

ACCREDITATION INFORMATION

PROGRAM COMMITTEE

MAJ Kelly G. Kilcoyne, MD - Co-Chair

LCDR Scott C. Wagner, MD - Co-Chair

LTC B. Kyle Potter, MD

CAPT Matti P. Asuma, MD

Lt Col Christopher T. LeBrun, MD

CDR Lance E. LeClere, MD

LCDR Lucas McDonald, MD, MPH

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 60th 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 *32.75 AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

- * 20.25 CME Credits for Scientific Program
- * 6.5 CME Credits for Scientific E-Poster Sessions
- * 6 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 2018 Society of Military Orthopaedic Surgeons (SOMOS) 60th 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 2018 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 11-14, 2018 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 11-14 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 11-14, at the designated times. A comprehensive selection of AAOS DVDs will be available for your individual education.

SOMOS Scientific Program
December 10-14, 2018
Keystone Resort & Conference Center
Keystone, Colorado

Tuesday, December 11

6:30 am-7:00 am **Scientific E-Poster Session** (*Torreys Peak I, Torreys Peak II, Torreys Peak III, Torreys Peak IV*)
(Presenters will be available to answer questions)

Opening Ceremony

Moderators: MAJ Kelly G. Kilcoyne, MD, Program Co-Chair, *William Beaumont Army Medical Center*
 LCDR Scott C. Wagner, MD, Program Co-Chair, *Walter Reed National Military Medical Center*
 LTC B. Kyle Potter, MD, President, *Walter Reed National Military Medical Center*

7:00 am-7:10 am Color Guard

7:10 am-7:20 am Report of SOMOS President
LTC B. Kyle Potter, MD, Walter Reed National Military Medical Center

Symposium 1: Future of Military Trauma

Moderator: MAJ James A. Blair Jr., MD, *William Beaumont Army Medical Center*

7:20 am-7:45 am Femoral Neck Fractures in the Young Adult
Cory A. Collinge, MD, Vanderbilt University Medical Center

7:45 am-7:50 am Discussion

General Session 1: Trauma 1

Civilian Moderator: Cory A. Collinge, MD, *Vanderbilt University Medical Center*
Military Moderator: MAJ James A. Blair Jr., MD, *William Beaumont Army Medical Center*

7:50 am-7:56 am The Complication and Re-Operation Rates after Osseointegrated Reconstruction
Munjed Al Muderis, MD, The Osseointegration Group of Australia

7:56 am-8:02 am Hypoalbuminemia is an Independent Risk Factor for Mortality, Postoperative Complications, Readmission, and Reoperation in the Operative Lower Extremity Orthopedic Trauma Patient
LT Matthew Lunati, MD, Emory University

- 8:02 am-8:08 am Use of Mini-Fragment Plating Decreases Removal of Hardware Rates in Military Personnel with Midshaft Clavicle Fractures Treated with Open Reduction Internal Fixation
LT Chihua Lee, MD, Naval Medical Center Portsmouth
- 8:08 am-8:14 am Dual versus Single Plate Fixation of Midshaft Clavicle Fractures: A Comparative Study Including Early Use of Dual Plating in a Military Population
Maj J. Ben Allis, MD, Davis Monthan Air Force Base
- 8:14 am-8:20 am Discussion
- 8:20 am-8:26 am Does Screw Location Affect the Risk of Subtrochanteric Femur Fracture after Femoral Neck Fixation?
LT Erica K. Crump, MD, Naval Medical Center San Diego
**Presented by LT Michael Quacinella, DO, MPH*
- 8:26 am-8:32 am Anterior Midline Incision is a Safe and Effective Approach for Schatzker IV Tibial Plateau Shear Fractures
CPT Kurt A. Yusi, MD, Vanderbilt University Medical Center
**Presented by MAJ Daniel J. Stinner, MD*
- 8:32 am-8:38 am Knee Disarticulation versus Transfemoral Amputations: Functional Outcomes
LT Benjamin W. Hoyt, MD, Walter Reed National Military Medical Center
- 8:38 am-8:44 am Definitive Management of Combat-Related Pelvic Ring Disruption Fractures with External Fixation: A Case Series
LT Benjamin W. Hoyt, MD, Walter Reed National Military Medical Center
**Presented by LT Alexander E. Lundy, MD*
- 8:44 am-8:50 am Discussion
- 8:50 am-9:10 am *Break with Exhibitors (Grays Peak & Longs Peak)*

Rapid Fire Session 1A: Trauma (*Torreys Peak I*)

Moderator: MAJ James A. Blair Jr., MD, *William Beaumont Army Medical Center*
 Cory A. Collinge, MD, *Vanderbilt University Medical Center*

- 9:10 am-9:14 am The History of Military Medical Evacuation
Brig Gen (Ret) Kory Cornum, MD, Palisade, CO
- 9:14 am-9:18 am Infection Rates of Low-Velocity Gunshot Femur Fractures Treated without Surgical Debridement

CAPT Mark E. Fleming, DO, Navy Trauma Training Center at LAC

9:18 am-9:25 am Discussion

9:25 am-9:29 am Wound Complications after Open Reduction and Internal Fixation of Tibial Plateau Fractures: A Multicenter Study
CAPT Christopher L. Gaunder, MD, San Antonio Military Medical Center
**Presented by CAPT Brandon McKinney, DO*

9:29 am-9:33 am How Rigid is the Diamond Frame for External Fixation?
MAJ Sushmith R. Gowda, MD, Royal Centre for Defence Medicine
**Presented by MAJ Daniel J. Stinner, MD*

9:33 am-9:42 am Discussion

Rapid Fire Session 1B: Oncology (*Torreys Peak II*)

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

9:10 am-9:14 am Limb Salvage is Associated with Improved Survivorship in Upper and Lower Extremity Osteosarcoma
Capt Sophia A. Traven, MD, Medical University of South Carolina

9:14 am-9:18 am The Effect of Limb Salvage versus Amputation on Osteosarcoma Survivorship: A Propensity- Score Matched Analysis
Capt Sophia A. Traven, MD, Medical University of South Carolina

9:18 am-9:22 am Concave-Convex Reaming of Intercalary Allograft: One Year Clinical Outcomes
CPT Nathan P. Bastien, MD, San Antonio Military Medical Center

9:22 am-9:26 am Discussion

9:26 am-9:30 am Osteoid Osteoma at the Lesser Trochanter: A Lesson in Mimicry
Capt Andrew S. Murtha, MD, San Antonio Military Medical Center

9:30 am-9:34 am Outcomes and Recurrence of Pediatric Ganglion Cysts Treated with Aspiration or Surgical Excision: A Retrospective Review with Prospective Follow Up
LCDR Darren D. Thomas, MD, Naval Medical Center San Diego

9:34 am-9:38 am Vascular Malformation of the Hand: Case Report in Active Duty Sailor
LT Nicholas P. Perry, MD, Naval Medical Center San Diego

9:38 am-9:42 am Discussion

Rapid Fire Session 1C: Basic Science (*Torreys Peak III*)

Moderator: LCDR Patrick E. Jones, MD, *Naval Hospital Okinawa*

9:10 am-9:14 am Traumatized Muscle Derived Multipotent Progenitor Cells From Low Energy Fractures

LT Stephen Fernicola, MD, Walter Reed National Military Medical Center

**Presented by LT Marvin Dingle, MD*

9:14 am-9:18 am Endogenous Expression Levels of F Repressor Element-1 Silencing Transcription Factor in Peripheral Multipotent Progenitor Cells

LT Stephen Fernicola, MD, Walter Reed National Military Medical Center

**Presented by LT Marvin Dingle, MD*

9:18 am-9:22 am Investigating the Underlying Molecular Mechanisms Involved in Post-Traumatic Heterotopic Ossification

Jaira Ferreira de Vasconcellos, MSc, PhD, Uniformed Services University of the Health Sciences

**Presented by LT Marvin Dingle, MD*

9:22 am-9:26 am Discussion

9:26 am-9:30 am Can Real Time Monitoring with a Controlled Advancement Drill Decrease Plunge Depth?

Anthony I. Riccio, MD, Texas Scottish Rite Hospital

**Presented by S. Blake Wallace, MD*

9:30 am-9:34 am Ankle Computed Tomography for the Detection of Low Bone Mineral Density: A Novel Technique

LT Sameer Saxena, MD, Walter Reed National Military Medical Center

**Presented by LT Marvin Dingle, MD*

9:34 am-9:38 am Anterior, Submandibular Approach for High Cervical Discectomy

CPT Michael D. Baird, MD, Dwight D. Eisenhower Army Medical Center

**Presented by CPT Anthony T. Mustovich, DO*

9:38 am-9:42 am Discussion

Rapid Fire Session 1D: Military Medicine (*Torreys Peak IV*)

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

9:10 am-9:14 am The Evolving Role of the Orthopedic Surgeon in Combat Zones and Austere Deployed Locations since the 2012 Troop Drawdown

Capt Daniel M. Kopolovich, MD, San Antonio Military Medical Center

9:14 am-9:18 am Early Prediction of Heterotopic Ossification Using Machine Learning

2LT Casey Mueller, MD, Uniformed Services University of the Health Sciences

- 9:18 am-9:22 am Augmented Reality Forward Damage Control Procedures for Non-Surgeons: A Feasibility Demonstration
COL Tyler Harris, MD, Womack Army Medical Center
- 9:22 am-9:26 am Discussion
- 9:26 am-9:30 am Solider Peak Performance Advanced Reconditioning for Tactical Athletes (SPARTA)
LTC Leah M. Triolo, MD, Carl R. Darnall Army Medical Center
- 9:30 am-9:34 am Solider Peak Performance Advanced Reconditioning for Tactical Athletes (SPARTA) IOC
LTC Leah M. Triolo, MD, Carl R. Darnall Army Medical Center
- 9:34 am-9:38 am Continuing Promise 2018 Concept of Operations and Lessons Learned
LCDR Conor B. Garry, MD, Naval Medical Center Portsmouth
- 9:38 am-9:42 am Discussion

Symposium 2: Trauma

Moderator: MAJ Justin T. Fowler, MD, *San Antonio Military Medical Center*
COL Patrick M. Osborn, MD, *San Antonio Military Medical Center*

- 9:45 am-10:10 am The 7 Deadly Sins of Femoral Nailing
Thomas DeCoster, MD, University of New Mexico
- 10:10 am-10:15 am Discussion
- 10:15 am-10:35 am Break with Exhibitors (Grays Peak & Longs Peak)*

General Session 2: Trauma 2

Civilian Moderator: Thomas DeCoster, MD, *University of New Mexico*
Military Moderator: MAJ Justin T. Fowler, MD, *San Antonio Military Medical Center*
COL Patrick M. Osborn, MD, *San Antonio Military Medical Center*

- 10:35 am-10:41 am Early Outcomes of Osseointegrated Implants in Transhumeral and Transfemoral Amputations
2LT Colin Harrington, BA, Uniformed Services University
- 10:41 am-10:47 am Walking Greater than Five Feet after Hip Fracture Surgery Decreases the Risk of Complications, Including Death
CPT Richard VanTienderen, DO, William Beaumont Army Medical Center

- 10:47 am-10:53 am A Retrospective Analysis of Five-Year Health Outcomes Following Upper Limb Combat Amputations: An Update
Ted Melcer, PhD, Naval Health Research Center
**Presented by V. Franklin Sechries II, MD*
- 10:53 am-10:59 am Rates of Complications, Reoperation, and Work Limitations and Functional Outcomes following ORIF of Midshaft Clavicle Fractures in an Active Duty Population
LT Nicholas H. Lake, MD, Naval Medical Center San Diego
- 10:59 am-11:05 am Discussion
- 11:05 am-11:11 am Length of Hospitalization for a Traumatic Orthopaedic Injury May be a Critical Factor for Duration of Opiate Use
Capt Kelly Mead, MD, Dartmouth-Hitchcock Medical Center
- 11:11 am-11:17 am Quantitative Lesser Trochanter Profile versus Cortical Step Sign in Assessing Femoral Malrotation after Femoral Nailing
CPT David R. Peterson, MD, Tripler Army Medical Center
- 11:17 am-11:23 am Osseointegration in Bilateral Above Knee Amputees following Blast: Two Year Follow Up Results from the Initial Cohort of UK Service Personnel
Surg Lt Cdr Louise McMenemy, MRCS MBBS BSc (Hons), Royal Centre for Defence Medicine
- 11:23 am-11:29 am Characterization of Through Knee and Transfemoral Amputations
CPT David J. Tennent, MD, San Antonio Military Medical Center
**Presented by Kyle Marshall*
- 11:29 am -11:35 am Discussion
- 11:35 am-11:40am AAOS CPG Update: Acute Compartment Syndrome
Luke H. Balsamo MD, Naval Medical Center Portsmouth
- 11:40 am-12:35 pm **Focused Lunch Presentations**
- Stryker Orthopaedics (*Torreys Peak I*)
Mako: The Evolution of TKA
Brian Blackwood, MD
- Johnson & Johnson Medical Devices Company (*Torreys Peak II*)
Fixation in Proximal Femur Fractures: Avoiding Common Pitfalls
Greg M. Osgood, MD
Anthony G. Sanzone, MD

Bioventus (*Torreys Peak III*)
EXOGEN® and Fracture Healing
Michael D. McKee, MD, FRCSC

Legally Mine (*Torreys Peak IV*)

12:35 pm-2:00 pm **Scientific E-Poster Session** (*Torreys Peak I, Torreys Peak II, Torreys Peak III, Torreys Peak IV*)
(Presenters will be available to answer questions)

2:00 pm-3:30 pm **Multimedia Education Session** (*Longs Peak Foyer*)

Symposium 3: Sports Injuries

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

3:30 pm-3:55 pm The Acute Management of Sports Related Upper Extremity Injuries
Michael J. O'Brien, MD, Tulane University

3:55 pm-4:00 pm Discussion

General Session 3: Sports Injuries

Civilian Moderator: Michael J. O'Brien, MD, *Tulane University*

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

4:00 pm-4:06 pm Non-Displaced Femoral Neck Stress Fractures in Young Adults: Seven Year Outcomes of Prophylactic Fixation Versus Non-Operative Treatment
LT Ryan C. Myers, MD, Naval Medical Center San Diego

4:06 pm-4:12 pm Rates and Risk Factors for Recurrent Instability during Four-Years of Follow-Up in Military Cadets with History of Shoulder Stabilization Surgery Prior to Enrollment
MAJ Dana T. Hensley Jr., MD, Keller Army Community Hospital

4:12 pm-4:18 pm Differences in Lower Extremity Movement Quality by Level of Sport Specialization in Cadets Entering a United States Service Academy
2LT Connor B. Venrick, BS, The Uniformed Services University of the Health Sciences

4:18 pm-4:24 pm Revision Arthroscopic Bankart Repair in the US Military
CPT Sean E. Slaven, MD, Walter Reed National Military Medical Center

4:24 pm-4:30 pm Discussion

4:30 pm-4:36 pm Outcomes of Combined ACL/PLC Reconstructions Versus Isolated ACL Reconstruction with at Least Two Year Follow-Up

CPT Steven R. Wilding, MD, Tripler Army Medical Center

- 4:36 pm-4:42 pm Blumensaat's Line Method: Predicting Native Anterior Cruciate Ligament Length via Fluoroscopy
LT Matthew J. Wilson, MD, Naval Medical Center Portsmouth
- 4:42 pm-4:48 pm The Association between Generalized Joint Laxity Upon Entry to Military Service and the Subsequent Risk of Glenohumeral Instability.
MAJ Ronald P. Goodlett, MD, Keller Army Community Hospital,
- 4:48 pm-4:54 pm Outcomes and Complications after Intramedullary Button Fixation for Open Subpectoral Biceps Tenodesis
CPT Zackary A. Johnson, MD, Tripler Army Medical Center
- 4:54 pm-5:00 pm Discussion

Seminar 1: The Use and Importance of Multimodal Pain Management in Orthopaedics

Moderator: MAJ Michael S. Patzkowski, MD, *Tripler Army Medical Center*

- 5:00 pm-5:30 pm Peri-Operative Multi-Modal Analgesia
MAJ Michael S. Patzkowski, MD, Tripler Army Medical Center
- 5:30 pm-6:00 pm Pain Management and Opioid Safety in the Perioperative Patient
LTC Sharon L. Rosser, SP, PA-C, DSc, MPAS, Defense Health Headquarters
- 6:00 pm-7:00 pm **Multimedia Education Session** (*Longs Peak Foyer*)

Wednesday, December 12 - Warren Kadrmas Memorial Sports Day

- 6:30 am-7:00 am **Scientific E-Poster Session** (*Torreys Peak I, Torreys Peak II, Torreys Peak III, Torreys Peak IV*)
(Presenters will be available to answer questions)

Symposium 4: Sports - Knee

Moderator: CDR James Bailey, MD, *Naval Medical Center San Diego*

- 7:00 am-7:25 am Return to Sport/Duty after Cartilage Surgery - What We Know and What We Still Have to Learn
Col (Ret) John M. Tokish MD, Mayo Clinic
- 7:25 am-7:30 am Discussion

General Session 4: Sports - Knee

Civilian Moderator: Col (Ret) John M. Tokish, MD, *Mayo Clinic*

- Military Moderator: CDR James Bailey, MD, *Naval Medical Center San Diego*
- 7:30 am-7:36 am Outcomes of Meniscal Allograft Transplantation in Active Duty Military
LTC Ivan J. Antosh, MD, Dwight D. Eisenhower Army Medical Center
- 7:36 am-7:42 am Expanded Multimodal Analgesia at Discharge is Associated with Reduced Opioid Prescriptions after Anterior Cruciate Ligament Reconstruction Surgery
MAJ Michael S. Patzkowski, MD, Tripler Army Medical Center
**Presented by MAJ Jeanne C. Patzkowski, MD*
- 7:42 am-7:48 am High Resiliency Improves Patient Reported Outcomes following Knee Surgery in Active-Duty Patients
CPT Nicholas J. Drayer, MD, Madigan Army Medical Center
- 7:48 am-7:54 am Stable Ramp Lesions of the Medial Meniscus Do Not Require Repair at the Time of ACL Reconstruction
LCDR George C. Balazs, MD, Hospital for Special Surgery
- 7:54 am-8:00 am Discussion
- 8:00 am-8:06 am Anterior Cruciate Ligament Reconstruction Survivability in the US Military: A Five-Year Case-Control Study
LTC Jonathan F. Dickens, MD, Walter Reed National Military Medical Center
**Presented by Veronika Pav, MS*
- 8:06 am-8:12 am Abnormal Lachman and Pivot-Shift Translations after Anterior Cruciate Ligament (ACL) Graft Implantation is Markedly Influenced by ACL Graft Conditioning Protocols: A Robotic Study in Three Different ACL Graft Constructs.
Maj Michael Palmer, MD, The Christ Hospital
- 8:12 am-8:18 am The Use of Femoral Nerve Blocks is Not Associated with Differences in Short-Term Knee Function after Anterior Cruciate Ligament Reconstruction
MAJ Michael S. Patzkowski, MD, Tripler Army Medical Center
**Presented by Krista Highland, PhD*
- 8:18 am-8:24 am Comprehensive Acute Pain Pathway is Associated with Improved Early Outcomes after Anterior Cruciate Ligament Reconstruction
MAJ Jeanne C. Patzkowski, MD, Tripler Army Medical Center
- 8:24 am-8:30 am Discussion
- 8:30 am-8:50 am *Break with Exhibitors (Grays Peak & Longs Peak)*

Rapid Fire Session 2A: Sports Hip (Torreys Peak I)

Moderator: MAJ E'Stephan Garcia, MD, *William Beaumont Army Medical Center*

- 8:50 am-8:54 am Acetabular Labral Tears in the Adolescent Athlete: Results of a Graduated Management Protocol from Therapy to Arthroscopy
Capt Andrew S. Murtha, MD, San Antonio Military Medical Center
- 8:54 am-8:58 am A Sport Specific Biomechanical Analysis of the Epidemiology of Hip Injuries in NCAA Athletes from 2009-2014
CPT Christian Cruz, MD, Tripler Army Medical Center
- 8:58 am-9:02 am Displaced Femoral Neck Stress Fractures in Young Adults: Nonunion and Osteonecrosis Rates with Five Year Functional Outcomes Scores
LCDR Grant K. Cochran, MD, Naval Health Clinic Oak Harbor
- 9:02 am-9:06 am Discussion
- 9:06 am-9:10 am Servicemembers with Low Back Pain and a Psychiatric Diagnosis Are Unlikely to Return to Duty after Hip Arthroscopy
LTC Sean P. Kearney, MD, MPH, Womack Army Medical Center
- 9:10 am-9:14 am Ischiofemoral Impingement: A Rare Cause of Hip Pain and a Novel Treatment Strategy
LT Ethan Bernstein, MD, MPH, Naval Medical Center San Diego
- 9:14 am-9:18 am A Case of Bilateral Atypical Tension-Sided Femoral Neck Stress Fracture in a Marine Recruit Treated Nonoperatively
LT Kyle Mombell, MD, Naval Medical Center San Diego
- 9:18 am-9:22 am Discussion

Rapid Fire Session 2B: Knee (Torreys Peak II)

Moderator: CDR Lucas S. McDonald, MD, MPH, *Naval Medical Center San Diego*

- 8:50 am-8:54 am Fluid Imbibition at the Bone-Cartilage Interface is Associated with Need for Early Chondroplasty following Osteochondral Allografting of the Knee
LCDR George C. Balazs, MD, Hospital for Special Surgery
- 8:54 am-8:58 am Posterior Tibial Slope and Risk of Posterior Cruciate Ligament Injury
LCDR Andrew S. Bernhardson, MD, The Steadman Clinic
- 8:58 am-9:02 am Timing of Surgery and Staged Procedures Show No Difference in Return to Duty Rates for US Military Service Members with Multi-Ligament Knee Injury

LT John Richards, MD, Walter Reed National Military Medical Center

- 9:02 am-9:06 am Discussion
- 9:06 am-9:10 am Surgical and Functional Outcomes of Patella Fractures Treated with Plate Osteosynthesis
Capt Hayley Jansson, MD, Harbor-UCLA Medical Center
- 9:10 am-9:14 am Aspirin for DVT Prophylaxis after ACL Reconstruction
LCDR Sean C. McIntire, MD, Naval Medical Center San Diego
- 9:14 am-9:18 am Insulin Dependence Predicts Complications and Hospital Admission following Knee Arthroscopy
Capt Sophia A. Traven, MD, Medical University of South Carolina
- 9:18 am-9:22 am Discussion

Rapid Fire Session 2C: Foot & Ankle (*Torreys Peak III*)

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

- 8:50 am-8:54 am Management of Acute Achilles Tendon Ruptures: A Survey of Military Orthopaedic Surgeons
CPT Nischal S. Nadig, DO, Dwight D. Eisenhower Army Medical Center
- 8:54 am-8:58 am Use of Ultrasonically Interdigitated Anchors in Haglund's Deformity Correction Surgery
Brittney Warren, MD, University of Texas Medical Branch at Galveston
- 8:58 am-9:02 am A Biomechanical Comparison of the Tensile Strength of Two Achilles Tendon Repair Techniques
LT Thomas Kelsey, MD, Naval Medical Center San Diego
- 9:02 am-9:08 am Discussion
- 9:08 am-9:12 am Does Hallux Valgus Correction Reduce the Width of the Forefoot?
2LT Justin Cordova, BA, University of Texas Medical Branch at Galveston
**Presented by Kiya Shazadeh Safavi, BS*
- 9:12 am-9:16 am Minced Autocartilage for an Acute Talar Dome Osteochondral Fracture
CPT Anthony T. Mustovich, DO, Dwight D. Eisenhower Army Medical Center
- 9:16 am-9:22 am Discussion

Rapid Fire Session 2D: Shoulder & Elbow (*Torreys Peak IV*)

Moderator: MAJ Daniel J. Song, MD, *Evans Army Community Hospital*

- 8:50 am-8:54 am Clavicle Fracture: Treatment, Complications, and Cost in the Commercially-Insured Population with Two-Years Follow-Up
COL Matthew D. Putnam, MD, West Chester, PA
- 8:54 am-8:58 am Insulin Dependence Predicts Morbidity and Mortality following Shoulder Arthroscopy
Capt Sophia A. Traven, MD, Medical University of South Carolina
- 8:58 am-9:02 am Return-to-Duty Rates after Distal Biceps Tendon Repairs in an Active Duty Military Population
CPT Michelle L. Dudevoir, MD, Madigan Army Medical Center
- 9:02 am-9:06 am Discussion
- 9:06 am-9:10 am Regional Differences in Bone Density of the Glenoid
LT Kyle E. Nappo, MD, Walter Reed National Military Medical Center
- 9:10 am-9:14 am The Follow-Through Sign: A Predictor of SLAP Tears?
LT Christopher Sullivan, MD, Naval Medical Center San Diego
**Presented by LT Trevor Tompane, MD, MPH*
- 9:14 am-9:18 am Arthroscopic Treatment of Shoulder Infection Has Fewer Complications, Cheaper Cost and Shorter Length of Stay than Open Arthroscopy: A Cohort-Matched Comparison
CPT Christian Cruz, MD, Tripler Army Medical Center
- 9:18 am-9:22 am Discussion

Symposium 5: Sports - Foot & Ankle

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

- 9:25 am-9:50 am Syndesmosis Injuries and their Treatment
Thomas O. Clanton, MD, The Steadman Clinic
- 9:50 am-9:55 am Discussion
- 9:55 am-10:15 am *Break with Exhibitors (Grays Peak & Longs Peak)*

General Session 5: Sports - Foot & Ankle

Civilian Moderator: Thomas O. Clanton, MD, *The Steadman Clinic*

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

- 10:15 am-10:21 am Comparative Outcomes of Arthrodesis and Open Reduction Internal Fixation for Low Energy Lisfranc Injuries
LT Trevor Tompane, MD, MPH, Naval Medical Center San Diego
- 10:21 am-10:27 am Tibiotalocalcaneal Fusion Rate with a Novel Pseudoelastic Intramedullary Nail with NiTiNOL
Capt Travis J. Dekker, MD, Duke University
- 10:27 am-10:33 am Foot and Ankle Patients Prefer a Hands-Free Single Crutch over Standard Axillary Crutches while Demonstrating Less Physiologic Fatigue
CPT Alicia Unangst, DO, Tripler Army Medical Center
- 10:33 am-10:39 am Comparison of Visual Analog Pain Score Reported to Physician versus Nurse, Part II
2LT Trevor McBride, BS, Thomas Jefferson University
- 10:39 am-10:45 am Discussion
- 10:45 am-10:51 am Lower Extremity Fracture Immobilization in an Austere Environment, A Comparative Study of Military Special Operations Medical Personnel using a SAM Splint versus a New Novel One-Step Spray on Foam
CPT Alicia Unangst, DO, Tripler Army Medical Center
**Presented by Kevin D. Martin, DO*
- 10:51 am-10:57 am Ultrasound Evaluation of Peroneal Tendon Location within the Fibular Groove: A Prospective Cohort Study of Asymptomatic Elite Military Service Members
2LT Jeffrey L. Wake, ATC, BS, Rocky Vista University College of Osteopathic Medicine
**Presented by ENS J. Preston VanBuren, DO*
- 10:57 am-11:03 am The Safety of Foot and Ankle Surgical Procedures at an Ambulatory Surgery Center
Peter Adamson, MD, University of Texas Medical Branch at Galveston
- 11:03 am-11:09 am Diagnostic Utility of Ottawa Ankle Rules in the Aging Population
LT Joshua Kotler, MD, Naval Medical Center Portsmouth
- 11:09 am-11:15 am Discussion
- 11:15 am-12:15 pm **Focused Lunch Presentations**
- Stryker Orthopaedics (*Torreys Peak I*)
T2 Alpha™ Nailing Redefined
Shannon Henderson

Arthrex, Inc. (*Torreys Peak II*)

Flexion Therapeutics (*Torreys Peak III*)

Clinical Data Supporting Approval for ZILRETTA® (Triamcinolone Acetonide Extended-Release Injectable Suspension Utilizing Microsphere PLGA Microsphere Technology) as an Intra-Articular Treatment for Osteoarthritis of the Knee (OAK) Pain
CAPT (Ret) Michael Langworthy, MD

MiMedx (*Torreys Peak IV*)

Scientific Rationale and Use of Allograft Amniotic Tissue for Orthopaedic Applications
Brett Cascio, MD

12:15 pm-1:45 pm **Scientific E-Poster Session** (*Torreys Peak I, Torreys Peak II, Torreys Peak III, Torreys Peak IV*)
(Presenters will be available to answer questions)

1:45 pm-3:15 pm **Multimedia Education Session** (*Longs Peak Foyer*)

Seminar 2: Evidence-Based Orthopedics

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

3:15 pm-3:40 pm Think Bigger: The New Era of Evidence-Based Orthopedics
Mohit Bhandari, MD, PhD, FRCSC, McMaster University

3:40 pm-3:45 pm Discussion

Best of SOMOS 2018

Civilian Moderator: Mohit Bhandari, MD, PhD, FRCSC, *McMaster University*

Military Moderator: MAJ Kelly G. Kilcoyne, MD, *William Beaumont Army Medical Center*
LCDR Scott C. Wagner, MD, *Walter Reed National Military Medical Center*

3:45 pm-3:53 pm **Norman T. Kirk Award**
Controlling Axonal Regeneration with Acellular Nerve Allograft Reduces Neuroma Formation following Peripheral Nerve Transection in Both a Rodent and Swine Model
CPT Patrick D. Grimm, MD, Walter Reed National Military Medical Center

3:53 pm-4:01 pm Influence of Autologous Stems Cells and Engineered Bone Constructs on Tissue Ingrowth in Porous Metal Implants for Osseointegration
CPT Patrick D. Grimm, MD, Walter Reed National Military Medical Center

4:01 pm-4:09 pm Posterior Instability of the Shoulder: Long-Term Analysis of Function and Outcomes
CAPT Matthew T. Provencher, MD, The Steadman Clinic
**Presented by Liam Peebles, BA*

4:09 pm-4:19 pm Discussion

4:19 pm-4:27 pm **Founders' Award**
The Association of Vitamin D Levels and Stress Fractures of the Lower Extremity in Military Recruits
LTC Jerome M. Benavides, MD, MBA, 212th Combat Support Hospital

4:27 pm-4:35 pm Overprescribing of Opioids in Orthopaedic Surgery
CPT Taylor D. Mansfield, MD, Madigan Army Medical Center

4:35 pm-4:45 pm Discussion

Rapid Fire Session 3A: Reconstruction (*Torreys Peak I*)

Moderator: LtCol Andrew W. Mack, MD, *Walter Reed National Military Medical Center*

4:48 pm-4:52 pm Incidence of Periprosthetic Femur Fractures Utilizing the Posterior Approach with a Single Wedge Tapered Stem
MAJ Peter M. Formby, MD, Darnall Army Medical Center

4:52 pm-4:56 pm Results of Metal on Metal Total Hip Replacement from a Single Military Institution at Six-12 Years: Where Are They Now?
LT Sameer Saxena, MD, Walter Reed National Military Medical Center
**Presented by CPT Sean E. Slaven, MD*

4:56 pm-5:00 pm Preoperative Smoking Cessation as a Durable Form of Long-Term Smoking Cessation
LT Ashley B. Anderson, MD, Walter Reed National Military Medical Center

5:00 pm-5:04 pm Discussion

5:04 pm-5:08 pm Failure of Arthrotomy Repair Following Total Knee Arthroplasty: A Novel Cause of Post-Operative Anterior Knee Pain and a Surgical Solution
CPT Nicholas J. Drayer, MD, Madigan Army Medical Center

5:08 pm-5:12 pm Total Joint Arthroplasty for International Patients at a Tertiary Military Medical Center: Is it Safe?
CPT Gregory Lausé, MD, Tripler Army Medical Center

5:12 pm-5:16 pm Femoral Head-Neck Dissociation Following Trunnionosis

Capt Gavin L. Mills, MD, San Antonio Military Medical Center

5:16 pm-5:20 pm Discussion

Rapid Fire Session 3B: Foot & Ankle (*Torreys Peak II*)

Moderator: MAJ Kevin D. Martin, DO, *Evans Army Community Hospital*

4:48 pm-4:52 pm Distribution of High-Volume Ankle Replacement Surgeons in United States Metropolitan Areas
Brandon A. Stein, MD, University of Texas Medical Branch at Galveston

4:52 pm-4:56 pm Utilizing a Multidisciplinary Checklist to “Flip” a Patient from Prone to Supine Position for Ankle Arthroscopy
CPT Alicia Unangst, DO, Tripler Army Medical Center

4:56 pm-5:00 pm An Analysis of 161 Foot and Ankle Device Recalls by the Foot and Drug Administration
Carl J. Pellerin, BS, University of Texas Medical Branch at Galveston
**Presented by Kiya Shazadeh Safavi, BS*

5:00 pm-5:04 pm Discussion

5:04 pm-5:08 pm Use of Synthetic Cartilage Implant for Freiberg’s Disease
CPT Sally A. Corey, DO, Dwight D. Eisenhower Army Medical Center

5:08 pm-5:12 pm Wide-Awake Local Anesthetic No Tourniquet Technique for Percutaneous Achilles Tendon Repairs
CPT Sally A. Corey, DO, Dwight D. Eisenhower Army Medical Center

5:12 pm-5:16 pm Treatment of Articular Cartilage Lesions in the Ankle with a Particulated Juvenile Cartilage Allograft: Four Year Outcomes
CPT Robert C. Turner, MD, Tripler Army Medical Center

5:16 pm-5:20 pm Discussion

Rapid Fire Session 3C: Sports Injuries (*Torreys Peak III*)

Moderator: CDR Lance E. LeClere, MD, *US Naval Academy*

4:48 pm-4:52 pm The Ability of the Patient-Reported Outcomes Measurement Information System to Predict Pre-Operative American Shoulder and Elbow Surgeons Shoulder Assessment Form Scores
Timothy C. Mauntel, PhD, ATC, Walter Reed National Military Medical Center

- 4:52 pm-4:56 pm Current Practices in Anterior Cruciate Ligament Reconstruction in the United States Military: A Survey of the Society of Military Orthopaedic Surgeons
CPT John D. Synovec, MD, MBA, Dwight D. Eisenhower Army Medical Center
- 4:56 pm-5:00 pm Higher BMI Predicts Additional Surgery in the Setting of ACL Reconstruction
Capt Sophia A. Traven, MD, Medical University of South Carolina
- 5:00 pm-5:04 pm Discussion
- 5:04 pm-5:08 pm Medial Patellofemoral Ligament Reconstruction in Military Servicemembers: Can We Reliably Restore Pre-Injury Function and Patellar Stability?
CPT Michael D. Baird, MD, Dwight D. Eisenhower Army Medical Center
**Presented by CPT Colleen M. Moreland, DO*
- 5:08 pm-5:12 pm Autologous Osteochondral Transplantation for Large Osteochondral Lesions of the Talus is a Viable Option in an Athletic Population
Surg Lt Cdr Louise McMenemy, MRCS MBBS BSc (Hons), Royal Centre for Defence Medicine
- 5:12 pm-5:16 pm Cost Analysis of ACL Reconstruction in the United States Military
LT Ashley B. Anderson, MD, Walter Reed National Military Medical Center
- 5:16 pm-5:20 pm Discussion

Rapid Fire Session 3D: Knee (Torreys Peak IV)

Moderator: MAJ Jeanne C. Patzkowski, MD, Tripler Army Medical Center

- 4:48 pm-4:52 pm Time to Anterior Cruciate Ligament Reconstruction in the US Military: Does Delay in Surgery Increase Articular or Meniscal Injury?
LTC Jonathan F. Dickens, MD, Walter Reed National Military Medical Center
**Presented by Archie Overman*
- 4:52 pm-4:56 pm Bone Marrow Aspirate Concentrate Does Not Improve Osseous Integration of Osteochondral Allografts for the Treatment of Chondral Defects in the Knee: A Comparative Magnetic Resonance Imaging Analysis
LCDR George C. Balazs, MD, Hospital for Special Surgery
- 4:56 pm-5:00 pm Surgeon Selection for Hip or Knee Arthroplasty: What Matters Most to Patients? A Survey at a High-Volume Urban Community Hospital.

LCDR Ryan D. Scully, MD, George Washington University Hospital
**Presented by 2LT Daniel Gelman, BS*

- 5:00 pm-5:06 pm Discussion
- 5:06 pm-5:10 pm How Do Patients Find Their Hip or Knee Arthroplasty Surgeon? A Survey at a High-Volume Urban Community Hospital
LCDR Ryan D. Scully, MD, George Washington University Hospital
**Presented by 2LT Matthew J. Kinnard, BS*
- 5:10 pm-5:14 pm The Arthroscopic Trans-Septal Technique for Access to the Posteromedial and Posterolateral Compartments of the Knee
COL Craig R. Bottoni, MD, Tripler Army Medical Center
- 5:14 pm-5:20 pm Discussion
- 5:20 pm-6:20 pm **Scientific E-Poster Session** (*Torreys Peak I, Torreys Peak II, Torreys Peak III, Torreys Peak IV*)
(Presenters will be available to answer questions)
- 5:20 pm-6:20 pm **Military Female Orthopaedic Surgeons Forum**

Thursday, December 13

- 6:00 am-7:00 am **Service Breakouts**
Air Force (*Torreys Peak I*)
Army (*Quandary Peak /Longs Peak*)
Navy (*Gray's Peak 3*)

Symposium 6: Adult Reconstruction

Moderator: LCDR Kevin A. Pinkos, DO, *Naval Medical Center Portsmouth*

- 7:15 am-7:40 am Unicompartamental Knee Arthroplasty: Past, Present and Future
Vivek M. Shah, MD, Brigham & Women's Hospital
- 7:40 am-7:45 am Discussion
- 7:45 am-8:15 am **Focused Brunch Presentation**

Vericel
Treating Articular Cartilage Defects in the Knee with the MACI® Implant
Joseph Lanzini, MD

General Session 6: Adult Reconstruction

Civilian Moderator: Vivek M. Shah, MD, *Brigham & Women's Hospital*

- Military Moderator: LCDR Kevin A. Pinkos, DO, *Naval Medical Center Portsmouth*
- 8:15 am-8:21 am Perioperative Complications, Costs and Length of Stay following Robotic-Assisted, Computer-Assisted, and Conventional Total Hip Arthroplasty
CPT Christian Cruz, MD, Tripler Army Medical Center
**Presented by 2LT Jeffrey L. Wake, ATC, BS*
- 8:21 am-8:27 am Selective Decolonization Does Not Lower PJI Risk in Primary Hip and Knee Arthroplasty
LT Ashton Goldman, MD, Mayo Clinic
- 8:27 am-8:33 am New Five-Factor Modified Frailty Index Predicts Morbidity and Mortality in Revision Hip and Knee Arthroplasty
Capt Sophia A. Traven, MD, Medical University of South Carolina
- 8:33 am-8:39 am Incisional Negative Pressure Wound Therapy Devices Improve Short Term Wound Complications, but Not Long Term Infection Rate following Hip and Knee Arthroplasty
James A. Keeney, MD, University of Missouri
- 8:39 am-8:45 am Discussion
- 8:45 am-8:51 am Prosthetic Joint Infections: Does Established Relationships Impact Medical Decision Making?
MAJ Peter M. Formby, MD, Darnall Army Medical Center
- 8:51 am-8:57 am 90-Day Emergency Department Visits following Total Joint Arthroplasty: Risk Factors and Causes for Return
MAJ Peter M. Formby, MD, Darnall Army Medical Center
- 8:57 am-9:03 am Effect of Incisional Negative Pressure Wound Therapy on Wound Drainage after Primary Total Knee Arthroplasty
CPT Taylor D. Mansfield, MD, Madigan Army Medical Center
- 9:03 am-9:09 am Patient Dissatisfaction after Total Knee Arthroplasty- Is the Opioid Epidemic a Cause or Effect?
James A. Keeney, MD, University of Missouri
- 9:09 am-9:15 am Discussion

Rapid Fire Session 4A: Shoulder & Elbow (Torreys Peak I)

Moderator: MAJ Adam M. Pickett, MD, *Ft. Belvoir*

- 9:18 am-9:22 am Shoulder Adhesive Capsulitis: Epidemiology and Predictors of Surgery
Jeansol Kang, MD, Boston University School of Medicine

- 9:22 am-9:26 am Mapping Physical Functions of the Shoulder to ASES and PROMIS Scores
Capt Aaron M. Roberts, MD, University of Rochester Medical Center
- 9:26 am-9:30 am New Five-Factor Modified Frailty Index Predicts Complications and Hospital Admission following Rotator Cuff Repair
Capt Sophia A. Traven, MD, Medical University of South Carolina
- 9:30 am-9:34 am Discussion
- 9:34 am-9:38 am Shoulder Arthroplasty for Proximal Humerus Fractures is Not a Typical DRG-483 – Implications for a Bundled Payment Model
Capt Corey Beals, MD, The Ohio State University Wexner Medical Center
- 9:38 am-9:42 am Return to Sport after SLAP Repair versus Biceps Tenodesis: A Systematic Review
CPT Nicholas J. Drayer, MD, Madigan Army Medical Center
- 9:42 am-9:46 am Humerus Fractures following Proximal Biceps Tenodesis: A Case Series
LT Nicholas J. Erdle, MD, Naval Medical Center Portsmouth
- 9:46 am-9:50 am Discussion

Rapid Fire Session 4B: Infection & Other (*Torreys Peak II*)

Moderator: MAJ Husain M. Bharmal, MD, *Fort Hood*

- 9:18 am-9:22 am Systematic Review of Intrasite Vancomycin Powder in Extremity Surgery
LT Stephen Fernicola, MD, Walter Reed National Military Medical Center
**Presented by LT Marvin Dingle, MD*
- 9:22 am-9:26 am Return to Duty following Periacetabular Osteotomy
Capt Andrew S. Murtha, MD, San Antonio Military Medical Center
- 9:26 am-9:30 am Exploring Penicillin G as an Intrawound Antibiotic Powder for Prevention of *Propionibacterium Acnes*: Does it Exhibit In-Vitro Chondrotoxicity?
CPT Nischal S. Nadig, DO, Dwight D Eisenhower Army Medical Center
- 9:30 am-9:34 am Discussion
- 9:34 am-9:38 am The Growing Contribution of Women to Orthopedic Surgery Research
CPT Meghan Fillinger, MD, William Beaumont Army Medical Center
- 9:38 am-9:42 am Abstracts Accepted for Presentation at Orthopaedic Trauma and Arthroplasty Conferences: Which Conference is the Best Indicator of Future Publication?

CPT Meghan Fillinger, MD, William Beaumont Army Medical Center

9:42 am-9:46 am Patients with Streptococcus Bovis Prosthetic Joint Infections Predictably Have an Identifiable Gastrointestinal Bleeding Source, a Case Series
LT Ashton Goldman, MD, Mayo Clinic

9:46 am-9:50 am Discussion

Rapid Fire Session 4C: Reconstruction (*Torreys Peak III*)

Moderator: LCDR Kevin A. Pinkos, DO, *Naval Medical Center Portsmouth*
Vivek M. Shah, MD, *Brigham & Women's Hospital*

9:18 am-9:22 am Why Are Contemporary Revision Total Hip Arthroplasties Failing? An Analysis of 2500 Cases
LT Ashton Goldman, MD, Mayo Clinic

9:22 am-9:26 am Computer-Assisted Total Knee Arthroplasty Reduces Perioperative Complications and Inpatient Length of Stay
CPT Christian Cruz, MD, Tripler Army Medical Center
**Presented by 2LT Jeffrey L. Wake, ATC, BS*

9:26 am-9:30 am Tripolar Articulations as a “High Stability Bearing” for Revision THA: Success Rates and Risk Factors for Failure
LT Ashton Goldman, MD, Mayo Clinic

9:30 am-9:34 am Discussion

9:34 am-9:38 am Noise Exposure in Total Joint Arthroplasty
LT Sameer Saxena, MD, Walter Reed National Military Medical Center
**Presented by CPT Sean E. Slaven, MD*

9:38 am-9:42 am New Five-Factor Modified Frailty Index Predicts Morbidity and Mortality in Primary Total Knee Arthroplasty
Capt Sophia A. Traven, MD, Medical University of South Carolina

9:42 am-9:46 am Insulin Dependence Predicts Medical Complications following Revision Hip and Knee Arthroplasty
Capt Sophia A. Traven, MD, Medical University of South Carolina

9:46 am-9:50 am Discussion

Rapid Fire Session 4D: Trauma (*Torreys Peak IV*)

Moderator: Jean-Claude D’Allyrand, MD, *Walter Reed National Military Medical Center*

9:18 am-9:22 am Blocking Screw-Assisted Nail Guidance in Lower Limb Deformity Correction

Capt Sarah N. Pierrie, MD, San Antonio Military Medical Center

9:22 am-9:26 am Usefulness of Computed Tomography Scans in the Evaluation of Distal Radius Fractures

LT Trevor Tompane, MD, MPH, Naval Medical Center San Diego

9:26 am-9:30 am Incidence of Pelvic Fractures in the US Military Population

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

9:30 am-9:34 am Discussion

9:34 am-9:38 am Measurements of Interlocking Cement-Coated Nails Formed Using Common Alternatives to Thoracostomy Tubes

LT Kyle Mombell, MD, Naval Medical Center San Diego

9:38 am-9:42 am Sural Fasciocutaneous Flaps for Ortho-Geriatric Patients

Capt Haydn M. Roberts, MD, University of Arizona

9:42 am-9:46 am Outcomes for Pauwel's Osteotomy in Nonunions of Displaced Femoral Neck Stress Fractures

LT Wei Wei Wu, MD, Naval Medical Center San Diego

9:46 am-9:50 am Discussion

AAOS Report

Moderator: LTC B. Kyle Potter, MD, *Walter Reed National Military Medical Center*

9:53 am-10:13 am AAOS Update

Kristy L. Weber, MD, AAOS First Vice-President, University of Pennsylvania

10:13 am-10:28 am **Business Meeting**

10:28 am-10:40 am Refreshment Break (Longs Peak Foyer)

Symposium 7: Shoulder

Moderator: MAJ Kelly V. Fitzpatrick, MD, *Madigan Army Medical Center*

10:40 am-10:55 am Pearls and Pitfalls of the Latarjet Procedure

CAPT Matthew T. Provencher, MD, The Steadman Clinic

10:55 am-11:05 am Laterjet's Gone Wrong - Case Presentations

MAJ (Ret) Stephen A. Parada, MD, Medical College of Georgia at Augusta University

MAJ Kelly V. Fitzpatrick, MD, Madigan Army Medical Center

11:05 am-11:10 am Discussion

General Session 7: Shoulder

Civilian Moderator: CAPT Matthew T. Provencher, MD, *The Steadman Clinic*
MAJ (Ret) Stephen A. Parada, MD, *Medical College of Georgia at Augusta University*

Military Moderator: Kelly V. Fitzpatrick, MD, *Madigan Army Medical Center*

11:10 am-11:16 am The Importance of Glenoid Bone Loss in the Outcomes of Arthroscopic Instability Repair: A Matched Cohort Analysis
CAPT Matthew T. Provencher, MD, The Steadman Clinic

11:16 am-11:22 am Management of the Failed Latarjet Procedure: Outcomes of Revision Surgery with Fresh Distal Tibial Allograft
CAPT Matthew T. Provencher, MD, The Steadman Clinic

11:22 am-11:28 am The Histopathology of the Degenerative Proximal Biceps Tendon
Capt Travis J. Dekker, MD, Duke University

11:28 am-11:34 am Donor Demographics and Distal Tibial Dimensions of Suitable Distal Tibial Allografts for Glenoid Reconstruction
CPT Colleen M. Moreland, DO, Dwight D. Eisenhower Army Medical Center
**Presented by CPT Matthew Griffith, MD*

11:34 am-11:40 am Discussion

11:40 am-11:46 am Postoperative Recovery Comparisons of Arthroscopic Bankart to Open Latarjet for the Treatment of Anterior Glenohumeral Instability
LCDR Jennifer Smith, MD, Naval Medical Center San Diego

11:46 am-11:52 am Intra-Articular Lidocaine versus Conscious Sedation in Reducing Anterior Shoulder Dislocations
LT Joshua Kotler, MD, Naval Medical Center Portsmouth

11:52 am-11:58 am Total Shoulder Arthroplasty Surgery in a Middle Age Active Duty Cohort: Return to duty status and Patient Reported Outcomes
CPT Christopher M. Belyea, MD, MBA, Tripler Army Medical Center

11:58 am-12:04 pm High Prevalence of Abnormal Bone Mineral Density in Patients Undergoing Shoulder Arthroplasty
LT Kyle E. Nappo, MD, Walter Reed National Military Medical Center

12:04 pm -12:10 pm Discussion

12:10 pm-12:20 pm **Hand/Sports Fellowship Update**

Seminar 3: Options for Your Military Career

Moderator: LTC Jeffrey R. Giuliani, MD, *Walter Reed National Military Medical Center*

12:20 pm -1:05 pm **Staying In, Getting Out, And Other Options**

COL Mark P. Pallis, DO, William Beaumont Army Medical Center

Col Brett A. Freedman, MD, Mayo Clinic

Brian R. Waterman, MD, Wake Forest Baptist

1:05 pm-2:05 pm **Scientific E-Poster Session** (*Torreys Peak I, Torreys Peak II, Torreys*

Peak III, Torreys Peak IV)

(Presenters will be available to answer questions)

2:05 pm-3:05 pm **Multimedia Education Session** (*Longs Peak Foyer*)

Friday, December 14

6:30 am-7:00 am **Scientific E-Poster Session** (*Torreys Peak I, Torreys Peak II, Torreys*

Peak III, Torreys Peak IV)

(Presenters will be available to answer questions)

Symposium 8: Hand & Wrist - Jamie Dianne Bulken-Hoover Memorial Hand Session

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

7:00 am-7:25 am From Replantation to Transplantation - The History of Microsurgical Reconstruction for the Wounded Warrior

L. Scott Levin, MD, University of Pennsylvania

7:25 am-7:30 am Discussion

General Session 8: Hand & Wrist - Jamie Dianne Bulken-Hoover Memorial Hand Session

Civilian Moderator: L. Scott Levin, MD, *University of Pennsylvania*

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

7:30 am-7:36 am **Jamie Dianne Bulken-Hoover Memorial - Best Hand Paper Award**

Prospective Randomized Trial Comparing Corticosteroid Injection to High Energy Extracorporeal Shock Wave Therapy for Lateral Epicondylitis

LT Sameer Saxena, MD, Walter Reed National Military Medical Center

**Presented by LT Marvin Dingle, MD*

7:36 am-7:42 am Blood Flow Restriction Therapy after Non-Operative Management of Distal Radius Fractures: A Randomized Controlled Pilot Study

CPT Nicole M. Sgromolo, MD, San Antonio Military Medical Center

- 7:42 am-7:48 am Plate versus Minimally Invasive Intramedullary Screw Fixation for Proximal Phalanx Fractures
MAJ Kevin P. Krul, MD, Walter Reed National Military Medical Center
**Presented by CPT Christopher M. Belyea, MD, MBA*
- 7:48 am-7:54 am Early Targeted Muscle Reinnervation Does Not Increase Complications after Upper Extremity Amputation
Capt Sarah Pierrie, MD, San Antonio Military Medical Center
- 7:54 am-8:00 am Discussion
- 8:00 am-8:06 am Radiographic Outcomes for Comminuted Distal Radius Fractures Treated with Distraction Bridge Plating
Capt Genevieve M. Rambau, MD, San Antonio Military Medical Center
- 8:06 am-8:12 am Incidence of Carpal Tunnel Syndrome in U.S. Military Aviators
CPT James B. Deal Jr., MD, Tripler Army Medical Center
- 8:12 am-8:18 am The Snap Test: Correlating a Simple Clinical Test for Carpal Tunnel Syndrome with Electrodiagnostic Studies
Maj Brad Hyatt, MD, Wright-Patterson Air Force Base
**Presented by Mark R. Bagg, MD*
- 8:18 am-8:24 am Targeted Muscle Reinnervation for Prosthesis Optimization and Neuroma Management following Transradial Amputation
Capt Sarah Pierrie, MD, San Antonio Military Medical Center
- 8:24 am-8:30 am Discussion
- 8:30 am-8:40 am *Refreshment Break (Longs Peak Foyer)*

Symposium 9: Spine

Moderator: MAJ Daniel G. Kang, MD, *Madigan Army Medical Center*

- 8:40 am-9:05 am Keeping Your Cool as an Orthopaedic Surgeon
Alan S. Hilibrand, MBA, MD, The Rothman Institute

9:05 am-9:10 am Discussion

General Session 9: Spine

Civilian Moderator: Alan S. Hilibrand, MBA, MD, *The Rothman Institute*

Military Moderator: MAJ Daniel G. Kang, MD, *Madigan Army Medical Center*

- 9:10 am-9:16 am Resiliency and Patient Reported Outcomes in Active-Duty Military Patients Undergoing Lumbar Spinal Surgery
CPT Nicholas J. Drayer, MD, Madigan Army Medical Center

- 9:16 am-9:22 am Reoperation Rates after Single-Level Lumbar Discectomy in the Military Health System
CPT Michael Elsenbeck Jr., MD, Walter Reed National Military Medical Center
- 9:22 am-9:28 am Same Day Discharge after Anterior Cervical Discectomy and Fusion in Suitable Patients has Similarly Low Readmission Rates as Admitted Patients
Capt Kartik Shenoy, MD, NYU Langone Orthopedic Hospital
- 9:28 am-9:34 am Preoperative Lumbar Corticosteroid Injections and Infection Rates in Lumbar Arthrodesis
CPT Alfred J. Pisano, MD, Walter Reed National Military Medical Center
- 9:34 am-9:40 am Discussion
- 9:40 am-9:46 am Mapping Bone Mineral Density in the Iliosacral Region Using Computed Tomography
LT Sameer Saxena, MD, Walter Reed National Military Medical Center
**Presented by Donald Fredericks, MD*
- 9:46 am-9:52 am Cervical Spine Computed Tomography Hounsfield Units Accurately Predicts Low Bone Mineral Density of the Femoral Neck
CPT Donald Colantonio III, MD, Walter Reed National Military Medical Center
- 9:52 am-9:58 am Medial Facetectomy Leads to Micromotion Instability After Fatigue Loading
CPT Alfred J. Pisano, MD, Walter Reed National Military Medical Center
- 9:58 am-10:04 am The Influence of Lumbar Spine Injuries on Performance Outcomes in Prospective NFL Athletes
CAPT Matthew T. Provencher, MD, The Steadman Clinic
**Presented by Liam Peebles, BA*
- 10:04 am-10:10 am Discussion
- 10:10 am-10:20 am Refreshment Break (Longs Peak Foyer)*

Symposium 10: Pediatrics

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

- 10:20 am-10:45 am Military Orthopedics on a (Voluntary) Mission
Terrence D. Anderson, MD, University of Texas

10:45 am-10:50 am Discussion

General Session 10: Pediatrics

Civilian Moderator: Terrence D. Anderson, MD, *University of Texas*

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

10:50 am-10:56 am Pediatric Elbow Dislocations with a Concomitant Lateral Condylar Humerus Fracture
Ryan Fairchild, MD, University of Texas Southwestern Medical Center
**Presented by Anthony I. Riccio, MD*

10:56 am-11:02 am Methods to Reduce Opioid Use after Surgical Treatment of Pediatric Supracondylar Fractures
CAPT William L. Hennrikus, MD, Penn State College of Medicine

11:02 am-11:08 am Anthropometric and MRI Measurements Are Not Reliable Predictors of Hamstring Graft Size In Adolescent Patients
CPT Sally A. Corey, DO, Dwight D. Eisenhower Army Medical Center

11:08 am-11:14 am Metaphyseal Fracture Displacement is Predictive of Intra-Articular Diastasis in Adolescent Triplane Ankle Fractures
Anthony I. Riccio, MD, Texas Scottish Rite Hospital
**Presented by Surya Mundluru, MD*

11:14 am-11:20 am Discussion

11:20 am-11:26 am Healing Potential of Weight-Bearing versus Non-Weightbearing Juvenile Osteochondritis Dissecans Lesions of the Lateral Femoral Condyle
CPT Liang Zhou, MD, Tripler Army Medical Center

11:26 am-11:32 am Effect of Distal Ulna Osteochondroma Excision and Distal Ulnar Tether Release on Forearm Deformity in Preadolescent Patients
CPT Christopher M. Belyea, MD, MBA, Tripler Army Medical Center

11:32 am-11:38 am Nighttime Bracing with the Providence TLSO for Treatment of Adolescent Idiopathic Scoliosis: A Retrospective Consecutive Clinical Series
CPT K. Aaron Shaw DO, Dwight D. Eisenhower Army Medical Center

11:38 am-11:44 am Quick Response Codes - Alternative Methods to Provide Cast Care Instructions for Adolescents and Children
Capt Michael Basso-Williams, DO, MPH, Riverside University Health System

11:44 am-11:50 am Discussion

Rapid Fire Session 5A: Spine (Torreys Peak I)

Moderator: Alan S. Hilibrand, MBA, MD, *The Rothman Institute*
LCDR Patrick B. Morrissey, MD, *The Rothman Institute*

- 11:53 am-11:57 am Thoracic Spine Computed Tomography Hounsfield Units Accurately Predicts Low Bone Mineral Density of the Femoral Neck
CPT Donald Colantonio III, MD, Walter Reed National Military Medical Center
- 11:57 am-12:01 pm Risk Factors for and Complications Associated with Surgical Delay in Multilevel Fusion for Spinal Deformity
CPT Michael Elsenbeck Jr., MD, Walter Reed National Military Medical Center
**Presented by LCDR Sean Wade, MD*
- 12:01 pm-12:05 pm Preoperative Disc Height Predicts Cage Subsidence after TLIF
CPT Alfred J. Pisano, MD, Walter Reed National Military Medical Center
- 12:05 pm-12:09 pm Discussion
- 12:09 pm-12:13 pm Retrolisthesis and Lumbar Disc Herniation: A Postoperative Assessment of Outcomes at Eight Year Follow-Up
Capt Kartik Shenoy, MD, NYU Langone Orthopedic Hospital
- 12:13 pm-12:17 pm Biomechanical Stability of the Sacroiliac Joint with Differing Implant Configurations in a Synthetic Model
Andrew Freeman, MS, University of Minnesota
**Preented by COL (Ret) David W. Polly Jr., MD*
- 12:17 pm -12:21 pm Sequential Changes in Lumbar Lordosis and Segmental Stability Following Lateral Interbody Cage Placement, Smith-Peterson Osteotomy, and Anterior Longitudinal Ligament Release
Capt Gavin L. Mills, MD, San Antonio Military Medical Center
- 12:21 pm -12:25 pm Discussion

Rapid Fire Session 5B: Hand & Wrist (Torreys Peak II)

Moderator: L. Scott Levin, MD, *University of Pennsylvania*
MAJ Emily H. Shin, MD, *Madigan Army Medical Center*

- 11:53 am-11:57 am Dorsal Wrist Pain and AIN/PIN Neurectomy: Does it Improve Outcomes?
CPT Nicole M. Sgromolo, MD, San Antonio Military Medical Center
- 11:57 am-12:01 pm Perilunar Injury with Concomitant Radiocarpal Dislocation: Incidence and Proposal for Treatment

CPT Nicole M. Sgromolo, MD, San Antonio Military Medical Center

12:01 pm-12:05 pm The Natural History and Results of Treatment of Pediatric Ganglion Cysts
LT Sameer Saxena, MD, Walter Reed National Military Medical Center
**Presented by LT Marvin Dingle, MD*

12:05 pm-12:09 pm Discussion

12:09 pm-12:13 pm Two-Year Clinical and Radiographic Outcomes of Constrained Distal
Radioulnar Joint Arthroplasty
Col Patrick S. Brannan, MD, Eglin Air Force Base

12:13 pm-12:17 pm Clinical Outcomes following Arthroscopically Assisted Triangular
Fibrocartilage Complex Tear Repair in a Young US Military Population
*CPT Christopher M. Daniels, MD, Walter Reed National Military Medical
Center*

12:17 pm-12:21 pm Epidemiology and Long-Term Outcomes of Wrist Sprains
*LT Benjamin W. Hoyt, MD, Walter Reed National Military Medical
Center*

12:21 pm-12:25 pm Discussion

Rapid Fire Session 5C: Shoulder & Elbow (*Torreys Peak III*)

Moderator: MAJ Kelly V. Fitzpatrick, MD, *Madigan Army Medical Center*
MAJ (Ret) Stephen A. Parada, MD, *Medical College of Georgia at Augusta
University*

11:53 am-11:57 am Surgical Volume and Postoperative Complications of Acromioclavicular
Joint Separations : Analysis of the ABOS Part II Examination
LCDR Kirk J. Hippensteel, MD, Naval Hospital Camp Pendleton

11:57 am-12:01 pm Clinical Results of Subpectoral Biceps Tenodesis Using a Single
Unicortical Anchor - A Retrospective Review of Prospective Data
CPT Taylor D. Mansfield, MD, Madigan Army Medical Center

12:01 pm -12:05 pm Return to Sport after Non-Operative Management of Medial Ulnar
Collateral Ligament Injuries about the Elbow
Capt. Ian A. Mullikin, MD, Brooke Army Medical Center

12:05 pm-12:11 pm Discussion

12:11 pm-12:15 pm A Real-World Study on Surgical Treatment, Complications, Health Care
Resource Utilization and Costs Among Patients with Acromioclavicular
Dislocations
Colonel Matthew D. Putnam, MD, West Chester, PA

12:15 pm-12:19 pm Distal Biceps Tendon Reconstruction in an Active Cohort
CPT Marina Rodriguez, MD, William Beaumont Army Medical Center

12:19 pm-12:25 pm Discussion

Rapid Fire Session 5D: Practice Management/Education (*Torreys Peak IV*)

Moderator: LCDR David T. Streets, MD, *Walter Reed National Military Medical Center*

11:53 am-11:57 am Consistent Team Staffing in the Operating Room Enhances the Trainee Educational Environment
Capt Kartik Shenoy, MD, NYU Langone Orthopedic Hospital

11:57 am-12:01 pm The Effects of Implementation of a Formalized Protocol on Resident Opioid Prescribing Patterns
Captain George A. Cibulas, MD, PharmD, University of Michigan

12:01 pm-12:05 pm Establishing the Validity of a Comprehensive Competency-Based Education Program for Residents on a Sports Medicine Service
COL Patrick M. Osborn, MD, San Antonio Military Medical Center

12:05 pm-12:09 pm Discussion

12:09 pm-12:13 pm Development of a Spine Surgical Skills Assessment For Orthopaedic Surgery Residents
Major Robert C. Ryu, MD, The Ohio State University Wexner Medical Center

12:13 pm-12:17 pm Disclosures Undisclosed
Kiya Shazadeh Safavi, BS, University of Texas Medical Branch at Galveston

12:17 pm-12:21 pm Postoperative Opioid Prescribing Patterns among Orthopaedic Surgeons for Common Arthroscopic Procedures
LTC Nathan A. Marsh, MD, Womack Army Medical Center

12:21 pm-12:25 pm Discussion

12:25 pm-1:25 pm **Multimedia Education Session** (*Longs Peak Foyer*)

2018 E-Poster Presentations

Station A

ADULT RECONSTRUCTION

Poster 1

Definitive Resection Arthroplasty of the Knee: A Surprisingly Viable Treatment to Manage Intractable Infection in Selected Patients

LT Ashton Goldman, MD, Mayo Clinic

Poster 2

Why Are Contemporary Revision Total Knee Arthroplasties Failing?

LT Ashton Goldman, MD, Mayo Clinic

Poster 3

Osteonecrosis of the Femoral Head following Food-Born Gastrointestinal Illness with Shiga Toxin-Producing E. Coli

LT Kyle Mombell, MD, Naval Medical Center San Diego

SPINE

Poster 4

Intra-Operative Cauda Equina Syndrome following Elective Gynecological Procedure

LCDR Conor B. Garry, MD, Naval Medical Center Portsmouth

Poster 5

Post Operative Hamstring Tightness following Anterior Lumbar Interbody Fusion

CPT Matthew Griffith, MD, Dwight David Eisenhower Army Medical Center

Poster 6

Intraoperative Patient Positioning Does Not Change Lumbar Plexus Location: MRI Neurography of the Lumbar Plexus in Flexion and Extension

Capt Gavin Mills, MD, San Antonio Military Medical Center

Station B

PEDIATRICS

Poster 7

Surgical Complications Using Magnetically Controlled Growing Instrumentation for Early Onset Scoliosis: A Systematic Review of the Literature

CPT K. Aaron Shaw DO, Dwight D. Eisenhower Army Medical Center

**Presented by MAJ Justin M. Hire, MD*

Poster 8

Reduced Postoperative Complications with the Addition of the Keeper Plate to Magnetically Controlled Growing Instrumentation for Early Onset Scoliosis

CPT K. Aaron Shaw DO, Dwight D. Eisenhower Army Medical Center

PRACTICE MANAGEMENT/EDUCATION**Poster 9**

Examining the Effectiveness of a Didactic Knot Tying Course for Orthopaedic Surgery Residents through Biomechanical Testing

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

Poster 10

A Guide to Understanding Reimbursement and Value-Based Care in the Military Health System

MAJ Joseph W. Galvin, DO, Blanchfield Army Community Hospital

**Presented by CPT Matti P. Asuma, MD*

TRAUMA**Poster 11**

Delayed Presentation of Gluteal Compartment Syndrome

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

Poster 12

Closed Distal Extrusion of the Intermediate Cuneiform in a Complex Lisfranc Fracture-Dislocation: A Case Report

CPT Matti P. Asuma, MD, Madigan Army Medical Center

Station C**HAND & WRIST****Poster 13**

Treatment of a Chronic Locked Thumb Metacarpophalangeal Joint with Sesamoid Entrapment

Capt John J. Carroll, MD, San Antonio Military Medical Center

Poster 14

Improved Repositionable Dynamic Distraction, External Fixator for Unstable Proximal Interphalangeal Joint Fracture-Dislocations

LT Joshua Kotler, MD, Naval Medical Center Portsmouth

Poster 15

Peri-Lunate Fracture Dislocation Hiding in a Polytraumatized Medevac Patient

LT Nicholas Perry, MD, Naval Medical Center San Diego

SHOULDER & ELBOW

Poster 16

Return to Sports after Surgical Treatment for Anterior Shoulder Instability: A Systematic Review
Jeansol Kang, MD, Boston University School of Medicine

Poster 17

Pectoralis Major Reconstruction for Chronic, Retracted Ruptures: A Systematic Review
Logan R. Koehler, MD, William Beaumont Army Medical Center

Poster 18

Extravasation of Fluid in Arthroscopic Shoulder Surgery Requiring Prolonged Intubation: A Case Report and Review of the Literature
LCDR Brandon Vier, MD, Naval Medical Center San Diego

Station D

SPORTS INJURIES

Poster 19

Malpositioning of Cortical Suspensory Fixation Devices in ACL Reconstruction
CPT Jacob M. Arthur, MD, Tripler Army Medical Center

Poster 20

Bilateral Proximal Tibia Stress Fractures through Persistent Physes
Capt John J. Carroll, MD, San Antonio Military Medical Center

Poster 21

Acute, Staged Repair of Bilateral Proximal Hamstring Rupture in an Active 48-Year-Old Female: A Case Report and Literature Review
LT Joshua Kotler, MD, Naval Medical Center Portsmouth

Poster 22

Pre-Operative Patient-Reported Outcomes Measurement Information System and Legacy Knee Related Orthopaedic Patient-Reported Outcome Measures in Military Health System Beneficiaries
Timothy C. Mauntel, PhD, ATC, Walter Reed National Military Medical Center

Poster 23

Acute Exercise-Induced Compartment Syndrome Precipitated by Compression Stockings in a Previously Asymptomatic Recreational Runner
LCDR Ryan D. Scully, MD, George Washington University Hospital
**Presented by 2LT Matthew J. Kinnard, BS*

WAR TRAUMA/MILITARY MEDICINE

Poster 24

Vietnam Trauma Exchange 2018 Concept of Operations and Lessons Learned

LCDR Conor B. Garry, MD, Naval Medical Center Portsmouth