

ACCREDITATION INFORMATION

PROGRAM COMMITTEE

CDR Lance E. LeClere, MD – Co-Chair
LCDR Lucas S. McDonald, MD, MPH – Co-Chair
MAJ James A. Blair, MD
CAPT Charles E. Craven Jr., MD
Lt Col Christopher T. LeBrun, MD
LTC Benjamin K. Potter, MD
Maj R. Judd Robins, MD
LCDR Theodore J. Steelman, 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 59th Annual Meeting of the Society of Military Orthopaedic Surgeons has been developed primarily for orthopaedic and trauma surgeons.

CME ACCREDITATION

This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of the American Academy of Orthopaedic Surgeons and the Society of Military Orthopaedic Surgeons. The American Academy of Orthopaedic Surgeons is accredited by the ACCME to provide continuing medical education for physicians.

The American Academy of Orthopaedic Surgeons designates this live activity for a maximum of 33.75 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

- * 24.25 CME Credits for Scientific Program
- * 5.5 CME Credits for Scientific E-Poster Sessions
- * 4 CME Credits for Multimedia Education Sessions

PURPOSE

The intent of the SOMOS Meeting is to provide an educational forum for the exchange of militarily relevant orthopaedic surgical advances in order to optimize the delivery of orthopaedic specialty care within the Department of Defense.

OBJECTIVES

Orthopaedic surgeons should attend updates reporting on the contemporary practice of orthopaedic surgery on a regular basis. Paramount to the process of continuing medical education is the sharing of new techniques and its outcomes. The SOMOS Annual Meeting provides the opportunity for the military orthopaedic surgery community to share their combined experiences and knowledge, so that individual practitioners can incorporate the most recent advances into

their own current surgical practice. By the end of the meeting, individual SOMOS attendees will be able to do the following:

- To identify the current trends and updates pertinent to military orthopaedic surgeons relating to wartime trauma.
- To describe current treatment recommendations for common military orthopaedic conditions involving sports, foot and ankle, hand, spine and pediatric conditions.
- To formulate a plan for the assimilation of current trends and standards into their own surgical practice.
- To identify advances specific to their orthopaedic practice.

DISCLAIMER

The Society of Military Orthopaedic Surgeons 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 2017 Society of Military Orthopaedic Surgeons (SOMOS) 58th 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 2017 Annual Meeting do not constitute endorsement, concurrence, validation or official position of SOMOS or any other department or agency.

FORMAT

The educational sessions will be held December 12-15, 2017 from approximately 7:00 am - 5:00 pm.

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 12-15 during the Scientific Program.

Please note on the Scientific Program Schedule the designated times the poster presenters will be available for discussion.

MULTIMEDIA EDUCATION

Multimedia education materials will be offered December 12-15, at the designated times. A comprehensive selection of AAOS DVDs will be available for your individual education.

SOMOS Scientific Program

Monday, December 11

12:00 pm-8:00 pm Meeting Registration

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

Tuesday, December 12

12:00 am-11:59 pm Speaker Ready Area (*Princess Ballroom Foyer*)

6:00 am-6:55 am **Scientific E-Poster Session** (Presenters will be available to answer questions.) (*Princess Ballroom Salons A, B, C & Castile 1*)

Opening Ceremony

Moderators: CDR Lance E. LeClere, MD, *US Naval Academy*
LCDR Lucas S. McDonald, MD, MPH, *Naval Medical Center San Diego*
CAPT Charles E. Craven Jr., MD, *Naval Medical Center San Diego*

7:00 am-7:10 am Color Guard

7:10 am -7:20 am Program Chairmen Welcome

7:20 am-7:30 am Report of SOMOS President

7:30 am-8:30 am Presidential Keynote Speaker
VADM Forest Faison, Surgeon General of the Navy

8:30 am-8:50 am Break with Exhibitors (*Princess Ballroom Salons D, E, F & G*)

Symposium 1: Lower Extremity Injuries 1

Moderator: Col. Brandon R. Horne, MD, *Wright Patterson Air Force Base*

8:50 am-9:15 am The Evolution and Future of Severe Open Fracture Care
CAPT (Ret) Michael Bosse, MD, Carolinas Medical Center Orthopaedics

9:15 am-9:20 am Discussion

General Session 1: War Trauma

Civilian Moderator: CAPT (Ret) Michael Bosse, MD, *Carolinas Medical Center Orthopaedics*
Military Moderator: Col. Brandon R. Horne, MD, *Wright Patterson Air Force Base*

- 9:20 am-9:26 am Risk Factors for Osteomyelitis in Wartime Open Tibia Fractures Do Not Predict Recurrence of Infection
MAJ Joseph L. Petfield, MD, Landstuhl Regional Medical Center
- 9:26 am-9:32 am Intra-Wound Application of Antibiotic Powder Decreases Deep Infection and Reduces Severity of Heterotopic Ossification in Combat-Related Major Lower Extremity Amputations
LT Benjamin W. Hoyt, MD, Walter Reed National Military Medical Center
- 9:32 am-9:38 am Physical Performance Measures and Patient Reported Outcomes Which Predict Future Amputation
CPT Nathan A. Franklin, DO, San Antonio Military Medical Center
- 9:38 am-9:44 am Osseointegration for the Reconstruction of Devastating Military and Terrorist Blast Injuries
Solon L. Rosenblatt, MD, Macquarie University Hospital
- 9:44 am-9:50 am Discussion
- 9:50 am-9:56 am Tranexamic Acid Administration and Venous Thromboembolism in Combat Casualties with Orthopedic Injuries
CPT Michael D. Baird, MD, Uniformed Services University of the Health Sciences
- 9:56 am-10:02 am Operative Stabilization of Unstable Flail Chest Injuries Reduces Mortality to that of Stable Chest Wall Injuries
Michael David McKee, MD, FRCS(C), St. Michael's Hospital, University of Toronto
**Presented by Niloofar Dehghan, MD, FRCSC*
- 10:02 am-10:08 am In Vivo Antimicrobial Efficacy and Degradation Kinetics of Dakin's Solution, An Adjunctive Treatment for Combat Wound Infections
CPT Nathan A. Franklin, DO, San Antonio Military Medical Center
- 10:08 am-10:14 am Increase in the Proportion of Combat-Related Amputations Forming Heterotopic Ossification
CPT Christopher M. Daniels, MD, Walter Reed National Medical Center
- 10:14 am-10:20 am Discussion
- 10:20 am-10:40 am Break with Exhibitors (Princess Ballroom Salons D, E, F & G)

Symposium 2: Lower Extremity Injuries 2

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

10:40 am-11:05 am Distal Femur Fractures
Alexandra (Sandy) Schwartz, MD, University of California, San Diego

11:05 am-11:10 am Discussion

General Session 2: Lower Extremity Trauma

Civilian Moderator: Alexandra (Sandy) Schwartz, MD, *University of California, San Diego*

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

11:10 am-11:16 am Osseointegrated Implants for Trans Femoral Amputees: Radiographic
Evaluation of Bone Remodeling
Seamus Thomson, PhD, The University of Sydney
**Presented by Solon L. Rosenblatt, MD, Macquarie University Hospital*

11:16 am-11:22 am Treatment of Bone Defects In Open Tibia Fractures Treated With an IMN
MAJ William T Obrebsky, MD, Vanderbilt University
**Presented by CAPT (Ret) Michael J. Bosse, MD, Carolinas Medical
Center Orthopaedics*

11:22 am-11:28 am Limb Salvage and Amputation Outcomes Following Severe Distal Tibia
and Hindfoot Injuries: A Multi-Center Prospective Evaluation
CAPT (Ret) Michael Bosse, MD, Carolinas Medical Center Orthopaedics

11:28 am-11:34 am Martial Arts-Based High Intensity Interval Training in the Rehabilitation
of Combat Amputees
Capt Gavin L. Mills, MD, San Antonio Military Medical Center

11:34 am-11:40 am Discussion

11:40 am-11:46 am The Outcomes of Early Surgical Intervention in Geriatric Proximal Femur
Fractures among Patients Receiving Direct Oral Anticoagulation
CPT Nathan A. Franklin, DO, San Antonio Military Medical Center

11:46 am-11:52 am Incidence, Predictors, and Impact of Valgus Reduction of Intertrochanteric
Hip Fractures Treated with the Trochanteric Fixation Nail Helical Blade
System: Is Anatomic Reduction Necessary?
CPT Nicholas A. Kusnezov, MD, William Beaumont Army Medical Center

11:52 am-11:58 am Is the Timing of Operative Splint Removal Following Surgical Fixation of
Ankle Fractures Associated with the Development of Wound
Complications?
LT Lauren Ehrlichman, MD, Naval Hospital Beaufort

11:58 am-12:04 pm Initiating a Diabetes Control Protocol During Inpatient Admissions
Decreases Surgical Site Infections among Diabetic Trauma Patients
CPT Stephen Chan, MD, William Beaumont Army Medical Center

12:04 pm-12:10 pm Discussion

12:15 pm-1:15 pm **SOMOS Luncheon – Industry Presentation**

Stryker (*Princess Ballroom Salons A*)

Legally Mine (*Princess Ballroom Salons B*)

DePuy (*Princess Ballroom Salons C*)

Symposium 3: Upper Extremity Trauma

Moderator: LTC Daniel J. Stinner, MD, *San Antonio Military Medical Center*

1:20 pm-1:45 pm Trends in Humerus and Clavicle Fracture Care
Steven J. Morgan, MD, FACS, Mountain Orthopaedic Trauma Surgeons at Swedish Medical Center

1:45 pm-1:50 pm Discussion

General Session 3: Upper Extremity Trauma

Civilian Moderator: Steven J. Morgan, MD, FACS, *Mountain Orthopaedic Trauma Surgeons at Swedish Medical Center*

Military Moderator: LTC Daniel J. Stinner, MD, *San Antonio Military Medical Center*

1:50 pm-1:56 pm Outcomes of Surgical Treatment for High-Energy Open Forearm Fractures
LT Kyle E. Nappo, MD, Walter Reed National Military Medical Center

1:56 pm-2:02 pm Operative vs. Non-Operative Treatment of Acute Displaced Distal Clavicle Fractures: A Multicentre Randomized Controlled Trial
Michael David McKee, MD, FRCS(C), St. Michael's Hospital, University of Toronto

2:02 pm-2:08 pm Figure of Eight Bracing for Displaced Midshaft Pediatric Clavicle Fractures: Effect on Shortening Compared to Simple Sling Treatment
Christopher Sugalski, MD, Ohio State University Medical Center

2:08 pm-2:14 pm Factors Associated with Ulnar Neuropathy after Bi-Columnar Plate Fixation of Distal Humerus Fractures
Michael David McKee, MD, FRCS(C), St. Michael's Hospital, University of Toronto
**Presented by Niloofar Dehghan, MD, FRCSC*

2:14 pm-2:20 pm Discussion

2:20 pm-2:26 pm Palovarotene Dampens Local and Systemic Inflammation as well as Osteogenic Connective Tissue Progenitor Cell Activity in a Rat Model of Trauma-Induced Heterotopic Ossification

LT Benjamin M. Wheatley, MD, Walter Reed National Military Medical Center

**Presented by CPT Patrick D. Grimm, MD*

- 2:26 pm-2:32 pm Targeted Reinnervation for the Orthopaedic Trauma Amputee
Travis L. Frantz, MD, Ohio State University Wexner Medical Center
- 2:32 pm-2:38 pm Advanced Characterisation of Combat Related Heterotopic Ossification and In Vivo Feasibility Study of a Novel Therapy
Major Neil M. Eisenstein, BMBCh MRCS, University of Birmingham, UK
- 2:38 pm-2:44 pm Proximal Femur Hounsfield Units on Computed Tomography Colonoscopy Accurately Predicts Low Bone Mineral Density: A Novel Osteoporosis Screening Technique
LCDR Daniel L. Christensen, MD, Walter Reed National Military Medical Center
**Presented by LCDR (Sel) Sameer Saxena, MD*
- 2:44 pm-2:50 pm Discussion
- 2:50 pm-3:10 pm Break with Exhibitors (Princess Ballroom Salons D, E, F & G)

Rapid Fire Session 1A: Trauma (*Princess Ballroom Salon A*)

Moderators: Alexandra (Sandy) Schwartz, MD, *University of California, San Diego*
CDR Bradley K. Deafenbaugh, MD, *Naval Medical Center San Diego*

- 3:10 pm-3:14 pm Assessment of Follow-Up and Osteoporosis Treatment in Patients with Fragility Fractures
Capt Sean P. Moroze, MD, San Antonio Military Medical Center
**Presented by Capt Matthew Mangini, MD*
- 3:14 pm-3:18 pm A Comparative Study of Orthopedic and Radiology Reads of Orthopedic Injuries at a Level-One Trauma Center
CPT Griffin M. Biedron, MD, William Beaumont Army Medical Center
- 3:18 pm-3:22 pm Incorporation of Familiar Surgical Instrumentation into a Modified Surgical Construct for Treating Pauwels III Femoral Neck Fractures
Bernard P. Kemker, MD, Michigan State University
- 3:22 pm-3:25 pm Discussion
- 3:25 pm-3:29 pm Outcomes Associated with Early Return to Work and Improved Functional Outcome after Ankle Fracture Fixation
Michael David McKee, MD, FRCS(C), St. Michael's Hospital, University of Toronto
**Presented by Niloofar Dehghan, MD, FRCSC*

- 3:29 pm-3:33 pm Outcomes of Early vs. Late Post-Operative Weightbearing in Patients Undergoing Surgical Fixation of Ankle Fractures: A Systematic Review and Meta Analysis
Michael David McKee, MD, FRCS(C), St. Michael's Hospital, University of Toronto
**Presented by Niloofar Dehghan, MD, FRCSC*
- 3:33 pm-3:37 pm Effect of Nonsteroidal Anti-Inflammatory Drugs (Nsaids) on Bone Healing Rates: A Meta-Analysis
LT Benjamin M. Wheatley, MD, Walter Reed National Military Medical Center
**Presented by Kyle E. Nappo, MD*

3:37 pm-3:40 pm Discussion

Rapid Fire Session 1B: War Trauma/Military Medicine (Princess Ballroom Salon B)

Moderators: CAPT (Ret) Michael Bosse, MD, *Carolinas Medical Center Orthopaedics*
Col. Brandon R. Horne, MD, *Wright Patterson Air Force Base*

- 3:10 pm-3:14 pm The Orthopedic Surgeon in the Field: An Update on Disaster Medicine
William H. Boyce, BA, Dartmouth College
- 3:14 pm-3:18 pm Epidemiology of Heterotopic Ossification Following Deployment Related Injury
MAJ Jessica Cross Rivera, MD, US Army Institute of Surgical Research
**Presented by CPT David J. Tennent, MD, San Antonio Military Medical Center*
- 3:18 pm-3:22 pm Are Surgical Skills Under-Emphasized in Disaster Literature? A Literature Review
CAPT Steven R. Wilding, MD, Tripler Army Medical Center
- 3:22 pm-3:25 pm Discussion
- 3:25 pm-3:29 pm Civilian-Military Collaboration During Natural Disasters: Civilian Perspective
Major Nikolaj Wolfson, MD, CPMC, St Mary's Medical Center
- 3:29 pm-3:33 pm Characterization of US Military Orthopaedic Medical Readiness and Training Exercises: Not All MEDRETEs Are Created Equal
CPT David J. Tennent, MD, San Antonio Military Medical Center
- 3:33 pm-3:37 pm Demographics and Disparities within US Military Orthopaedic Surgery
CPT Christopher M. Daniels, MD, Walter Reed National Medical Center

3:37 pm-3:40 pm Discussion

Rapid Fire Session 1C: Basic Science/Trauma (*Princess Ballroom Salon C*)

Moderators: Steven J. Morgan, MD, FACS, *Mountain Orthopaedic Trauma Surgeons at Swedish Medical Center*
CDR Colin Crickard, MD, *Naval Medical Center Portsmouth*

3:10 pm-3:14 pm Inhibiting Protein – Protein Interaction as a Strategy for Epigenetic Targeting in Peripheral Nerve Regeneration
CPT Christopher M. Daniels, MD, Walter Reed National Medical Center
**Presented by LT Stephen Fernicola, MD*

3:14 pm-3:18 pm Evaluation of Factors Influencing Fixation of a Pauwels III Femoral Neck Fracture Using a Traid of Screws
Sean Caskey, DO, McLaren Flint

3:18 pm-3:22 pm Testosterone Levels in Anterior Cruciate Ligament Reconstruction vs. Arthroscopic Meniscal Debridement
LT Matthew J. Wilson, MD, Naval Medical Center Portsmouth

3:22 pm-3:25 pm Discussion

3:25 pm-3:29 pm Glenoid Neck Hounsfield Units on Computed Tomography Can Accurately Identify Patients with Low Bone Mineral Density
LT Kyle E. Nappo, MD, Walter Reed National Military Medical Center

3:29 pm-3:33 pm Radiographic Relationship between the Lateral Tibial Plateau and Lateral Femoral Condyle in Normal Adult Knees
Nima Kabirian, MD, University of Southern California
**Presented by CAPT Mark E. Fleming, MD*

3:33 pm-3:37 pm Effect of Medical Comorbidities on Quadriceps Tendon Tear Morphology and Complexity
LCDR Conor B. Garry, MD, Montefiore Medical Center

3:37 pm-3:40 pm Discussion

Rapid Fire Session 1D: Practice Management and Education (*Castile 1*)

Moderators: CAPT (Ret) Scott W. Helmers, MD, *Southern California Permanente Medical Group*
LtCol Andrew W. Mack, MD, *Walter Reed National Military Medical Center*

3:10 pm-3:14 pm Survey on Mental Health in Orthopedic Surgery Residents across North America
LT Michelle M. Gosselin, MD, Washington University in Saint Louis/Barnes-Jewish Hospital

- 3:14 pm-3:18 pm Risk of Burnout in Faculty and Resident Orthopaedic Surgeons at ACS Certified Level-1 Trauma Centers
CPT David J. Tennent, MD, San Antonio Military Medical Center
- 3:18 pm-3:22 pm AAOS Res Study Program and the Effectiveness on the Orthopedic In-Training Examination
CPT Ian A. Mullikin, MD, San Antonio Military Medical Center
- 3:22 pm-3:25 pm Discussion
- 3:25 pm-3:29 pm A Preliminary Investigation of Risk Factors for Prolonged Opioid Use Following Anterior Cruciate Ligament Reconstruction
LT Ashley B. Anderson, MD, Walter Reed National Military Medical Center
- 3:29 pm-3:33 pm Can a Bayesian Belief Network Be Used to Predict Prolonged Opioid Use after Anterior Cruciate Ligament Reconstruction?
LT Ashley B. Anderson, MD, Walter Reed National Military Medical Center
- 3:33 pm-3:37 pm Musculoskeletal Injury Treatment and Resource Utilization in United States Military Veterans, Fiscal Year (FY) 2013-2015
Timothy C. Mauntel, PhD, ATC, Walter Reed National Military Medical Center

3:37 pm-3:40 pm Discussion

Symposium 4: Orthopaedic Oncology

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

- 3:45 pm-4:10 pm Bone Tumors: The Good, Bad and Ugly - How to Avoid Errors in the Managements of Common Bone Tumors
CAPT (Ret) Scott W. Helmers, MD, Southern California Permanente Medical Group
- 4:10 pm-4:15 pm Discussion

General Session 4: Orthopaedic Oncology

Civilian Moderator: CAPT (Ret) Scott W. Helmers, MD, *Southern California Permanente Medical Group*

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

- 4:15 pm-4:21 pm External Validation of a Tool for Survival Estimation in Patients with Metastatic Bone Disease Treated with Surgical Fixation Utilizing a Military Health System Cohort

LT Ashley B. Anderson, MD, Walter Reed National Military Medical Center

- 4:21 pm-4:27 pm External Validation of a Tool for Survival Estimation in Patients with Metastatic Bone Disease Treated with Radiation Utilizing a Military Health System Cohort
LT Ashley B. Anderson, MD, Walter Reed National Military Medical Center
- 4:27 pm-4:33 pm Low Grade Central Osteosarcoma: A Single Institution Experience with Long Term Follow Up
LtCol Dustin Lybeck, MD, San Antonio Military Medical Center
- 4:33 pm-4:39 pm Does Obesity Mask Soft Tissue Sarcoma Growth?
Capt George A. Cibulas, PharmD, MD, University of Michigan
- 4:39 pm-4:45 pm Discussion
- 4:45 pm-4:51 pm Analysis of Patient Centered Orthopaedic Oncology Care at a Military Facility
CPT Sean Kelly, MD, San Antonio Military Medical Center
- 4:51 pm-4:57 pm Are All Femurs Created Equal? The Basis for Femoral Component Design of the Osseointegration Implant
Solon L. Rosenblatt, MD, Macquarie University Hospital
- 4:57 pm-5:03 pm Rate of Metabolic and Endocrine Abnormalities in Patients with Stress Fractures
MAJ Daniel J. Song, MD, Landstuhl Regional Medical Center
**Presented by MAJ Kevin P. Krul, MD, Tripler Army Medical Center*
- 5:03 pm-5:09 pm Development and Evaluation of Weight Bearing Bone Grafts
CPT David J. Tennent, MD, San Antonio Military Medical Center
- 5:09 pm-5:15 pm Discussion
- 5:15 pm-6:15 pm **Scientific E-Poster Session Tour** (Presenters will be available to answer questions.) (*Princess Ballroom Salons A, B, C & Castile 1*)
- 6:15 pm -7:15 pm **Multimedia Education Session** (*Princess Ballroom Foyer*)

Wednesday, December 13 - Warren Kadrmas Memorial Sports Day

- 12:00 am-11:59 pm Speaker Ready Area (*Princess Ballroom Foyer*)

6:30 am-7:00 am **Scientific E-Poster Session** (Presenters will be available to answer questions.) (*Princess Ballroom Salons A, B, C & Castile 1*)

Symposium 5: Sports - Knee

Moderator: Lt Col Ross A. Schumer, MD, *San Antonio Military Medical Center*

7:00 am-7:25 am ACL Reconstruction 2017: Pearls of Success!!!
Darren L. Johnson, MD, University of Kentucky Sports Medicine

7:25 am-7:30 am Discussion

General Session 5: Sports - Knee

Civilian Moderator: Darren L. Johnson, MD, *University of Kentucky Sports Medicine*

Military Moderator: Lt Col Ross A. Schumer, MD, *San Antonio Military Medical Center*

7:30 am-7:36 am Meniscectomy and Resultant Articular Cartilage Lesions of the Knee in Prospective National Football League Players: An Imaging and Performance Analysis
CAPT Matthew T. Provencher, MD, The Steadman Clinic

7:36 am-7:42 am Surgical Repair of the Knee Extensor Mechanism: Are There Differences in the Rates and Timing of Failure?
Capt Aaron M. Roberts, MD, University of Rochester

7:42 am-7:48 am Change in KOOS and WOMAC Scores over 4 Years in a Young, Athletic Population With and Without Anterior Cruciate Ligament Injury
MAJ Ivan J. Antosh, MD, Eisenhower Army Medical Center
**Presented by MAJ E'Stephan J. Garcia, MD, William Beaumont Army Medical Center*

7:48 am-7:54 am The Effect of Whipstitch Suture on Pullout Strength for Tibial Interference Fixation of Anterior Cruciate Ligament Soft Tissue Grafts
LT Ethan Bernstein, MD, MPH, Naval Medical Center San Diego
**Presented by ENS Kevin Taniguchi, BA, Uniformed Services University of the Health Sciences School of Medicine*

7:54 am-7:59 am Discussion

7:59 am-8:05 am Clinical Outcomes of Multiple Osteochondral Allograft Transplantation of the Knee: An Analysis of Snowman Technique and Multifocal Lesions
Brian R. Waterman, MD, Wake Forest Baptist
**Presented by Eric Cotter, BS*

8:05 am-8:11 am Return to Duty after ACL Reconstruction: Are They Getting and Staying Back in the Fight?
MAJ Jay B. Cook, MD, Winn Army Community Hospital

- 8:11 am-8:17 am Return to Duty after Multiligamentous Knee Reconstructions in Active Duty Service Members
CPT Robert C. Turner, MD, Tripler Army Medical Center
- 8:17 am-8:23 am MRI-Based Analysis of Knee Composition Is Correlated with Outcomes after Anterior Cruciate Ligament Reconstruction
Capt Kartik Shenoy, MD, NYU Hospital for Joint Diseases
- 8:23 am-8:29 am Anterior Cruciate Ligament Graft Removal versus Retention in the Setting of Septic Arthritis following Reconstruction: A Systematic Review and Expected Value Decision Analysis
CPT David R. Peterson, MD, Tripler Army Medical Center
- 8:29 am-8:35 am Discussion
- 8:35 am-8:55 am *Break with Exhibitors (Princess Ballroom Salons D, E, F & G)*

Rapid Fire Session 2A: Shoulder and Elbow (Princess Ballroom Salon A)

Moderators: CAPT John-Paul H. Rue, MD, *Mercy Medical Center*
 MAJ Stephen A. Parada, MD, *Dwight D. Eisenhower Army Medical Center*

- 8:55 am-8:59 am Outcome Measures Following Medial Ulnar Collateral Ligament Reconstructions in a Military Population
John B. Fuller, MD, William Beaumont Army Medical Center
- 8:59 am-9:03 am Return to Sporting Activity after Ulnar Nerve Transposition for Isolated Neuritis in Competitive Overhead
Brian R. Waterman, MD, Wake Forest Baptist
**Presented by Michael C. O'Brien, MA, BS*
- 9:03 am-9:07 am Incidence of Cubital Tunnel Syndrome in the US Military Population
CPT Andrew G. Chan, MD, MPH, William Beaumont Army Medical Center
**Presented by John J. Pisquiy, MHA, Paul L. Foster School of Medicine*
- 9:07 am-9:10 am Discussion
- 9:10 am-9:14 am Mid-Term Functional Outcomes and Complications Following Pectoralis Major Tendon Reconstruction in Active Duty Military Personnel
CPT Drew W. Nute, MD, William Beaumont Army Medical Center/Texas Tech
- 9:14 am-9:18 am High Tensile Strength Tape vs. High Tensile Strength Suture in Labral Repair and Capsulorrhaphy: A Biomechanical Study
LT Nicholas P. Lopreiato, MD, Naval Medical Center San Diego

9:18 am-9:22 am Biomechanical Evaluation of Unicortical Stress Risers of the Proximal Humerus Associated with Pectoralis Major Repair
CPT Brian P. Milam, MD, Madigan Army Medical Center

9:22 am-9:25 am Discussion

Rapid Fire Session 2B: Sports Injuries – Hip (*Princess Ballroom Salon B*)

Moderators: MAJ E'Stephan Garcia, MD, *William Beaumont Army Medical Center*
 LTC Jeffrey Giuliani, MD, *Walter Reed National Military Medical Center*

8:55 am-8:59 am The Effect of Previous Methylphenidate Use on Incidence of Stress Fractures in Military Recruits: A Retrospective Cohort
CPT Haggai Schermann, MD, Tel-Aviv Sourasky Medical Center

8:59 am-9:03 am Tension-Sided Femoral Neck Stress Fractures: Nonoperative Treatment without Progression Tension-Sided Femoral
LT Kyle Mombell, MD, Naval Medical Center San Diego

9:03 am-9:07 am Radiographic, Histologic, and Clinical Characteristics of Patients with Paralabral Ossicles in Femoroacetabular Impingement
LCDR Daniel L. Christensen, MD, Walter Reed National Military Medical Center
**Presented by CPT Michael Elsenbeck, MD*

9:07 am-9:10 am Discussion

9:10 am-9:14 am Surgical Variables That Predict Successful Outcomes after Arthroscopic Surgery for Femoroacetabular Impingement
COL Bryant G. Marchant, MD, Madigan Army Medical Center

9:14 am-9:18 am Influence of Joint Hypermobility on Patient-Reported Outcomes after Hip Arthroscopy for Femoroacetabular Impingement Syndrome
Brian R. Waterman, MD, Wake Forest Baptist
**Presented by Gift Ukwuani, MD*

9:18 am-9:22 am Longer Preoperative Symptom Duration Leads to Lower Patient Satisfaction and Worse Function after Hip Arthroscopy
Brian R. Waterman, MD, Wake Forest Baptist
**Presented by Gift Ukwuani, MD*

9:22 am-9:25 am Discussion

Rapid Fire Session 2C: Shoulder Instability (*Princess Ballroom Salon C*)

Moderators: COL (Ret) Dean C. Taylor, MD, *Duke University Medical Center*
 MAJ Kelly G. Kilcoyne, MD, *William Beaumont Army Medical Center*

- 8:55 am-8:59 am Tobacco Use Is a Risk Factor for Recurrent Dislocation after Arthroscopic Bankart Repairs
MAJ Kevin P. Krul, MD, Tripler Army Medical Center
- 8:59 am-9:03 am Incidence of Bone Loss in Circumferential Lesions of the Glenoid Labrum
CPT Henry H. Yu, MD, Madigan Army Medical Center
- 9:03 am-9:07 am Surgical Implications of the Distal Tibia Morphology for Glenoid Augmentation
CPT Colleen M. Moreland, DO, Eisenhower Army Medical Center
- 9:07 am-9:10 am Discussion
- 9:10 am-9:14 am Pathoanatomy and Bone Loss Associated with First-Time and Recurrent Anterior Shoulder Instability in Collegiate Athletes: A Prospective Multicenter Study
MAJ Jonathan F. Dickens, MD, Walter Reed National Military Medical Center
- 9:14 am-9:18 am Baseline Functional Scores in Soldiers Undergoing Arthroscopic Shoulder Stabilization
CPT Zackary A. Johnson, MD, Tripler Army Medical Center
- 9:18 am-9:22 am The Arthroscopic West Point Technique: An Arthroscopic Load Shift for Assessing a Balanced Shoulder
CPT Donald R. Fredericks, MD, Walter Reed National Military Medical Center
- 9:22 am-9:25 am Discussion

Rapid Fire Session 2D: Shoulder and Biceps (Castile 1)

Moderators: COL Mark P. Pallis, DO, *William Beaumont Army Medical Center*
LCDR James E. Hammond, DO, *Portsmouth Naval Hospital*

- 8:55 am-8:59 am Arthroscopic Treatment of Posterior Shoulder Instability With and Without Glenoid Dysplasia
MAJ Joseph W. Galvin, DO, Blanchfield Army Community Hospital
- 8:59 am-9:03 am Incidence of Bone Deficiency in Patients with Posterior Glenohumeral Instability
CPT Jared A. Wolfe, MD, Walter Reed National Military Medical Center
- 9:03 am-9:07 am The Results of Posterior Labral Repairs in Baseball Players with Minimum 2-Year Follow-Up
Capt Timothy P. McCarthy, MD, Emory University

- 9:07 am-9:10 am Discussion
- 9:10 am-9:14 am Patient Preferences for Treatment of Shoulder and Proximal Biceps Disorders Are Associated with Patient Age, Race, Sex and Activity Level
LT Michelle M. Gosselin, MD, Washington University in Saint Louis/Barnes-Jewish Hospital
- 9:14 am-9:18 am High Return to Preoperative Military Function after Arthroscopic Panlabral Repairs for Complex Shoulder Instability
CPT Andrew G. Chan, MD, MPH, William Beaumont Army Medical Center
- 9:18 am-9:22 am Risk Factors for Failure of Non-Operative Treatment of Posterior Labral Tears
LCDR Daniel L. Christensen, MD, Walter Reed National Military Medical Center
**Presented by CPT Michael Elsenbeck, MD*
- 9:22 am-9:25 am Discussion

Symposium 6: Sports - Foot and Ankle

Moderator: LTC Thomas C. Dowd, MD, *San Antonio Military Medical Center*

- 9:30 am-9:55 am Athletic Foot and Ankle Injuries: Treating the Active Duty Service Member like the Elite Athlete
Robert B. Anderson, MD, Ortho Carolina Foot and Ankle Institute
- 9:55 am-10:00 am Discussion

General Session 6: Sports - Foot and Ankle

Civilian Moderator: Robert B. Anderson, MD, *Ortho Carolina Foot and Ankle Institute*

Military Moderator: LTC Thomas C. Dowd, MD, *San Antonio Military Medical Center*

- 10:00 am-10:06 am Achilles Tendinopathy Outcomes within the Active Duty Population
CPT Gregory E. Lausé, MD, Tripler Army Medical Center
- 10:06 am-10:12 am Does Clinical Exam and Ultrasound Correlate with MRI Findings When Assessing Tendon Approximation in Acute Achilles Tendon Tears? A Clinical Study
CPT Justin J. Ernat, MD, Blanchfield Army Community Hospital
**Presented by MAJ John D. Johnson, MD, Tripler Army Medical Center*
- 10:12 am-10:18 am Ultrasound Measurement of the Achilles Tendon in an Asymptomatic Elite Military Population: Cross Sectional Area of the Achilles Tendon in a Prospective Cohort of an Elite Military Population

MAJ Kevin D. Martin, DO, Evans Army Community Hospital
*Presented by 2LT Jeffrey L. Wake, BS

- 10:18 am-10:24 am Discussion
- 10:24 am-10:30 am Outcomes of Particulated Juvenile Cartilage Transplantation for Osteochondral Lesions of the Talus in a High-Demand Population
CPT Kenneth Heida, MD, William Beaumont Army Medical Center
- 10:30 am-10:36 am Ankle Distraction Arthroplasty Compared to Other Cartilage Preservation Procedures in Patients with Post Traumatic Arthritis: A Systematic Review
Capt Jason A. Beachler, MD, San Antonio Military Medical Center
- 10:36 am-10:42 am Outcomes Following Modified Brostrom Procedure for Chronic Lateral Ankle Instability with and Without Peroneal Tendon Exploration/Repair
CPT Brian P. Milam, MD, Madigan Army Medical Center
- 10:42 am-10:48 am Discussion
- 10:48 am-11:08 am Break with Exhibitors (Princess Ballroom Salons D, E, F & G)

Seminar 1: Joint-Service Research Initiative - MOTION

Moderator: MAJ Jonathan F. Dickens, MD, Walter Reed National Military Medical Center

- 11:08 am-12:20 pm Joint-Service Research Initiative
MAJ Jonathan F. Dickens, MD, Walter Reed National Military Medical Center
RADM Bruce L. Gillingham, MD, USN, Deputy Chief, Readiness and Health Directorate, Chief Quality Officer, Bureau of Medicine and Surgery
- 12:20 pm-12:30 pm Discussion
- 12:35 pm-1:35 pm **SOMOS Luncheon – Industry Presentation**
Stryker (Princess Ballroom Salons A)
Vericel (Princess Ballroom Salons B)
Arthrex (Princess Ballroom Salons C)
Pacira (Castile 1)

Symposium 7: Sports Injuries

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

- 1:35 pm-2:00 pm Patient-Centered Leadership as seen Through Shoulder Instability
COL (Ret) Dean C. Taylor, MD, *Duke University Medical Center*

2:00 pm-2:05 pm Discussion

General Session 7: Sports Injuries

Civilian Moderator: COL (Ret) Dean C. Taylor, MD, *Duke University Medical Center*

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

2:05 pm-2:11 pm Shoulder Injection Prior to Rotator Cuff Repair Is Associated with Increased Risk of Subsequent Surgery
Capt Sophia A. Traven, MD, Medical University of South Carolina

2:11 pm-2:17 pm Enhanced Multi-Modal Analgesia Pathway Associated with Reduced 90-Day Opioid Prescribing after Elective Sports Orthopaedic Surgery
MAJ Jeanne C. Patzkowski, MD, Tripler Army Medical Center

2:17 pm-2:23 pm Using the Kerlan Jobe Orthopaedic Shoulder Score to Predict Future Injury in Professional Baseball Pitchers
LT Vanna Rocchi, DO, Naval Medical Center San Diego

2:23 pm-2:29 pm Intraoperative Evaluation of SLAP Tear Morphology: A Retrospective Review
LT Hannah E. Kirby, MD, Naval Medical Center San Diego

2:29 pm-2:35 pm Discussion

2:35 pm-2:41 pm Liposomal Bupivacaine versus Bupivacaine with Fascia Iliaca Blockade for Perioperative Pain Management during Hip Arthroscopy: A Double-Blinded Prospective Randomized Control Trial
CPT Patrick D. Grimm, MD, Walter Reed National Military Medical Center

2:41 pm-2:47 pm Circumferential Labral Reconstruction with ITB Allograft: A Viable Option for Patients with Missing or Severely Compromised Labral Tissue?
2LT John P. Scanaliato, BS, Uniformed Services University of the Health Sciences School of Medicine

2:47 pm-2:53 pm Mid to Long-Term Follow-Up of MRI Proven Acetabular Labral Pathology in Previously Asymptomatic Patients
LtCol Matthew R. Schmitz, MD, San Antonio Military Medical Center

2:53 pm-2:59 pm Hip Arthroscopy for Femoroacetabular Impingement in a Military Population
LT Ethan Bernstein, MD, MPH, Naval Medical Center San Diego
**Presented by LT Martin Collier, MD, Keller Army Community Hospital*

2:59 pm-3:05 pm Discussion

3:05 pm-3:20 pm *Refreshment Break (Princess Ballroom Foyer)*

Seminar 2: Transitioning Your Practice from Military to Civilian

Moderator: CAPT John-Paul H. Rue, MD, *Mercy Medical Center*

3:20 pm-4:50 pm Things to Appreciate When You're in the Military; What to Look for When You Are Finding Civilian Employment; How to Get the Most Out of It When You're There

Panel: *CDR Leo T. Kroonen MD, Permanente Medical Group*
COL (Ret) Tad Gerlinger, MD, Rush University

4:50 pm-5:50 pm **Scientific E-Poster Session** (Presenters will be available to answer questions.) (*Princess Ballroom Salons A, B, C & Castile 1*)

5:50 pm-6:50 pm **Multimedia Education Session** (*Princess Ballroom Foyer*)

Thursday, December 14

12:00 am-11:59 pm Speaker Ready Area (*Princess Ballroom Foyer*)

6:00 am-7:00 am **Service Breakouts**

Air Force (Castile 5)

Army (Princess Ballroom Salons H & I)

Navy (Princess Ballroom Salon C)

Symposium 8: Adult Reconstruction

Moderator: LCDR Brian T. Barlow, MD, *Naval Medical Center San Diego*

7:00 am-7:25 am Update in Total Joint Replacement
James V. Bono, MD, New England Baptist Hospital

7:25 am-7:30 am Discussion

General Session 8: Adult Reconstruction

Civilian Moderator: James V. Bono, MD, *New England Baptist Hospital*

Military Moderator: LCDR Brian T. Barlow, MD, *Naval Medical Center San Diego*

7:30 am-7:36 am Fewer Complications Following Revision Hip and Knee Arthroplasty in Patients with Normal Vitamin D Levels
Capt Sophia A. Traven, MD, Medical University of South Carolina

7:36 am-7:42 am Acetabular Placement Accuracy with the Direct Anterior Approach Free-Hand Technique

Melissa C. Soderquist, BS, Georgetown University School of Medicine

- 7:42 am-7:48 am Does Periarticular Infiltration of a Local Anesthetic Cocktail Have Similar Efficacy as a Continuous Femoral Nerve Block During the First Two Days after Total Knee Arthroplasty
LT Michael A. Quacinella, DO, MPH, Naval Medical Center San Diego
**Presented by LCDR Brian T. Barlow, MD*
- 7:48 am-7:54 am Is there Any Role for Direct Repair of Extensor Mechanism Disruption Following Total Knee Arthroplasty?
COL (Ret) Tad Gerlinger, MD, Rush University
- 7:54 am-8:00 am Discussion
- 8:00 am-8:06 am Geographic Trends in Total Joint Arthroplasty in the Military Health System
LT Ashley B. Anderson, MD, Walter Reed National Military Medical Center
- 8:06 am-8:12 am Enhanced Multi-Modal Analgesia Pathway Associated with Reduced Hospital Length of Stay after Total Knee Arthroplasty
MAJ Michael S. Patzkowski, MD, Tripler Army Medical Center
- 8:12 am-8:18 am Mechanical Knee Alignment in Osteoarthritic Knees versus Non-Arthritic Knees: What is a Normal Joint Line?
LCDR Brian T. Barlow, MD, Naval Medical Center San Diego
- 8:18 am-8:24 am Return to Active Duty After Total Knee and Total Hip Arthroplasty
LT Alanna B. Balboni, MD, Naval Medical Center Portsmouth
- 8:24 am-8:30 am Discussion
- 8:30 am-8:45 am Refreshment Break (Princess Ballroom Foyer)

Rapid Fire Session 3A: Adult Reconstruction/Infection (Princess Ballroom Salon A)

Moderators: James V. Bono, MD, *New England Baptist Hospital*

LCDR Brian T. Barlow, MD, *Naval Medical Center San Diego*

- 8:45 am-8:49 am Is Outpatient Unicompartmental Knee Arthroplasty Safe to Perform at an Ambulatory Surgery Center? A Comparative Study of Early Post-Operative Complications
MAJ John P. Cody, MD, Walter Reed National Military Medical Center
**Presented by CPT Richard L. Purcell, MD*
- 8:49 am-8:53 am The Shift to Same-day Outpatient Joint Arthroplasty: A Systematic Review

CPT Nicholas J. Zarkadis, DO, William Beaumont Army Medical

- 8:53 am-8:57 am Total Hip Arthroplasty Perioperative Factors and Their Predictive Value
for Patient Discharge Destination
LCDR Cory F. Janney, MD, UTMB at Galveston
- 8:57 am-9:01 am Return to Duty Following Periacetabular Osteotomy
Capt Andrew S. Murtha, MD, San Antonio Military Medical Center
- 9:01 am-9:04 am Discussion
- 9:04 am-9:08 am Septic Olecranon and Prepatellar Bursitis: A Single Center Experience
CPT James B. Deal, MD, Tripler Army Medical Center
**Presented by CPT Aaron S. Vaslow, MD*
- 9:08 am-9:12 am Rapid and Convenient Decontamination of Thyroid Shields
LT Chihua Lee, MD, Naval Medical Center Portsmouth
- 9:12 am-9:15 am Discussion

Rapid Fire Session 3B: Hand and Wrist (*Princess Ballroom Salon B*)

Moderators: *LCDR Dominic T. Gomez-Leonardelli, MD, Naval Medical Center San Diego*
 LCDR Emily Gilley, MD, Naval Hospital Camp Pendleton

- 8:45 am-8:49 am Underutilization of Upper Extremity Reconstruction for Persons with
Tetraplegia: The Patient Perspective
Maj Julia A.V. Nuelle, MD, Loyola University Medical Center
- 8:49 am-8:53 am Outcomes of Metacarpal Fractures with Associated Behavioral Health
Diagnosis
MAJ Seon A. Jones, MPAS, PA-C, Brooke Army Medical Center
- 8:53 am-8:57 am Wrist Arthroscopy for the Treatment of Scapholunate (SL) Predynamic
Instability and Return to Duty
CPT Christopher Belyea, MD, MBA, Tripler Army Medical Center
- 8:57 am-9:00 am Discussion
- 9:00 am-9:04 am Processed Nerve Allograft Utilization in Peripheral Nerve Reconstruction:
Continued Analysis
*2LT Andrew J. Lopez, BS, Uniformed Services University of Health
Sciences*
- 9:04 am-9:08 am Perilunate Dislocations and Fracture Dislocations in the United States
Military
Logan R. Koehler, MD, William Beaumont Army Medical Center

9:08 am-9:12 am Delayed and Nonunion of Distal Radius Fractures in a Military Population
CPT Christopher M. Daniels, MD, Walter Reed National Medical Center
**Presented by LT Stephen Fernicola, MD*

9:12 am-9:15 am Discussion

Rapid Fire Session 3C: Pediatrics (*Princess Ballroom Salon C*)

Moderators: Anthony I. Riccio, MD, *Texas Scottish Rite Hospital*
 LTC S. Imran Ahmed, MD, *Ft. Belvoir*

8:45 am-8:49 am Accuracy of Robot-Assisted Pedicle Screw Insertion in Adolescent
Idiopathic Scoliosis: Is Triggered Electromyographic Pedicle Screw
Stimulation Necessary?
*CPT Kenneth A. Shaw, DO, Dwight David Eisenhower Army Medical
Center*

8:49 am-8:53 am Reliability of Shoulder Height Assessment in Adolescent Idiopathic
Scoliosis
MAJ Daniel G. Kang, MD, Madigan Army Medical Center
**Presented by CPT Justin C. Anderson, MD*

8:53 am-8:58 am Discussion

8:58 am-9:02 am ACL Reconstruction in Adolescents: Midterm Results Using a Combined
Biologic Approach
Paul R. Fleissner, MD, Crystal Clinic Orthopedic Center

9:02 am-9:06 am Growth Arrest after Transphyseal ACL Reconstruction in Skeletally
Immature Pubescent Adolescents: Are Transphyseal Independent Femoral
Tunnels Safe?
CPT Thomas J. Melton, MD, Madigan Army Medical Center

9:06 am-9:10 am Adolescent Kienbock Disease: Outcomes of Surgical Intervention.
Maj Julia A.V. Nuelle, MD, Loyola University Medical Center

9:10 am-9:15 am Discussion

Rapid Fire Session 3D: Spine (*Castile 1*)

Moderators: MAJ Melvin D. Helgeson, MD, *Walter Reed National Military Medical Center*
 LCDR David Glassman, MD, *Naval Medical Center San Diego*

8:45 am-8:49 am Blood Transfusion Associated with Surgery for Adolescent Idiopathic
Scoliosis Should Be a Rare Event
COL(Ret) Robert P. Stanton, MD, Nemours Children's Hospital

- 8:49 am-8:53 am Effect of Lordotic Cages on Foraminal Volume: A Finite Element Analysis
Col (Ret) David W. Polly Jr., MD, University of Minnesota
- 8:53 am-8:57 am Percutaneous Pedicle Screws in the Obese: Should the Skin Incision Be More Lateral?
LT Kyle Mombell, MD, Naval Medical Center San Diego
- 8:57 am-9:00 am Discussion
- 9:00 am-9:04 am Disparities in Access to Spine Surgery among Active Duty Beneficiaries in the Military Health System
LCDR George C. Balazs, MD, Walter Reed National Military Medical Center
- 9:04 am-9:08 am Impact of Implant Density on Curve Correction for Large Stiff Idiopathic Scoliosis Curves
CPT Gregory E. Lausé, MD, Tripler Army Medical Center
- 9:08 am-9:12 am Tranexamic Acid (TXA) in Thoracic and Lumbar Fusions and Perioperative Blood Loss
Nathan Wanderman, MD, Mayo Clinic
**Presented by Col Brett A. Freedman, MD*
- 9:12 am-9:15 am Discussion

AAOS Report

Moderator: CAPT Charles E. Craven Jr., MD, *Naval Medical Center San Diego*

9:20 am-9:40 am AAOS Update

9:40am-9:50 am Discussion and Questions

Business & Strategic Planning Meeting

Moderator: CAPT Charles E. Craven Jr., MD, *Naval Medical Center San Diego*

9:50 am-10:00 am Business Meeting

10:00 am-10:10 am Strategic Planning Meeting

10:10 am-10:20 am Refreshment Break (Princess Ballroom Foyer)

Symposium 9: Shoulder

Moderator: LCDR James E. Hammond, DO, *Portsmouth Naval Hospital*

10:20 am-10:45 am Rotator Cuff Repair: Advanced Techniques Including Convergence, Nerve Decompression, SCR and RM Patches; When and How
(Buddy) Felix H. Savoie III, MD, Tulane University

10:45 am-10:50 am Discussion

General Session 9: Shoulder

Civilian Moderator: (Buddy) Felix H. Savoie III, MD, Tulane University

Military Moderator: LCDR James E. Hammond, DO, Portsmouth Naval Hospital

10:50 am-10:56 am Using Pre-Injury and Post-Injury MRI for Quantification of Glenoid Bone Loss after First-Time and Recurrent Anterior Glenohumeral Instability
CPT Sean E. Slaven, MD, Walter Reed National Military Medical Center

10:56 am-11:02 am PROMIS for Patients Undergoing Arthroscopic Shoulder Surgery in the Military: Multidimensional Assessment as Standard of Care
Matthew N. Millington, BS, Walter Reed National Military Medical Center

11:02 am-11:08 am Complications and Reoperation Rates Following Latarjet Procedure in the US Military
ENS William R. Shannon, BS, George Washington University School of Medicine

11:08 am-11:14 am Glenoid Track Instability Management Score: Radiographic Modification of The Instability Severity Index Score (ISIS)
CAPT Matthew T. Provencher, MD, The Steadman Clinic

11:14 am-11:20 am Discussion

11:20 am-11:26 am Midterm Functional and Radiographic Outcomes of Total Shoulder Arthroplasty in Patients with a B2 Glenoid Addressed with Corrective Reaming
LT Michelle M. Gosselin, MD, Washington University in Saint Louis/Barnes-Jewish Hospital

11:26 am-11:32 am Salvage of Failed Hemi- and Total to Reverse Shoulder Arthroplasty: Clinical Improvement despite Increased Short-Term Risk of Reoperation
Brian R. Waterman, MD, Wake Forest Baptist
*Presented by Robert S. Dean, BS

11:32 am-11:38 am Midterm Functional Outcomes of Total Shoulder Arthroplasty in Patients with a B2 Glenoid Addressed with a Reversed Offset Humeral Head
LT Michelle M. Gosselin, MD, Washington University in Saint Louis/Barnes-Jewish Hospital

- 11:38 am-11:44 am Clinical Outcomes and Activity Levels after Anatomic Total Shoulder Arthroplasty with an Inlay Glenoid Component in an Active, Young Patient Population
Brian R. Waterman, MD, Wake Forest Baptist
**Presented by Michael C. O'Brien, MA, BS*
- 11:44 am-11:50 am Discussion
- 12:00 am-1:30 pm **Scientific E-Poster Session** (Presenters will be available to answer questions.) (*Princess Ballroom Salons A, B, C & Castile 1*)
- 1:30 pm-2:30 pm **Multimedia Education Session** (*Princess Ballroom Foyer*)

Friday, December 15

- 12:00 am-11:55 am Speaker Ready Area (*Princess Ballroom Foyer*)
- 6:30 am-7:00 am **Scientific E-Poster Session** (Presenters will be available to answer questions.) (*Princess Ballroom Salons A, B, C & Castile 1*)

Symposium 10: Jamie Dianne Bulken-Hoover Memorial Hand Session

Moderator: LCDR Dominic T. Gomez-Leonardelli, MD, *Naval Medical Center San Diego*

- 7:00 am-7:25 am Elbow Arthritis Options: TEA to Interposition
Scott P. Steinmann, MD, Mayo Clinic
- 7:25 am-7:30 am Discussion

General Session 10: Hand and Upper Extremity

Civilian Moderator: Scott P. Steinmann, MD, *Mayo Clinic*

Military Moderator: LCDR Dominic T. Gomez-Leonardelli, MD, *Naval Medical Center San Diego*

- 7:30 am-7:36 am Functional Outcomes of Thumb Trapeziometacarpal Arthrodesis with a Locked Plate Versus Ligament Reconstruction and Tendon Interposition
LCDR K. J. Hippensteel, MD, Washington University, Saint Louis
- 7:36 am-7:42 am The Effect of Dorsal Screw Prominence in the Radial Shaft of Distal Radius Fractures Treated with Volar Locked Plating
LCDR Nicholas Pulos, MD, Mayo Clinic
- 7:42 am-7:48 am Derotational Pronation-Producing Osteotomy of the Radius and Biceps Tendon Rerouting for Supination Contractures
Capt Casey Dedeugd, MD, Mayo Clinic

- 7:48 am-7:54 am Relative Tissue Oxygenation Changes Are More Reliable Than Clinical Exam or Temperature Changes for Detecting Early Tissue Ischemia
MAJ Elizabeth M. Polfer, MD, Walter Reed National Military Medical Center
**Presented by MAJ Jennifer M. Sabino, MD, Johns Hopkins Hospital*
- 7:54 am-8:00 am Discussion
- 8:00 am-8:06 am Suture-Button Stabilization Following Ring Finger Ray Amputation: A Comparative Biomechanical Study
MAJ Emily Morgan, MD, Landstuhl Regional Medical Center
**Presented by MAJ Anthony M. Barcia, MD*
- 8:06 am-8:12 am Primary Medial Femoral Condyle Free Vascularized Bone Graft for the Treatment of Scaphoid Nonunions with Carpal Collapse and Proximal Pole Avascular Necrosis
LCDR Nicholas Pulos, MD, Mayo Clinic
- 8:12 am-8:18 am The Role of Medial Femoral Condyle Free Vascularized Bone Graft for the Treatment of Failed Scaphoid Nonunion Surgery associated with Proximal Pole Avascular Necrosis
LCDR Nicholas Pulos, MD, Mayo Clinic
- 8:18 am-8:24 am Matti-Russe Technique for Scaphoid Nonunions in Pediatric Patients
CAPT Irshad A. Shakir, MD, Saint Louis University

8:24 am-8:30 am Discussion

Symposium 11: Spine

Moderator: MAJ Melvin D. Helgeson, MD, *Walter Reed National Military Medical Center*

8:30 am-8:55 am The Sacroiliac Joint - The Link Between the Hip and Spine
Col (Ret) David W. Polly Jr., MD, University of Minnesota

8:55 am-9:00 am Discussion

9:00 am-9:15 am *Refreshment Break (Princess Ballroom Foyer)*

General Session 11: Spine

Civilian Moderator: Col (Ret) David W. Polly, MD, *University of Minnesota*

Military Moderator: MAJ Melvin D. Helgeson, MD, *Walter Reed National Military Medical Center*

9:15 am-9:21 am Spine Surgery in Patients with Previous THA: Should We Fuse the Spine First?
LT Shian Liu, MD, Camp Pendleton

- 9:21 am-9:27 am The Impact of Translation and Stenosis
LCDR David Glassman, MD, Naval Medical Center San Diego
- 9:27 am-9:33 am Comorbid Mental Health Disorders Are Associated with Poor Outcomes
after Cervical Spine Surgery at 2-Year Follow-Up
LT Shian Liu, MD, Camp Pendleton
- 9:33 am-9:39 am Routine Microscope Use Does Not Increase Operative Time or Affect
Short Term Outcomes in Single Level Lumbar Microdecompression
LCDR Patrick B. Morrissey, MD, Rothman Institute
- 9:39 am-9:45 am Discussion
- 9:45 am-9:51 am Four and Five-Level Anterior Cervical Discectomy and Fusion with Plate
Fixation: Radiographic and Clinical Results
*LCDR Theodore J. Steelman, MD, Walter Reed National Military Medical
Center*
- 9:51 am-9:57 am Re-Operation Following Sacral Alar-Iliac (S2AI) versus Traditional Iliac
Pelvic Fixation
MAJ Daniel G. Kang, MD, Madigan Army Medical Center
**Presented by CPT Justin C. Anderson, MD*
- 9:57 am-10:03 am Intraoperative Pedicle Screw Navigation Does Not Significantly Decrease
Complications after Spine Surgery
LCDR Scott C. Wagner, MD, Rothman Institute
- 10:03 am-10:09 am Number of Levels Fused Does Not Affect C5 Palsy Rate after Anterior
Cervical Discectomy and Fusion
LCDR Scott C. Wagner, MD, Rothman Institute
- 10:09 am-10:15 am Discussion
- 10:15 am-10:25 am *Refreshment Break (Princess Ballroom Foyer)*

Symposium 12: Pediatrics

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

- 10:25 am-10:50 am Pediatric Spine Trauma: The Texas Scottish Rite Hospital Experience
Anthony I. Riccio, MD, Texas Scottish Rite Hospital
- 10:50 am-10:55 am Discussion

General Session 12: Pediatrics

Civilian Moderator: Anthony I. Riccio, MD, *Texas Scottish Rite Hospital*

- Military Moderator: Lt Col Matthew R. Schmitz, MD, FAAP, *San Antonio Military Medical Center*
- 10:55 am-11:01 am Does Pre-Culture Antibiotic Administration Lead to Non-Diagnostic Bone and Joint Culture Results in Pediatric Osteomyelitis and Septic Arthritis: A 12-Year Retrospective Review
Capt Michael Basso-Williams, DO, MPH, Riverside University Health System Medical Center
- 11:01 am-11:07 am Increased Radiation Exposure in Patients Treated with Intramedullary Fixation Versus Spica Casting for Pediatric Femur Fractures
Philip A. Ashley, MD, Texas Scottish Rite Hospital for Children
- 11:07 am-11:13 am Is Postoperative Admission Necessary Following Lengthening of Growth Friendly Spinal Implants? An Analysis of the National Surgical Quality Improvement Program – Pediatrics
CPT Kenneth A. Shaw, DO, Dwight David Eisenhower Army Medical Center
- 11:13 am-11:19 am Perioperative Outcomes Following Surgical Treatment of the Neuromuscular Hip: An Analysis of the National Surgical Quality Improvement Program – Pediatrics
CPT Kenneth A. Shaw, DO, Dwight David Eisenhower Army Medical Center
- 11:19 am-11:25 am Discussion
- 11:25 am-11:31 am Fracture Risk through Oblique External Fixator Pin Tracts
CPT Shawn M. Gee, MD, Tripler Army Medical Center
- 11:31 am-11:37 am High Rate of Inappropriate Referrals to Pediatric Orthopaedics in an Egalitarian Health Care System
LT Ashley B. Anderson, MD, Walter Reed National Military Medical Center
- 11:37 am-11:43 am Does the Increasing Rate of Transfer of Displaced Supracondylar Fractures in Children to Trauma Centers Increase Value?
CAPT (Ret) William L. Hennrikus, MD, Penn State College of Medicine
- 11:43 am-11:49 am Prenatal Factors Affecting Early Childhood Fracture Risk
CPT Jared A. Wolfe, MD, Walter Reed National Military Medical Center
- 11:49 am-11:55 am Discussion
- 11:55 am-12:55 pm **Multimedia Education Session** (*Princess Ballroom Foyer*)

2017 E-Poster Presentations

STATION A *(Princess Ballroom Salon A)*

Adult Reconstruction

Poster 1

A Case Series of Total Knee Arthroplasty Arthrotomy Failures Following Closure with Barbed Suture

CPT Brian P. Milam, MD, Madigan Army Medical Center

Basic Science

Poster 2

Analysis of Development of Post-Traumatic Osteoarthritis in a Sheep (Ovis Aries) Model Utilizing EPIC Microct

Capt Ian P. Goodman, MD, San Antonio Military Medical Center

Knee

Poster 3

Simultaneous Patella Fracture and Patellar Tendon Avulsion Following Arthroscopic ACL Reconstruction

LT Nicholas H. Lake, MD, Naval Medical Center San Diego

Pediatrics

Poster 4

Rice Bodies and a Partial Flexor Tendon Rupture in a Patient with Juvenile Idiopathic Arthritis: A Case Report and Review of the Literature

LT Austin C. Nabet, DO, Naval Medical Center Portsmouth

Trauma

Poster 5

Ballistic Fractures to the Sacrum and Innominate Did Not Require Operative Fixation in a Large Case Series at a Level I Trauma Center

Mary Kate Erdman, MD, LAC and USC Medical Center

Poster 6

Incidence of Vacuum Phenomenon Related Intra-Articular or Subfascial Gas Found on Computer Assisted Tomography (CT) Scans of Closed Lower Extremity Fractures

Lt Col Christopher LeBrun, MD, R Adams Cowley Shock Trauma Center

Poster 7

Closed Lateral Pan-Talar Dislocation with Associated Lateral Talar Process and Medial Malleolus Fractures: A Traumatology Case Report with Technical Notes

Kurt Madzunovic, DO, Chicago Osteopathic Orthopedic Residency/ Midwestern University

Poster 8

Pre-Hospital Advanced Therapies for Control of Hemorrhage (PATCH): Pilot Study Results

Capt Sarah N. Pierrie, MD, Carolinas Medical Center

Poster 9

The Psychology of Limb Loss and the Effects on Post-Operative Pain

Solon L. Rosenblatt, MD, Macquarie University Hospital

Poster 10

Increased Anterior Column Exposure Using the Anterior Intrapelvic Approach Combined with an Anterior Superior Iliac Spine (ASIS) Osteotomy: A Cadaveric Study

Maj Andrew J. Sheean, MD, San Antonio Military Medical Center

**Presented by CPT Richard K. Hurley MD*

Poster 11

A Systematic Review of Osmotic Therapy for Extremity Compartment Syndrome

LCol Max Talbot, MD, FRCSC, Canadian Armed Forces

Poster 12

Open Reduction Internal Fixation versus Intramedullary Nailing for Humeral Shaft Fractures: An Expected Patient Value Decision Analysis

CPT Nicholas J. Zarkadis, DO, William Beaumont Army Medical

STATION B *(Princess Ballroom Salon B)***Hand and Wrist****Poster 13**

A Unique Case Of Simultaneous Dislocation Of Multiple Carpometacarpal Joints Including The Thumb, Index, Long, And Ring Fingers, But Sparing The Small Finger

LT Nicholas J. Erdle, MD, Naval Medical Center Portsmouth

Poster 14

Self-Inflicted Wrist Injuries Masquerading as Scaphoid Fractures in Military Recruits: Case Series

Captain (Res) Assaf Kadar, MD, Tel Aviv Sourasky Medical Center

**Presented by CPT Haggai Schermann, MD*

Poster 15

Clinical and Radiologic Outcomes after Scaphoid Fracture Treatment in NFL Combine Athletes

CAPT Matthew T. Provencher, MD, The Steadman Clinic

Practice Management/Education

Poster 16

Exaggerated Pre-Operative Patient Reported Visual Analog Pain Scale, A Retrospective Review of 201 Consecutive Surgical Patients

MAJ Kevin D. Martin, DO, Evans Army Community Hospital

**Presented by ENS J. Preston Van Buren*

Poster 17

Orthopaedic Injury Treatment and Resource Utilization in the United States Military, Fiscal Year (FY) 2012-2015

Timothy C. Mauntel, PhD, ATC, Walter Reed National Military Medical Center

Poster 18

One Military Treatment Facility's Experience with a Fracture Liaison Service

LT Kyle E. Nappo, MD, Walter Reed National Military Medical Center

Poster 19

Virtual Reality Simulator versus Dry Lab Training for Shoulder Arthroscopy Procedures

MAJ Jessica Cross Rivera, MD, US Army Institute of Surgical Research

**Presented by COL Anthony E. Johnson, MD*

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Orthopaedic In-Training Examination: Does What Service Residents Are on Correlate with Scores?

CAPT Irshad A. Shakir, MD, Saint Louis University

Tumor/Musculoskeletal

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Preserving and Advancing the Military's Elite Rehabilitation Centers through Oncologic Restoration

Capt Taylor Bates, MD, San Antonio Military Medical Center

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Osteosarcoma of the Calcaneus Presenting in Active Duty Sailor

LT Nicholas P. Perry, MD, Naval Medical Center San Diego

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Diagnostic Dilemma: Atypical Giant Cell Tumor of Bone versus Primary Giant Cell Sarcoma

Capt Tierney A. Shannon, MD, San Antonio Military Medical Center

STATION C *(Princess Ballroom Salon C)*

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Return to Play Criteria Following Shoulder Stabilization Surgery

LT Ashley B. Anderson, MD, Walter Reed National Military Medical Center

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Risk Factors for Revision Hip Arthroscopy in Military Patients Undergoing Hip Arthroscopy for Femoroacetabular Impingement

LT Ethan Bernstein, MD, MPH, Naval Medical Center San Diego

**Presented by LT Martin Collier, MD*

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Correlating Intra-Operative Hamstring Autograft Size With Anthropometric And MRI Measurements

CPT Sally A. Corey, DO, Dwight D. Eisenhower Army Medical Center

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Low Return to Active Duty after Hip Arthroscopy: A Prospective Cohort Study

MAJ(P) Sean P. Kearney, MD, MPH, Womack Army Medical Center

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20 Month Follow-Up after Repair of Chronic Patellar Tendon Rupture with Allograft

LT Hicks C. Manson, MD, Navy Medical Center Portsmouth

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Inverted C-Arm Orientation During Simulated Hip Arthroscopy Decreases Patient Radiation Exposure by Half

CPT Nischal S. Nadig, DO, Dwight David Eisenhower Army Medical Center

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Stress Radiographs for Evaluating Acromioclavicular Joint Separations in an Active-Duty Patient Population: What Have We Learned?

CPT Kenneth A. Shaw, DO, Dwight David Eisenhower Army Medical Center

**Presented by CPT John D. Synovec, MBA, MD*

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Open versus Arthroscopic Management of Snapping Scapula Syndrome: A Matched Comparative Analysis

Brian R. Waterman, MD, Wake Forest Baptist

**Presented by Michael C. O'Brien, MA, BS*

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MAJ Anthony M. Barcia, MD, Landstuhl Regional Medical Center

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LtCol Chance Jack Henderson, MD, US Air Force Academy

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Capt Andrew S. Murtha, MD, San Antonio Military Medical Center

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Robert S. Dean, BS, Midwest Orthopaedics at Rush

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Return to Duty and Complications Following Ulnar Collateral Ligament Reconstruction

MAJ Michael A. Donohue, MD, Walter Reed National Military Medical Center

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CPT Nicholas J. Drayer, MD, Madigan Army Medical Center

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LT Jason J. Ehrhart, PA-C, Navy Base Coronado Branch Health Clinic, Naval Medical Center San Diego

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Brian R. Waterman, MD, Wake Forest Baptist
**Presented by Michael C. O'Brien, MA, BS*

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John B. Fuller, MD, William Beaumont Army Medical Center

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CPT Spencer Schulte, MD, William Beaumont Army Medical Center

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LCDR Scott C. Wagner, MD, Rothman Institute

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LCDR Scott C. Wagner, MD, Rothman Institute

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Risk Factors for and Complications after Surgical Delay in Elective Single-Level Lumbar Fusion
LCDR Scott C. Wagner, MD, Rothman Institute