EXTREMITY XXIII

READY TO FACE THE THREATS OF TODAY AND TOMORROW

January 16-17, 2024 • Washington, DC











EXTREMITY WAR INJURIES XVII SYMPOSIUM

January 16-17, 2024
The Mayflower Hotel • Washington, DC



Symposium Co-Chairs: Lt Col Andrew J. Sheean, MD & Joseph R. Hsu, MD

Scientific Director: LTC Daniel Song, MD EWI Oversight Chair: Joseph R. Hsu, MD

This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of the American Academy of Orthopaedic Surgeons and the Society of Military Orthopaedic Surgeons.

The American Academy of Orthopaedic Surgeons is accredited by the ACCME to provide continuing medical education for physicians. The American Academy of Orthopaedic Surgeons designates this live activity for approximately 12 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.









SYMPOSIUM AGENDA

Monday, January 15, 2024

9:00 am - 5:00 pm **Meetings (STaR)**

9:15 am - 9:30 am

9:30 am - 9:45 am

Questions/Panel Discussion

BREAK

3:00 pm - 5:30 pm **EWI Symposium Check In** (Foyer)

Tuesday, January 16, 2024

	Tuesday, Jar	nuary 16, 202	4
6:30 am	EWI Symposium Check In (Foyer)	Session II: Biomarkers A	-
6:30 am – 7:00 am	Coffee	Moderator: LCDR Michell	e Gosselin and LCDR Ashley Anderson, MD
7:00 am – 7:05 am	Symposium Welcome	9:45 am – 9:51 am	Utility of Biomarkers at Point of Injury
	Lt Col Andrew J. Sheean, MD and		Michael P. Kelly, MD Rady Children's Hospital, San Diego
7:05 am – 7:15 am	Joseph R. Hsu, MD EWI 2024: Why Are We Here? Lt Col Andrew J. Sheean, MD	9:51 am – 9:57 am	Use of Biomarkers in Articular Ankle Fractures Samuel Adams, MD <i>Duke University</i>
7:15 am – 7:45 am	San Antonio Military Medical Center Breakfast/Industry Update *CME Credit Not Available	9:57 am – 10:03 am	Establishment of a Musculoskeletal Biorepository for Gene and Protein Discovery at a Military Medical Center (Recorded)
7:45 am – 7:55 am	METRC Update Robert V. O'Toole, MD	40.00	LTC Joseph W. Galvin, DO Madigan Army Medical Center
7:55 am – 8:05 am	University of Maryland Medical Center ANCHOR Update John C. Clohisy, MD	10:03 am – 10:09 am	Biomarkers and Osteoporosis CAPT Scott M. Tintle, MD Walter Reed National Military Medical Center
	Washington University	10:09 am – 10:15 am	Questions/Panel Discussion
8:05 am – 8:15 am	MOON Knee Update Kurt Spindler, MD	10:15 am – 10:30 am	BREAK
	Cleveland Clinic	Session III: Addressing	
8:15 am – 8:25 am	MOON Shoulder Update	Moderators: COL Kenneth	Nelson, MD and CDR (sel) Christopher H. Renninger, MD
	Carolyn M. Hetterich, MD Brigham and Women's Hospital	10:30 am – 10:36 am	Fundamentals for Initial Evaluation and Management
8:25 am - 8:30 am	Questions/Panel Discussion Lt Col Andrew J. Sheean, MD		MAJ Shawn E. Boomsma, DO Ryder Trauma Center/Jackson Memorial Hospital
8:30 am – 8:45 am	BREAK	10:36 am – 10:42 am	Are there Limits to the Masquelet Technique? LTC (P) Daniel J. Stinner, MD, PhD
-	jics Across the Spectrum of MSK Disease		Vanderbilt University
	y Anderson, MD and Lt Col Andrew Sheehan, MD	10:42 am – 10:48 am	Tips and Tricks of Distraction Osteogenesis Geoffrey S. Maracek, MD
8:45 am – 8:51 am	Orthobiologics in Trauma Surgery: Current Uses and Applications in Acute Interventions		Cedars-Sinai Medical Center
	Phillip Leucht, MD NYU Langone	10:48 am – 10:54 am	How to Address the Challenges of Articular Defects
8:51 am – 8:57 am	Orthobiologics in Trauma Surgery: Strategies for Addressing Non-Unions		Timothy S. Achor, MD McGovern Medical School at UTHealth Houston
	Christopher Lee, MD University of California, Los Angeles	10:54 am – 11:00 am	When to Use a Free Fibula? CAPT Scott M. Tintle, MD
8:57 am – 9:03 am	Point of Care Blood Products: Is this the Future?	11:00 am – 11:15 am	Walter Reed National Military Medical Center
	Adam Anz, MD		Questions/Panel Discussion
	Andrews Institute for Orthopaedics and Sports Medicine	11:15 am – 11:30 am	BREAK
9:03 am – 9:09 am	Bone Marrow Aspirate: Current Indications in Sports Medicine and Future Uses		in Ukraine: Lessons Learned and Future Directions I J. Stinner, MD and Joseph R. Hsu, MD
	Don Buford, MD Texas Orthobiologics Institute	11:30 am – 12:10 pm	Panel Discussion COL (ret) James R. Ficke, MD
9:09 am – 9:15 am	An Update from the Benchtop Chelsea Bahney, PhD <i>University of California, San Francisco</i>		Johns Hopkins University COL (ret) Roman A. Hayda, MD Rhode Island Hospital

Michael Beltran, MD

University of Cincinnati

SYMPOSIUM AGENDA

Tuesday, January 16, 2024

12:10 pm – 12:40 pm Lunch/Industry Update
*CME Credit Not Available

12:40 pm – 1:00 pm Dessert in Exhibit Hall

Investigators Workshop Part 1: Hear from the Program Managers and Committee Chairs

Moderators: Kurt Spindler, MD and Lt Col Andrew J. Sheean, MD

1:00 pm - 1:05 pm CDMRP: Peer Reviewed Orthopaedic Research

Program Akua Roach, PhD

US Army Medical Research and Development Command

1:05 pm - 1:10 pm National Institutes of Health: MSK/Orthopaedic Program

Charles Washabaugh, PhD

NIAMS, National Institutes of Health, DHHS

1:10 pm - 1:15 pm Military Technology Enterprise Consortium:

Military Operational Medicine Research

Program

Elizabeth Esposito-Russell, PhD

Military Operational Medicine Research Program

1:15 pm - 1:20 pm Orthopaedic Research Foundation (OREF)

COL (ret) James R. Ficke, MD *Johns Hopkins University*

1:20 pm - 1:35 pm Questions/ Panel Discussion

1:35 pm - 1:40 pm OTA Research: Current Efforts and Priorities

Saam Morshed, MD

University of California, San Francisco

1:40 pm - 1:45 pm ASSH Research: Current Efforts and Priorities

David Brogan, MD Washington University

1:45 pm - 1:50 pm AOSSM Research: Current Efforts and Priorities

C. Benjamin Ma, MD

University of California, San Francisco

1:50 pm - 2:00 pm **Questions/Panel Discussion**

2:00 pm - 2:20 pm **BREAK**



Track A: Degenerative Shoulder ConditionsModerators: LTC Kelly Kilcoyne, MD and Jonathan F. Dickens, MD

2	2:20 pm – 2:26 pm	Focal Chondral Lesions About the Shoulder Lance E. LeClere, MD Vanderbilt University
2	2:26 pm – 2:32 pm	Joint Preservation and CAM Justin Arner, MD University of Pittsburgh Medical Center
2	2:32 pm – 2:38 pm	Arthroplasty in the Young Patient Stephen A. Parada, MD Augusta University
2	2:38 pm – 2:44 pm	Scaffolds and Augments for Rotator Cuff Repair Asheesh Bedi, MD University of Michigan Health
2	2:44 pm - 2:55 pm	Questions/Panel Discussion

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3:00 pm – 3:05 pm	Abstract
3:05 pm – 3:10 pm	Abstract
3:10 pm – 3:15 pm	Abstract
3:15 pm – 3:20 pm	Abstract
3:20 pm - 3:30 pm	Questions
3:30 pm - 3:40 pm	BREAK

RESEARCH HIGHLIGHTS

Track B: Distal Upper Extremity Trauma/ReconstructionModerator: TBD

2:20 pm – 2:26 pm	Scapholunate Reconstruction LTC David Wilson, MD Brooke Army Medical Center
2:26 pm – 2:32 pm	Advances in Distal Radius Fractures Tamara D. Rozental, MD Israel Deaconess Medical Center
2:32 pm – 2:38 pm	Scaphoid Non-union James Higgins, MD <i>Medstar Union Memorial</i>
2:38 pm – 2:44 pm	Metacarpal and Phalangeal Fractures - Is Intramedullary Fixation the Standard of Care? Aviram M. Giladi, MD, MS Medstar Union Memorial
2:44 pm - 2:55 pm	Questions/Panel Discussion

RESEARCH HIGHLIGHTS

3:00 pm – 3:05 pm	Abstract
3:05 pm – 3:10 pm	Abstract
3:10 pm – 3:15 pm	Abstract
3:15 pm – 3:20 pm	Abstract
3:20 pm - 3:30 pm	Questions
3:30 pm - 3:40 pm	BREAK

SYMPOSIUM AGENDA

Tuesday, January16, 2022

Session V: Topics in Advanced Reconstruction Moderators: MAJ Shawn Boomsma, MD and CDR Louis Lewandowski, MD		Breakout Sessions	
3:40 pm - 3:46 pm	Orthoplastics: When to Do It Yourself and When to Call for Help Jana M. Davis, MD Penn State Health Center	4:30 pm - 5:15 pm	Breakout Group A: Antibiotic Coated Implants Moderators: Joseph R. Hsu, MD and LTC (P) Daniel J. Stinner, MD, PhD Breakout Group B: Stratogies and
3:46 pm - 3:52 pm	What's New in Amputation Optimization? COL B. Kyle Potter, MD Walter Reed National Military Medical Center		Breakout Group B: Strategies and Controversies Regarding the Management of Critical Bone Defects Moderators: Timonthy Achor, MD and
3:52 pm - 3:58 pm	Osseous Integration in 2024 and Beyond COL (ret) Joseph Alderete, MD University of Texas Health, San Antonio		LCDR Michelle Gosselin, MD Breakout Group C: Orthobiologics - Where Do We Need to Go?
3:58 pm - 4:04 pm	Hand Transplantation: Fact or Fiction? David Leonard, MD, PhD, FRCS		Moderators: CDR Robert Waltz, MD or MAJ Michael Donohue, MD
4:04 pm - 4:10 pm	Leeds Teaching Hospitals NHS Trust Future Directions in Advanced Prosthetic Design and Use Lee Childers, PhD		Breakout Group D: Post-traumatic Osteoarthritis - Are We Making Progress? Moderators: Lt Col Aaron Barrow, MD and Christian Latterman, MD
	DoD/VA Extremity Trauma and Amputation Center of Excellence	5:20 pm - 5:50 pm	Breakout Group Reports
440 420		5:50 pm - 7:00 pm	Reception/Scientific Poster Session
4:10 pm - 4:20 pm	Questions/Panel Discussion	7:30 nm	FWI Faculty Dinner

Wednesday, January 17, 2024

4:20 pm - 4:30 pm

BREAK

7:30 pm

EWI Faculty Dinner

6:30 am 6:30 am – 7:00 am	EWI Symposium Check In (Foyer) Coffee	•	'art 2: Hear from the Investigators Sheean, MD and Kurt Spindler, MD
7:00 am – 7:05 am	Welcome/Review of Day Two	8:15 am - 8:25 am	A Primer on Machine Learning and Artificial Intelligence: What Do You Need
Session VI: Bone Health a Moderators: CDR Louis Lewa	and Stress Fractures andowski, MD and LCDR Erica Crump, MD		to Know Right Now? Mark P Cote, PT, DPT, MS, CTR Harvard University
7:05 am – 7:11 am	Stress Fractures in the Military: Burden of Disease and Readiness Threats LCDR Ashley B. Anderson, MD Fort Belvoir/Walter Reed National Military Medical Center	8:25 am - 8:31 am	How to Collaborate with a Scientist: Do's and Don'ts Joseph C. Wenke, PhD University of Texas Medical Branch Galveston
7:11 am – 7:17 am	Bone Health: The Basics Anna N. Miller, MD Washington University School of Medicine	8:31 am - 8:37 am	My Journey as a Military Clinical Scientist Jonathan F. Dickens, MD <i>Duke University</i>
7:17 am – 7:23 am	Therapeutics in Current Clinical Practice CDR James H. Flint, MD Naval Medical Center San Diego	8:37 am - 8:43 am 8:43 am - 8:50 am	MOTION Update Matthew Bradley, MPH The Geneva Foundation Questions/Panel Discussion
7:23 am – 7:29 am	Implementing a Bone Health Program: Lessons Learned LCDR Benjamin W. Hoyt, MD James A. Lovell FHCC	8:50 am - 9:10 am	BREAK
7:29 am – 7:40 am	Questions/Panel Discussion		
7:40 am - 8:10 am	Breakfast/Industry Update *CME Credit Not Available		

SYMPOSIUM AGENDA

Wednesday, January 17, 2024

Track A:
Distal Upper Extremity Trauma/Reconstruction
Moderator: TBD

9:10 am – 9:16 am	Ballistic Injuries of the Upper Extremity Jeffrey G. Stepan, MD, MSc <i>University of Chicago</i>
9:16 am – 9:22 am	Cubital Tunnel Syndrome Advances in Diagnostics Daniel A. Osei, MD, MSc Hospital for Special Surgery
9:22 am – 9:28 am	Carpal Tunnel Syndrome Advances in Diagnostics Justin Fowler, MD Rush University
9:28 am – 9:34 am	Elbow Instability Advances Maj Casey Sabbag, MD Brooke Army Medical Center
9:34 am – 9:50 am	Questions/Panel Discussion
RESEARCH HIGHLIGHTS	
9:55 am – 10:00 am	Abstract
10:00 am –10:05 am	Abstract
10:05 am – 10:10 am	Abstract

Abstract

Abstract

BREAK

Questions/Panel Discussion

10:35 am - 11:00 am

10:10 am – 10:15 am

10:15 am - 10:20 am

10:20 am - 10:35 am

Track A:

Skills SustainmentModerators: COL Kenneth Nelson, MD and MAJ Archie Overmann, MD

11:00 am – 11:10 am	Experience at a Military Level 1 Trauma Center Maj R. Bradley Kessler, MD San Antonio Military Medical Center
11:10 am – 11:20 am	Military-Civilian Partnerships: Utilizing Local Resources James A. Blair, MD Emory University/Grady Memorial Hospital
11:20 am – 11:30 am	Lessons Learned from Transitioning an MTF to a Civilian Trauma Center CDR Louis R. Lewandowski, MD Naval Medical Center Camp Lejeune
11:30 am – 11:40 am	COTS+ Update and Future Goals CDR (sel) Christopher H. Renninger, MD Walter Reed National Military Medical Center
11:40 am - 11:50 am	MAST Update LTC Kelly Kilcoyne, MD Walter Reed National Military Medical Center
11:50 am - 11:55 am	Discussion

Track B: Infection in Musculoskeletal TraumaModerators: CDR Christopher H. Renniger, MD and Maj R. Bradley Kessler, MD

9:10 am – 9:16 am	What's On the Horizon? LTC Daniel J. Stinner, MD, PhD Vanderbilt University
9:16 am – 9:22 am	Fundamentals of Diagnosis Mark R. Brinker, MD <i>Texas Orthopaedic Hospital</i>
9:22 am – 9:28 am	Utility of Topical Antibiotics Robert V. O'Toole, MD <i>University of Maryland Medical Center</i>
9:28 am – 9:34 am	Antibiotic Coated Implants Rahul Vaidya, MD Wayne State University
9:34 am – 9:50 am	Questions/Panel Discussion
RESEARCH HIGHLIGHTS	
9:55 am – 10:00 am	Abstract
10:00 am –10:05 am	Abstract
10:05 am – 10:10 am	Abstract
10:10 am – 10:15 am	Abstract
10:15 am - 10:20 am	Abstract
10:20 am - 10:35 am	Questions/Panel Discussion
10:35 am - 11:00 am	BREAK

Track B: Shoulder Instability

Moderators: Maj Travis Dekker, MD and

Justin Arner, MD

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11:00 am – 11:06 am	Current Refinements to the Glenoid Track Paradigm Albert Lin, MD University of Pittsburgh Medical Center
11:06 am – 11:12 am	Criteria-Based Return to Duty/Play Decision Making Dean C. Taylor, MD Duke University
11:12 am – 11:18 am	Remplissage: Indications and Limitations Brian R. Waterman, MD Wake Forest University
11:18 am – 11:24 am	Posterior Instability: How Can We Get Better? Lt Col Andrew Sheean, MD Brooke Army Medical Center
11:24 am – 11:30 am	Bone Grafting in 2024: Current Indications and Limitations Matthew T. Provencher, MD The Steadman Clinic
11:50 am - 11:55 am	Discussion

SYMPOSIUM AGENDA

Wednesday, January 17, 2024

11:55 am – 12:25 pm	Lunch/Industry Update *CME Credit Not Available	Session VIII: Ligamentous Knee Injuries Moderators: MAJ David Tennant, MD and Clayton, Nuelle, MD	
12:25 pm – 12:45 pm	Dessert in Exhibit Hall	1:30 pm – 1:36 pm	STaR Trial: What We've learned So Far
Session VII: Post Traumatic Osteoarthritus and the Knee Moderators: MAJ Michael Donohue, MD and Jonathan F. Dickens, MD			Jay Irrgang, PhD <i>University of Pittsburgh</i>
12:45 pm – 12:51 pm	Pathogenesis of PTOA: What Do We Know in 2024? Christian Latterman, MD Brigham and Women's Hospital	1:36 pm – 1:42 pm	STABILITY Trial: Maximizing Success of ACL Reconstruction Bryson P. Lesniak, MD University of Pittsburgh
12:51 pm – 12:57 pm	Cartilage Restoration in 2024 and Beyond Drew Lansdown, MD University of California, San Francisco	1:42 pm – 1:48 pm	Strategies for Addressing Rotatory Knee Instability Bruce A. Levy, MD Orland Health Medical Group
12:57 pm – 1:03 pm	Orthobiologics as Adjuncts and Primary Treatment Jason Dragoo, MD University of Colorado	1:48 pm – 1:54 pm	ACL Repair: When to Do It and How to Do It Joseph J. Ruszbarsky, MD The Steadman Clinic
1:03 pm – 1:09pm	Osteochondral Allografts: Optimizing Clinical Outcomes	1:54 pm – 2:05 pm	Questions/Panel Discussion
		2:05 pm – 2:15 pm	BREAK
	Clayton Nuelle, MD <i>University of Missouri</i>	2:15 pm - 2:30 pm	Closing Comments and Adjourn
1:09pm – 1:15 pm	Patient Specific Osteotomies About the Knee Travis Dekker, MD United States Air Force Academy		
1:15 pm - 1:25 pm	Questions/Panel Discussion		