

**SOMOS Scientific Program
December 17-20, 2019
PGA National Resort & Spa
Palm Beach, FL**

Tuesday, December 17

12:00 pm-5:00 pm **Board of Directors Meeting**

12:00 pm-8:00 pm **Meeting Registration**

12:00 pm-11:59 pm **Speaker Ready Area**

Wednesday, December 18

12:00 am-11:59 pm **Speaker Ready Area**

6:00 am-7:00 am **Scientific E-Poster Session** (Presenters will be available to answer questions.)

6:30 am-5:05 pm **Meeting Registration**

6:30 am-5:05 pm **Technical Exhibits, Coffee Breaks and Daily Drawing**

Opening Ceremony

Moderators: Maj Andrew J. Sheean, MD, *San Antonio Military Medical Center*
 LTC Thomas C. Dowd, MD, *San Antonio Military Medical Center* LtCol
 Christopher T. LeBrun, MD, *R. Adams Cowley Shock Trauma Center*

7:00 am-7:10 am Color Guard

7:10 am-7:15 am Welcome & Opening Announcements

Symposium 1 – Trauma 1

Moderator: LCDR Bradley K. Deafenbaugh, MD, *Naval Medical Center San Diego*

7:15 am-7:40 am Pelvic Ring Injury Management – Current State of the Art
Hassan R. Mir, MD, MBA, Florida Orthopaedic Institute

7:40 am-7:45 am Discussion

7:45 am-8:05 am *Break with Exhibitors*

General Session 1 – Trauma 1

Civilian Moderator: Hassan R. Mir, MD, MBA, *Florida Orthopaedic Institute*

Military Moderator: LCDR Bradley K. Deafenbaugh, MD, *Naval Medical Center San Diego*

8:05 am-8:11 am 159 - Impact of Fascia Iliaca Block on Pain, Opioid Consumption, and Clinical Outcomes for Patients with Hip Fractures – A Prospective, Randomized Study

CPT Spencer S. Schulte, MD, William Beaumont Army Medical Center

- 8:11 am-8:17 am 91 - Implementation of a Multidisciplinary “Code Hip” Protocol is Associated with Decreased Time to Surgery and Improved Patient Outcomes
CPT Richard J. VanTienderen, DO, William Beaumont Army Medical Center
- 8:17 am-8:23 am 198 - Longitudinal Analysis of Bone Turnover Biomarkers in Osteoporotic Women
CPT Sean E. Slaven, MD, Walter Reed National Military Medical Center
- 8:23 am-8:29 am 25 - Resident Involvement Affects OR Time and Complications in Lower Extremity Fracture Care
Capt Sophia A. Traven, MD, Medical University of South Carolina
- 8:29 am-8:35 am Discussion
- 8:35 am-8:41 am 183 - The Lateral Pubic Symphysis Fluoroscopic Image Identifies Screw Cortical Breaches During Symphyseal Plating
LT Kyle Mombell, MD, Naval Medical Center San Diego
- 8:41 am-8:47 am 61 - Multimodal Pain Control in Femoral and Tibial Shaft Fractures
CPT Kyle J Klahs, DO, William Beaumont Army Medical Center
- 8:47 am-8:53 am 45 - Negative Pressure Wound Therapy Does Not Diminish Effectiveness of Topical Antibiotic Powder
CPT Nicole M. Sgromolo, MD, San Antonio Military Medical Center
- 8:53 am-8:59 am 204 - Factors Predicting Recurrence After Treatment of Fracture Related Infections
Benjamin W. Hoyt, MD, Walter Reed National Military Medical Center
- 8:59 am-9:05 am Discussion

Rapid Fire Sessions 1A – Education

Moderators: TBD

- 9:08 am-9:12 am 39 - Implementation of a Mobile App for Trauma Education: Results from a Multicenter Study
Natasha Simske, BS, University of Wisconsin School of Medicine and Public Health
- 9:12 am-9:16 am 103 - Research Productivity of Residents Accepted for Orthopaedic Trauma Fellowships
CPT Andrew G. Chan, MD, MPH, William Beaumont Army Medical Center
- 9:16 am-9:20 am 216 - Characterization of Blast Injuries at a Civilian Level 1 Trauma Center
LT Carl A Nunziato, MD, Dell Seton Medical Center

- 9:20 am-9:24 am Discussion
- 9:24 am-9:28 am 148 -Factors Considered when Ranking Military Orthopedic Surgery Residency Applicants
CPT Matthew Wells, DO, William Beaumont Army Medical Center
- 9:28 am-9:32 am 3 - The H-Index and Self-Citation Among Orthopaedic Surgery Fellowship Directors
MAJ Justin J. Ernat, MD, Blanchfield Army Community Hospital
- 9:32 am-9:36 am 67 - The Orthopaedic Burden of Illegal Border Crossings at a US-Mexico Border Level 1 Trauma Center
CPT Richard J. VanTienderen, DO, William Beaumont Army Medical Center
- 9:36 am-9:40 am Discussion

Rapid Fire Sessions 1B – Hip/Pelvis Fracture

Moderators: TBD

- 9:08 am-9:12 am 118 - Does Insurance Status Influence the Treatment or Outcomes of Geriatric Patients with a Hip Fracture?
CPT Richard J. VanTienderen, DO, William Beaumont Army Medical Center
- 9:12 am-9:16 am 219 - Can Partially Threaded Screws Be Improved to Maximize Sacral Purchase?
MAJ Shawn Boomsma, DO, Army Trauma Training Detachment - Ryder Trauma Center
- 9:16 am-9:20 am 181 - Minimally Invasive Lumbopelvic Fixation for Trauma
CPT Darshan Shah, MD, San Antonio Military Medical Center
- 9:20 am-9:24 am Discussion
- 9:24 am-9:28 am 59 - Optimal Clamp Positioning for the Reduction of Transtectal Acetabular Fractures Through the AIP Approach
LT Erica K. Crump, MD, Naval Medical Center San Diego
- 9:28 am-9:32 am 227 - Reliability of the Walter Reed Classification for Heterotopic Ossification Severity
Benjamin W. Hoyt, MD, Walter Reed National Military Medical Center
- 9:32 am-9:36 am 172 - Internal Fixation vs. Arthroplasty for the Treatment of Non-Displaced Femoral Neck Fractures in the Elderly: A Systematic Review and Meta-Analysis
LT John T. Richards, MD, Walter Reed National Military Medical Center
- 9:36 am-9:40 am Discussion

Rapid Fire Sessions 1C – Upper Extremity

Moderators: TBD

- 9:08 am-9:12 am 160 -Locked Plating Proximal Humeral Fractures with and without Fibula Allograft
CPT Dexter C. Allen, Doctor of Medicine, Tripler Army Medical Center
- 9:12 am-9:16 am 94 - Non-Operative Management of Olecranon Fractures in Elderly Patients: A Systematic Review
CPT Griffin M Biedron, MD, William Beaumont Army Medical Center
- 9:16 am-9:20 am 141 - Pharmacologic Treatments in Chronic Neuropathic Upper Extremity Pain: Systematic Review
Michael Ramirez, MS, Uniformed Services University
- 9:20 am-9:24 am Discussion
- 9:24 am-9:28 am 114 - A Surgical Technique for Percutaneous Plating of Ulnar Diaphyseal Fractures
CPT Desraj M. Clark, MD, Walter Reed National Military Medical Center
- 9:28 am-9:32 am 10 - Interposition Arthroplasty after Proximal Ulna Reconstruction with Masquelet Technique
Capt John J. Carroll, MD, Brooke Army Medical Center
- 9:32 am-9:36 am 164 - Resection of Symptomatic Flexor Carpi Radialis Brevis Muscle
LT Ethan M. Bernstein, MD, MPH, Naval Medical Center San Diego
- 9:36 am-9:40 am Discussion
- Rapid Fire Sessions 1D – Hand**
Moderators: TBD
- 9:08 am-9:12 am 51 - Outcomes Following Complex Nerve Lacerations in the Volar Forearm
CPT Ryan B. Bucknam, MD, William Beaumont Army Medical Center
- 9:12 am-9:16 am 75 - Subcutaneous Anterior Transposition vs. In-Situ Decompression of the Ulnar Nerve
CPT Michael D. Eckhoff, MD, William Beaumont Army Medical Center
- 9:16 am-9:20 am 185 - Anatomical Variations in Pathway of Median Nerve: Gross Cadaver Study
Chika Okafor, MD, Howard University Hospital
- 9:20 am-9:24 am Discussion
- 9:24 am-9:28 am 107 - Analysis of the Quality of Prospective Controlled Randomized Trials of Treatment of Boxer’s Fractures
Isaac Fernandez, MD, Texas Tech University Health Sciences Center, El Paso
- 9:28 am-9:32 am 48 - Dorsal Bridge Plate for Distal Radius Fracture: A Systematic Review
CPT Austin Fares, MD, William Beaumont Army Medical Center

9:32 am-9:36 am 84 - Bone Morphogenetic Protein in Scaphoid Non-Union: A Systematic Review
CPT Michael M. Polmear, MD, William Beaumont Army Medical Center

9:36 am-9:40 am Discussion

9:40 am-10:00 am *Break with Exhibitors*

Symposium 2 – Trauma 2

Moderator: MAJ Justin T. Fowler, MD, *San Antonio Military Medical Center*

10:00 am-10:25 am Extreme Nailing of Periarticular Fractures
Walter Virkus, MD, Indiana University Health

10:25 am-10:30 am Questions

General Session 2 – Trauma 2

Civilian Moderator: Walter Virkus, MD, *Indiana University Health*

Military Moderator: MAJ Justin T. Fowler, MD, *San Antonio Military Medical Center*

10:30 am-10:36 am 133 - Cell Behaviour Following Blast Trauma Influences the Likelihood of Non-Union
MAJOR Sarah K Stewart, MBChB BMedSci (Hons), Imperial College London

10:36 am-10:42 am 53 - Effects of a Targeted-Therapy Approach for Post-Traumatic Heterotopic Ossification
LCDR Marvin Dingle, MD, Walter Reed National Military Medical Center

10:42 am-10:48 am 169 - Bisphosphonate Temporal-Spatial Localization and Therapeutic Impact in Burn-Orthopaedic Injury Model
Capt Samuel L Posey, MD, Carolinas Medical Center

10:48 am-10:54 am 7 - Pulmonary Complication After Tibial and Femoral Nailing
LT Benjamin M. Wheatley, MD, Walter Reed National Military Medical Center

10:54 am-11:00 am Discussion

11:00 am-11:06 am 74 - The Productivity and Utilization of Active Duty Orthopaedic Trauma Surgeons
CPT Archie Overmann, MD, Walter Reed National Military Medical Center

11:06 am-11:12 am 121 - Defining the Intramedullary Axis of the Distal Tibia using Computed Tomography
Capt Haydn J. Roberts, MD, University of Arizona - Tucson

11:12 am-11:18 am 9 - Effect of Peri-Articular Implants On Contact Pressure Across the Knee Joint

LT Michelle M. Gosselin, BS, MD, Naval Medical Center Camp Lejeune

11:18 am-11:24 am 158 - Intramedullary Nail Entry Point Affects Postoperative Femoral Shaft Fracture Alignment
M. Wesley Honeycutt, MD, University of South Alabama

11:24 am-11:30 am Discussion

11:30 am-12:30 pm **Focused Lunch Presentations**
**CME Credit Not Available*

12:30 pm-12:50 pm **Report of SOMOS President**
Areas of Military Civilian Partnership to Domestic Disaster Planning and Response
Christopher T. LeBrun, MD, R. Adams Cowley Shock Trauma Center

Symposium 3 – Hand - Jamie Dianne Bulken-Hoover Memorial Hand Session

Moderator: Col P. Shea Brannan, MD, *Eglin Air Force Base*

12:50 pm-1:15 pm Advancements in the Care of Upper Extremity Amputees
R. Glenn Gaston, MD, OrthoCarolina

1:15 pm-1:20 pm Questions

General Session 3 – Hand - Jamie Dianne Bulken-Hoover Memorial Hand Session

Civilian Moderator: R. Glenn Gaston, MD, *OrthoCarolina*

Military Moderator: Col P. Shea Brannan, MD, *Eglin Air Force Base*

1:20 pm-1:26 pm 49 - Nerve Repair Using Processed Nerve Allograft in the US Military
CPT Kyle J. Klahs, DO, William Beaumont Army Medical Center

1:26 pm-1:32 pm 63 - Ultrasound Measurement Criteria for Carpal Tunnel Syndrome: Which is Best?
Collin S. Black, MS3, Duke University Medical Center

1:32 pm-1:38 pm 184 - Limb Occlusion Pressure vs. Standard Pneumatic Tourniquet Pressure in Open Carpal Tunnel Surgery – A Randomized Trial
Capt Hannah Morehouse, MD, Houston Methodist Hospital

1:38 pm-1:44 pm 106 - Modulation of Repressor Element-1 Silencing Transcription Factor levels in Trauma-Induced Mesenchymal Progenitor Cells to Promote Peripheral Nerve Regeneration
CPT Desraj M. Clark, MD, Walter Reed National Military Medical center Orthopaedic Surgery

1:44 pm-1:50 pm Discussion

1:50 pm-1:56 pm 207 - Prospective Evaluation of Open Dorsal Wrist Ganglion Excision in the Active Duty Military Population
LCDR Marvin Dingle, MD, Walter Reed National Military Medical Center

- 1:56 pm-2:02 pm 108 - Arthroscopically Assisted Transosseous Triangular Fibrocartilage Complex Foveal Tear Repair
CPT Michael M. Polmear, MD, William Beaumont Army Medical Center
- 2:02 pm-2:08 pm 50 - Functional Outcomes of Processed Nerve Allograft in the US Military
CPT Joshua C. Tadlock, MD, William Beaumont Army Medical Center
- 2:08 pm-2:14 pm 161 - Electromyography in Posterior Interosseous Nerve Compression & Surgical Decompression Outcomes
CPT Dexter C. Allen, Doctor of Medicine, Tripler Army Medical Center
- 2:14 pm-2:20 pm Discussion

Special Presentation 1

Moderator:

- 2:20 pm-2:45 pm The Future of War Trauma
Kenneth J. Nelson, MD, Womack Army Medical Center
- 2:45 pm-2:50 pm Discussion
- 2:50 pm-3:10 pm *Break with Exhibitors*

Symposium 4 – Pediatrics

Moderator: Lt Col Matthew R. Schmitz, MD, FAAP, *San Antonio Military Medical Center*

- 3:10 pm-3:35 pm Pediatric Topic
Admiral Bruce Gillingham, MD, Navy Bureau of Medicine and Surgery
- 3:35 pm-3:40 pm Questions

General Session 4 – Pediatrics

Civilian Moderator: Admiral Bruce Gillingham, MD, *Navy Bureau of Medicine and Surgery*
Military Moderator: Lt Col Matthew R. Schmitz, MD, FAAP, *San Antonio Military Medical Center*

- 3:40 pm-3:46 pm 128 - Open Fractures of the Phalangeal Head and Neck in Children
CPT J. Banks Deal Jr., MD, Tripler Army Medical Center
- 3:46 pm-3:52 pm 16 - Inappropriate Pediatric Orthopaedic Emergency Department Transfers: A Burden on the Healthcare System
Brandon Hull, MD, University of Texas Southwestern
- 3:52 pm-3:58 pm 129 - Pediatric Orthopaedic Surgeon Time Utilization in Clinic: The EMR and Click Fatigue
CAPT William Hennrikus, MD, Penn State College of Medicine
- 3:58 pm-4:04 pm 13 - Botulinum Toxin May Delay or Prevent Surgery in Spastic Hemiplegic Cerebral Palsy
Stephen Gates, MD, University of Texas Southwestern Medical Center
- 4:04 pm-4:10 pm Discussion

- 4:10 pm-4:16 pm 212 - Core Decompression with Bone Marrow Aspirate Concentrate in the Treatment of Legg-Calve-Perthes Disease
Matthew Griffith, BS, MD, Dwight D. Eisenhower Army Medical Center
- 4:16 pm-4:22 pm 38 - Pediatric Navicular-Medial Cuneiform Tarsal Coalitions: A Case Series
Megan E. Fischer-Colbrie, BS, Naval Medical Center San Diego
- 4:22 pm-4:28 pm 120 - Functional Implications of the Flat-Topped Talus in Idiopathic Clubfoot Deformity
Anthony I. Riccio, MD, Texas Scottish Rite Hospital for Children
- 4:28 pm-4:34 pm 17 - Guided Growth and Infantile Blount's Disease: Is it a Viable Option?
MAJ K. Aaron Shaw, DO, Dwight D. Eisenhower Army Medical Center
- 4:34 pm-4:40 pm Discussion

Rapid Fire Sessions 2A – Nerves

Moderators: TBD

- 4:43 pm-4:47 pm 97 - Supercharge End to Side Nerve Transfer: Systematic Review
Isaac Fernandez, MD, Texas Tech University Health Sciences Center El Paso
- 4:47 pm-4:51 pm 76 - Combat-Sustained Peripheral Nerve Injuries in the US Military
CPT Michael D. Eckhoff, MD, William Beaumont Army Medical Center
- 4:51 pm-4:55 pm 46 - Combat Sustained Peripheral Nerve Injury Outcomes
CPT Tyler Nicholson, MD, William Beaumont Army Medical Center
- 4:55 pm-4:59 pm Discussion
- 4:59 pm-5:03 pm 139 - Radial Nerve Palsies in Humeral Shaft Fractures: A Systematic Review
Erik Hegeman, BS, Uniformed Services University
- 5:03 pm-5:07 pm 122 - Radial Tunnel Syndrome Secondary to Rare Vascular Anomaly
LT Matthew J. Wilson, MD, Naval Medical Center San Diego
- 5:07 pm-5:11 pm 226 - Managing Complex Peripheral Nerve Injuries within the Military Health System: A Multi-Disciplinary Approach to Treatment, Education, and Research at Walter Reed National Military Medical Center
LCDR Sean Wade, MD, Walter Reed National Military Medical Center
- 5:11 pm-5:15 pm Discussion

Rapid Fire Sessions 2B – Hand

Moderators: TBD

- 4:43 pm-4:47 pm 109 - Botulinum Therapy for Vasospastic Disease of the Hand: A Systematic Review

CPT Christopher Alberts, DO, William Beaumont Army Medical Center

- 4:47 pm-4:51 pm 90 - Preoperative Sleep Disturbance Linked to Patient Outcomes following Orthopaedic Hand Surgery
CPT Nicholas J. Drayer, MD, Madigan Army Medical Center
- 4:51 pm-4:55 pm 126 - Ulnar Metacarpal Base Fracture-Dislocations: Treatment Options and Literature Review
John B. Fuller, MD, William Beaumont Army Medical Center
- 4:55 pm-4:59 pm Discussion
- 4:59 pm-5:03 pm 35 - Risk Factors for Infection Following Total Wrist Arthroplasty and Arthrodesis: An Analysis of 6,641 Patients
Alyssa D. Althoff, BS, Medical University of South Carolina
- 5:03 pm-5:07 pm 64 - Factors Affecting Decision Making Regarding Antibiotics for Elective Hand Surgery
CPT Tyler Nicholson, MD, William Beaumont Army Medical Center
- 5:07 pm-5:11 pm 37 - Resilience and Patient Reported Outcomes in Patient Undergoing Orthopaedic Hand Surgery
CPT Nicholas J. Drayer, MD, Madigan Army Medical Center
- 5:11 pm-5:15 pm Discussion

Rapid Fire Sessions 2C – Spine

Moderators: TBD

- 4:43 pm-4:47 pm 166 - Radiographic Analysis of Lumbar Disc Arthroplasty Reoperations
CPT Darshan Shah, MD, San Antonio Military Medical Center
- 4:47 pm-4:51 pm 230 - Analysis of Severe Dysphagia Patients Following Anterior Cervical Spine Surgery
Capt John Wuellner, MD, University of California, Davis
- 4:51 pm-4:55 pm 111- Cervical Paraspinal Muscle Fat Infiltration Can Be Estimated by Computed Tomography Hounsfield Units
LCDR Scott C. Wagner, MD, Walter Reed National Military Medical Center
CPT Donald R. Fredericks Jr., MD, Walter Reed National Military Medical Center
- 4:55 pm-4:59 pm Discussion
- 4:59 pm-5:03 pm 149 - Sacroiliac Fusion Revision: A Case Series-Based Technique Guide
CPT Daniel J. Cognetti, MD, Brooke Army Medical Center
- 5:03 pm-5:07 pm 11 - Burst Fracture Managed with XLIF and Posterior Instrumentation: Technical Note
Capt John J. Carroll, MD, Brooke Army Medical Center

5:07 pm-5:11 pm 12 -Vertically Unstable Sacral Fracture Nonunion Revised with Iliac-Iliac Fixation
Capt John J. Carroll, MD, Brooke Army Medical Center

5:11 pm-5:15 pm Discussion

Rapid Fire Sessions 2D – Practice and Pain Management

Moderators: TBD

4:43 pm-4:47 pm 224 - Initial Deployability and Outcome Trends in Military Health System Beneficiaries Undergoing Shoulder Procedures Enrolled in MOTION Database
Col Mark Slabaugh, MD, United States Air Force Academy

4:47 pm-4:51 pm 117 - Billing and Coding Education and Knowledge Among Military Orthopaedic Surgeons
CPT Matthew Mangini, MD, San Antonio Military Medical Center

4:51 pm-4:55 pm 116 - Opioid Prescribing Patterns and Patient Satisfaction with Care
MAJ Nathan Lanham, MD, Martin Army Community Hospital

4:55 pm-4:59 pm Discussion

4:59 pm-5:03 pm 72 - Utilization of the Department of Defense Peer Reviewed Orthopaedic Research Program (PRORP)
LT Ashley B. Anderson, MD, Walter Reed National Military Medical Center

5:03 pm-5:07 pm 105 - Opioid Prescribing Patterns for United States Military Veterans with a History of Musculoskeletal Injury
ENS Katina Kartalias, BS, MS, The George Washington University School of Medicine

5:07 pm-5:11 pm 147 - Multivitamin Use in Enhanced Recovery After Surgery Protocols: A Cost Analysis
Capt Dawn M. G. Rask, MD, San Antonio Military Medical Center

5:11 pm-5:15 pm Discussion

5:15 pm-6:15 pm **Military Female Orthopaedic Surgeons Forum**
Moderator: TBD

5:15 pm-6:15 pm **Scientific E-Poster Session** (Presenters will be available to answer questions.)

6:15 pm-6:45 pm **Multimedia Education Session**

Thursday, December 19

12:00 am-11:59 pm **Speaker Ready Area**

6:00 am-7:00 am **Scientific E-Poster Session** (Presenters will be available to answer questions.)

7:00 am-12:05 pm **Meeting Registration**

7:00 am-12:05 pm **Technical Exhibits, Coffee Breaks and Daily Drawing**

Symposium 5 – Reconstruction/Tumor

Moderator: LtCol Dustin Lybeck, MD, *San Antonio Military Medical Center*

7:00 am-7:25 am Segmental Bone Loss in Tumor Surgery: Past to Present
Andre R. Spiguel, MD, University of Florida

7:25 am-7:30 am Questions

General Session 5 – Reconstruction/Tumor

Civilian Moderator: Andre R. Spiguel, MD, *University of Florida*

Military Moderator: LtCol Dustin Lybeck, MD, *San Antonio Military Medical Center*

7:30 am-7:36 am 22 - Resilience and Patient Reported Outcomes in Patients Undergoing Total Hip Arthroplasty
CPT Nicholas J. Drayer, MD, Madigan Army Medical Center

7:36 am-7:42 am 220 - Safe Return to Driving Following Anterior vs. Posterior Approach to Total Hip Arthroplasty
LT John T. Richards, MD, Walter Reed National Military Medical Center

7:42 am-7:48 am 195 - Fixed-Bearing Medial Unicondylar Knee Arthroplasty - Slight Varus, Just Right
CPT Sean E. Slaven, MD, Walter Reed National Military Medical Center

7:48 am-8:54 am 85 - What is the Critical Tibial Resection Depth During Unicompartmental Knee Arthroplasty? A Biomechanical Study of Fracture Risk.
LT Trevor Tompane, MD, MPH, Naval Medical Center San Diego

7:54 am-8:00 am Discussion

8:00 am-8:06 am 134 - Isolated Tibial Revision with a Cruciate Retaining Femoral Component: Can You Stay CR?
CDR Robert W Tracey, MD, Rush University Medical Center

8:06 am-8:12 am 110 - Sarcoma Survival in the US Military Population: A Comparison of the DoD Central Cancer Registry and National Cancer Institute's SEER Program
LT Ashley B. Anderson, MD, Walter Reed National Military Medical Center

- 8:12 am-8:18 am 27 - Survivorship Following Resection of Primary Tumors in Patients with Metastatic Soft Tissue Sarcoma
Capt Sophia A. Traven, MD, Medical University of South Carolina
- 8:18 am-8:24 am 242 - Examining the Use of the Pressure Modulated Knee Rehabilitation Machine (PMKR) In Addition to Traditional Physical Therapy vs. Traditional Physical Therapy Alone Following Total Knee Arthroplasty: A Randomized Control Study
Capt Brett G. Brazier, DO, San Antonio Military Medical Center
- 8:24 am-8:30 am Discussion
- 8:30 am – 8:50am *Break with Exhibitors*

Rapid Fire Sessions 3A – Hand

Moderators: TBD

- 8:50 am-8:54 am 131 -Guidewire Referencing Dorsal Scaphoid Fixation Technique: A Comparative Cadaveric Study
CDR Jason H. Rockwood, DO, Okinawa Naval Hospital
- 8:54 am-9:58 am 125 - Hand Surgeons Are Tackling Tougher Scaphoids
CPT Tyler Nicholson, MD, William Beaumont Army Medical Center
- 8:58 am-9:02 am 217 - Functional Outcomes Following Operative Treatment of Scaphoid Nonunion
LT Nicholas Lake, MD, Naval Medical Center San Diego
- 9:02 am-9:06 am Discussion
- 9:06 am-9:10 am 68 - Capitulum Fusion: A Systematic Review
CPT Michael M. Polmear, MD, William Beaumont Army Medical Center
- 9:10 am-9:14 am 101 - Post Traumatic Avascular Necrosis of the Triquetrum
LCDR Sean McIntire, MD, Naval Medical Center San Diego
- 9:14 am-9:18 am 34 - Streamlining Care for Occult Scaphoid Fractures: A Retrospective Review of the Diagnostic Work-Up
LT Shian Liu, MD, Naval Medical Center San Diego
- 9:18 am-9:22 am Discussion

Rapid Fire Sessions 3B - Musculoskeletal Oncology

Moderators: TBD

- 8:50 am-8:54 am 28 - A Multicentered RCT of Negative Pressure Therapy for Irradiated Soft Tissue Sarcoma Wounds
Capt Sophia A. Traven, MD, Medical University of South Carolina
- 8:54 am-9:58 am 102 - Publication Trends of Residents Accepted for Musculoskeletal Oncology Fellowships

CPT Andrew G. Chan, MD, MPH, William Beaumont Army Medical Center

8:58 am-9:02 am 41 - External Validation of PATHFx Version 3.0 in Patients Treated Surgically and Non-Surgically for Symptomatic Skeletal Metastases
LT Ashley B. Anderson, MD, Walter Reed National Military Medical Center

9:02 am-9:06 am Discussion

9:06 am-9:10 am 203 - Synovial Sarcoma: A Series of Small Tumors in Active Duty Service Members
Capt Taylor J. Bates, MD, San Antonio Military Medical Center

9:10 am-9:14 am 115 - Fellowship-Trained Orthopaedic Oncologist and the Effect on Residency Training
CPT Phillip R. Schneider, MD, William Beaumont Army Medical Center

9:14 am-9:18 am 31 - Improved Survivorship Following Surgical Resection of Primary Tumors in Patients with Metastatic Osteosarcoma
Capt Sophia A. Traven, MD, Medical University of South Carolina

9:18 am-9:22 am Discussion

Rapid Fire Sessions 3C – General Interest

Moderators: TBD

8:50 am-8:54 am 187 - Evaluation of Hip Medical Device Recalls by the FDA from 2007 to 2017
Wesley Peters, BS, Naval Medical Center San Diego

8:54 am-9:58 am 92 - 10 Year Follow-Up of Ceramic-on-Ceramic Total Hip Arthroplasty: Squeaking is Common and Increases Over Time
LT Kevin Taniguchi, MD, Naval Medical Center San Diego

8:58 am-9:02 am 214 - Skiving or Diving: A Mechanical Study on the Sagittal Saw Blade During Total Knee Arthroplasty
Jonathan H. Shaw, MD, Henry Ford Hospital

9:02 am-9:06 am Discussion

9:06 am-9:10 am 98 - Implementation of a Rapid Recovery Peri-operative Arthroplasty Protocol at a Military Treatment Facility
LT Sarah Nelson, MD, MS, Walter Reed National Military Medical Center

9:10 am-9:14 am 182 - Albumin as a Predictor of Total Joint Arthroplasty Complications
Matthew Sloan, MD, MS, University of Pennsylvania

9:14 am-9:18 am 54 - Quality of Evidence Regarding Platelet-Rich Plasma Injections for Knee Osteoarthritis
CPT Andrew G. Chan, MD, MPH, William Beaumont Army Medical Center

9:18 am-9:22 am Discussion

Rapid Fire Sessions 3D – Return to Duty and Performance Optimization

Moderators: TBD

8:50 am-8:54 am 209 - In Season Return to Play Following Posterior Shoulder Instability in NCAA Division I Football Players
CPT Daniel L Rodkey, MD, MBA, Walter Reed National Military Medical Center

8:54 am-9:58 am 155 - Return to Play Following Platelet-Rich Plasma Injection of Elbow Ulnar Collateral Ligament Based on Injury Severity
Frederic B. Mills, MS, Palmetto Health - University of South Carolina Orthopaedic Center

8:58 am-9:02 am 231 - Early Analysis of Common Knee Surgery and Ability to Deploy in a Military Population
Lt. Col. Richard J. Robins, MD, United States Air Force Academy

9:02 am-9:06 am Discussion

9:06 am-9:10 am 150 - Patellar Tendon Disruptions in the Active Duty Military Population: A Retrospective Review
CPT Donald R. Fredericks Jr., MD, Walter Reed National Military Medical Center

9:10 am-9:14 am 60 - High Resilience Linked to Short-Term Patient Reported Outcomes and Return to Duty Following Arthroscopic Knee Surgery
CPT Nicholas J. Drayer, MD, Madigan Army Medical Center

9:14 am-9:18 am 196 - Delay in Primary Anterior Cruciate Ligament Reconstruction Increases Medical Separation Risk in the US Military
Veronika Pav, PhD, Kennell and Associates, Inc.

9:18 am-9:22 am Discussion

Special Presentation 2

Moderator:

9:25 am -10:00 am Limb Optimization
Speaker(s)

10:00 am-10:20 am *Break with Exhibitors*

10:20 am – 10:35 am **SOMOS Business Meeting**
LtCol Christopher T. LeBrun, MD, R. Adams Cowley Shock Trauma Center
(All Active SOMOS Members Invited to Attend)

Symposium 6 – Spine

Moderator: LCDR Scott C. Wagner, MD, *Walter Reed National Military Medical Center*

11:035 am-11:00 am Pediatric Topic
Christopher K. Kepler, MD, MBA, Rothman Orthopaedic Institute

11:00 am-11:05 am Questions

General Session 6 – Spine

Civilian Moderator: Christopher K. Kepler, MD, MBA, *Rothman Orthopaedic Institute*

Military Moderator: LCDR Scott C. Wagner, MD, *Walter Reed National Military Medical Center*

11:05 am-11:11 am 156 - Radiographic Analysis of Cervical Disc Arthroplasty Reoperations
MAJ Griffin Holoachock, PhD, San Antonio Military Medical Center

11:11 am-11:17 am 6 - Are Precontoured Spinal Rods Mechanically Superior to Manually Contoured Rods?
MAJ K. Aaron Shaw, DO, Dwight D. Eisenhower Army Medical Center

11:17 am-11:23 am 112 - Severity of Cervical Paraspinal Muscle Degeneration May Predict Axial Pain Improvement after Anterior Cervical Discectomy and Fusion
Donald R. Fredericks, MD, Walter Reed National Military Medical Center

11:23 am-11:29 am 218 - Cervical Paraspinal Muscle Fatty Degeneration does not relate to Muscle Cross Sectional Area: Qualitative Assessment Preferable for Cervical Sarcopenia
Arjun Sebastian, MD, MS, Mayo Clinic

11:29 am-11:35 am Discussion

11:35 am-11:41 am 157 - The Timing and Incidence of Surgical Intervention Following Diagnosis of Lumbar Disc Herniation at Military Treatment Facilities
LT Ashley B. Anderson, MD, Walter Reed National Military Medical Center

11:41 am-11:47 am 186 - Minimally Invasive Sacroiliac Joint Fusion in Military Service Members
MAJ(P) Anton Y. Jorgensen, MD, San Antonio Military Medical Center
Kyle Marshall, San Antonio Military Medical Center

11:47 am-11:53 am 221 - Objective Swallowing Abnormalities Following Anterior Cervical Spine Surgery
Capt John Wuellner, MD, University of California, Davis

11:53 am-11:59 am 162 - Outcomes of Failed Lumbar Disc Arthroplasties
MAJ(P) Anton Y. Jorgensen, MD, San Antonio Military Medical Center
Capt Taylor J. Bates, MD, San Antonio Military Medical Center

11:59 am-12:05 pm Discussion

12:05 am-1:05 pm **Focused Lunch Presentations**
**CME Credit Not Available*

- 1:05 pm-2:05 pm **Scientific E-Poster Session** (Presenters will be available to answer questions.)
- 2:05 pm-3:05 pm **Multimedia Education Session**

Friday, December 20 - Warren Kadrmas Memorial Sports Day

- 12:00 am-11:59 pm **Speaker Ready Area**
- 6:00 am-7:00 am **Scientific E-Poster Session** (Presenters will be available to answer questions.)
- 6:00 am-4:20 pm **Meeting Registration**
- 6:00 am-4:20 pm **Technical Exhibits, Coffee Breaks and Daily Drawing**

Symposium 7 – Sports 1

Moderator: MAJ Kelly G. Kilcoyne, MD, *William Beaumont Army Medical Center*

- 7:00 am-7:25 am New Paradigms in Treatment Shoulder Instability
John D. Kelly IV, MD, University of Pennsylvania
- 7:25 am-7:30 am Questions

General Session 7 – Sports 1: Shoulder & Elbow

Civilian Moderator: John D. Kelly IV, MD, *University of Pennsylvania*

Military Moderator: MAJ Kelly G. Kilcoyne, MD, *William Beaumont Army Medical Center*

- 7:30 am-7:36 am 175 - The Instability Severity Index Score Revisited: Evaluation of 217 Consecutive Cases of Recurrent Anterior Shoulder Instability
Capt Travis J. Dekker, MD, The Steadman Clinic
- 7:36 am-7:42 am 144 - The Incidence and Characteristics of Shoulder Instability at the United States Naval Academy
CPT Bobby G. Yow, MD, Walter Reed National Military Medical Center
- 7:42 am-7:48 am 136 - Combined and Posterior Labral Tears are More Common in a Large Military Population with Operative Shoulder Instability than Previously Reported
Capt Erin R. Swan, MD, BS, San Antonio Uniformed Services Health Education Consortium
- 7:48 am-8:54 am 215 - Novel Technique to Assess Glenoid Bone Loss Using Anterior CoracoGlenoid Line
Patrick W. Joyner, MD, OrthoCollier
- 7:54 am-8:00 am Discussion
- 8:00 am-8:06 am 1 - Analysis of Glenohumeral Joint Intraarticular Pressure Measurements in Volume-Limited MR Arthrograms in Patients with Shoulder Instability compared to a Control Group

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

8:06 am-8:12 am 44 - Return to Sport Following Circumferential Labral Reconstruction in Athletes
CPT Michael M. Polmear, MD, William Beaumont Army Medical Center

8:12 am-8:18 am 32 - The Modified Frailty Index Predicts Morbidity and Mortality in Arthroscopic Rotator Cuff Repair
Capt Sophia A. Traven, MD, Medical University of South Carolina

8:18 am-8:24 am 146 - Return to Duty Following Arthroscopic Assisted Biceps Tenodesis with or without Concomitant Distal Clavicle Excision in Active Duty Soldiers
Taylor D. Mansfield, MD, Madigan Army Medical Center

8:24 am-8:30 am Discussion

8:30 am-8:50 am *Break with Exhibitors*

Rapid Fire Sessions 4A – Knee

Moderators: TBD

8:50 am-8:54 am 201 - Survivability of Primary Anterior Cruciate Ligament Reconstructions in Active Duty Service Members: A Four-Year Case-Control Study
Veronika Pav, PhD, Kennell and Associates, Inc.

8:54 am-9:58 am 89 - Preoperative Sleep Disturbance Linked to Patient Reported Outcomes Following Arthroscopic Knee Surgery
CPT Nicholas J. Drayer, MD, Madigan Army Medical Center

8:58 am-9:02 am 23 - Elevated BMI Predicts Concurrent Surgical Pathology at the Time of Adolescent ACL Reconstruction
Capt Sophia A. Traven, MD, Medical University of South Carolina

9:02 am-9:06 am Discussion

9:06 am-9:10 am 200 - Does Graft Selection Affect Risk of Failure After Anterior Cruciate Ligament Reconstruction in Active Duty Female Military Members?
LT Sarah Nelson, MD, MS, Walter Reed National Military Medical Center

9:10 am-9:14 am 232 - ACL Reconstruction with Hamstring Autograft and Allograft Augmentation
CPT Bryan G. Adams, MD, Madigan Army Medical Center

9:14 am-9:18 am 78 - Tibial Tubercle Osteotomy for Patellofemoral Instability in an Active-Duty Cohort
CPT Liang Zhou, MD, MS, Tripler Army Medical Center

9:18 am-9:22 am Discussion

Rapid Fire Sessions 4B – Shoulder

Moderators: TBD

- 8:50 am-8:54 am 135 - Primary Circumferential Labral Reconstruction: Not Just a Salvage Procedure
CPT John P. Scanaliato, MD, William Beaumont Army Medical Center
- 8:54 am-9:58 am 165 - Shoulder Instability in High School Football: Years of Eligibility Remaining
LT Jessica R. Stambaugh, MD, Naval Medical Center San Diego
- 8:58 am-9:02 am 180 - Anterior Shoulder Instability in the Professional Athlete: Return to Competition, Time to Return, and Career Length
Capt Travis J. Dekker, MD, The Steadman Clinic
- 9:02 am-9:06 am Discussion
- 9:06 am-9:10 am 123 - Treatment of an Intercondylar Notch Ganglion Cyst with Arthroscopic Debridement
LT Nicholas P. Lopreiato, MD, US Naval Hospital Okinawa
- 9:10 am-9:14 am 225 - Impact of Permissive Mobilization after Biceps Tenodesis on Early Failure Rates
LT John W Cancian, MD, Naval Medical Center Portsmouth
- 9:14 am-9:18 am 192 - Readiness Impairment Following Primary Anterior Cruciate Ligament Reconstruction in Infantry ADSMs
Veronika Pav, PhD, Kennell and Associates, Inc.
- 9:18 am-9:22 am Discussion

Rapid Fire Sessions 4C – General Interest

Moderators: TBD

- 8:50 am-8:54 am 73 - Comparison of Knee and Shoulder Instability Recovery Trends in Military Health System Beneficiaries
Timothy C. Mauntel, PhD, ATC, Walter Reed National Military Medical Center
- 8:54 am-9:58 am 93 - Pectoralis Major Reconstruction for Irreparable Ruptures: A Systematic Review
CPT Phillip R. Schneider, MD, William Beaumont Army Medical Center
- 8:58 am-9:02 am 8 - MRI of Pectoralis Major Injuries: Mechanism Affects Tear Location
CPT John D. Synovec, MD MBA, Fort Gordon, GA
- 9:02 am-9:06 am Discussion
- 9:06 am-9:10 am 71 - Surfing Injuries - A Review for the Orthopaedic Surgeon
Ryan J. Bickley, MD, Tripler Army Medical Center

- 9:10 am-9:14 am 19 - Outcomes of Pectoralis Major Tears in Active Duty US Military Personnel: A Comparison of Surgical Repairs Performed in the Forward Deployed Setting to Those Performed in the Continental United States
Maj Dane Salazar, MD, Loyola University Hospital System
- 9:14 am-9:18 am 20 - Acute Pectoralis Major Tears in Active Duty US Military Personnel: Mid-Term Outcomes of Repairs Performed in the Forward Deployed Setting
Maj Dane Salazar, MD, Loyola University Hospital System
- 9:18 am-9:22 am Discussion

Rapid Fire Sessions 4D – Shoulder and Elbow Arthroplasty

Moderators: TBD

- 8:50 am-8:54 am 21 - Intraoperative Efficiency in Contemporary Total Shoulder Arthroplasty: Is Manual Pressure During Cement Curing Still Necessary with Interference Fit Pegged Glenoids?
Maj Dane Salazar, MD, Loyola University Hospital System
- 8:54 am-9:58 am 83 - Evaluation of Polyethylene Liner Dissociation in Reverse Total Shoulder Arthroplasty
2LT Mikalyn T. DeFoor, BS, Medical College of Georgia at Augusta University
- 8:58 am-9:02 am 104 – Publication Trends of Residents Matching into Shoulder and Elbow Fellowships
CPT Andrew Chan, MD, William Beaumont Army Medical Center
- 9:02 am-9:06 am Discussion
- 9:06 am-9:10 am 199 - Glenoid Bone Loss in Relation to Glenoid Bone Mineral Density
CPT Donald Colantonio III, MD, Walter Reed National Military Medical Center
- 9:10 am-9:14 am 57 - Total Elbow Arthroplasty: A Surgical Decision-Making Analysis on Outcomes
CPT John P. Scanaliato, MD, William Beaumont Army Medical Center
- 9:14 am-9:18 am 33 - Smoking is Associated with Increased Surgical Complications Following Total Shoulder Arthroplasty: An Analysis of 14,465 Patients
Alyssa D. Althoff, BS, Medical University of South Carolina
- 9:18 am-9:22 am Discussion

Symposium 8 – Sports 2

Moderator: MAJ David Tennent, MD, *Evans Army Medical Activity*

- 9:25 am-9:50 am Pediatric Topic
Gregory C. Fanelli, MD, Fanelli Geisinger Sports Injury Clinic
- 9:50 am-9:55 am Questions

9:55 am-10:15 am Break with Exhibitors

General Session 8 – Sports 2

Civilian Moderator: Gregory C. Fanelli, MD, *Fanelli Geisinger Sports Injury Clinic*

Military Moderator: MAJ David Tennent, MD, *Evans Army Medical Activity*

10:15 am-10:21 am 240 - Prior Sports Specialization is Associated with Lower Extremity Stress Fracture in Service Academy Cadets
Kenneth L. Cameron, PhD, MPH, ATC, Keller Army Hospital

10:21 am-10:27 am 190 - Minimum 5-Year Clinical Outcomes, Survivorship, and Return to Sports after Hamstring Autograft Reconstruction for Sternoclavicular Joint Instability
Capt Travis J. Dekker, MD, The Steadman Clinic

10:27 am-10:33 am 222 - Adolescent Sports Specialization Is Associated with College Sports Ankle Injury
MAJ Michael A. Donohue, MD, Keller Army Community Hospital

10:33 am-10:39 am 154 - Blumensaat's Line as a Prediction of Native Anterior Cruciate Ligament Length
Frederic B. Mills, MS, Palmetto Health - University of South Carolina Orthopaedic Center

10:39 am-10:45 am Discussion

10:45 am-10:51 am 130 - Mechanical Testing of ACL Reconstruction Secondary Fixation Devices
MAJ David J. Tennent, MD, John A Feagin Jr. Orthopaedic Sports Medicine Fellowship

10:51 am-10:57 am 66 - Increased Posterior Tibial Slope is Associated with Higher Rates of Anterior Cruciate Ligament Reconstruction Graft Rupture
CPT Christian Cruz, MD, Tripler Army Medical Center

10:57 am-11:03 am 79 - Bone-Patellar Tendon-Autograft (BTA) ACL Reconstruction: Clinical results of New Technique
COL(R) Craig R. Bottoni, MD, Tripler Army Medical Center

11:03 am-11:09 am 205 - Current Practice Patterns in ACL Reconstruction (ACLR) Among Fellowship-Trained Military Orthopaedic Surgeons
CPT Thomas B. Lynch, MD, San Antonio Military Medical Center

11:09 am-11:15 am Discussion

11:15 am-12:15 pm **Focused Lunch Presentations**
**CME Credit Not Available*

12:20 pm-12:35 pm **AAOS Update**
Kristy L. Weber, MD, President, AAOS, University of Pennsylvania

Symposium 9 – Sports 3

Moderator: LCDR George C. Balazs, MD, *Hospital for Special Surgery*

12:35 pm-1:00 pm How Combined Version Affects My Hip Scope Practice
Anil S. Ranawat, MD, Hospital for Special Surgery

1:00 pm -1:05 pm Questions

General Session 9 – Sports 3

Civilian Moderator: Anil S. Ranawat, MD, *Hospital for Special Surgery*

Military Moderator: LCDR George C. Balazs, MD, *Hospital for Special Surgery*

1:05 pm-1:11 pm 99 - Predictors of Failure After Surgical Treatment of Femoroacetabular Impingement: Results of a Multicenter Prospective Cohort of 621 Hips
Lt Col Matthew R. Schmitz, MD, San Antonio Military Medical Center

1:11 pm-1:17 pm 113 - Periacetabular Osteotomy in US Military Personnel: A Single Center's Experience
Capt Andrew S. Murtha, MD, San Antonio Military Medical Center

1:17 pm-1:23 pm 191 - Patient Outcomes after Vascularized Fibular Graft for Treatment of Femoral Head Avascular Necrosis
Christopher M. Belyea, MD, Tripler Army Medical Center

1:23 pm-1:29 pm 176 - Minimum 5-Year Outcomes and Return to Sport Following Resection Arthroplasty for the Treatment of Sternoclavicular Osteoarthritis
Capt Travis J. Dekker, MD, The Steadman Clinic

1:29 pm-1:35 pm Discussion

1:35 pm-1:41 pm 100 - Surgical Treatment of Femoroacetabular Impingement: Arthroscopy vs. Surgical Hip Dislocation – A Propensity Matched Analysis
Lt Col Matthew R. Schmitz, MD, San Antonio Military Medical Center

1:41 pm-1:47 pm 137 - Hip Effusion is Predictive of Progression to Surgical Management of Femoral Neck Stress Fractures: A Review in US Military Service Members
Capt Erin R. Swan, MD, BS, San Antonio Uniformed Services Health Education Consortium

1:47 pm-1:53 pm 58 - Lumbar Plexus Block vs. Peri-capsular Injection for Hip Arthroscopy
CPT John P. Scanaliato, MD, William Beaumont Army Medical Center

1:53 pm-1:59 pm 26 - Nationwide Trends in Opioid Prescriptions for Common Orthopaedic Procedures: Are We Over-Prescribing?
Capt Sophia A. Traven, MD, Medical University of South Carolina

1:59 pm-2:05 pm Discussion

2:05 am-2:15 am *Break*

Special Presentation 3

Moderator:

2:15 pm-2:50 pm So You Think You Want to Be a Team Physician
Peter Indelicato, MD, University of Florida

Symposium 10 – Foot & Ankle

Moderator: CDR Thomas J. Douglas III, MD, *Naval Medical Center Portsmouth*

2:50 pm-3:15 pm Pediatric Topic
Christopher P. Chiodo, MD, Brigham and Women's Hospital

3:15 pm-3:20 pm Questions

General Session 10 – Foot & Ankle

Civilian Moderator: Christopher P. Chiodo, MD, *Brigham and Women's Hospital*

Military Moderator: CDR Thomas J. Douglas III, MD, *Naval Medical Center Portsmouth*

3:20 pm-3:26 pm 152 - Outcomes of Posterior Arthroscopic Reduction and Internal Fixation
for the Posterior Malleolar Fragment in Trimalleolar Ankle Fractures
MAJ Kevin Martin, DO, Womack Army Medical Center

3:26 pm-3:32 pm 124 - Characterization of Operatively Treated Osteochondral Lesions of
the Talus
CPT Tyler Nicholson, MD, William Beaumont Army Medical Center

3:32 pm-3:38 pm 194 - Patient Reported Outcomes of Lateral Ankle Stabilization in a
Military Population: Good Results After Two Years
LT Chihua Lee, MD, Naval Medical Center Portsmouth

3:38 pm-3:44 pm 171 - The Effect of Lateral Column Lengthening on Subtalar Motion
CAPT Mitchell C. Harris, MD, Texas Scottish Rite Hospital for Children

3:44 pm-3:50 pm Discussion

3:50 pm-3:56 pm 86 - Preoperative Sleep Disturbance Linked to Short-Term Outcomes
following Orthopaedic Foot and Ankle Surgery
CPT Nicholas J. Drayer, MD, Madigan Army Medical Center

3:56 pm-4:02 pm 24 - Significant Racial and Ethnic Disparities in Lower Extremity
Amputation for Critical Limb Ischemia
Capt Sophia A. Traven, MD, Medical University of South Carolina

4:02 pm-4:08 pm 170 - Open Ankle Fractures: Is Immediate Internal Fixation Safe?
Griffin M. Biedron, MD, William Beaumont Army Medical Center

4:08 pm-4:14 pm 70 - Outcomes after Intramedullary Screw Fixation of Jones Fractures: A
Case Series
CPT Ryan B. Bucknam, MD, William Beaumont Army Medical Center

4:14 pm-4:20 pm Discussion

4:20 pm-5:20 pm

Service Breakouts

Air Force

Army

Navy

5:20 pm-6:20 pm

Multimedia Education Session