeffrey Ransom

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A Network Analysis of Patient-Reported Outcomes in Active Duty Service Members with Chronic Pain

Presentation Author: MAJ Jeffrey Ransom

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Cognitive-Motor Dual-Tasking Results in Postural Instability in Healthy Service Members During an Augmented Reality Rifle Qualification Test

Presentation Author: Dr. Ryan Kaya

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Musculoskeletal Injuries, Functional Level, and Disposition of Soldiers Seeking Sports Medicine Care During Army Physical Readiness Training

Presentation Author: Dr. Richard Westrick

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Development of a Therapeutic anti-Siglec -15 Antibody to Reduce Bone Loss and Enhance Bone Integrity After Acute Spinal Cord Injury-Induced Immobilization

Presentation Author: Dr. Weiping Qin

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Compression Cycling of 3D-Printed Meniscal Tissues In Vitro Using a Custom Bioreactor

Presentation Author: Dr. George Klarmann

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Development of an Improved Parachute Ankle Brace for Ankle Prophylaxis and Recovery During Airborne Missions

Presentation Author: Mr. Nate Lazenga

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Injury Tracking Using Non-Invasive Metabolomic Analysis

Presentation Author: Geoffrey Gao

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Autograft versus Allograft in the Treatment of Long Bone Non-Unions: A Multicenter Study

Presentation Author: Dr. Meghan Wally

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Non-Surgical Interventions and Instrumented Running Kinetics Evaluation for Treatment of Lower-Limb Chronic Exertional Compartment Syndrome in an Active-Duty Service Member: A Case Study

Presentation Author: Dr. Teonette Velasco

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Mobility Virtual Assistant

Presentation Author: Ms. Catherine Ashley

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Differences in Functional Outcomes and Rehabilitation Exposure Between Service Members and Civilians with Lower Limb Loss

Presentation Author: Mr. Adam Bunn

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Demographics and Kinematic Predictors of Gait Speed in Service Members with Traumatic Lower Limb Amputation

Presentation Author: Mr. Adam Bunn

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Virtual Reality Environment for Improving At-Home Upper Extremity Physical Therapy and Recovery

Presentation Author: Dr. Luke Osborn

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Performance Optimization and Injury Mitigation for Air Force Student Fighter Pilots: Spine Training Program

Presentation Author: MAJ Stephanie Chayrez

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Photochemical Passivation of Arthritis-Related Inflammation in a Rat Knee Model

Presentation Author: Dr. Robert Redmond

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Photochemical Passivation for Prevention of Inflammation and Fibrosis of the Shoulder Capsule

Presentation Author: Dr. Robert Redmond

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Epigenetic Alterations Associated with Gene Expression Changes in Muscle and Bone in a Segmental Bone Defect Mouse Model

Presentation Author: Ms. Stacy-Ann Miller

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Extending Touch to Immersive Virtual Reality with a Neurostimulation-Based Haptic Feedback Platform

Presentation Author: Ms. Aliyah Shell

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Special Operations Performance and Recovery (SPaR) Occupational Therapy Outcomes

Presentation Author: Dr. Nicholas Levine

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Predicting Pain Chronification Following Traumatic Injury

Presentation Author: Dr. Jennifer Nyland

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Market-Level Variations in Low Back Pain Treatment and Outcomes

Presentation Author: Dr. William Patrick Luan

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Novel Wireless Electrotherapy for Healing of Infected and Diabetic Wounds

Presentation Author: Dr. Daria Narmoneva

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A Cellularized Nerve Regeneration Graft for the Repair of Peripheral Nerve Injuries

Presentation Author: Mr. Jeremy Perrelle

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Surgical Repair for Proximal Rectus Femoris Avulsion: Biomechanical Study

Presentation Author: Dr. Scott Tashman

MHSRS-23-08544 - SESSION 3 - #281

Surgical Reconstruction for Chronic Hamstring Injury: Biomechanical Study

Presentation Author: Dr. Scott Tashman

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Innovative Tools and Technologies for Predicting and Assessing Musculoskeletal Injuries of the Warfighter

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Diffusion-Weighted MRI Metrics Are Related to Quadriceps Strength in Asymptomatic and Osteoarthritic Muscles
Presentation Author: Dr. Scott Tashman

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Shear Wave Ultrasound Elastography for Compartment Syndrome Evaluations
Presentation Author: Dr. Ichiro Tsukamoto

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Using a Single Inertial Measurement Unit to Relate Y-Balance Reach Distance to Movement Complexity in U.S. Marines
Presentation Author: Dr. Amy Silder

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Development of a Model to Predict Re-Injury After Returning to Duty from a Musculoskeletal Injury: Prediction Model Derivation in U.S. Army Soldiers
Presentation Author: Dr. Daniel Rhon

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Multi-Scale Muscle Activation Methods for High-Fidelity Human Body Models to Simulate Braced Occupant Injury Risk
Presentation Author: Dr. Kevin Lister

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Service Member Musculoskeletal Injury Risk Stratification: A Traffic Light System
Presentation Author: Dr. Megan Roach

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A Confirmatory Factor Analysis of the Return to Duty Readiness Questionnaire (RDRQ)
Presentation Author: MAJ Carly Cooper

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Impact of COVID-19 Pandemic on Military Medical Encounters and Musculoskeletal Injuries
Presentation Author: Dr. Vy Nguyen

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Application of Three-Dimensional Knee Kineisiography to Identify Underlying Musculoskeletal Pathology in an Active-Duty Service Member: A Case Study
Presentation Author: Dr. George Wentz

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Active Duty and Veterans' Holistic Musculoskeletal Management and Enhancement (ADVet HOMME): A Program Overview
Presentation Author: Mr. Michael Smuda

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Factors Related to Failed Trials on a Hop-to-Stabilization Task in Service Members and Civilians with Chronic Ankle Instability
Presentation Author: Dr. Matt Hoch

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Realistic Injury Simulation for Development of Musculoskeletal Injury Predictive Capabilities
Presentation Author: Brian Baum

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Hallux Valgus Surgery and Occupational Retention Among U.S. Military Service Members
Presentation Author: Dr. D. Alan Nelson

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Creating a 3D Reconstruction of the Glenohumeral Joint from an MRI to Assist in Surgical Decision Making
Presentation Author: Mr. Jacob Dowe

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Mission-Ready Soldiers Report Pain with Basic Movements: A Comparison of Uninjured First-Term and Career Soldiers
Presentation Author: Dr. Benjamin Adams

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A Highly Sensitive Photothermal-Based Microfluidic Thread Analytical Devices (μ TADs) for Monitoring Inflammation Markers in Human Urine and Saliva
Presentation Author: Sameer Sonkusale

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Continuous Monitoring of Weight Bearing Behavior and 6-Month Outcomes Following Lower Extremity Fractures
Presentation Author: Mrs. Kylee North

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Continuous Biomarker Measurements Aid in the Detection of Peripheral Compartment Syndrome in a Porcine Model

Presentation Author: Dr. Giorgio Giatsidis

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Sensation-Seeking and Resilience Are Not Associated with Perceptual-Cognitive Control in Healthy U.S. Marines

Presentation Author: Ms. Ke'La Porter

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Multi-Center Clinical Study Using Ultrasound-Based Shear Wave Elastography in Patients with Suspicion of Having Acute Lower Extremity Compartment Syndrome

Presentation Author: Dr. Kenton Gregory

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ADRESTIA: An IMU-Based Technology for Accelerated Return to Duty Following Musculoskeletal Injury

Presentation Author: Dr. Pedram Hovareshti

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Estimating Relative Patellar Tendon Loading with Wearable Technology While Navigating Various Outdoor Terrains

Presentation Author: Dr. Alex Reiter

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Role of Multiple Anterior Cruciate Ligament Injuries on Thigh Musculature Motor Control

Presentation Author: Dr. Nathaniel Bates

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Early Detection of Pressure Injuries Using Subcutaneous Blood Flow by Noninvasive Optical Method

Presentation Author: Dr. Leonid Zubkov

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A Novel Methodology for Analyzing Surface Electromyography (sEMG) Data to Assess Muscular Fatigue During a Simulated Litter Carry Task

Presentation Author: Mr. Matthew Ballard

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Patient Reported and Biomechanical Outcomes for Service Members with Anterior Cruciate Ligament Reconstruction Undergoing Rehabilitation at a Military Treatment Facility

Presentation Author: Mr. Trevor Kingsbury

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Feasibility of an Injury Risk Screening Program

Presentation Author: Dr. Kyle Brandenberger

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The Effectiveness of Telehealth Gait Retraining in Addition to Standard Physical Therapy Treatment for Running-Related Knee Injuries in Military Service Members

Presentation Author: Dr. Erin Miller

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Portable Stiffness Measurement Device for Musculoskeletal Injury Prediction

Presentation Author: Dr. Kelley Virgilio

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Evaluating Back Motion and Performance Using Markerless Motion Capture: An Accuracy Study

Presentation Author: Mr. Charles Weisenbach

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Accuracy of a Markerless Motion Capture System in Assessing Neck Range of Motion

Presentation Author: Mr. Charles Weisenbach

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Individualized Design Optimization of a Soft Wearable Orthosis by Combining Human Shape Modeling and Musculoskeletal Simulation

Presentation Author: Mr. Ross Neuman

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ECG Variability During Autonomic Dysreflexia in a Spinal Cord Injury Rat Model

Presentation Author: Ms. Zada Anderson

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A Robotic Pipeline to Evaluate ACL Injury Prevention Measures

Presentation Author: Ms. Ophelie Herve

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SAVIT, a Novel Risk Score Based on the OTA Open Fracture Classification, Predicts Limb Salvage After Severe Open Tibia Fractures

Presentation Author: CPT Jefferson Lansford

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Development and Optimization of a Rodent Craniofacial Model for Assessment of Functional Recovery Following Volumetric Muscle Loss Injury

Presentation Author: Ms. Sydney Shriver

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Military Injury Biomechanics and Applications for Injury Prevention

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Repetitive Head Impact Exposure from Boxing in Civilian Law Enforcement Cadets

Presentation Author: Dr. Jaclyn Caccese

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Weight-Bearing Postmortem Human Subjects as a Lower Extremity Injury Model

Presentation Author: Mrs. Erika Matheis

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Lumbar Intervertebral Disk Response from Cyclical Loading and Induced Damage Conditions

Presentation Author: Mr. Trevor Leite

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Close-Range Fire Inflicting Behind Armor Blunt Trauma: A Case-Series and Implications for Battlefield Care

Presentation Author: CPT Tomer Talmay

MHSRS-23-09148 - SESSION 3 - #322

Evaluation of Nanostructured Viscoelastic Trauma Attenuating Backings for Use in Body Armor to Reduce Non-Penetrating Shockwave Injuries

Presentation Author: Ms. Melissa Sutter

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The Effect of a Soft Active Exosuit on Muscle Activations, Muscle Forces, and Spine Loading During Lifting Tasks

Presentation Author: Dr. Dennis Anderson

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Using Blast Trauma Cases to Assess the Explanatory Theories of Injuries and Support Biofidelic Future Modeling Work

Presentation Author: Dr. Rachel Lance

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Impact of Low-Intensity Blast Reveals Position-Dependent Blast Effects

Presentation Author: Dr. Zezong Gu

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Penetration Thresholds of In Situ Porcine Limbs as a Function of Sectional Density

Presentation Author: Mr. Joseph LeSueur

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Ovine Material Characterization and Development for Use in Modeling High-Rate Non-Penetrating Blunt Impact

Presentation Author: Ms. Patricia Thomas

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Implant Design and Cervical Spinal Biomechanics and Neurorehabilitation: A Finite Element Investigation

Presentation Author: Dr. Suman Chowdhury

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Hybrid III Dummy Lumbar Spinal Column Responses Under Vertical Impact

Presentation Author: Mr. Narayan Yoganandan

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Blunt Cardiac Contusion in Live Swine Surrogate from Behind Armor Blunt Trauma

Presentation Author: Col Lewis Somberg

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Annulus Fibrosus Quasi-Static Failure and Mechanical Degradation from Sub-Failure Cyclic Loading: An I-PREDICT Study

Presentation Author: Mr. Jack Seifert

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Blast Injury Prevention Standards Recommendations (BIPSR) Process Skull Fracture Blast Injury Type

Presentation Author: Dr. Ryan Byrne

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A Clearer Picture of Traumatic Brain Injury: Biophotonics Tools Unveiling Astrocyte Behavior

Presentation Author: Dr. Daryl Preece

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Multiple Impacts at the Time of Concussion Result in More Severe Clinical and Neurobiological Changes Compared to Single Impact Concussions

Presentation Author: Ms. Rachel Cutlan

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Incapacitation Prediction for Readiness in Expeditionary Domains: An Integrated Computational Tool (I-PREDICT) - A Probabilistic Investigation of Behind Armor Blunt Trauma (BABT)

Presentation Author: Dr. Vivek Kote

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A Study of the Effectiveness of Body Armor on Blast Injury
Presentation Author: Dr. Nobuaki Kiriu

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Towards a Fully Automated Workflow for Subject-Specific Human Digital Twins for Traumatic Brain Injury Risk Assessment
Presentation Author: Dr. Anu Tripathi

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Development of a Robust 5th Percentile Female Human Body Model with Articulation Capabilities for Aircraft Safety Evaluations
Presentation Author: Dr. Teja Garimella

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Identifying Incipient Injury in Porcine Lumbar Intervertebral Disc from Prolonged Flexion-Compression Loading
Presentation Author: Derek Pang

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Biomechanics of Degradation and Fracture for the Vertebral Endplate
Presentation Author: Ms. Verushca Labsuchagne

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The Development of a Finite Element Ovine Thorax Model for Use in the High-Rate Non-Penetrating Blunt Impact Environment
Presentation Author: Ms. Juliette Caffrey

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The Influence of Footwear on Ankle Stiffness in Human Volunteers
Presentation Author: Dr. Kerry Danelson

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Hip Belts Reduce Lumbar Spine Compressive Impulse During Heavy Load Carriage When Walking Downhill
Presentation Author: Dr. Jordan Sturdy

Multifactorial Problems Contributing of Musculoskeletal Injuries in the Military

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Hamstrings Injury Risk During Heavy Load Carriage Is Related to Work Demands with Walking Slope
Presentation Author: Dr. Jordan Sturdy

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Clarifying the Relationship Between Personality, Psychology, and Musculoskeletal Injuries in Athletes and Warfighters Using Statistical Genetics
Presentation Author: Dr. Richard Chapleau

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Dual Effect of Low-Level Light on Mitochondria Biogenesis and Gut Homeostasis in Anaerobic High-Intense Exercise
Presentation Author: Dr. Prabhat Upadhyay

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Flight-Associated Neck Pain in Fighter Pilots: Literature Review and Study Protocol
Presentation Author: Dr. Brian Stemper

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Prevalence of Neck Pain in U.S. Soldiers as a Result of mild Traumatic Brain Injury-Associated Trauma
Presentation Author: Dr. Tara Caberwal

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Impact of Musculoskeletal Conditions on Changes in Quality of Life Among Injured Service Members in the Millennium Cohort
Presentation Author: Ms. Karen Tannenbaum

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Adapting and Evaluating an Existing Health Promotion Program to Prevent Musculoskeletal Conditions Among Seafarers: A Research Protocol
Presentation Author: Ms. Karen Tannenbaum

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Factors Associated with Return to Sport and Reinjury in Athletes and Military After Anterior Cruciate Ligament Reconstruction: A Systematic Review and Meta-Analysis
Presentation Author: LCDR Aubrey Aguero

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Utilizing Tissue Chip to Elucidate the Crosstalk Between Cartilage and Synovial Tissue in Pain Activation
Presentation Author: Mr. Hang Lin

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First Generation FAI Surgery: Midterm Outcomes of a Multicenter North American Cohort
Presentation Author: Dr. John Clohisy

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Musculoskeletal Injury Risk Stratification of Paratroopers by Body Mass Index and Two-Mile Run Time

Presentation Author: Mr. Jackson Carver

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Musculoskeletal Injury Incidence in Active Duty Service Members (ADSM) Reporting to a Base Medical Clinic

Presentation Author: Dr. Hope Mowery

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Indicators of Delayed Recovery in Active Duty Service Members with Musculoskeletal Disorders Reporting to a Branch Medical Clinic

Presentation Author: Dr. Hope Mowery

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Psychiatric Symptoms in Active Duty Service Members with Musculoskeletal Disorders Reporting to a Naval Medical Facility for Outpatient Physical Therapy Care

Presentation Author: Dr. Hope Mowery

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Examining U.S. Army Holistic Health and Fitness System Provider Engagement with Brigade Soldiers

Presentation Author: Mr. Dylan Nugent

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Altered Mitochondrial Signaling and Metabolism in Osteoclasts May Lead to Musculoskeletal Disintegration in Ionizing Radiation-Exposed Veterans and Possibly Active-Duty Military

Presentation Author: Dr. Ha-Neui Kim

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Effect of Concussion History and Anterior Cruciate Ligament Injury on Thigh Musculature Motor Control

Presentation Author: Dr. April McPherson

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Reliability and Time Required to Administer Tests to Identify Pain and Movement Dysfunction in Healthy U.S. Army Soldiers

Presentation Author: Dr. Jennifer Emberton

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Percent Difference in Peak Knee Adduction Moments During Walking Is Related to Knee Cartilage T2 Relaxation Times in Osteoarthritic Knees

Presentation Author: Dr. Scott Tashman

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Talar Neck Fractures with Associated Ipsilateral Foot and Ankle Fractures Have a Higher Risk of Avascular Necrosis

Presentation Author: Jarod Griffin

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Presentation Author: Dr. Daniel Rhon

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Asymmetry of Knee Joint Contact Forces Increases When Carrying Heavy Loads

Presentation Author: Ms. Anna Corman

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A New Categorization System for Foot Type to Prevent and Treat Lower Extremity Injuries

Presentation Author: Mr. Matthew Bradley

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Differential Early Adipocyte Response Following Volumetric Muscle Loss and Peripheral Nerve Injuries

Presentation Author: Dr. Sarah Greising

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Presentation Author: Dr. Jinzeng Yang

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Lymphedema in a Lower Extremity Reconstructed with Free Omental Flap

Presentation Author: CPT Sarah Rabin

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Identifying Relationships from a Comprehensive Evaluation of Knee Joint Health in Service Members with Unilateral Lower Limb Loss: A Two-Year Longitudinal Study

Presentation Author: Dr. Joseph Wasser

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Presentation Author: Dr. Masnsen Cherief

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Presentation Author: Dr. Joshua Wooldridge

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Medializing Rearfoot Pressure Distribution Using Wireless Sensor Insoles Improves Knee Joint Loading in Patients After Anterior Cruciate Ligament Reconstruction

Presentation Author: Dr. Jade He

Force Health Protection: Operational Exposure Research and Predictive Risk Methods

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Presentation Author: Dr. Shannon Romer

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Presentation Author: Dr. Barbara Shykoff

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A Pilot Study of Biological Effects of Repeated Whole-Body Irradiation in Yucatan Miniature Pigs

Presentation Author: Capt Timothy Boorady

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Simulated Burn Pit Smoke Exposures Increase Inflammation in the Brain

Presentation Author: Dr. Melanie Mendez

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The Impact of Human and Environmental Microbiomes on Submariner Health and Performance During a Seven-Month Deployment

Presentation Author: CDR Joanna Halford

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Comparison of Two Field Deployable PCR Platforms for Respiratory Pathogen Detection

Presentation Author: Ms. Susana Asin

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Protection Against Neurological Disorders Induced by Neurotoxicant Pesticides with Itaconate

Presentation Author: Mr. Pedro Cabrales

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Force Health Protection: Understanding Emerging Health Risks in the Arctic and the Threat of Pathogen Reanimation from Melting Permafrost due to Climate Change

Presentation Author: Dr. Anna Adetona

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Presentation Author: Lt Col Joseph Maddry

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Combined Effects of Traumatic Brain Injury and Radiation Injury: In Preparation for Expeditionary Medicine in Prolonged and Deep Space Missions

Presentation Author: Dr. Samuel Shin

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Presentation Author: Dr. Zane Lybrand

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Long-Term Toxic Effects from Cutaneous Nitrogen Mustard Exposure in Mice

Presentation Author: Mr. Andrew Roney

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Data Repository Platform (DRP) Software for Facilitating Individual Longitudinal Exposure Records (ILER) Reporting

Presentation Author: Mr. Shoaib Shaikh

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Transient Overpressure Stimuli Disrupt Performance of a Learned Task and Impact Continuously Monitored In Vivo Stress Responses in Male and Female Rats

Presentation Author: LCDR Josh Havassy

MHSRS-23-10442 - SESSION 3 - #389

The Pulmonary Immune Response of Mice to Single and Multiple Exposures of Flaming Combustion Products from Simulated Burn Pit Constituents

Presentation Author: Dr. Claire Doerschuk

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MHSRS-23-10471 - SESSION 3 - #390

Cognitive and Physiologic Responses to Normobaric Hypoxia versus Hypobaric Hypoxia

Presentation Author: Dr. Bianca Cerqueira

MHSRS-23-10628 - SESSION 3 - #391

Needed Levels of Protection of PPE to Prevent Onward Transmission of Respiratory Illnesses in the Warfighter

Presentation Author: Mr. Robert Dettmann

Precision Medicine Research: Optimizing Warfighter Healthcare, Readiness, and Return to Duty

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Psychological and Functional Outcomes Following a Randomized Controlled Trial of Surf and Hike Therapy for U.S. Service Members

Presentation Author: Erin Miggantz

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Exploring Beyond Sample Identification to Strengthen the Role of Molecular Quality Control in the APOLLO Program

Presentation Author: Ms. Sue Shuss

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Identifying Potential Biomarkers in Military Trauma-Related ARDS Patients for Improved Clinical Outcomes

Presentation Author: Dr. Michael Rouse

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Understanding the Crosstalk of Local and Systemic Cellular Networks in Military Trauma Patients

Presentation Author: Dr. Michael Rouse

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Non-Invasive Immune Monitoring After Vascularized Composite Allotransplantation: Predictive Modeling from a Preclinical Swine Hind Limb Transplant Model to Human Upper Extremity Transplant Recipients

Presentation Author: Dr. Renhua Li

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External Validation Confirms IL8, IL15 and Wound Size May Predict the Development of Heterotopic Ossification in Combat-Related Extremity Trauma by Hospital Admission

Presentation Author: Dr. Felipe Lisboa

MHSRS-23-08383 - SESSION 3 - #399

Using Healthcare Utilization Data and Machine Learning Algorithms to Identify Military Beneficiaries with Nonalcoholic Fatty Liver Disease

Presentation Author: Dr. Scott Grey

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Adenosine, Lidocaine and Magnesium (ALM) Therapy Modulates Sex-Specific Inflammatory, Immune and Healing Responses Following Anterior Cruciate Ligament (ACL) Rupture and rConstruction

Presentation Author: Dr. Geoffrey Dobson

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Proteogenomic Analysis of the Ovarian Tumor Microenvironment: Modeling Cellular Admixture

Presentation Author: Dr. Pang-ning Teng

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Precision Medicine for the Treatment of ERG Positive Prostate Cancer

Presentation Author: 2LT Gartrell Bowling

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Murtha Cancer Center Research Program Efforts to Provide Precision Medicine for the Military through Participation in the Oncology Research Information Exchange Network (ORIEN)

Presentation Author: Mrs. Brenda Deyarmin

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Using Connectivity Mapping and Genomic Medicine to Identify Novel Compounds Which Can Suppress Keloid Formation and Optimize Wound Healing

Presentation Author: Dr. Zhenyu Ji

MHSRS-23-08618 - SESSION 3 - #405

A Precision Health Trial to Assess Immune Health and Promote Resilience in Hospital Staff

Presentation Author: Zachary Colburn

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Method Development Supporting Efficiencies in APOLLO: A Modified Dual Preparatory Protocol for Improved Isolation of Nucleic Acids from Laser Microdissected Frozen Human Cancer Tissue Specimens

Presentation Author: Ms. Tracy Litz

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Using Machine Learning to Predict Response to Insomnia Treatment

Presentation Author: COL Vincent Capaldi

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An Analytically Ready and a Ready Analytical Clinical Proteomics Capability for Military Health System Precision Medicine Applications

Presentation Author: Dr. Kelly Conrads

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Apply Novel Technology in Natural Language Processing to Adjudicate Venous Thromboembolism in Radiological Reports

Presentation Author: Dr. Jeffrey Wang

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Transcriptomics of Anterior Shoulder Instability: Differences in Gene Expression in the Blood of Patients With and Without Significant Glenoid Bone Loss

Presentation Author: LTC Joseph Galvin

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Gene Expression Analysis Reveals Differences in the Capsular Tissue of Patients with Anterior and Posterior Shoulder Instability

Presentation Author: LTC Joseph Galvin

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A Protein Expression Signature of TMPRSS2-ERG Gene Fusion and ERG Protein Overexpression in Prostate Cancer

Presentation Author: Dr. Nicholas Bateman

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Artificial Intelligence-Informed Quantification of Tumor Infiltrated Lymphocytes in Histopathology Images from HGSOC Patients Experiencing Improved Disease Prognosis

Presentation Author: Mr. David Mitchell

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Vaccine Adverse Reactions and Hereditary-Alpha Trypsinemia: Case Reports and Vaccine Adverse Event Reporting System Review

Presentation Author: Ms. Jennifer Ritschl

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Addressing the Gap in Cardiogenetics Care within the MHS

Presentation Author: Mrs. Austin Pagani

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Microvascular Reconstructions in Oral and Maxillofacial Surgery - A Data Collection Regarding Current Standards and Future Challenges in Germany, Austria and Switzerland

Presentation Author: Andreas Pabst

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Human B-Lymphoblast Mechanisms of Resistance to Shiga Toxins

Presentation Author: Dr. Ghulam Chaudry

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Bioinformatics Analysis for Detection and Diagnosis of Respiratory Pathogens Using Nanopore Sequencing Reads

Presentation Author: Ms. Grace Reed

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Association of Obesity with mild Traumatic Brain Injury Symptoms, Inflammatory Profile, Quality of Life, and Functional Outcomes: A TRACK-TBI Study

Presentation Author: Dr. Shawn Eagle

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Differences in Arterial Oxyhemoglobin Desaturation During Moderate Hypoxia Explains Performance Differences in Working Memory Tasks During Gamified Cognitive Assessments

Presentation Author: Dr. Jason Keeler

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Real World Pitfalls of Analyzing Real World Data: A Cautionary Note and Path Forward

Presentation Author: CPT Karen Shou

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Salivary Biomarker Changes During Stress Inoculation in Mass Casualty Training for Military Medical Students, Border Patrol

Presentation Author: 2LT Caroline Little

MHSRS-23-10130 - SESSION 3 - #423

Utility of Wearable and Home Sensor (WHST) Technologies for Accelerating Insomnia Therapeutic Development and Enhancing Current Insomnia Treatment

Presentation Author: Dr. Allyson Gage

MHSRS-23-10159 - SESSION 3 - #424

Designing Personalized Exercise Interventions for Military Populations Using Bayesian Case-Based Reasoning

Presentation Author: Dr. Evan Anderson

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Exertional Illness in the Warfighter: Return to Duty Considerations

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Genetics of Exertional Heat Illness: Exploratory Genomic Study
Presentation Author: Dr. Mungunsukh Ognoon

MHSRS-23-08795 - SESSION 3 - #426

Comparing of Clinical and Genetic Findings in Exertional Rhabdomyolysis Cases with Single versus Recurrent Episodes
Presentation Author: Dr. Mungunsukh Ognoon

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A Multidisciplinary Evaluation of Sudden Death in the Military Health System: Protecting Those Left Behind
Presentation Author: Ms. Lydia Hellwig

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Genomics of Exertion-Related Events Associated with Sickle Cell Trait (GERESCT) Study: Pilot Study of Whole Genome Methylation Analyses
Presentation Author: Dr. Nyamkhishig Sambuughin

MHSRS-23-08724 - SESSION 3 - #429

Multidisciplinary Case Review Committee: Comprehensive Referral Source for Evaluation and Treatment of High-Risk Exertional Heat Injuries Fostering Safe and Expeditious Return to Duty Decisions
Presentation Author: Dr. Francis O'Connor

MHSRS-23-08775 - SESSION 3 - #430

The Epidemiology of Heat Stroke: A 5-Year Study of the Canadian Armed Forces
Presentation Author: Ms. Laura Bogaert

MHSRS-23-09759 - SESSION 3 - #431

Left of Bang: Electrocardiographic Screening of Cadets and Midshipmen at Service Academies
Presentation Author: Dr. Marc Franzos

Military Exposures and Subsequent Long-term Outcomes

MHSRS-23-08054 - SESSION 3 - #432

Disruption of Enteric Neuroimmune Function and Physiology in Gulf War Illness
Presentation Author: Mrs. Claudia Collier

MHSRS-23-08247 - SESSION 3 - #433

The Effect of Childhood Adversities and Other Pre-Accession Characteristics and Combat Exposures on New-Onset Depression
Presentation Author: Dr. Diane Williams

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Clinical and Molecular Markers Associated with Distinct Long-Term PTSD Symptom Trajectories
Presentation Author: Mr. Nicholas Gary

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Brain Gauge™ Measure After Heavy Weapons Training in U.S. Special Operators: A Component of the INVICTA Study
Presentation Author: Dr. David Keyser

MHSRS-23-08462 - SESSION 3 - #436

Comparison of U.S. Army Soldiers' Health-Related Behaviors Before and During the COVID-19 Pandemic Era
Presentation Author: LTC Julianna Jayne

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Subterranean Environmental Threats: Carbon Dioxide Alters Breathing Discomfort During High Intensity Running
Presentation Author: CPT Tyrone Ceaser

MHSRS-23-08564 - SESSION 3 - #438

Disease and Non-Battle Injury During Deployment: A Systematic Review and Meta-Analysis
Presentation Author: Dr. Karl Alcover

MHSRS-23-08633 - SESSION 3 - #439

Stress Response to Winter Warfare Training: Potential Impact of Location
Presentation Author: Ms. Lauren Visconti

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Biomaterials Strategies for Engineering Patient-Specific 3D Models of Pulmonary Fibrosis
Presentation Author: Dr. Chelsea Magin

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Long-Term Reproductive Health Outcomes in Women Veterans Exposed to Airborne Hazards and Open Burn Pits
Presentation Author: Dr. Maheen Adamson

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Noninvasive Assessment of Spinal Cord Injury in a Rat Model Using Novel PET Tracers
Presentation Author: Ms. Shalini Jaiswal

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Assessing Serum Biomarker Changes from Recurrent Exposure to Military Occupational Blast in Heavy Weapons Instructors - Preliminary Analysis
Presentation Author: Dr. Liying Zhang

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Localization and Quantitation of Traumatic Microvascular Injury and Blood-Brain Barrier Disruption by Laser Ablation Inductively Coupled Plasma Mass Spectrometry (LA-ICP-MS) Brain Mapping
Presentation Author: Dr. Lee Goldstein

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Production of Live Attenuated Leishmania major Cell Banks under Current Good Manufacturing Practices (cGMP) for Vaccine Development Against Leishmaniasis
Presentation Author: Dr. Robert Molestina

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Stressors and Support Experienced by Active Duty Navy Personnel at Sea
Presentation Author: Ms. Lauren Hurtado

MHSRS-23-08835 - SESSION 3 - #447

Clinical Phenotypes of Dementia in Older Adults With and Without a TBI
Presentation Author: Dr. Jill Del Pozzo

MHSRS-23-08836 - SESSION 3 - #448

Changes in Functional Outcomes Over Time Following Major Lower Limb Trauma Among Veterans Undergoing Primary Amputation versus Limb Salvage
Presentation Author: Dr. Benjamin Brooke

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Long-Term Functional Outcomes Following Major Lower Limb Trauma Sustained in the Military
Presentation Author: Dr. Jessica Rivera

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Association Between Polytrauma/TBI Clinic and Vocational Rehabilitation Collaboration and Intent for Paid Employment Among Veterans Evaluated for TBI
Presentation Author: Dr. Terri Pogoda

MHSRS-23-09099 - SESSION 3 - #451

A Virtual Functional Medicine-Based Interdisciplinary and Integrative Intervention for Gulf War Illness
Presentation Author: Dr. Omowunmi Osinubi

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Disentangling the Effects of PTSD from Gulf War Illness in Male Veterans via a Systems-Wide Analysis of Immune Cell, Cytokine, and Symptom Measures
Presentation Author: Ms. Esha Sultana

MHSRS-23-09210 - SESSION 3 - #453

Characterizing the Asthma Phenotype of Service-Connected Medically Separated Military Personnel
Presentation Author: CPT Joshua Boster

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Whole Genome Sequence Analysis of Candidate Genes Identified Three Loci Potentially Related to Mefloquine Side Effects
Presentation Author: CDR Monique Hollis-Perry

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Opportunities for Remote Sampling Technologies to Enable Comprehensive Biobanking of Military Population Towards Digitizing Biology
Presentation Author: Dr. Jonathan Katz

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Comparison of the Veteran-Military Occupational and Environmental Exposure Assessment Tool (V-MOAT) with Other Measures of Exposure
Presentation Author: COL John Barrett

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Development and Validation of the Veteran-Military Occupational and Environmental Exposure Assessment Tool (V-MOAT)
Presentation Author: COL John Barrett

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Mitigation of Occupational Lead Exposure Among MARSOC Marines
Presentation Author: Ms. Beth Poitras

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Using the Veteran Military Occupational and Environmental Exposure Assessment Tool (V-MOAT) 1.0 to Characterize Complex Military Exposure Histories: Compare Exposure Profiles of Explosive Ordnance Disposal (EOD) Veterans Compared to Non-EOD Veterans

Presentation Author: Dr. Kamila Pollin

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The Identification of Genetic Biomarkers for Fibromyalgia and PTSD in Military Members Following a Combat Deployment

Presentation Author: Mrs. Chelsea Sterne

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Evaluation of Active Duty Military Personnel with Chronic Respiratory Symptoms Post-COVID

Presentation Author: MAJ Daniel Wingo

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Expression of miRNAs in Papillary Thyroid Cancers from Ukrainian Patients with History of Exposure to Ionizing Radiation

Presentation Author: Lt Col Kirk Jensen

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Deep Phenotypic Computational Analysis of a Large-Scale Randomized, Double-Blind, Placebo-Controlled, Phase III Trial of Coenzyme Q10 (CoQ10) in Gulf War Illness: CoQ10 Improves Aspects of GWI Symptomatology & Inflammatory Phenotype Measures

Presentation Author: Dr. Konstantinos Sidiropoulos

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Jet Fuel Impact on Estrogen Signaling Pathways as a Potential Mechanism for Endocrine Disruption and Reproductive Toxicity

Presentation Author: CAPT William Howard

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Air Evacuation from Southwest Asia for Asthma Exacerbations

Presentation Author: CAPT Krista Carlson

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How Does Bodily Injury Affect Recovery from Concussion in Military Service Members?

Presentation Author: Dr. Jan Kennedy

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TrkA+ Sensory Nerves Regulate Osteosarcoma Disease Progression

Presentation Author: Ms. Lingke Zhong

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Use of Targeted Nanoparticles for Prostate Cancer

Presentation Author: Dr. P.S. MohanKumar

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Etiologies and Characteristics of Interstitial Lung Disease in an Active Duty Military Population

Presentation Author: CPT William Moore

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Behavioral and Molecular Characterization of a Mouse Gulf War Illness Model Allows for the Search for Novel Therapeutics

Presentation Author: Mrs. Nadezhda Sabeva

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Disentangling the Effects of PTSD from GWI in Female Veterans via a Network Analysis of Cell-Cytokine-Symptom Interactions for Improved Diagnostics and Treatments

Presentation Author: Mr. Nandan Shastry

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Cytokine Response in the Peripheral Blood to a Clinical Trial of Coenzyme Q10 (CoQ10) Treatment in Gulf War Illness (GWI)

Presentation Author: Mr. Zachary Barnes

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An Integrative Point-of-Care System for Early Detection of COPD Exacerbation

Presentation Author: Ms. Tiffany Lin

MHSRS-23-10604 - SESSION 3 - #474

Evidence of Astrocyte Endfoot Injury in the Brains of Blast-Exposed Military Personnel: A Postmortem Ultrastructural Analysis

Presentation Author: Dr. Michael Cranston

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Sperm Cryopreservation, Fertility Risk, and the Warfighter of the 21st Century

Presentation Author: CPT John Crowley

MHSRS-23-10655 - SESSION 3 - #476

United States Active-Duty Military Personnel with Ventricular Pre-Excitation and High-Risk Occupations Commonly Receive Invasive Risk Stratification for Asymptomatic Pre-Excitation

Presentation Author: Capt John-Henry Dean

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An Evaluation of Exposure History with Lymphoma in the U.S. Military

Presentation Author: MAJ Matthew Rendo

MHSRS-23-10696 - SESSION 3 - #478

Impact of Neurotoxicant Exposure on Veteran Health Symptoms: The Fort Devens Cohort

Presentation Author: Ms. Leah Orlinsky

MHSRS-23-10739 - SESSION 3 - #479

Concurrent Lymphoid Malignancies in U.S. Military Veterans Who Served During the Vietnam War Era

Presentation Author: Mr. Matthew Moldenhauer

MHSRS-23-10780 - SESSION 3 - #480

Self-Reported Symptom Improvement from a Clinical Trial of Coenzyme Q10 (CoQ10) Treatment in Gulf War Illness (GWI)

Presentation Author: Ms. Fanny Collado



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