

ACCREDITATION INFORMATION

PROGRAM COMMITTEE

LCDR Marvin E. Dingle, MD – Co-Chair

LCDR Sean E. Slaven, MD – Co-Chair

CDR Scott M. Tintle, MD

LT Vivek Abraham, MD

Maj Travis J. Dekker, MD

MAJ Bryan K. Lawson, MD

R. Judd Robins, MD

LTC Daniel J. Song, MD

LTC Daniel J. Stinner, MD, PhD

MAJ David J. Tennent, MD

SOMOS MISSION STATEMENT

To provide a forum for the interchange of medical knowledge as it relates to the practice of orthopaedic surgery in the military.

TARGET AUDIENCE

The 65th Annual Meeting of the Society of Military Orthopaedic Surgeons has been developed primarily for orthopaedic and trauma surgeons.

PURPOSE

1. Provide a forum for the dissemination of military-specific orthopaedic knowledge relevant to military surgeons and servicemembers.
2. Provide attendees with the latest surgical, clinical, and research advances in each orthopaedic sub-specialty area.

OBJECTIVES

Educational objectives will be met through a combination of paper presentations, lectures and symposia in plenary and specialty sessions including open discussion with the lecturers and paper presenters. Following participation in the Scientific Program, attendees should be able to:

1. Critically evaluate orthopaedic diseases and treatments through evidenced based outcome presentations.
2. Discuss basic science and clinical research and its implications for diagnosis and treatment of orthopaedic diseases.
3. Enhance and maximize clinical and operative skills by integrating new information into their practice.

These educational objectives will be obtained through paper presentations, instructional courses, guest lectureships, symposia, multimedia educational sessions and poster sessions.

ACCREDITATION STATEMENT

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 Society of Military Orthopaedic Surgeons 65th Annual Meeting, December 4 – 8, 2023 to be held in Vail, Colorado for an approximate maximum of 27 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

The Scientific Program is 20.75 AMA PRA Category 1 Credits™

The Posters are 6.25 AMA PRA Category 1 Credits™

DISCLAIMER

The Society of Military Orthopaedic Surgeons (SOMOS) is a private not-for-profit organization that is not sponsored by any department or agency of the DoD or local state or federal government. Speakers and exhibitors at the 2023 Society of Military Orthopaedic Surgeons (SOMOS) 65th Annual Meeting represent and are solely responsible for their own presentations. Their presentation and displays do not represent concepts, policy or the official position of any department or agencies of the DoD or local or state government.

Presentations and displays at the 2023 Annual Meeting do not constitute endorsement, concurrence, validation or official position of SOMOS or any other department or agency.

SCIENTIFIC E-POSTER PRESENTATIONS

Scientific E-Posters are an important feature of the SOMOS Annual Meeting. E-Posters will be on video display along with their presenters December 5-8 during the Scientific Program. **Please note on the Scientific Program Schedule the designated times the poster presenters will be available for discussion.**

SOMOS Scientific Program
December 4-8, 2023
The Hythe
Vail, CO

Monday, December 4

- 7:30 am-4:00 pm **MAST Lab – Elbow**
- 12:00 pm-5:00 pm **Meeting Registration**
- 12:00 pm-11:59 pm **Speaker Ready Area**

Tuesday, December 5

Opening Ceremony

Moderators: CDR Scott Tintle, MD, *Walter Reed National Military Medical Center*
 LCDR Marvin E. Dingle, MD, *US Naval Hospital Okinawa, Japan*
 MAJ Sean E. Slaven, MD, *Walter Reed National Military Medical Center*

- 7:00 am-7:10 am Color Guard
- 7:10 am-7:20 am Report of SOMOS President
 CDR Scott Tintle, MD, Walter Reed National Military Medical Center

Symposium 1 – Trauma

Moderator: LCDR Christopher H. Renninger, MD, *Walter Reed National Military Medical Center*

- 7:20 am-7:35 am Prone to the Tibia: Top to Bottom
 Lisa K. Cannada, MD, Novant Health
- 7:35 am-7:50 am Urban Ballistic Trauma - What do we Actually Know
 Jason Strelzow, MD, University of Chicago

General Session 1 – Trauma

Moderators: Lisa K. Cannada, MD, *Novant Health*
 Jason Strelzow, MD, *University of Chicago*
 LCDR Christopher H. Renninger, MD, *Walter Reed National Military Medical Center*

- 7:50 am-7:56 am 279 - SAVIT, a Novel Risk Score, Predicts Limb Salvage
 MAJ Jefferson Lansford, MD, Walter Reed National Military Medical Center

- 7:56 am - 8:02 am 77 - Open, Mixed Nerve Cryoneurolysis for Subacute Pain Mitigation in Patients with Limb Loss
CAPT Patrick J. McGlone, MD, Walter Reed National Military Medical Center
- 8:02 am-8:08 am 139 - Posterolateral Approach Associated with Increased Rate of Sural Nerve Injury
CPT Natasha Simske, MD, WBAMC Orthopaedic Surgery Residency Program
- 8:08 am-8:14 am 243 - Comparison of Antiglide Plating to 6.5mm Screws in Hoffa Fractures
CDR Chris Smith, MD, Naval Medical Center Portsmouth
- 8:14 am-8:20 am Discussion
- 8:20 am-8:26 am 187 - Increased Complications Following Early Conversion THA After Acetabular ORIF
Phillip T. Grisdela, MD, Harvard Combined Orthopaedic Residency Program
- 8:26 am-8:32 am 206 - The Anconeus Triceps Hemipeel Approach for Displaced Intra-Articular Distal Humeral Fractures is a Safe and Effective Technique
Andrew B. Rees, MD, Atrium Health Musculoskeletal Institute
- 8:32 am-8:38 am 191 - Are Orthopedic Trauma Surgeons Adequately Compensated for Treating Acetabular Fractures?
Nainisha Chintalapudi, MD, Atrium Health Musculoskeletal Institute
- 8:38 am-8:44 am 289 - Trauma as a Recurrent Disease: ISS Scores and Trauma Recidivism
Capt Annemarie C. Galasso, MD, Medical University of South Carolina
- 8:44 am-8:50 am Discussion
- 8:50 am-9:10 am *Break with Exhibitors*

Special Presentation 1 – Orthopaedic Surgery in the Ukraine Conflict

Moderator: COL (Ret) Roman Hayda, MD, *Brown University*

- 9:10 am-10:10 am Panel Discussion
Panel: *Samer Attar, MD, Northwestern University*
CPT Valentin Rogozinskiy, MD, PhD, Armed Forces of Ukraine
COL Yurii Yarmoliuk, MD, Armed Forces of Ukraine

Symposium 2 – Sports - Shoulder and Elbow

Moderator: Lt. Col. R. Judd Robins, MD, *United States Air Force Academy*

10:10 am-10:25 am Ulnar Collateral Ligament Injuries: Athletes to Active Duty
Jeffrey R. Dugas, MD, Andrews Sports Medicine and Orthopaedic Center

10:25 am-10:40 am Title TBD
Michael J. O'Brien, MD, Tulane University

10:40 am-11:00 am Break with Exhibitors

General Session 2 – Sports – Shoulder and Elbow

Moderators: Jeffrey R. Dugas, MD, *Andrews Sports Medicine and Orthopaedic Center*
Michael J. O'Brien, MD, *Tulane University*
LT COL R. Judd Robins, MD, *United States Air Force Academy*

11:00 am-11:06 am 281 - Outcomes of Revision Surgery for Failed Arthroscopic Bankart Repair
Ryan J. Whalen, BS, The Steadman Clinic

11:06 am-11:12 am 114 - Minimal Clinical Important Differences Not Uniform in Servicemembers After Shoulder Surgery
Capt Mikalyn T. DeFoor, MD, San Antonio Military Medical Center

11:12 am-11:18 am 105 - Novel Radial Head Donor Graft for Capitellum Osteochondral Autograft Transfer: A Cadaveric Biomechanical Analysis
CPT Bryan G. Adams, MD, Madigan Army Medical Center
**Presented by CPT Rachel J. Milam, MD*

11:18 am-11:24 am 52 - Incorporation of Arthroscopy into Surgical Correction of Olecranon Fractures
Van Freischmidt, OrthoCollier

11:24 am-11:30 am Discussion

11:30 am-11:36 am 42 - Comparison of Anterior Glenoid Reconstruction and Latarjet for Shoulder Instability
2LT Jonah M Liwag, BS, Uniformed Services University of Health Sciences

11:36 am-11:42 am 284 - Clinical and Sport Specific Outcomes after Rotator Cuff Repair in Patients Younger than 45 Years
Peter J. Millett, MD, MSc, Steadman Philippon Research Institute

11:42 am-11:48 am 287 - Biomechanics of Caspari Weber vs. Metal Button for Biceps Tenodesis
LT Jeremy Tran, MD, Walter Reed National Military Medical Center

11:48 am-11:54 am 46 - Fresh Osteochondral Allograft Transplantation of the Capitellum for the Treatment of Osteochondritis Dissecans
CPT Christian Cruz, MD, Tripler Army Medical Center

11:54 am-12:00 pm Discussion

12:00 pm-1:00 pm **Focused Lunch Presentations**
**CME Credit Not Available*

1:00 pm-3:00 pm **Scientific E-Poster Session**
(Presenters will be available to answer questions)

Panel Discussion 1 – Shoulder and Elbow Challenging Case Debate

Moderators: LTC Kelly G. Kilcoyne, MD, *Walter Reed National Military Medical Center*

3:00 pm-4:00 pm Panel Discussion
Panel: *CAPT Casey Sabbag, MD, OrthoCarolina*
COL(Ret) Dean C. Taylor, MD, Duke University
LTC David J. Wilson, MD, Brooke Army Medical Center

4:00 pm-4:20 pm *Break with Exhibitors*

Rapid Fire Session 1A – Shoulder & Elbow

Moderators: LCDR KJ Hippensteel, MD, *Walter Reed National Military Medical Center*
LTC Daniel J. Song, MD, *Evans Army Community Hospital*

4:20 pm-4:24 pm 116 - Subacromial Balloons vs. Debridement: A Dual-Armed Systematic Review
CPT Alexis B. Sandler, MD, William Beaumont Army Medical Center

4:24 pm-4:28 pm 141 - Midterm Outcomes in Combined Biceps Tenodesis and Anterior Labral Repair
CPT James A. Jordan, MD, William Beaumont Army Medical Center

4:28 pm-4:32 pm 124 - Imperfect Circle: Poor Interrater Reliability of the Perfect Circle Technique
CPT Alexis B. Sandler, MD, William Beaumont Army Medical Center

4:32 pm-4:36 pm 161 - Understanding Relationships Between Reverse Total Shoulder Arthroplasty Implant Design and Patient-Specific Complication Risk: A Game-Theory-Base Machine Learning Approach
ENS Jacob F. Oeding, MS, Mayo Clinic Alix School of Medicine

4:36 pm-4:40 pm 149 - Concomitant SLAP Repair Does Not Portend Worse Outcomes Following Arthroscopic Posterior Glenohumeral Stabilization
CPT Logan A. Kenney, MD, William Beaumont Army Medical Center

- 4:40 pm-4:44 pm 160 - Anatomic Total Shoulder Arthroplasty Is Cost-Effective in Patients Over 67 Years of Age With Glenohumeral Osteoarthritis and an Intact Rotator Cuff: A Decision-Analytic Markov Model-Based Cost-Utility Analysis
ENS Jacob F. Oeding, MS, Mayo Clinic Alix School of Medicine
- 4:44 pm-4:47 pm Discussion
- 4:47 pm-4:51 pm 223 - Risk Factors for Glenoid Bone Loss in the Setting of Posterior Glenohumeral Instability
CPT Cole Patrick, MD, William Beaumont Army Medical Center
- 4:51 pm-4:55 pm 123 - Posterior and Combined-Type Shoulder Instability: A Military Base's 10-Year Experience
CPT Michael M. Polmear, MD, William Beaumont Army Medical Center
- 4:55 pm-4:59 pm 143 - Treatment of Periprosthetic Humerus Fractures after Shoulder Arthroplasty: A Systematic Review
Capt Patrick J. Tansey, MD, University of Texas Medical Branch
- 4:59 pm-5:03 pm 164 - Outcomes of Treating On-Track and Off-Track Lesions with Open Latarjet
CPT John N. Wary, MD, Tripler Army Medical Center
- 5:03 pm-5:07 pm 148 - Establishing the Minimal Clinically Important Difference, Substantial Clinical Benefit, and Patient Acceptable Symptomatic State After Arthroscopic Posterior Labral Repair
CPT Logan A. Kenney, MD, William Beaumont Army Medical Center
- 5:07 pm-5:11 pm 222 - Preoperative Mental Health Status Predicts Rotator Cuff Repair Outcomes
CPT Dexter C. Allen, MD, University of Texas Medical Branch
- 5:11 pm-5:15 pm Discussion

Rapid Fire Session 1B – Trauma

Moderators: LCDR Michelle M. Gosselin, MD, *Naval Medical Center San Diego*

- 4:20 pm-4:24 pm 57 - Detecting Traumatic Ankle Arthrotomies: CT Scan vs. Saline Load Test
LT Thomas J. Berault, MD, Naval Medical Center Portsmouth
- 4:24 pm-4:28 pm 131 - Traumatic Transradial Forearm Amputation Temporized with Extracorporeal Membrane Oxygenation (ECMO)
CPT Erik Hegeman, MD, Brooke Army Medical Center

- 4:28 pm-4:32 pm 140 - Tobacco Smoking Portends Worse Functional Outcomes after Acetabular Fracture
CPT Natasha Simske, MD, William Beaumont Army Medical Center
- 4:32 pm-4:36 pm 199 - Increased Complications Following Conversion THA After Cutout of Hip Fracture Fixation
Phillip T. Grisdela, MD, Harvard Combined Orthopaedic Residency Program
- 4:36 pm-4:40 pm 108 - A Comparison of Outcomes in Ankle Syndesmosis Injuries Treated Operatively
LT Reinaldo E. Colon-Morillo, MD, Harvard Combined Orthopaedic Residency Program
- 4:40 pm-4:44 pm 80 - Evaluation of Treatment Trends in Distal Femur Fractures Amongst Early Surgeons
CPT Cole Patrick, MD, William Beaumont Army Medical Center
- 4:44 pm-4:47 pm Discussion
- 4:47 pm-4:51 pm 291 - Collagen X as a Fracture Biomarker Associated with Clinical Healing
Chelsea S. Bahney, PhD, Steadman Philippon Research Institute
- 4:51 pm-4:55 pm 315 - Estimated Prevalence of Limb Loss in the US in 2019
Kara Churovich, BS, MPH, Henry M. Jackson Foundation for the Advancement of Military Medicine
- 4:55 pm-4:59 pm 298 - Novel Technology to Assess Post-Fracture Pain in an Animal Model
Chelsea S. Bahney, PhD, Steadman Philippon Research Institute
- 4:59 pm-5:03 pm 267 - Orthopaedic Trauma Research: Do US Partner Nations Truly Benefit?
Jerome Andres, BA, David Geffen School of Medicine at UCLA
- 5:03 pm-5:07 pm 245 - Technical Considerations and Early Results of Magnetic Compressive Intramedullary Nailing for Tibial and Femoral Shaft Non-Unions
CPT Daniel J. Cognetti, MD, Brooke Army Medical Center
- 5:07 pm-5:11 pm 188 - Is Fixing a Fracture Below a Short Nail Really Easier? A Comparative Study of Peri-Implant Fractures.
LT Jonathan C. Savakus, MD, Vanderbilt University Medical Center
- 5:11 pm-5:15 pm Discussion

Rapid Fire Session 1C – Hand & Wrist

Moderators: MAJ Christopher M. Daniels, MD, *Keller Army Community Hospital*
MAJ Nicole M. Sgromolo, MD, *Brooke Army Medical Center*

- 4:20 pm-4:24 pm 328 - Is PRP Effective for Wrist Sprains and TFCC Tears
CPT Anthony N. Gavalas, MD, William Beaumont Army Medical Center
- 4:24 pm-4:28 pm 325 - Interobserver Reliability of Radiographic Parameters following
Closed Reduction of Distal Radius Fractures
CPT Gabriel Mason, MD, San Antonio Military Medical Center
- 4:28 pm-4:32 pm 153 - Who Gets Scaphoid Surgery: Epidemiology of Scaphoid Fractures
CPT Anthony N. Gavalas, MD, William Beaumont Army Medical Center
- 4:32 pm-4:36 pm 186 - Effects of Socioeconomic Factors on Presentation of Cubital Tunnel
Syndrome
*Phillip T. Grisdela, MD, Harvard Combined Orthopaedic Residency
Program*
- 4:36 pm-4:40 pm 216 - Evaluating PASS for BCTQ following Carpal and Cubital Tunnel
Release
Capt Jantz J. Arbon, MD, Brooke Army Medical Center
- 4:40 pm-4:44 pm 94 - Increasing Selective Utilization of Wrist Arthroscopy by Hand
Surgeons Despite Overall Stable Usage over the Past Decade
CPT Cole Patrick, MD, William Beaumont Army Medical Center
- 4:44 pm-4:47 pm Discussion
- 4:47 pm-4:51 pm 242 - Impact on Safety of Preoperative Ultrasound for CTR: A Case Series
Marin Smith, DPT, The Geneva Foundation
- 4:51 pm-4:55 pm 130 - Evaluation of Porcine Peripheral Nerves with Magnetic Resonance
Neurography to Monitor Nerve Injuries and Repairs following PEG
Fusion
CPT Erik Hegeman, MD, Brooke Army Medical Center
- 4:55 pm-4:59 pm 111 - Return to Duty Following Limb Salvage with Free Flap
CPT Alexandria Murphy, MD, MS, Madigan Army Medical Center
- 4:59 pm-5:03 pm 213 - Predictors of Early Patient Initiated Contact After Carpal Tunnel
Release
LT Kevin O'Mary, DO, University of Texas Medical Branch
**Presented by Jacob Harper, BS, University of Texas Medical Branch*

- 5:03 pm-5:07 pm 198 - Return to Duty after Operative Management of Triangular Fibrocartilage Injuries
Maggie M. Scribner, MD, Tripler Army Medical Center
- 5:07 pm-5:11 pm 159 - Diagnostic Performance of Artificial Intelligence for Detection of Scaphoid and Distal Radius Fractures: A Systematic Review
ENS Jacob F. Oeding, MS, Mayo Clinic Alix School of Medicine
- 5:11 pm-5:15 pm Discussion

Rapid Fire Session 1D – Practice Management & Misc.

Moderators: LCDR Sean M. Wade, MD, *Naval Hospital Jacksonville*

- 4:20 pm-4:24 pm 151 - Economic Feasibility of Cadaver-Based Training at an Academic Military Hospital
LT Alexander D. Li, MD, Naval Medical Center Portsmouth
- 4:24 pm-4:28 pm 50 - Resiliency Instability in Patients Undergoing Shoulder Surgery Utilizing the Brief Resiliency Score
LTC Daniel J. Song, MD, Evans Army Community Hospital
**Presented by CPT Emily McDermott, MD, San Antonio Military Medical Center*
- 4:28 pm-4:32 pm 210 - Diabetes Stewardship in Orthopaedics? Observations from a Hand Surgery Clinic
Capt Sarah E. Poirier, MD, Cleveland Clinic Foundation
- 4:32 pm-4:36 pm 145 - Medical Student “Bootcamp” Increases Knowledge and Preparedness for Away Rotations
Capt Patrick J. Tansey, MD, University of Texas Medical Branch
**Presented by Ian Meshay, MD, University of Texas Medical Branch*
- 4:36 pm-4:40 pm 179 - Deficiencies in Military Health System Inpatient List Functionality Negatively Impact Orthopaedic Resident Education and Wellness
Capt Raul A. Davalos III, MD, Brooke Army Medical Center
- 4:40 pm-4:44 pm 248 - Defining the Pipeline of Women in Orthopaedic Surgical Residency Training
ENS Ashlynn K. Gunderson, BA, Howard University College of Medicine
- 4:44 pm-4:47 pm Discussion
- 4:47 pm-4:51 pm 280 - Precocious Leadership in Military Orthopaedic Surgery
CPT Marcus Hoof, MD, San Antonio Military Medical Center

- 4:51 pm-4:55 pm 100 - Journal Club Efficacy – Survey of Orthopaedic Attending Surgeons and Residents
CPT Michael M. Polmear, MD, William Beaumont Army Medical Center
- 4:55 pm-4:59 pm 310 - Burnout in Military Orthopaedic Surgery: A Multicenter, Cross-Sectional Study
LT Jordan Tropf, MD, Walter Reed National Military Medical Center
- 4:59 pm-5:03 pm 122 - Female Patients Sustain Serious Orthopaedic Trauma Traversing the US-Mexico Border
CPT Alexis B. Sandler, MD, William Beaumont Army Medical Center
- 5:03 pm-5:07 pm 175 - Factors Influencing Residency Selection Among Females Across All Surgical Specialties
Capt Sarah E Poirier, MD, Cleveland Clinic Foundation
- 5:07 pm-5:11 pm 221 - Female Authorship in Orthopaedics: Changes in JBJS Over a Decade
CPT Alexis B. Sandler, MD, William Beaumont Army Medical Center
- 5:11 pm-5:15 pm Discussion

Wednesday, December 6

Symposium 3 – Foot and Ankle

Moderator: LTC Jerome M. Benavides, MD, MBA, *Madigan Army Medical Center*

- 7:00 am-7:15 am Title TBD
COL (Ret) James R. Ficke, MD, Johns Hopkins University
- 7:15 am-7:30 am Custom 3D Implants: When to Pull the Trigger
Scott B. Shawen, MD, Orthocarolina

General Session 3 – Foot and Ankle

Moderators: COL (Ret) James R. Ficke, MD, *Johns Hopkins University*
Scott B. Shawen, MD, *Orthocarolina*
LTC Jerome M. Benavides, MD, MBA, *Madigan Army Medical Center*

- 7:30 am-7:36 am 258 - Effects of Losartan and Fisetin on Microfracture Mediated Cartilage Repair of Ankle Cartilage in a Rabbit Model
Ingrid K. Stake, MD, Ostfold Hospital
**Presented by Xueqin Gao, MD, PhD*
- 7:36 am-7:42 am 118 - Prospective Evaluation of Rate of Fusion with Augment® Bone Graft

Capt Jacob I. Priester, MD, University of California, Davis

- 7:42 am-7:48 am 195 - Opioid Use Among Workers Compensation Foot and Ankle Patients
Capt Tyler M. Goodwin, MD, University of Tennessee Health Science Center Chattanooga
**Presented by Richard D. Murray, MD*
- 7:48 am-7:54 am 283 - Advances in Fibular Plating Technology: Are the Increased Costs Justified?
CPT Bonamico Jacobs, MD, Dwight D. Eisenhower Army Medical Center, Orthopaedic Surgery
- 7:54 am-8:00 am Discussion
- 8:00 am-8:06 am 259 Biomechanical Role of the Deltoid Ligament on Ankle Stability
Alex W. Brady, Steadman Philippon Research Institute
- 8:06 am-8:12 am 35 - Outcomes of Lisfranc Injuries Treated with Flexible Augmentation Device
CAPT Patrick M. Wise, MD, University of California, Davis
- 8:12 am-8:18 am 73 - Subtalar and Ankle Joint Destruction with Reaming for Tibiotalocalcaneal Nailing
CPT James D. Baker, MD, San Antonio Military Medical Center
- 8:18 am-8:24 am 14 - Suture Button Fixation for Lisfranc Injuries: A Systematic Review
LT Andrew D. Lachance, MD, Guthrie Clinic
- 8:24 am-8:30 am Discussion
- 8:30 am-8:50 am *Break with Exhibitors*
- 8:50 am-9:05 am **Business Meeting**
CDR Scott Tintle, MD, Walter Reed National Military Medical Center

Panel Discussion 2 – Transition to Civilian Practice

Moderators: LTC (Ret) Jonathan F. Dickens, MD, *Duke University Health*

- 9:05 am-9:50 am Panel Discussion
Panel: *CDR (Ret) James Bailey, MD, Ryu Hurvitz Orthopedic Clinic*
CPT Brendan T. Higgins, MD, MS, Concord Orthopaedics
LTC Kurtis Kowalski, MD, Tennessee Orthopaedic Alliance
COL (Ret) Mark P. Pallis, DO, Geisinger Musculoskeletal Institute

Symposium 4 – Hand: Jamie Dianne Bulken-Hoover Memorial Hand Session

Moderator: LTC Emily H. Shin, MD, *Madigan Army Medical Center*

9:50 am-10:05 am Hybrid Extended FCR Approach for ORIF of the Distal Radius and Concurrent Prophylactic Carpal Tunnel Release
A. Bobby Chhabra, MD, University of Virginia

10:05 am-10:20 am Bridge Plating Across MCP and PIP Joints after Gunshot Wounds
Jennifer M. Wolf, MD, PhD, University of Chicago

10:20 am-10:45 am *Break with Exhibitors*

General Session 4 –Hand: Jamie Dianne Bulken-Hoover Memorial Hand Session

Moderators: A. Bobby Chhabra, MD, *University of Virginia*
Jennifer M. Wolf, MD, PhD, *University of Chicago*
LTC Emily H. Shin, MD, *Madigan Army Medical Center*

10:45 am-10:51 am 142 - Postoperative pain and Opioid Use in Upper Extremity Orthopedic Surgery
CPT Amy Thompson, MD, William Beaumont Army Medical Center

10:51 am-10:57 am 144 - Venous Thromboembolism and Postoperative Bleeding Rates in Upper Extremity Orthopedic Surgery
CPT Amy Thompson, MD, William Beaumont Army Medical Center

10:57 am-11:03 am 314 - Ideal Imaging for Base of the 5th Metacarpal Fractures
CPT Hannah N. Imlay, MD, Tripler Army Medical Center

11:03 am-11:09 am Discussion

11:09 am-11:15 am 217 - Implementation of a Hand Training Curriculum in Junior Resident Education
CPT James D. Baker, MD, San Antonio Military Medical Center

11:15 am-11:21 am 113- Bridge vs. Volar Plating Polytrauma Patients with Lower Extremity Fractures
Frank Martinez, BS, Mayo Clinic

11:21 am-11:27 am 129 - A Translational Porcine Model for Polyethylene Glycol Fusion-Based Therapies in Nerve Reconstruction After Large-Gap Peripheral Nerve Injury
CPT Erik Hegeman, MD, Brooke Army Medical Center

11:27 am-11:33 am 38 - Admission of Upper Extremity Injuries Presenting to the Emergency Department: An NEISS Study
CPT Michael D. Eckhoff, MD, Brian D. Allgood Army Community Hospital

11:33 am-11:40 am Discussion

11:40 am-12:40 pm **Focused Lunch Presentations-Pacira**
Evolving the Osteoarthritis Knee Patient Experience: The Past, Present, and Future

Yao-wen Eliot Hu, MD, MBA, RMSK, CIC, FAAFP

**CME Credit Not Available*

12:40 pm-3:00 pm **Scientific E-Poster Session**
(Presenters will be available to answer questions)

Panel Discussion 3 – SOMOS & Diversity, Equity and Inclusion

Moderator: LCDR Marvin E. Dingle, MD, *US Naval Hospital Okinawa, Japan*

3:00 pm-3:15 pm Modernized Allyship in the New Leadership Paradigm
Erica Taylor, MD, MBA, Duke University Medical Center

3:15 pm-4:00 pm Panel Discussion
Panel: *Lisa K. Cannada, MD, Novant Health*
CAPT Miles W.A. Fisher, MD, Brooke Army Medical Center
LTC Jeanne Patzkowski, MD, San Antonio Military Medical Center
Erica Taylor, MD, MBA, Duke University Medical Center

4:00 pm-4:20 pm *Break with Exhibitors*

Rapid Fire Session 2A – War Trauma/Military Medicine & Bone Health

Moderators: LCDR Ashley B. Anderson, MD, *Walter Reed National Military Medical Center*

4:20 pm-4:24 pm 82 - Outcome Measures and Complications of Transfemoral Osseointegration Surgery
Julio Rivera, PhD, Uniformed Services University of the Health Sciences

4:24 pm-4:28 pm 272 - Cortical thickness and serum Calcium may affect Outcomes following Transfemoral Osseointegration Surgery
Angelica M. Melendez-Munoz, BS, Walter Reed National Military Medical Center

4:28 pm-4:32 pm 83 - Outcome Measures and Complications of Transhumeral Osseointegration Surgery
Julio Rivera, PhD, Uniformed Services University of the Health Sciences

4:32 pm-4:36 pm 135 - Long Term Follow Up After Elective Trans-Tibial Amputation: CRPS and Neuropathic Pain vs Other Causes of Delayed Amputation After Limb Salvage

ENS Addison G. Cantor, BS, Walter Reed National Military Medical Center

- 4:36 pm-4:40 pm 249 - Structured Orthopaedic Surgery Training in Theater Hospital Operations Replication
CDR Chris Smith, MD, Naval Medical Center Portsmouth
**Presented by LT Karolina A. Serhan, MD, Naval Medical Center Portsmouth*
- 4:40 pm-4:45 pm Discussion
- 4:45 pm-4:49 pm 266 - A Field Evaluation of Proprietary and Improvised Pelvic Binders
Capt Thomas Howe, MBBS BSc, British Army
- 4:49 pm-4:53 pm 204 - Whole Body Vibration and Lower Back Pain: A Systematic Review of the Current Literature
Major Abigail Bainbridge, MBChB, BSC, Defence Medical Deanary
- 4:53 pm-4:57 pm 70 - Medical Readiness Among U.S. Military Personnel Presenting for Orthopaedic Care
Andrew MacGregor, PhD, MPH, Naval Health Research Center
- 4:57 pm-5:01 pm 290 - Hounsfield Units Predict Poor Bone Health Among Sex and Race
2LT Matthew M. McDonough, BS, Uniformed Services University of the Health Sciences
- 5:01 pm-5:05 pm 286 - Hounsfield Units are a Viable Measure for Predicting Fragility Fracture When Compared to “FRAX”
LT Janse Schermerhorn, MD, Walter Reed National Military Medical Center
- 5:05 pm-5:09 pm 247 - Quantitative Analysis of Condition Based Limited Duty on Musculoskeletal Conditions
CDR Chris Smith, MD, Naval Medical Center Portsmouth
- 5:09 pm-5:15 pm Discussion

Rapid Fire Session 2B – Sports Medicine

Moderators: CDR J. Imani Dupree, MD, *Naval Health Clinic Annapolis*
LTC Adam Pickett, MD, *Fort Belvoir Community Hospital*

- 4:20 pm-4:24 pm 251 - A Novel Approach to the Tibial Tubercle Osteotomy: Early Safety Outcomes from a Prospective Cohort Study
ENS Aimee Steen, BA, Western University of Health Sciences College of Osteopathic Medicine of the Pacific

- 4:24 pm-4:28 pm 312 - Impact of Femoral Derotational Osteotomy Level on Patellofemoral Joint Loading
LT Conor F. McCarthy, MD, Walter Reed National Military Medical Center
- 4:28 pm-4:32 pm 167 - Reevaluating Evidence for Platelet-Rich Plasma in Knee Osteoarthritis: A Systematic Review and Meta-Analysis of the Statistical Fragility of Randomized Controlled Trials
ENS Jacob F. Oeding, MS, Mayo Clinic Alix School of Medicine
- 4:32 pm-4:36 pm 246 - Osteochondral Allograft Transplantation Using Dowell Technique for the Treatment of Steroid-Associated Osteonecrosis of the Femoral Condyles
LCDR Nicholas Perry, MD, Naval Medical Center San Diego
- 4:36 pm-4:40 pm 263 - Planned Tunnel Convergence for Concomitant Posterior Cruciate Ligament Reconstruction and Meniscal Root Repair
LT Kathryn C. Yeager, MD, University of New Mexico Hospital
**Presented by Ryan Price, MD*
- 4:40 pm-4:44 pm 95 - Accuracy of Intraoperative Retrograde Reaming Measurement During Cruciate Ligament Socket Drilling
CPT Emily McDermott, MD, San Antonio Military Medical Center
- 4:44 pm-4:47 pm Discussion
- 4:47 pm-4:51 pm 255 - Headless Screw Fixation Reduces Re-Operation Risk Following Tibial Tubercle Osteotomy: A Prospective Cohort Study
ENS Aimee Steen, BA, Western University of Health Sciences College of Osteopathic Medicine of the Pacific
- 4:51 pm-4:55 pm 326 - US Military Exertional Compartment Syndrome Burden and Risk Factors
LCDR John P. Waggoner, MD, MPH, MAS, MA, Naval Medical Center San Diego
- 4:55 pm-4:59 pm 264 - Does Bone Marrow Aspirate Concentrate Use Improve Hip Arthroscopy Outcomes? A Systematic Review
LT Jack R. Gagné, MD, Navy Medicine Readiness and Training Unit Groton
- 4:59 pm-5:03 pm 330 - Which Osteochondritis Dissecans Lesions of the Knee Will Heal Non-Operatively?
ENS Thomas Michael Johnstone, BS, Stanford University School of Medicine

- 5:03 pm-5:07 pm 115 - Resilience Inconclusively Affects Clinical Outcomes after Arthroscopy: A Systematic Review
Capt Mikalyn T. DeFoor, MD, San Antonio Military Medical Center
- 5:07 pm-5:11 pm 31 - Outcomes and Technique for Reconstruction of Irreparable Pectoralis Major Tears
LT Sennay Ghenbot, MD, Walter Reed National Military Medical Center
- 5:11 pm-5:15 pm Discussion

Rapid Fire Session 2C – Shoulder & Elbow

Moderators: CDR (Ret) James Bailey, MD, *Ryu Hurvitz Orthopedic Clinic*
MAJ Jared Wolfe, MD, *Fort Belvoir*

- 4:20 pm-4:24 pm 225 - Concomitant Glenohumeral Stabilization Does Not Portend Worse Outcomes Following Arthroscopic Rotator Cuff Repair in Military Patients Under 40
CPT Cole Patrick, MD, William Beaumont Army Medical Center
- 4:24 pm-4:28 pm 136 - Glenoid Bone Loss in Combined Shoulder Instability: Prevalence and Risk Factors in a Cohort of Young, Active-Duty Military Patients
CPT Franklin J. Powlan, MD, William Beaumont Army Medical Center
- 4:28 pm-4:32 pm 74 - The Influence of Posterior Acromial Morphology on Outcomes and Return to Pushups in Young Patients Undergoing Arthroscopic Posterior Capsulolabral Repair
CPT Patrick W. Rooney, MD, Madigan Army Medical Center
- 4:32 pm-4:36 pm 81 - Superior Capsular Reconstruction vs. Marginal Convergence for Massive Rotator Cuff Tears
CPT Logan A. Kenney, MD, William Beaumont Army Medical Center
- 4:36 pm-4:40 pm 270 - Simulation Optimized Surgical Planning for Reverse Total Shoulder Arthroplasty
Colin R Smith, PhD, Steadman Philippon Research Institute
- 4:40 pm-4:44 pm 227 - Glenoid Bone Loss in Posterior Shoulder Instability: Correlation to Long Term Clinical Outcomes in a Cohort of Active-Duty Military Patients Under 40
Isaac Fernandez, MD, Texas Tech University Health Sciences Center
- 4:44 pm-4:47 pm Discussion
- 4:47 pm-4:51 pm 48 - Transcriptomics of Anterior Shoulder Instability: Differences in Gene Expression in the Blood of Patients with and without Significant Glenoid Bone Loss

LTC Joseph W. Galvin, DO, Madigan Army Medical Center
**Presented by CPT Patrick W. Rooney, MD*

- 4:51 pm-4:55 pm 282 - Subscapularis Tendon Management in Total Shoulder Arthroplasty: Unicortical Button Fixation vs. Transosseous Repair
Ryan J. Whalen, BS, The Steadman Clinic
- 4:55 pm-4:59 pm 39 - Equivocal Post-Operative Pain and Function after Biceps Tenodesis using an Expedited Sling Protocol: A Two Year Update
ENS Andrew J. Recker, BS, Wake Forest School of Medicine
- 4:59 pm-5:03 pm 169 - Early Surgery and Nonoperative Management with PRP Provide Superior Cost-Effectiveness When Compared to Nonoperative Management Alone for Partial Tears of the UCL in Baseball Pitchers: Outcomes From 1,000 Simulated Patients
ENS Jacob F. Oeding, MS, Mayo Clinic Alix School of Medicine
- 5:03 pm-5:07 pm 87 - Congruent-arc Distal Clavicle Autograft for Anterior Glenoid Reconstruction: CT Analysis
CPT Brooke Kowalski, MD, Madigan Army Medical Center
- 5:07 pm-5:11 pm 162 - Predicting and Understanding the Risk for Shoulder and Elbow Injuries in Major League Baseball Pitchers: A Game-Theory-Based Machine Learning Approach
ENS Jacob F. Oeding, MS, Mayo Clinic Alix School of Medicine
- 5:11 pm-5:15 pm Discussion

Rapid Fire Session 2D – Pediatrics

Moderators: LCDR Vanna Rocchi, DO, *Naval Medical Center, Portsmouth*
LCDR Kimberly Spahn, MD, *Naval Medical Center San Diego*

- 4:20 pm-4:24 pm 37 - The Inferior Sacral Iliac Line, A New Horizontal Reference Plane.
LT Thomas J. Berault, MD, Naval Medical Center Portsmouth
- 4:24 pm-4:28 pm 184 - Open and Concomitant Injuries with Pediatric Supracondylar Humerus Fractures
CPT Andrew R. Cooper, MD, Tripler Army Medical Center
- 4:28 pm-4:32 pm 180 - Cost Analysis and Demographic Investigation into Tendon Transfers for Congenital Talipes Equinovarus (Congenital Clubfoot): A Truven Database Study
CPT Kyle J. Klahs, DO, William Beaumont Army Medical Center
- 4:32 pm-4:36 pm 317 - The Diagnostic Utility of Hip Ultrasound in the DIAGNOSIS of Septic Arthritis of the Hip in Pediatric Patients

LCDR Nicholas P. Lopreiato, MD, Walter Reed National Military Medical Center

- 4:36 pm-4:40 pm 275 - Have AVBT Outcomes Improved Over Time? An Examination of Survivorship Trends
MAJ Joshua C. Tadlock, MD, San Antonio Military Medical Center
- 4:40 pm-4:44 pm 212 - Parent Perspectives on Firearm Safety Discussions in a Pediatric Orthopedic Surgery Clinic
Capt Annemarie C. Galasso, MD, Medical University of South Carolina
- 4:44 pm-4:47 pm Discussion
- 4:47 pm-4:51 pm 8 - Investigation of Pediatric Distal Humerus Fractures: A TRUVEN Database Study
CPT Kyle J. Klahs, DO, William Beaumont Army Medical Center
- 4:51 pm-4:55 pm 176 - Radiographic Evaluation of Diaphyseal Forearm Fracture Rotation
LT Samuel Renfro, MD, Naval Medical Center Portsmouth
- 4:55 pm-4:59 pm 244 - TAL and ATTT for Previously Untreated Clubfoot in Children Age 2 to 10 years old
Joshua Chen, MD, Inspira Medical Center
- 4:59 pm-5:03 pm 28 - The Prevalence of Hip Dysplasia Present on Screening Radiographs for Adolescent Idiopathic Scoliosis
Capt Annemarie C. Galasso, MD, Medical University of South Carolina
- 5:03 pm-5:07 pm 185 - Pediatric Supracondylar Fractures Cost Analysis: A Deidentified Database Study
CPT Andrew R. Cooper, MD, Tripler Army Medical Center
- 5:07 pm-5:11 pm 36 - Transient Synovitis After COVID-19 Infection: Case Report and Literature Review
LT Evan D. Crawford, DO, Naval Medical Center Portsmouth
- 5:11 pm-5:15 pm Discussion

Thursday, December 7

Symposium 5 – Sports Knee and Hip

Moderator: LTC David J. Tennent, MD, *Evans Army Community Hospital*

- 7:00 am-7:15 am Evolution of Hip Arthroscopy and Innovation in Treatment of Hip Disorders

Marc J. Philippon, MD, The Steadman Clinic and Steadman Philippon Research Institute

7:15 am-7:30 am Titles TBD
CAPT (Ret) Matthew T. Provencher, MD, MBA, The Steadman Clinic

General Session 5 – Sports Knee and Hip

Moderators: Marc J. Philippon, MD, *The Steadman Clinic and Steadman Philippon Research Institute*

CAPT (Ret) Matthew T. Provencher, MD, MBA, The Steadman Clinic

LTC David J. Tennent, MD, Evans Army Community Hospital

- 7:30 am-7:36 am 23 - Return to Duty After High Tibial Osteotomy: A Radiographic Analysis
LT Scott Feeley, MD, Walter Reed National Military Medical Center
**Presented by LT Valentina Ramirez, MD*
- 7:36 am-7:42 am 262 - Revision Hip Arthroscopy with Labral Reconstruction or Augmentation Demonstrate Favorable Patient Reported Outcomes: A Systematic Review
LT Jack R. Gagné, MD, Navy Medicine Readiness and Training Unit Groton
- 7:42 am-7:48 am 261 - Weight-Bearing Ultrasound Detects Changes in Physiologic Medial Meniscal Extrusion
Lauren Watkins, Steadman Philippon Research Institute
- 7:48 am-7:54 am 332 - Lateral Meniscus Radial Tears - Biomechanics of Four All-Inside Repair Techniques
ENS Thomas Michael Johnstone, BS, Stanford University School of Medicine
- 7:54 am-8:00 am Discussion
- 8:00 am-8:06 am 66 - Increased Incidence of Anterior Cruciate Ligament Ruptures in Collegiate Division I Soccer Players Following Stop of Injury Prevention Program
CPT Emily McDermott, MD, San Antonio Military Medical Center
- 8:06 am-8:12 am 117 - An Evolution of 20 Years of ACL Reconstructions in the Military Repairs, Allografts and Autografts
COL(R) Craig R. Bottoni, MD, Tripler Army Medical Center
- 8:12 am-8:18 am 190 - Hip Arthroscopy in Recreational Athletes: Risk Factors for Failure to Return to Sport and Factors that Influence Psychological Readiness to Return to Sport

LCDR KJ Hippensteel, MD, Walter Reed National Military Medical Center

8:18 am-8:24 am 334 - Femoroacetabular Impingement: Preoperative Characteristics and Postoperative Duty Status within a Military Population
CPT Jeffrey L. Wake, DO, Tripler Army Medical Center

8:24 am-8:30 am Discussion

Panel Discussion 4 – Sports Knee and Hip Challenging Case Debate

Moderator: LTC David J. Tennent, MD, *Evans Army Community Hospital*

8:30 am-9:15 am Panel Discussion
Panel: *CDR (Ret) James Bailey, MD, Ryu Hurvitz Orthopedic Clinic*
LTC Jeanne Patzkowski, MD, San Antonio Military Medical Center
CAPT (Ret) Matthew T. Provencher, MD, MBA, The Steadman Clinic

9:15 am-9:30 am Refreshment Break

Symposium 6 - Adult Reconstruction Hip and Knee

Moderator: CAPT Robert W. Tracey, MD, *Walter Reed National Military Medical Center*

9:30 am-9:45 am Anterior THA: Technical Keys for the Best Outcomes
Joel Matta, MD, The Steadman Clinic

9:45 am-10:00 am Patient Specific Knee Alignment
Kiel J. Pfefferle MD, Spi Orthopaedics and Sports Medicine

General Session 6 – Adult Reconstruction Hip and Knee

Moderator: Joel Matta, MD, *The Steadman Clinic*
Kiel J. Pfefferle MD, *Spi Orthopaedics and Sports Medicine*
CAPT Robert W. Tracey, MD, Walter Reed National Military Medical Center

10:00 am-10:06 am 125 - Management of Isolated Greater Trochanter Fractures associated with Total Hip Arthroplasty
CPT Erik Hegeman, MD, Brooke Army Medical Center

10:06 am-10:12 am 91 - Mental Health Factors Associated with Post Operative Emergency Department Presentation Following Primary Total Joint Arthroplasty
Stephanie Price, MD, MPH, UT Dell Medical School
**Presented by Chizitam Ibezim, MD, UT Dell Medical School*

- 10:12 am-10:18 am 84 - Incidence and Risk Factors for Periprosthetic Joint Infection in Patients with Total Hip and Knee Arthroplasty Undergoing Preoperative Colonoscopy
LCDR Ashley B. Anderson, MD, Walter Reed National Military Medical Center
- 10:18 am-10:24 am 85 - Incidence and Risk Factors for Periprosthetic Joint Infection in Patients with Total Hip and Knee Arthroplasty Undergoing Postoperative Colonoscopy
LCDR Ashley B. Anderson, MD, Walter Reed National Military Medical Center
- 10:24 am-10:30 am Discussion
- 10:30 am-10:36 am 208 - The Cost of Delayed Referral for Prosthetic Joint Infection
Josef E. Jolissaint, MD, Atrium Health Musculoskeletal Institute
- 10:36 am-10:42 am 55 - Conversion of Unicompartmental to Total Knee Arthroplasty: Are Revision Components Necessary?
Joyee Tseng, BS, MS, Rush University Medical Center
- 10:42 am-10:48 am 146 - Short Term Outcomes in Unicompartmental vs. Total Knee Arthroplasty
LT Graham E. Sullivan, MD, Naval Medical Center Portsmouth
**Presented by LCDR Ashton H. Goldman, MD, Naval Medical Center Portsmouth*
- 10:48 am-10:54 am 202 - Running After Hip and Knee Arthroplasty: Patient Reported Activity
CPT Matthew J. Kinnard, MD, Walter Reed National Military Medical Center
- 10:54 am-11:00 am Discussion
- 11:00 am-12:00 pm **Focused Lunch Presentations**
**CME Credit Not Available*
- 12:00 pm-2:00 pm **Scientific E-Poster Session**
(Presenters will be available to answer questions)

Rapid Fire Session 3A – Adult Reconstruction

Moderators: MAJ Joseph H. Dannenbaum IV, MD, *Madigan Army Medical Center*
LCDR Ashton H. Goldman, MD, *Naval Medical Center Portsmouth*

- 2:00 pm-2:04 pm 305 - Biochemical and Histologic Milieu of Pulvinar Inflammation and Osteoarthritis Progression
Ben Kuhns, MD, The Steadman Clinic

- 2:04 pm-2:08 pm 89 - Which Oral Drugs Associated with Adverse Effects on Bone Mineral Density Demonstrate Worse Total Knee Arthroplasty Implant-Related Complications
ENS Emile-Victor Kuyt, BS, George Washington University School of Medicine and Health Sciences
- 2:08 pm-2:12 pm 96 - Predictors of MUA after Knee Arthroplasty in Military Health System
CPT Matthew J. Kinnard, MD, Walter Reed National Military Medical Center
- 2:12 pm-2:16 pm 68 - High Conversion Rate among Military Members after Unicompartamental Knee Arthroplasty
LT Robert A. Tardif, MD, Naval Medical Center Portsmouth
- 2:16 pm-2:20 pm 63 - A Systematic Review on Revision Total Hip Arthroplasty Employing the Direct Anterior Approach
LT Cord J. Peters, MD, Naval Medical Center Portsmouth
- 2:20 pm-2:24 pm 207 - Treatment at a Specialized Prosthetic Joint Infection Center Improves Mortality Rates
Capt Samuel L. Posey, MD, Atrium Health Musculoskeletal Institute
- 2:24 pm-2:30 pm Discussion
- 2:30 pm-2:34 pm 209 - Delayed Referral for Prosthetic Joint Infection Leads to Inferior Outcomes
Alexander Dombrowsky, Atrium Health Musculoskeletal Institute
- 2:34 pm-2:38 pm 234 - Prior Patellectomy: Comparing CR and PS Total Knee Arthroplasty Survivorship and Reported Outcomes
CPT Matthew E. Wells, DO, William Beaumont Army Medical Center
- 2:38 pm-2:42 pm 338 - Skiving or Diving: A Cadaver Study on the Uniformity of Tibial Cuts
CPT Erickson Andrews, MD, Henry Ford Health System
- 2:42 pm-2:46 pm 58 - Patients with Periprosthetic Joint Infection Have Elevated Omega-6: Omega-3 Ratio in Blood
LT Laura Y. Lu, MD, Massachusetts General Hospital/Harvard Medical School
- 2:46 pm-2:50 pm 110 - Outcomes of Isolated Femoral Revision THA following Periprosthetic Fracture in the Acute Period
Alexander T. Bradley, MD, Rush University Medical Center

2:50 pm-2:54 pm 237 - Synthetic Mesh Augmentation of an Acute Quadriceps Tendon Repair in a Well-Functioning Total Knee Arthroplasty
CPT Alexys Bermudez, MD, Tripler Army Medical Center

2:54 pm-3:00 pm Discussion

Rapid Fire Session 3B – Sports Medicine Knee & Hip

Moderators: LTC Adam Pickett, MD, *Fort Belvoir Community Hospital*

2:00 pm-2:04 pm 294 - Understanding the Roles of Senescence in an Acute ACL Injury
Lucas Minas, Steadman Philippon Research

2:04 pm-2:08 pm 72 -Evaluating Nonoperatively Treated Proximal Tibia Stress Fractures
LCDR Christopher Martin, MD, Naval Medical Center San Diego

2:08 pm-2:12 pm 254 - Biomechanical Analysis of Meniscotibial Ligament Tenodesis to Treat Meniscal Extrusion
Justin Hollenbeck, BS, MS, Steadman Philippon Research Institute

2:12 pm-2:16 pm 157 - Operative Treatment has Greater Expected Value than Nonoperative Treatment for First-Time Patellar Dislocations: A Meta-Analysis and Expected Value Decision Analysis
ENS Andrew J. Recker, BS, Wake Forest School of Medicine

2:16 pm-2:20 pm 183 - Comparing Bone-Tendon Autograft with Bone-Tendon-Bone Autograft for ACL Reconstruction, Five Year Outcomes
CPT Timothy H. Stocker-Downing, DO, Tripler Army Medical Center

2:20 pm-2:24 pm 269 - Comparison of Injuries in Professional Football Based on Playing Surface
Ryan J. Whalen, BS, The Steadman Clinic

2:24 pm-2:30 pm Discussion

2:30 pm-2:34 pm 252 - Medial Meniscal Root Forces after Meniscotibial Ligament Disruption and Repair
Justin Hollenbeck, BS, MS, Steadman Philippon Research Institute

2:34 pm-2:38 pm 67 - Acute Anterior Cruciate Ligament Reconstruction Performed Within Ten Days of Injury Does Not Increase Risk of Postoperative Arthrofibrosis: A Systematic Review and Meta-Analysis
CPT Emily McDermott, MD, San Antonio Military Medical Center
**Presented by Capt Mikalyn T. DeFoor, MD, San Antonio Military Medical Center*

- 2:38 pm-2:42 pm 45 - Bipolar Osteochondral Allograft Transplantation of the Patello-Trochlear Joint: Mid-Term Outcomes
CPT Christian Cruz, MD, Tripler Army Medical Center
- 2:42 pm-2:46 pm 189 - The Effect of Femoral Retroversion on Hip Range of Motion: A 3D Computational Analysis
LCDR KJ Hippensteel, MD, Walter Reed National Military Medical Center
- 2:46 pm-2:50 pm 331 - Menisco-Tibial Ligament Complex Anatomy and Biomechanics: Implications for Meniscus Repairs
ENS Thomas Michael Johnstone, BS, Stanford University School of Medicine
- 2:50 pm-2:54 pm 196 - Hip Paralabral Cyst as a Cause of Femoral Vein Thrombosis Treated with Arthroscopic Cyst Decompression and Labral Repair
Capt Tyler M. Goodwin, MD, University of Tennessee Health Science Center Chattanooga

2:54 pm-3:00 pm Discussion

Rapid Fire Session 3C – Spine

Moderators: MAJ Bryan K. Lawson, MD, *Brooke Army Medical Center*
CPT Alfred J. Pisano, MD, *Walter Reed National Military Medical Center*

- 2:00 pm-2:04 pm 47 - Kickstand Rod Improves Coronal Alignment and Maintains Correction Compared to Control
CPT Anson G. Bautista, MD, Dwight D. Eisenhower Army Medical Center
- 2:04 pm-2:08 pm 319 - Impact of Neurocheck Frequency on Delirium following Traumatic Brain Injury
EODI Philip J. Davis, BS, Vanderbilt University School of Medicine
- 2:08 pm-2:12 pm 44 - A Sacral Fracture Model to Demonstrate Effects on Sagittal Alignment
David W. Polly, MD, University of Minnesota
- 2:12 pm-2:16 pm 4 - Injuries and Chronic Musculoskeletal Pain Among High-Speed Boat Operators
CPT Yohan Robinson, MD, PhD, MBA, Armed Forces Centre for Defence Medicine
- 2:16 pm-2:20 pm 51 - Incidence of S1 Fracture after Lumbosacral Interbody Fusion
Nathan R. Hendrickson, MD, MS, University of Minnesota
- 2:20 pm-2:24 pm 240 - Effects of a Combined Spine Service on Orthopaedic Training

LT Robert G. Patterson, DO, Naval Medical Center Portsmouth

- 2:24 pm-2:30 pm Discussion
- 2:30 pm-2:34 pm 119 - Early Results of Adult Spinal Deformity Correction with Robotic Assistance
CDR Roland S. Kent, MD, Musculoskeletal Education and Research Center
- 2:34 pm-2:38 pm 273 - Biomechanical Comparison of C3 Dome Laminectomy vs. Open-Door Plate Laminoplasty
LT Jeremy Tran, MD, Walter Reed National Military Medical Center
- 2:38 pm-2:42 pm 75 - Novel Injection Technique Predictive Pain Relief after Removal of Instrumentation
CPT John D. Synovec, MD, MBA, Jack Hughston Memorial Orthopedic Residency
- 2:42 pm-2:46 pm 102 - The Learning Curve for Pelvic Fixation with the Bedrock Technique
Nathan R. Hendrickson, MD, MS, University of Minnesota
- 2:46 pm-2:50 pm 78 - Paraspinal Compartment Syndrome in the Active-Duty Population: A Case Series
CPT Craig M. Johnson, DO, Madigan Army Medical Center Orthopaedic Surgery
- 2:50 pm-2:54 pm 224 - Operating Room Turnover Times for Spine Surgery
CPT Dillon J. Macky, MD, Dwight D. Eisenhower Army Medical Center
- 2:54 pm-3:00 pm Discussion

Rapid Fire Session 3D – Basic Science

Moderators: **LCDR** Ashley B. Anderson, MD, *Walter Reed National Military Medical Center*
LTC Elizabeth M. Polfer, MD, *Memorial Sloan Kettering Cancer Center*

- 2:00 pm-2:04 pm 320 - Titanium Alloy Supports Robust Biofilm Growth: Assessing Implications for Orthopedic Implants
CPT Siang C. Kua, MD, Dwight D. Eisenhower Army Medical Center
- 2:04 pm-2:08 pm 301 - Senescence Phenotype in Osteoarthritis May Lead to Novel Clinical Detection
Johnny Huard, PhD, Steadman Philippon Research Institute
- 2:08 pm-2:12 pm 285 - Muscle ERR γ Overexpression Mitigates the Muscle Atrophy after ACL Injury
Aiping Lu, MD, Steadman Philippon Research Institute

- 2:12 pm-2:16 pm 205 - Bone Loss following Burn Injuries: Preliminary Results of a Novel Murine Model
CAPT Patrick M. Wise, MD, University of California, Davis
- 2:16 pm-2:20 pm 121 - Chondroprotective and Analgesic Effect of Natural and Synthetic Cannabinoids in Murine PTOA
CPT Amy Thompson, MD, William Beaumont Army Medical Center
- 2:20 pm-2:24 pm 292 - Fisetin Treated Human Bone Marrow Aspirate Concentrate on Osteoarthritis Rats
Haruki Nishimura, MD, PhD, Steadman Philippon Research Institute
- 2:24 pm-2:30 pm Discussion
- 2:30 pm-2:34 pm 200 - The Relationship Between Cartilage Loading and Degeneration in Knee Osteoarthritis
Colin R. Smith, PhD, Steadman Philippon Research Institute
- 2:34 pm-2:38 pm 302 - Systemic Senescence Levels can be Reduced by Senolytic Therapy
Chelsea S. Bahney, PhD, Steadman Philippon Research Institute
- 2:38 pm-2:42 pm 260 - Targeting Muscle Cell Senescence in Dystrophin^{-/-}/Utrophin^{-/-} Double Knockout Mice Improves Muscle Histopathology and Enhances Bone Mass and Lifespan
Xueqin Gao, MD, PhD, Steadman Philippon Research Institute
- 2:42 pm-2:46 pm 296 - Aging Murine Model Exhibits Elevated Senescence and Delayed Fracture Healing
Dane R. G. Lind, BA, Steadman Philippon Research Institute
- 2:46 pm-2:50 pm 339 - β -Catenin mRNA Lipoplexes Promote Bone Healing in Murine Tibia Fractures
Anna Laura Nelson, MS, PhD, Steadman Philippon Research Institute
- 2:50 pm-2:54 pm 53 - Influence of a Threaded Implant Design and Manufacturing on Osseointegration
David W. Polly, MD, University of Minnesota
- 2:54 pm-3:00 pm Discussion
- 3:00 pm-3:15 pm *Refreshment Break*

Best of SOMOS – Award Presentations

Moderators: LCDR Marvin E. Dingle, MD, *US Naval Hospital Okinawa, Japan*
MAJ Sean E. Slaven, MD, *Walter Reed National Military Medical Center*

3:15 pm-3:21 pm **Founders' Award**
309 - Surgeon Experience Impact on Complications after Severe Open Tibial Fractures
LT Conor F. McCarthy, MD, Walter Reed National Military Medical Center

3:21 pm-3:27 pm **Norman T. Kirk Award**
64 - ERSA vs. MTF: Comparing Efficiency in Military Total Joint Arthroplasty
CPT Kenneth J. Fellows, MD, Brooke Army Medical Center

3:27 pm-3:33 pm **Jamie Dianne Bulken-Hoover Memorial - Best Hand Paper Award**
218 - Second Metacarpal Cortical Percentage Predicts Loss of Distal Radius Reduction
Capt Clinton J. Ulmer, MD, UT Health San Antonio

3:33 pm-3:40 pm Discussion

Panel Discussion 5 – Allgood Award Winners

Moderator: COL Daniel J. Stinner, MD, PhD, *Vanderbilt University Medical Center*
 CDR Scott Tintle, MD, *Walter Reed National Military Medical Center*

3:40 pm-3:50 pm Introduction of the Allgood Panel

3:50 pm-4:50 pm Panel: *COL(Ret) James R. Ficke, MD, Johns Hopkins University*
 COL (Ret) Mark P. Pallis, DO, Geisinger Musculoskeletal Institute
 CAPT Matthew T. Provencher, MD, The Steadman Clinic
 COL(Ret) Dean C. Taylor, MD, Duke University

Special Event – Speed Mentoring Session (Colorado Ballroom)

Moderator: LCDR Sarah Nelson, MD, MS, *Walter Reed National Military Medical Center*
 LCDR Nicholas Perry, MD, *Naval Medical Center San Diego*

5:00 pm - 6:00 pm *Speakers TBD*

Friday, December 8

7:00 am-8:00 am **Service Breakouts**

Concurrent Symposium 7 – Pediatrics

Moderator: LCDR Vanna Rocchi, DO, *Naval Medical Center, Portsmouth*

8:15 am-8:45 am Pediatric and Adolescent ACL: What's New in Reconstruction, Repair, and Augmentation

Emily L. Niu, MD, Childrens National Hospital

8:15 am-8:45 am Osteochondritis Desiccans of the Knee: Recommendations for Today's Adolescent Athletes
Stephanie Pearce, MD, Nemours Children's Health

Concurrent General Session 7 – Pediatrics

Moderator: Emily L. Niu, MD, *Childrens National Hospital*
Stephanie Pearce, MD, *Nemours Children's Health*
LCDR Vanna Rocchi, DO, *Naval Medical Center, Portsmouth*

8:45 am-8:51 am 241 - Prospective Evaluation of Reduction Loss Following Pediatric Cast Bivalving
CPT Daniel J. Cognetti, MD, Brooke Army Medical Center

8:51 am-8:57 am 308 - Post-Operative Pain Control for Pediatric Patients after Orthopaedic Surgery
CPT Marcus Hoof, MD, San Antonio Military Medical Center

8:57 am-9:03 am 321 - Is Posterior Tibial Slope Increased in Pediatric and Adolescent Patients with Tibial Spine Fracture? A Casecontrol Study
LCDR Nicholas P. Lopreiato, MD, Walter Reed National Military Medical Center

9:03 am-9:09 am 165 - Combined Anterior Thoracic Vertebral Body Tethering and Posterior Lumbar Tethering Results in Quicker Return to Sport and Activity Compared to Posterior Spinal Instrumented Fusion in Patients with Adolescent Idiopathic Scoliosis
ENS Jacob F. Oeding, MS, Mayo Clinic Alix School of Medicine

9:09 am-9:15 am Discussion

9:15 am-9:21 am 92 - Long Leg Cast vs. Hinged Knee Brace Immobilization After Surgical Treatment of Tibial Tubercle Fractures
Stephanie Price, MD, MPH, UT Dell Medical School

9:21 am-9:27 am 233 - The Lambrinudi Triple Arthrodesis for Previously Untreated Clubfoot in Adolescents
Joshua Chen, MD, Inspira Medical Center

9:27 am-9:33 am 211 - Patella Fractures in Children: Outcomes and Complications
Avani Chopra, Penn State College of Medicine

9:33 am-9:39 am 220 - Idiopathic vs. Concomitant Sensory Processing Disorders in Pediatric Recurrent Toe-Walkers
Taylor Zak, MD, Texas Scottish Rite Hospital for Children

9:39 am-9:45 am Discussion

Concurrent Symposium 8 –Tumor

Moderator: LTC Elizabeth M. Polfer, MD, *Memorial Sloan Kettering Cancer Center*

8:15 am-8:45 am Compressive Osseointegration for Endoprosthetic Reconstruction
Samer Attar, MD, Northwestern University

Concurrent General Session 8 –Tumor

Moderator: Samer Attar, MD, *Northwestern University*
LTC Elizabeth M. Polfer, MD, *Memorial Sloan Kettering Cancer Center*

8:45 am-8:51 am 231 - Outcomes of a Novel Osseointegration Device for Transfemoral Amputation: A Prospective Case Series
CDR Daniel C. Allison, MD, MBA, Cedars-Sinai Medical Center

8:51 am-8:57 am 79 - Does Diagnostic Imaging in Trauma Patients Increase the Probability of Cancer?
LT Kyle P. Messer, DO, Walter Reed National Military Medical Center

8:57 am-9:03 am 154 - Oncologic Lower Extremity Intercalary Allograft Reconstruction: Plates vs Nails
CPT Brooke Kowalski, MD, Madigan Army Medical Center

9:03 am-9:09 am 303 - Midfoot Instability Following Sarcoma Resection: A Novel Technique to Facilitate Functional Limb Salvage
CPT Rachel J. Milam, MD, Madigan Army Medical Center

9:09 am-9:15 am Discussion

9:15 am-9:21 am 236 - Ewing Sarcoma of Bone in the Pediatric Population: Predictors of Survival within the United States
CPT Matthew E. Wells, DO, William Beaumont Army Medical Center

9:21 am-9:27 am 232 - Reconstruction of a Massive Hemipelvic Defect with a Novel Custom Pelvic Endoprosthesis
CDR Daniel C. Allison, MD, MBA, Cedars-Sinai Medical Center

9:27 am-9:33 am 307 - Use of Intraoperative Laser Angiography in Pediatric Van Nes Rotationplasty
CPT Alec C. Egan, MD, MS, Madigan Army Medical Center
**Presented by Courtney Lavin, MD, Madigan Army Medical Center Orthopaedic Surgery*

9:33 am-9:39 am 20 - Lateral Hinge Screw Effect for Medial Opening Wedge HTO in Sawbones Model
Andrew Wright, Medstar Health Research Institute

9:39 am-9:45 am Discussion

9:45 am-10:00 am Refreshment Break

Special Presentation 2 - Nutrition

Moderator: TBD

10:00 am-10:30 am Title TBD
Nathan R. Hendrickson, MD, MS, University of Minnesota

Symposium 9 - Spine

Moderator: MAJ Donald R. Fredericks, MD, *Walter Reed National Military Medical Center*

10:30 am-10:15 am Title TBD
Christopher K. Kepler, MD, MBA, Rothman Institute

10:15 am-11:00 am Title TBD
Arjun Sebastian MD, MS, Mayo Clinic

General Session 9 – Spine

Moderators: Christopher K. Kepler, MD, MBA, *Rothman Institute*
Arjun Sebastian MD, MS, *Mayo Clinic*
MAJ Donald R. Fredericks, MD, *Walter Reed National Military Medical Center*

11:00 am-11:06 am 274 - Low Back Pain Risk is Associated with Spinal, Pelvic and Lower Limb Pathologies
Capt Galina Cohen-Shapiro, MD, PhD, Israel Defense Forces

11:06 am-11:12 am 25 - Aborted AIS Spinal Fusion due to Persistent Loss of IONM: Which Patients are at Greatest Risk?
CPT Connor Zale, MD, Tripler Army Medical Center

11:12 am-11:18 am 62 - Meta-Analysis Comparing CDA vs. ACDF in Patients with Preoperative Kyphosis
LCDR Clare E. Griffis, MS, MD, Naval Medical Center Portsmouth

11:18 am-11:24 am 32 - Direct Electrical Stimulation Assessment of Pedicle Screws in Pediatric Spinal Deformities
Capt Jack McKeon, MD, Ohio State University

11:24 am-11:30 am Discussion

- 11:30 am-11:36 am 3 - Biomechanical Analysis of a Modified Triangular Osteosynthesis Technique
CAPT Wyatt D. Vander Voort, MD, University of California, Davis
- 11:36 am-11:42 am 103 - Sacropelvic Fixation with Porous Fusion/Fixation Screws: A Retrospective Review
Nathan R. Hendrickson, MD, MS, University of Minnesota
- 11:42 am-11:48 am 327 - Retroperitoneal Anatomy in Supine, Prone, and Lateral Lumbar Spine MRIs
CPT Gabriel Mason, MD, Brooke Army Medical Center
- 11:48 am-11:54 am 297 - Shoulder or Spine? Patterns in Surgical Intervention for Patients Treated for Both Cervical Radiculopathy and Shoulder Pathology
LT Jeremy Tran, MD, Walter Reed National Military Medical Center
- 11:54 am-12:00 pm Discussion

2023 SOMOS E-Poster Presentations

Station A

ADULT RECONSTRUCTION

41 - Patient Reported Outcomes Measures in THA/TKA Randomized Controlled Trials

LT Vivek M. Abraham, MD, Naval Medical Center Portsmouth

**Presented by LCDR Ashton H. Goldman, MD, Naval Medical Center Portsmouth*

177 - 30-Day Perioperative Morbidity and Mortality After Elective Arthroplasty During COVID

LCDR Daniel J Enriquez, MD, Naval Medical Center Portsmouth

18 - Low Volume Total Joint Arthroplasty at Surgeon and Hospital Level in the Military Health System

MAJ Peter Formby, MD, Carl R Darnall Army Medical Center

33 - Comparing Debridement Techniques in Revision Total Knee Arthroplasty

CPT Joshua A. Hansen, MD, William Beaumont Army Medical Center

88 - Analyzing the Risk of Complications After Total Hip Arthroplasty in Patients Taking Bone-Density-Reducing Medications

ENS Emile-Victor Kuyl, BS, George Washington University School of Medicine and Health Sciences

FOOT & ANKLE

194 - Workers Compensation Healthcare Resource Utilization Following Foot and Ankle Surgery

Capt Tyler M. Goodwin, MD, University of Tennessee Health Science Center Chattanooga

24 - Outcomes of Primary Total Ankle Arthroplasty using a Revision Ankle System

Capt George Graham, MD, OrthoCarolina Foot & Ankle Institute

268 - An Analysis of Foot and Ankle Questions on the Orthopaedic In-Training Examination

CPT Trevor McBride, MD, Brooke Army Medical Center

TRAUMA

313 - Fibrin Glue Use in Periarticular Fixation

CPT Cole Johnson, MD, William Beaumont Army Medical Center

98 - Injury Severity in Falls from Height

CPT Michael M. Polmear, MD, William Beaumont Army Medical Center

Station B

PEDIATRICS

90 - Cost Analysis of Medial Epicondyle and Lateral Condyle Fractures: A TRUVEN Database Study

CPT Kyle J. Klahs, DO, William Beaumont Army Medical Center

7 - Popliteal Deep Vein Thrombosis in a Pediatric Patient with Streptococcus Viridians Osteomyelitis

CPT Joshua A. Hansen, MD, William Beaumont Army Medical Center

PRACTICE MANAGEMENT/EDUCATION

197 - Factors Influencing Orthopedic Surgery Residents' Decision to Pursue Fellowship: A Survey Questionnaire

CPT Francesco Biolzi, DO, Eisenhower Army Medical Center

238 - Social Media and Citations in Orthopaedic Surgery Literature Review

Capt Zachary Bowers, DO, Brooke Army Medical Center

137 - Orthopaedic Operating Room Fire Risks: FDA Database and Literature Review

Capt David B. Carmack, MD, Brooke Army Medical Center

22 - Army Military Treatment Facilities Rate Poorly when Compared to Local Civilian Centers

MAJ Peter Formby, MD, Carl R. Darnall Army Medical Center

299 - Comparative Efficacy of Virtual Reality in Orthopedic Surgery Training Across Specialties

2-LT Mireya Rahman, BSA, TCU Burnett School of Medicine

271 - Deployment Effects on Patient Care and Physician Experience

2LT Lily Swope, BS, Uniformed Services University of Health Sciences

SPINE

276 - The Use of Traction for Adult Spine Deformity: A Systematic Review

CPT Timothy H. Stocker-Downing, DO, Tripler Army Medical Center

293 - Patterns in Treatment Practice for Nondisplaced Type II Odontoid Fractures

LT Jeremy Tran, MD, Walter Reed National Military Medical Center

Station C

SHOULDER & ELBOW

215 - Arthroscopic Supraperoneal Biceps Tenodesis Utilizing a Dual Suture Anchor Modified Mason-Allen Technique: An evaluation of 1-Year Clinical Outcomes

Capt Brett G. Brazier, DO, San Antonio Military Medical Center

107 - Postoperative Infection Rates in Shoulder Arthroscopy Following Preoperative Topical Antimicrobials

ENS Addison G. Cantor, BS, Naval Medical Center San Diego

30 - Outcomes of Tendon Transfers for Scapular Winging in Young Military Athletes

CPT Brandon H. Chung, DO, Tripler Army Medical Center

173 - Outcomes Following Pectoralis Major Rupture Repair in Active-Duty Members

CPT Michael D. Czarnecki, DO, Tripler Army Medical Center

49 - Gene Expression Analysis Reveals Differences in the Capsular Tissue of Patients with Anterior and Posterior Shoulder Instability

LTC Joseph W. Galvin, DO, Madigan Army Medical Center

155 - Intraobserver and Interobserver Reliability in Glenoid Track Measurement

CPT Anthony J. Magee, MD, Tripler Army Medical Center

76 - Patient Reported Outcomes and Rotator Cuff Strength After Rotator Cuff Repair

CPT Austin McCadden, MD, Tripler Army Medical Center

304 - Minimum 5-year Outcomes Following Primary Anterior Cruciate Ligament Repair

Peter J. Millett, MD, MScThe Steadman Clinic

333 - Analysis of Commercial Payer's Policies for Shoulder Arthroplasty

CPT Marc Nicholes, DO, William Beaumont Army Medical Center

134 - Influence of Obesity on Outcomes Following Arthroscopic Rotator Cuff Repair

CPT Franklin J. Powlan, MD, William Beaumont Army Medical Center

147 - Glenoid Bone Loss in Unidirectional Shoulder Instability versus Combined Shoulder Instability

CPT Annette Yoon, MD, William Beaumont Army Medical Center

Station D

OTHER

59 - Does Gamification Improve Patient Engagement and Adherence in Physical Therapy?

Christopher G. Bacak, MD, William Beaumont Army Medical Center

230 - Targeted Muscle Reinnervation To Treat The Painful Neuroma: A Solution When Radiofrequency Ablation Fails

CPT Rachel J. Milam, MD, Madigan Army Medical Center

201 - Waste Management and Resource Utilization in Orthopaedic Surgery
CPT Wyatt A.R. Smith, MD, MPH, San Antonio Military Medical Center

SPORTS INJURIES

219 - Inaccurate Citations are Prevalent within Orthopaedic Sports Medicine Literature
CPT Daniel D. Homeier, MD, Brooke Army Medical Center
**Presented by CPT Mason Adams, DO*

126 - Suture Anchors vs. Bone Tunnels in Primary Patellar Tendon Repair
LT Vaughn Land, MD, Naval Medical Center Portsmouth

128 - Comparing Bone Tunnels and Suture Anchors in Quadriceps Tendon Repair
LT Vaughn Land, MD, Naval Medical Center Portsmouth

214 - Active-Duty Retrospective Review in ACL Reconstruction: Quadriceps versus Patellar Tendon
CPT Connor Venrick, MD, Tripler Army Medical Center

TUMOR

21 - Recurrent Ganglion Cyst in the Lateral Portal following Knee Arthroscopy
2LT Rebecca McAllister, BS, Uniformed Services University

182 - Photodynamic Bone Stabilization Use in Upper Extremity Pathologic Fractures
CPT Timothy H. Stocker-Downing, DO, Tripler Army Medical Center

235 - A Masquerading Hematoma Resulting in the Delayed Diagnosis of a Soft Tissue Sarcoma:
A Case Report
CPT Matthew E. Wells, DO, William Beaumont Army Medical Center