Grantor & Exhibitor Acknowledgements

The Society of Military Orthopaedic Surgeons is grateful for the support of its educational grantors and exhibitors. Thank you for your participation and commitment to SOMOS.

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Dear SOMOS Colleagues,

It is my pleasure and honor to welcome you to Squaw Valley and this year’s Annual Meeting. We are celebrating the 58th Annual Meeting of the Society of Military Orthopaedic Surgeons. Because of you, the outstanding members of SOMOS, this meeting will prove to be the best one yet. We had a record number of abstract submissions reflecting your dedication to research. Our two program co-chairs, Drs. James Blair and Judd Robins, have put together a stellar program of didactics and research presentations for this year’s Annual Meeting. I am very excited about the program that they have put together. Additionally, many thanks to our Orthopaedic Consultants, the SOMOS Board of Directors and our Committee Chairs who have put in a tremendous amount of work to make this year’s meeting a resounding success.

The academic program includes cutting edge research from our members and over 12 instructional course lectures from world renown experts in their sub-specialty fields. We will be honored to have current AAOS president Dr. Gerald Williams speak to us not only about his experience in treating shoulder conditions but also on the status of AAOS and where our national society will be going in the future.

There will be many opportunities to have non-CME educational activities during breaks and lunches. These activities have been designed to give you exposure to new surgical techniques and the latest in surgical technology. Additionally, there will be ample time to reconnect with colleagues, discuss cases, and collaborate on future research. I strongly encourage you to take full advantage of all the educational opportunities available to you during the Annual Meeting. Sign up early for the hands-on training during the lunches and vendor workshops. We also have several great events planned for the Commanders’ Cup! As always there will be stiff competition from the three services as we fight for the Commanders Cup supremacy!

SOMOS continues to afford its membership many opportunities in researcher, leadership and volunteerism. I would highly recommend that each of you consider getting involved in many of the committees and programs that SOMOS offers. This year we are excited to have a new mentor program where mentors who have been in SOMOS for many years have graciously offered to take new residents and/or junior staff under their wings. This is an excellent opportunity to stand on the shoulder of giants. Additionally, we are proud to announce a new leadership award for junior staff to attend the John Feagin Leadership Program in May 2017. If you missed out on applying this year, I would highly recommend applying next year.

We are very excited to have a long-awaited DoD collaborative database to enable to answer many of the pressing questions that our patients and their conditions present to us. This database and the research we glean from it will put SOMOS surgeons at the forefront of our profession giving us even more opportunities to serve.

Again, welcome to the Annual Meeting. It is my desire that everyone will come away with some pearl of knowledge that will enable us to be better surgeons, leaders and educators.

Sincerely,

Mark Slabaugh, MD
Lt Col Mark Slabaugh, MD
2016 President, Society of Military Orthopaedic Surgeons
Summary of Events

Monday, December 12

12:00 pm-5:00 pm
Board of Directors Meeting  Tinker’s Knob

12:00 pm-8:00 pm
Meeting Registration  Grand Sierra Ballroom Foyer

12:00 pm-11:59 pm
Speaker Ready Area  Grand Sierra Ballroom Pre-Function

5:30 pm-6:30 pm
Sponsor Reception  Granite Chef

6:30 pm-9:00 pm
Welcome Reception with Exhibitors  Grand Sierra Ballroom
Join us for a fun evening filled with delicious food, and many of your medical industry friends as we kick off an exceptional week. This is an opportunity to visit with the Exhibitors.
Price: Included in Registration Fee, Unregistered Spouse or Guest $60; Unregistered Children 5 and older $25

Tuesday, December 13

12:00 am-11:59 pm
Speaker Ready Area  Grand Sierra Ballroom Pre-Function

6:30 am-8:00 am
Registered Attendees’ Breakfast  Grand Sierra Ballroom

6:30 am-11:45 am
Meeting Registration  Grand Sierra Ballroom

6:30 am-11:45 am
Technical Exhibits, Coffee Breaks and Daily Drawing  Grand Sierra Ballroom
The Drawing will take place at the end of the Second Break in the Exhibit Area. You must be present to win!

7:00 am-7:20 am
Opening Ceremony  Alpine Ballroom

7:20 am-7:50 am
Symposium 1: Lower Extremity Injuries 1  Alpine Ballroom

7:50 am-8:10 am
Break with Exhibitors  Grand Sierra Ballroom

8:10 am-9:10 am
General Session 1: Lower Extremity Injuries 1  Alpine Ballroom

9:15 am-9:45 am
Rapid Fire Session 1A: Miscellaneous Trauma  Castle Peak A
Rapid Fire Session 1B: Basic Science  Castle Peak B
Rapid Fire Session 1C: Education  Monument Peak B
Rapid Fire Session 1D: Military Medicine  Pyramid Peak

9:50 am-10:20 am
Symposium 2: Lower Extremity Injuries 2  Alpine Ballroom

10:20 am-10:40 am
Break with Exhibitors  Grand Sierra Ballroom

10:40 am-11:40 am
General Session 2: Lower Extremity Injuries 2  Alpine Ballroom

11:40 am-12:40 pm
SOMOS Luncheon – Industry Presentations  *Not for CME Credit
DePuy  Papoose Peak
DT MedSurg, LLC, a Data Trace Company  Monument Peak A
(Seminar presentation supported by an unrestricted educational grant from Pacira Pharmaceuticals, Inc.)
Legally Mine  Silver Peak
Stryker Orthopaedics  Emigrant Peak A & B

12:45 pm-2:15 pm
Scientific E-Poster Session  Castle Peak A, Castle Peak B, Monument Peak B, Pyramid Peak
Presenters will be available to answer questions.

2:15 pm-3:30 pm
Multimedia Education Session  Grand Sierra Ballroom Pre-Function

3:30 pm-5:00 pm
Meeting Registration  Grand Sierra Ballroom

3:30 pm-4:00 pm
Symposium 3: Upper Extremity Trauma  Alpine Ballroom

4:00 pm-5:00 pm
General Session 3: Upper Extremity Trauma  Alpine Ballroom

5:00 pm-6:00 pm
Scientific E-Poster Session  Castle Peak A, Castle Peak B, Monument Peak B, Pyramid Peak
Presenters will be available to answer questions.

7:00 pm-10:00 pm
Commander’s Cup Event  Ice Skating Arena
Broomball Tournament and Spectator Event
It’s time to heat things up with the first event of the Commander’s Cup Competition! The race to the cup begins with a “friendly,” outdoor Broomball Tournament where teams of six will heat up the ice during this “hockey like” sporting event. Off the ice, hearty fare will warm your spirits, and an outdoor bar will be available to keep you

Dress Code

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<tr>
<th>Dress Code</th>
<th>Monday, December 12</th>
<th>Tuesday, December 13</th>
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| Speakers            | Military: Service Uniform/Class “A”  
Civilian: Suit & Tie | Military: Working Uniform/Class “C”  
Civilian: Business Casual |
| Awards Dinner       | Military & Civilian: Business Casual |
| Educational Sessions| Military: Working Uniform/Class “C”  
Civilian: Business Casual |
| Special Events      | Casual |
|                     | |
Summary of Events

Wednesday, December 14

12:00 am-11:59 pm
**Speaker Ready Area** Grand Sierra Ballroom Pre-Function

6:30 am-7:00 am
**Scientific E-Poster Session**
Castle Peak A, Castle Peak B, Monument Peak B, Pyramid Peak
Presenters will be available to answer questions.

6:30 am-8:00 am
**Registered Attendees’ Breakfast** Grand Sierra Ballroom

6:30 am-11:25 am
**Meeting Registration** Grand Sierra Ballroom

6:30 am-11:25 pm
**Technical Exhibits, Coffee Breaks and Daily Drawing**
Grand Sierra Ballroom
The Drawing will take place at the end of the Second Break in the Exhibit Area. You must be present to win!

7:00 am-7:30 am
**Symposium 4: Sports – Knee** Alpine Ballroom

7:30 am-8:30 am
**General Session 4: Sports – Knee** Alpine Ballroom

8:30 am-8:50 am
**Break with Exhibitors** Grand Sierra Ballroom

8:50 am-9:20 am
**Rapid Fire Session 2A: Shoulder Instability** Castle Peak A
**Rapid Fire Session 2B: Young Adult Hip Preservation Session** Castle Peak B
**Rapid Fire Session 2C: Sports Knee** Monument Peak B
**Rapid Fire Session 2D: Miscellaneous** Pyramid Peak

9:25 am-9:55 am
**Symposium 5: Sports Foot and Ankle Injuries** Alpine Ballroom

9:55 am-10:15 am
**Break with Exhibitors** Grand Sierra Ballroom

10:15 am-11:15 am
**General Session 5: Sports Foot and Ankle Injuries** Alpine Ballroom

11:15 am-11:25 am
**CDR Michael T. Mazurek Clinician Scholar Award Presentation** Alpine Ballroom

11:25 am-12:25 pm
**SOMOS Luncheon – Industry Presentations** *Not for CME Credit
Bioventus Papoose Peak
Stryker Orthopaedics Emigrant Peak A & B

12:30 pm-2:00 pm
**Scientific E-Poster Session**
Castle Peak A, Castle Peak B, Monument Peak B, Pyramid Peak
Presenters will be available to answer questions.

2:00 pm-3:30 pm
**Multimedia Education Session** Grand Sierra Ballroom Pre-Function

3:30 pm-6:00 pm
**Meeting Registration** Grand Sierra Ballroom

3:30 pm-4:00 pm
**Symposium 6: Sports – Pediatric Sports Injuries** Alpine Ballroom

4:00 pm-5:00 pm
**General Session 6: Sports – Sports Injuries** Alpine Ballroom

5:00 pm-5:10 pm
**Break**

5:10 pm-5:40 pm
**Current Concepts** Alpine Ballroom

5:40 pm-6:00 pm
**Joint-Service Research Initiative** Alpine Ballroom

6:00 pm-6:45 pm
**SOMOS Dinner – Industry Presentation** *Not for CME Credit
DT MedSurg, LLC, a Data Trace Company Alpine Ballroom
(Seminar presentation supported by an unrestricted educational grant from Pacira Pharmaceuticals, Inc.)
Advances in Postsurgical Pain Management by Romney Andersen, MD

7:00 pm-9:00 pm
**Commander’s Cup Event** Ice Skating Arena
**Curling Tournament and Spectator Event**

What is curling? Seemingly simple, but very competitive, curling utilizes a granite stone, a long handled brush, a sheet of ice, and a target 42 yards away. The team of four that finishes with their stones closer to the target than their opponents’ wins a game. Curling is an Olympic sport, which uniquely mixes keen competition and camaraderie with a wonderful social atmosphere. Enjoy the s’mores and other sweets then warm up with your favorite coffee liquor drink!
*Price: Players – $5 per person (maximum 48); Spectators – Included in Registration

Thursday, December 15

12:00 am-11:59 pm
**Speaker Ready Area** Grand Sierra Ballroom Pre-Function
Summary of Events

5:30 am-8:00 am  
**Registered Attendees’ Breakfast**  Grand Sierra Ballroom C & D

6:00 am-7:00 am  
**Service Consultant Breakouts**  
- Air Force  Silver Peak
- Army  Alpine Ballroom
- Navy  Monument Peak

6:00 am-11:30 am  
**Meeting Registration**  Grand Sierra Ballroom

7:00 am-7:30 am  
**Symposium 7: Hand**  Alpine Ballroom

7:30 am-8:30 am  
**General Session 7: Jamie Dianne Bulken-Hoover Memorial Hand Session**  Alpine Ballroom

8:30 am-8:45 am  
**Refreshment Break**  Grand Sierra Ballroom Pre-Function

8:45 am-9:15 am  
**Rapid Fire Session 3A: Hand**  Castle Peak A  
**Rapid Fire Session 3B: Spine**  Castle Peak B  
**Rapid Fire Session 3C: Shoulder Reconstruction/Pediatric**  Monument Peak B  
**Rapid Fire Session 3D: Adult Reconstruction**  Pyramid Peak

9:20 am-9:50 am  
**AAOS Report & Business Meeting**  Alpine Ballroom

10:00 am-10:30 am  
**Symposium 8: Shoulder**  Alpine Ballroom

10:30 am-11:30 am  
**General Session 8: Shoulder**  Alpine Ballroom

11:30 am-12:30 pm  
**Scientific E-Poster Session**  
- Castle Peak A  
- Castle Peak B  
- Monument Peak B  
- Pyramid Peak  
Presenters will be available to answer questions.

12:00 pm-2:00 pm  
**Commander’s Cup Event**  Nastar Course  
**Dual Slalom Event**  
This is the final event in the Commander’s Cup Competition. If you have ever wanted to race like the members of the U.S. Ski Team, now is your chance! Each racer gets a chance to achieve the fastest time on two combined runs.  
Price: $5 per person

12:00 pm-2:00 pm  
**American Society for Surgery of the Hand Luncheon**  Tinker’s Knob

12:30 pm-1:30 pm  
**Multimedia Education Session**  Grand Sierra Ballroom Pre-Function

6:30 pm-10:00 pm  
**Awards Dinner**  Cascades  
Enjoy delicious food, drinks and good friends as we celebrate the many successes of the week! This signature event will include the COL Brian Allgood Memorial Leadership Award presentation along with the winners of the Founder’s Award, the Norman T. Kirk Award, and the Louise House Award, a few special recognitions, and the winner of this year’s Commander’s Cup Competition.  
**Presidential Guest Speaker: COL Michael Steele**  
Price: Included in Registration Fee  Unregistered Spouse/Guest $85  Unregistered Children 5 and over $25

Friday, December 16

12:00 am-11:45 pm  
**Speaker Ready Area**  Grand Sierra Ballroom Pre-Function

6:30 am-7:00 am  
**Scientific E-Poster Session**  
- Castle Peak A  
- Castle Peak B  
- Monument Peak B  
- Pyramid Peak  
Presenters will be available to answer questions.

6:30 am-8:00 am  
**Registered Attendees’ Breakfast**  Grand Sierra Ballroom C & D

6:30 am-11:45 am  
**Meeting Registration**  Grand Sierra Ballroom

7:00 am-7:30 am  
**Symposium 9: Adult Reconstruction**  Alpine Ballroom

7:30 am-8:30 am  
**General Session 9: Adult Reconstruction**  Alpine Ballroom

8:30 am-9:00 am  
**Symposium 10: Spine**  Alpine Ballroom

9:00 am-9:15 am  
**Refreshment Break**  Grand Sierra Ballroom Pre-Function

9:15 am-10:15 am  
**General Session 10: Spine**  Alpine Ballroom

10:15 am-10:25 am  
**Refreshment Break**  Grand Sierra Ballroom Pre-Function

10:25 am-10:55 am  
**Symposium 11: Tumor**  Alpine Ballroom

10:55 am-11:45 am  
**General Session 11: Tumor**  Alpine Ballroom

11:45 am-12:45 pm  
**Multimedia Education Session**  Grand Sierra Ballroom Pre-Function

11:50 am-1:45 pm  
**Board of Directors’ Meeting**  Tinker’s Knob
Scientific Program  Alpine Ballroom, Unless Otherwise Specified

CME ACCREDITATION
The American Academy of Orthopaedic Surgeons designates this live activity for a maximum of 30.75 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

* 20 CME Credits for Scientific Program
* 6 CME Credits for Scientific E-Poster Sessions
* 4.75 CME Credits for Multimedia Education Sessions

To ensure correct CME credit is awarded, please go online to www.somos.org to complete the SOMOS 2016 Annual Meeting CME Credit Records. CME Certificates will be awarded to all registered participants.

Tuesday, December 13

Opening Ceremony
Moderators: MAJ James A. Blair, MD, Program Co-Chair, William Beaumont Army Medical Center, El Paso, TX
Lt Col R. Judd Robins, MD, Program Co-Chair, United States Air Force Academy, Colorado Springs, CO
Lt Col Mark A. Slabaugh, MD, President, United States Air Force Academy, Colorado Springs, CO

7:00 am  Color Guard
7:10 am  Report of SOMOS President

Symposium 1: Lower Extremity Injuries 1
Moderator: MAJ James A. Blair, MD, William Beaumont Army Medical Center, El Paso, TX

7:20 am  Femoral Head Fractures
H. Claude Sagi, MD, Harborview Medical Center, Seattle, WA

7:45 am  Discussion

7:50 am  Break with Exhibitors  Grand Sierra Ballroom

General Session 1: Lower Extremity Injuries 1
Civilian Moderator: H. Claude Sagi, MD, Harborview Medical Center, Seattle, WA
Military Moderator: MAJ James A. Blair, MD, William Beaumont Army Medical Center, El Paso, TX

8:10 am  Quality Of Life, Spatiotemporal Gait Parameters And Overall Outcomes In Patients With Elective Delayed Amputation After Failed Limb Preservation
LT Kimberly Spahn, MD, Naval Medical Center San Diego, San Diego, CA

8:16 am  Femoral Neck Stress Fractures In Military Recruits: Clinical Course And Risk Factors For Progression
LT Clarence E. Steele, MD, Naval Medical Center San Diego, San Diego, CA

8:22 am  Functional Outcomes of Operatively Treated Femoral Neck Stress Fractures
CPT Emmanuel D. Eisenstein, MD, William Beaumont Army Medical Center, El Paso, TX
*Presented by CPT Timothy B. Pekari, MPAS

8:28 am  Discussion

8:34 am  Lower Extremity Non Tensioned Traction Pins: Is It A Benign Procedure?
CAPT Irshad A. Shakir, MD, Saint Louis University School of Medicine, St. Louis, MO

8:40 am  Delayed Primary Closure Of Fasciotomies Utilizing Acute Dermatotraction
Capt James W. Barnes, MD, University of Missouri - Kansas City, Kansas City, MO

8:46 am  Spatiotemporal Gait Improvements After Pilon Fracture Using The Intrepid Dynamic Skeletal Orthosis
LT Michael A Quacinella, DO, MPH, Naval Medical Center San Diego, San Diego, CA

8:52 am  Dismounted Complex Blast Injuries: Patterns Of Contralateral Limb Injuries In Patients With Lower Extremity Amputations
CPT Steven Wilding, MD, Tripler Army Medical Center, Honolulu, HI

8:58 am  Early Revision Surgery For Tibial Plateau Fractures
LT Dominic Van Nielan, MD, Naval Medical Center Portsmouth, Portsmouth, VA

9:04 am  Discussion

Rapid Fire Session 1A: Miscellaneous Trauma  Castle Peak A
Moderator: MAJ Justin T. Fowler, MD, San Antonio Military Medical Center, JBSA-Fort Sam Houston, TX

9:15 am  Plafond Impaction In Supination-Adduction Ankle Fractures: The Role Of Computed Tomography In Diagnosis And Surgical Planning
Ram K. Alluri, MD, Keck School of Medicine at USC, Los Angeles, CA

9:19 am  Outcomes Of Lisfranc Injuries In An Active Duty Military Population
CPT Michael P. Hawkinson, MD, San Antonio Military Medical Center, San Antonio, TX

9:23 am  Treatment of Low Energy Lisfranc Joint Injuries in a Young Athletic Population: Primary Arthrodesis Compared with Open Reduction and Internal Fixation
LCDR Grant K. Cochran, MD, Naval Medical Center San Diego, San Diego, CA
9:27 am  Discussion

9:30 am  **Introduction of Modern Reverse Total Shoulder Arthroplasty: A Comprehensive Analysis of a High-Volume Center**
Maj Dane H. Salazar, MD, Washington University, St. Louis, MO

9:34 am  **Outcomes Of Triceps Rupture In The US Military. Minimum 2 Year Follow-Up**
CPT John Dunn, MD, William Beaumont Army Medical Center, El Paso, TX
*Presented by CPT Nicholas Zarkadis, DO

9:38 am  **A Systematic Review Of Pre-Clinical Trials To Prevent Or Treat Bone Non-Union**
Captain Sarah K. Stewart, MBChB, Frimley Park Hospital, Surry, UK

9:42 am  Discussion

**Rapid Fire Session 1B: Basic Science  Castle Peak B**
Moderator: MAJ Jessica C. Rivera, MD, US Army Institute of Surgical Research, JBSA-Fort Sam Houston, TX

9:15 am  **The Effect Of Mesenchymal Progenitor Cell Therapy On Fibrosis And Recovery In A Muscle Crush Mode**
LT Daniel W. Griffin, MD, William Beaumont Army Medical Center, El Paso, TX
*Presented by CPT Christophere Daniels, MD

9:19 am  **In-Vivo Chondrotoxicity Of Liposomal Bupivacaine In A Porcine Model**
CPT K. Aaron Shaw, DO, Dwight D. Eisenhower Army Medical Center, Fort Gordon, GA

9:23 am  **Detecting Differences In The Interpretation Of Radiographs: Do Gaze Data Vary Based On Level Of Expertise?**
Maj Andrew J. Sheean, MD, San Antonio Military Medical Center, San Antonio, TX

9:27 am  Discussion

9:30 am  **In Vitro Effect Of Vancomycin On The Viability Of Articular Chondrocytes**
CPT K. Aaron Shaw, DO, Dwight D. Eisenhower Army Medical Center, Fort Gordon, GA

9:34 am  **Serum Metal Ions In Well-Functioning Total Hip Arthroplasty: Does Femoral Stem Metallurgy Affect Results?**
LCDR Brian T. Barlow, MD, Naval Medical Center San Diego, San Diego, CA

9:38 am  **Local Control Of Polymicrobial Infections Via A Dual Antibiotic Delivery System**
CPT David J. Tennent, MD, San Antonio Military Medical Center, Fort Sam Houston, TX

9:42 am  Discussion

**Rapid Fire Session 1C: Education  Monument Peak B**
Moderator: LtCol Wade T. Gordon, MD, Walter Reed National Military Medical Center, Bethesda, MD

9:15 am  **Orthopaedic Residency Training Structure. Implications On Quantity And Quality Of Scholarship**
CPT John Dunn, MD, William Beaumont Army Medical Center, El Paso, TX
*Presented by CPT Richard Van Tienderen, DO

9:19 am  **Publication Rate Of Abstracts Presented At The Annual Military Orthopaedic Meeting, CPT John Dunn, MD, William Beaumont Army Medical Center, El Paso, TX
*Presented by CPT Richard Van Tienderen, DO

9:23 am  **Factors Impacting The Quantity And Quality Of Research Publications At Academic Orthopaedic Residency Programs**
MAJ Chad A. Krueger, MD, Womack Army Medical Center, Fort Bragg, NC

9:27 am  Discussion

9:30 am  **3-Year Analysis Of Value And Utilization After Development Of An Orthopaedic Ultrasound Injection Clinic**
CPT Chase A. Dukes, MD, Madigan Army Medical Center, Tacoma, WA

9:34 am  **Orthopaedic Resident Surgical Case Log Disparities Observed In The Next Accreditation System**
CPT Jonathan H. Payne, MD, San Antonio Military Medical Center, Fort Sam Houston, TX

9:38 am  **Analysis of References Used in Orthopaedic Self-Assessment Exams**
Capt Sean P. Moroze, MD, San Antonio Military Medical Center, Fort Sam Houston, TX
*Presented by Capt Andrew S. Murtha, MD

9:42 am  Discussion

**Rapid Fire Session 1D: Military Medicine  Pyramid Peak**
Moderator: LTC Kenneth J. Nelson, MD, Womack Army Medical Center, Fort Bragg, NC

9:15 am  **Something Old Or Something New? Casualty Care Behind The Lines 1916**
COL (RTD) Peter F. Sharwood, MBBS, FRACS, FA(Orth)A, Greenslopes Private Hospital, Brisbane, QLD

9:19 am  **An Analysis Of The Most Commonly Tested Topics And Their Taxonomy From Recent Self-Assessment Examinations**
Capt Andrew S. Murtha, MD, San Antonio Military Medical Center, Fort Sam Houston, TX

9:23 am  **The Impact Of The Thomas Splint**
COL (RTD) Peter F. Sharwood, MBBS, FRACS, FA(Orth)A, Greenslopes Private Hospital, Brisbane, QLD

9:27 am  Discussion
Scientific Program  Alpine Ballroom, Unless Otherwise Specified

9:30 am  Evolution Of FSTS Supporting Unconventional Warfare: Considerations For Future Development And Utilization  
CPT(P) Michael A. Donohue, MD, Walter Reed National Military Medical Center, Bethesda, MD

9:34 am  Deployment Numbers And What They Are Telling Us  
MAJ Jeremy McCallum, MD, Landstuhl Regional Medical Center, Landstuhl, Germany

9:38 am  The Interwar Period: Promising Role For Medical Readiness Training Exercises In Maintaining Military Orthopedic Surgical Skills  
2D LT Kelly C. Mead, BA, San Antonio Military Medical Center, Fort Sam Houston, TX

9:42 am  Discussion

Symposium 2: Lower Extremity Injuries  
Moderator: Maj Ryan Finnman, MD, University of Cincinnati, Cincinnati, OH

9:50 am  Failure: Engineering in Orthopaedics  
Michael T. Archdeacon, MD, MSE, University of Cincinnati Academic Health Center, Cincinnati, OH

10:15 am  Discussion

10:20 am  Break with Exhibitors  
Grand Sierra Ballroom

General Session 2: Lower Extremity Injuries  
Civilian Moderator: Michael T. Archdeacon, MD, MSE, University of Cincinnati Academic Health Center, Cincinnati, OH  
Military Moderator: Maj Ryan Finnman, MD, University of Cincinnati, Cincinnati, OH

10:40 am  Founder's Award  
Continual Near Infrared Spectroscopy Monitoring in the Injured Extremity at Risk for Acute Compartment Syndrome—Results of a Prospective, FDA-IDE Trial  
Brett A. Freedman, MD, Mayo Clinic, Rochester, MN

10:46 am  A Pilot Study Of Tele-Surgery For Compartment Release  
LCol Max Talbot, MD, FRCS, Canadian Armed Forces, Montréal, QC

10:52 am  Creation And Evaluation Of A Training Program To Train Non-Orthopedic Medical Personnel To Accurately Measure Leg Intracompartmental Pressure With Use Of A Novel Pressure Transducer  
Lt Col Christopher T. LeBrun, MD, R. Adams Cowley Shock Trauma Center, Baltimore, MD

10:58 am  Mechanical Wound Therapy - The Next Generation in Advanced Wound Care  
Brett A. Freedman, MD, Mayo Clinic, Rochester, MN

11:04 am  Discussion

11:10 am  ORIF vs ORIF And Primary Subtalar Arthrodesis For Displaced Intraarticular Calcaneus Fractures: A Decision Analysis  
CPT Emmanuel D. Eisenstein, MD, William Beaumont Army Medical Center, El Paso, TX

11:16 am  Combat Hindfoot Fractures In UK Military 2003-2014 - Is Salvage Feasible?  
Surg Lt Philippa M. Bennett, MB, ChB, Royal Centre for Defence Medicine, Birmingham, UK

11:22 am  Outcomes Of Talus Fractures Associated With Combat-Related Injuries  
Capt Travis J. Junge, MD, San Antonio Military Medical Center, San Antonio, TX

11:28 am  Hindfoot Fractures In UK Combat Casualties: Medium-Term Patient Reported Outcomes  
Surg Lt Cdr Jowan G. Penn-Barwell, MB ChB, MSc, FRCS (Tr & Orth), Royal Centre for Defence Medicine, Birmingham, UK

11:34 am  Discussion

11:40 am  SOMOS Luncheon – Industry Presentations  
*Not for CME Credit

Legally Mine  
Silver Peak  
Keys to Locking Out Lawsuits and Lowering Taxes  
Presented by Art McOmber  
DePuy Synthes Papoose Peak  
DT MedSurg, LLC, a Data Trace Company  
Monument Peak A  
(Seminar presentation supported by an unrestricted educational grant from Pacira Pharmaceuticals, Inc.)

Latest Developments in Avoiding Opioid Dependency Following Surgery by Romney Andersen, MD  
Stryker Orthopaedics  
Emigrant Peak A & B  
The Surgical Spine, When Surgery Is The Answer & Common Procedures For Treatment by Joel Jenne, MD

12:45 pm  Scientific E-Poster Session  
Logo Peak A, Castle Peak B, Monument Peak B, Pyramid Peak  
Poster presenters will be available to answer questions.

2:15 pm  Multimedia Education Session  
Grand Sierra Ballroom Pre-Function

Symposium 3: Upper Extremity Trauma  
Moderator: Lt Col Christopher T. LeBrun, MD, R. Adams Cowley Shock Trauma Center, Baltimore, MD

3:30 pm  Fractures of the Clavicle: How Science Changed Practice  
Michael D. McKee, MD, St. Michael's Hospital, Toronto, ON

3:55 pm  Discussion

General Session 3: Upper Extremity Trauma  
Civilian Moderator: Michael D. McKee, MD, St. Michael's Hospital, Toronto, ON  
Military Moderator: Lt Col Christopher T. LeBrun, MD, R. Adams Cowley Shock Trauma Center, Baltimore, MD

4:00 pm  Upper Extremity Injuries and Correlates with Amputation Outcome Following Combat Trauma  
Capt John J. Carroll, MD, San Antonio Military Medical Center, San Antonio, TX

4:06 pm  Operative Management Of Unstable Radial Head Fractures In A Young Active Population  
CPT Emmanuel D. Eisenstein, MD, William Beaumont Army Medical Center, El Paso, TX  
*Presented by CPT Phillip R. Schneider MD
Scientific Program  Alpine Ballroom, Unless Otherwise Specified

4:12 pm  Orthopaedic And Plastic Surgery Training Differences Manifested In The Analysis Of Distal Radius Fracture Fixation
Logan R. Koehler, MD, William Beaumont Army Medical Center, El Paso, TX

4:18 pm  Distal Ulnar Hounsfield Units Accurately Predicts Future Fragility Fracture Risk
LT Theodora C. Dworak, MD, Walter Reed National Military Medical Center, Bethesda, MD

4:24 pm  Discussion

4:30 pm  Acute Transhumeral Replantation For Traumatic Amputation: Early Promising Results
LTC Joseph F. Alderete Jr., MD, Brooke Army Medical Center, Fort Sam Houston, TX

4:36 pm  Ulnar Collateral Ligament Repair following Elbow Dislocation
Aaron Wey, MD, William Beaumont Army Medical Center, El Paso, TX

4:42 pm  Radial Head Arthroplasty In The Young High Demand Military Servicemember With Minimum 2-Year Follow-Up
CPT John Dunn, MD, William Beaumont Army Medical Center, El Paso, TX

4:48 pm  Inaccuracy In Diagnosis And Inefficiency Of Management Of Orthopaedic Injuries By Emergency Medicine Physicians
CPT Nicholas A. Kusnezov, MD, William Beaumont Army Medical Center, El Paso, TX

5:00 pm  Scientific E-Poster Session
Castle Peak A, Castle Peak B, Monument Peak B, Pyramid Peak Poster presenters will be available to answer questions.

Wednesday, December 14
Warren Kadrmas Memorial Sports Day

6:30 am  Scientific E-Poster Session
Castle Peak A, Castle Peak B, Monument Peak B, Pyramid Peak Poster presenters will be available to answer questions.

Symposium 4: Sports - Knee
Moderator: CDR Lance E. LeClere, MD, US Naval Academy, Annapolis, MD

7:00 am  ACL Surgery, Where We've Been, Where We're Going
Robert T. Burks, MD, University of Utah Health Sciences Center, Salt Lake City, UT

7:25 am  Discussion

General Session 4: Sports - Knee
Civilian Moderator: Robert T. Burks, MD, University of Utah Health Sciences Center, Salt Lake City, UT

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

7:30 am  Acute Changes In Serum Biomarkers Of Collagen Turnover And Metabolism Following Anterior Cruciate Ligament Injury
Kenneth L. Cameron, PhD, MPH, ATC, Keller Army Hospital, West Point, NY

7:36 am  Epidemiology and Risk Factors for Failed Meniscal Repair in a Military Population
CPT Alaina M. Brelin, MD, Walter Reed National Military Medical Center, Bethesda, MD
*Presented by LCDR George C. Balazs, MD

7:42 am  Return To Duty After ACL Reconstruction: Are We Getting Them Back?
MAJ Jay B. Cook, MD, Winn Army Community Hospital, Fort Stewart, GA

7:48 am  Moderate Return To High Impact Function After Fresh Osteochondral Allograft Transplantation For Medium To Large Chondral Defects Of The Knee
MAJ Dimitri M. Thomas, MD, Munson Army Health Center, Fort Leavenworth, KS

8:00 am  Predictors Of Subsequent Injury After ACL Reconstruction In Children And Adolescents
Captain Travis J. Dekker, MD, Duke University, Durham, NC

8:06 am  Interference Screw Position Relative To A Bone Patellar Tendon Bone Anterior Cruciate Ligament Graft In The Tibia: Is A Cortical Or Cancellous Graft Screw Interface Stronger?
MAJ Nathan A. Marsh, MD, Keller Army Community Hospital, West Point, NY

8:12 am  Avoiding Graft Tunnel Mismatch In Allograft Anterior Cruciate Ligament Reconstruction: The Blumensaat’s Line Method
LCDR Patrick W. Joyner, MD, Naval Medical Center Portsmouth, Portsmouth, VA

8:18 am  Passive Anterior Tibial Subluxation in the Setting of ACL Injury: A Comparative Analysis of Ligament Deficient States
LCDR Lucas McDonald, MD, MPH, Naval Medical Center San Diego, San Diego, CA

8:24 am  Discussion

8:30 am  Break with Exhibitors  Grand Sierra Ballroom

Rapid Fire Session 2A: Shoulder Instability  Castle Peak A
Moderator: MAJ Stephen A. Parada, MD, Dwight D. Eisenhower Army Medical Center, Fort Gordon, GA

8:50 am  Radiographic Characterization Of Posterior Bone Loss Using Computed Tomography And Three-Dimensional Printed Models With Recurrent Posterior Shoulder Instability
CAPT (Ret) Matthew T. Provencer, MD, The Steadman
<table>
<thead>
<tr>
<th>Time</th>
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<tr>
<td>8:54 am</td>
<td>Incidence and Outcomes of Open Biceps Tenodesis in Patients 30 and Younger</td>
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<td>CPT Alaina M. Brelin, MD, Walter Reed National Military Medical Center, Bethesda, MD</td>
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<td>*Presented by LCDR George C. Balazs, MD</td>
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<tr>
<td>8:58 am</td>
<td>Low Risk Of Recurrence After Posterior Labral Repairs In An High-Risk US Military Population</td>
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<td>CPT Stephen Chan, MD, William Beaumont Army Medical Center, El Paso, TX</td>
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<td>9:02 am</td>
<td>Discussion</td>
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<td>9:05 am</td>
<td>Prospective Analysis Of Imaging And Surgical Findings In Surgical Instability: A Matched Cohort Analysis Of Patients With Anterior Versus Posterior Instability</td>
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<td>CAPT (Ret) Matthew T. Provencher, MD, The Steadman Clinic, Vail, CO</td>
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<tr>
<td>9:09 am</td>
<td>Anterior Anchor Position Is Not Associated With Higher Failure Rate After Isolated Type II Slap Repair</td>
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<td>CPT William Arroyo, MD, William Beaumont Army Medical Center, El Paso, TX</td>
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<td>*Presented by CPT Kenneth Heida, MD</td>
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<tr>
<td>9:13 am</td>
<td>Open Versus Arthroscopic Anterior Shoulder Stabilization in the Collision and Contact Athlete: A Systematic Review</td>
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<td>CPT Alaina M. Brelin, MD, Walter Reed National Military Medical Center, Bethesda, MD</td>
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<tr>
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<td>*Presented by LCDR George C. Balazs, MD</td>
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<td>9:17 am</td>
<td>Discussion</td>
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**Rapid Fire Session 2B: Young Adult Hip Preservation Session**

*Castle Peak B*

**Moderators:** LCDR Brian T. Barlow, MD, Naval Medical Center San Diego, San Diego, CA & LCDR Terrence D. Anderson, MD, Walter Reed National Military Medical Center, Bethesda, MD

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<th>Time</th>
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<tr>
<td>8:50 am</td>
<td>Defining New Measures Of Debility In Patients With Femoroacetabular Impingement Syndrome</td>
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<td>Maj Andrew J. Sheean, MD, San Antonio Military Medical Center, San Antonio, TX</td>
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<tr>
<td>8:54 am</td>
<td>Hip Arthroscopy For Femoroacetabular Impingement In A Military Cohort: Short And Long Term Outcomes</td>
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<td>Captain Sarah K. Stewart, MBChB, Frimley Park Hospital, Surry, UK</td>
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<td>8:58 am</td>
<td>Labral Hypertrophy Is Associated With Subtle Hip Dysplasia In An Impingement Cohort</td>
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<td>MAJ Nathan A. Marsh, MD, Keller Army Community Hospital, West Point, NY</td>
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<tr>
<td>9:02 am</td>
<td>Discussion</td>
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<tr>
<td>9:05 am</td>
<td>The Vacuum Sign Of The Hip: A Radiographic Indicator Of Chondrolabral Disruption</td>
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<td>Maj Matthew C. Mai, MD, Eglin Air Force Base, Valparaiso, FL</td>
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**Rapid Fire Session 2C: Sports Knee**

*Monument Peak B*

**Moderator:** LtCol Brett C. Anderson, MD, United States Air Force Academy, Colorado Springs, CO

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<th>Time</th>
<th>Presentation</th>
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<tr>
<td>8:50 am</td>
<td>Septic Arthritis after Anterior Cruciate Ligament Reconstruction: Does Graft Retention Portend Increased Risk of Surgical Revision?</td>
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<td>CPT William Arroyo, MD, William Beaumont Army Medical Center, El Paso, TX</td>
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<td>*Presented by CPT Kenneth Heida, MD</td>
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<td>8:54 am</td>
<td>Platelet Rich Plasma: No Significant Early Improvements In A Military Population After Intra-Articular Knee Injection</td>
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<td>MAJ Anthony M. Barcia, MD, Combat Support Hospital/Brian Allgood Army Community Hospital, Seoul, Korea</td>
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<tr>
<td>8:58 am</td>
<td>Functional Outcomes, Complications, And Rupture Following Patellar Tendon Repair In A Young Active Population With Intense Lower Extremity Demands</td>
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<td>CPT Phillip R. Schneider, MD, William Beaumont Army Medical Center, El Paso, TX</td>
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**Rapid Fire Session 2D: Miscellaneous**

*Pyramid Peak*

**Moderator:** COL Steven J. Svoboda, MD, Keller Army Community Hospital/United States Military Academy, West Point, NY

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<th>Time</th>
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<tr>
<td>9:09 am</td>
<td>Safe Operation Of The Brake Pedal Following Arthroscopic Hip Surgery</td>
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<td>LCDR George C. Balazs, MD, Walter Reed National Military Medical Center, Bethesda, MD</td>
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<tr>
<td>9:13 am</td>
<td>Functional Outcomes Of Arthroscopically Treated Femoroacetabular Impingement In An Active Duty Population</td>
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<td>CPT Griffin M. Biedron, MD, William Beaumont Army Medical Center, El Paso, TX</td>
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<td>9:17 am</td>
<td>Discussion</td>
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<tr>
<td>8:50 am</td>
<td>Occupational Outcomes Of Reconstructive Surgery For Adult Acquired Flatfoot Deformity</td>
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<td>8:54 am</td>
<td>Anatomically Contoured Anterior Plating For Isolated Tibiotal Arthrodesis: A Systematic Review</td>
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<td>*Presented by CPT Richard Van Tienderen, DO</td>
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<tr>
<td>8:58 am</td>
<td>New Technique For Tibiotal Arthrodesis Using A New Intramedullary Nail Device: A Cadaveric Study</td>
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<td>*Presented by CPT Nicholas Rensing, MD</td>
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<tr>
<td>9:02 am</td>
<td>Discussion</td>
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<tr>
<td>9:05 am</td>
<td>Return To Sport Following Intramedullary Fixation Of Jones Fractures In A Young, Active Population</td>
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<tr>
<td>9:09 am</td>
<td>Efficacy Of Map3 Cellular Allogeneic Bone Graft In Foot And Ankle Arthrodesis Procedures</td>
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<tr>
<td>9:13 am</td>
<td>Radiographic Outcomes Following Intraosseous Sliding Osteotomy Plate For Hallux Valgus</td>
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<td>9:17 am</td>
<td>Discussion</td>
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**Symposium 5: Sports Foot and Ankle Injuries**

**Moderator:** LTC Paul M. Ryan, MD, Tripler Army Medical Center, Honolulu, HI

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<th>Time</th>
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<tr>
<td>9:50 am</td>
<td>Discussion</td>
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<tr>
<td>9:55 am</td>
<td><strong>Break with Exhibitors</strong> <em>Grand Sierra Ballroom</em></td>
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**General Session 5: Sports Foot and Ankle Injuries**

**Civilian Moderator:** Annunziato “Ned” Amendola, MD, Duke Sports Science Institute, Durham, NC
**Military Moderator:** LTC Paul M. Ryan, MD, Tripler Army Medical Center, Honolulu, HI

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<th>Time</th>
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<tbody>
<tr>
<td>10:15 am</td>
<td><strong>Norman T. Kirk Award</strong> Early Versus Delayed Weightbearing After Microfracture For Osteochondral Lesions Of The Talus: A Prospective Randomized Trial</td>
<td>CPT James B. Deal, MD, Tripler Army Medical Center, Honolulu, HI</td>
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<tr>
<td>10:27 am</td>
<td>Injury Characteristics of Low-Energy Lisfranc Injuries Compared with High-Energy Injuries</td>
<td>LT Christopher H. Renninger, MD, Naval Medical Center San Diego, San Diego, CA</td>
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<tr>
<td>10:33 am</td>
<td>Comparative Outcomes For Treatment Of Articular Cartilage Lesions In The Ankle With Juvenile Particulated Cartilage Allograft: Open Versus Arthroscopic Treatment</td>
<td>CPT Robert C. Turner, MD, Tripler Army Medical Center, Honolulu, HI</td>
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<tr>
<td>10:39 am</td>
<td>Discussion</td>
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<tr>
<td>10:45 am</td>
<td>Low Risk For Local And Systemic Complications After Primary Repair Of 1626 Achilles Tendon Ruptures</td>
<td>CPT Nicholas Rensing, MD, William Beaumont Army Medical Center, El Paso, TX</td>
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<tr>
<td>10:51 am</td>
<td>Rates Of Secondary Operations With Use Of Particulated Juvenile Cartilage In The Treatment Of Talus Osteochondral Lesions</td>
<td>Captain Travis J. Dekker, MD, Duke University, Durham, NC</td>
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<td>10:57 am</td>
<td>Comparison Of MRI And Operative Findings In Peroneal Tendon Disorders In A Military Population</td>
<td>CPT Shawn E. Boomsma, DO, Dwight D. Eisenhower Army Medical Center, Fort Gordon, GA</td>
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<td>11:03 am</td>
<td>Treatment Of Proximal Fifth Metatarsal Fractures And Re-Fractures In Elite Athletes With Plantar Plating</td>
<td>LT Ronald J. Mitchell, MD, Houston Methodist Hospital, Houston, TX</td>
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<td>11:09 am</td>
<td>Discussion</td>
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**CDR Michael T. Mazurek Clinician Scholar Award Presentation**

**Moderator:** Lt Col Mark A. Slabaugh, MD, United States Air Force Academy, Colorado Springs, CO

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<tr>
<td>11:15 am</td>
<td><strong>CDR Michael T. Mazurek Clinician Scholar Award Presentation</strong></td>
<td>MAJ Chad A. Krueger, MD, Womack Army Medical Center</td>
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<td>11:25 am</td>
<td><strong>SOMOS Luncheon – Industry Presentations</strong></td>
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<td><em>Not for CME Credit</em></td>
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<td>Bioventus Papoose Peak Spotlight on Hyaluronic Acid by Vinod Dasa, MD</td>
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<td>Styker Orthopaedics Emigrant Peak A &amp; B Revision Knee, using Triathlon Revision Cone Augments by Nic Aldrich</td>
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<td>12:30 pm</td>
<td><strong>Scientific E-Poster Session</strong></td>
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<td>Castle Peak A, Castle Peak B, Monument Peak B, Pyramid Peak</td>
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<td>Poster presenters will be available to answer questions.</td>
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<tr>
<td>2:00 pm</td>
<td><strong>Multimedia Education Session</strong></td>
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<td><em>Grand Sierra Ballroom Pre-Function</em></td>
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</table>
Symposium 6: Sports – Pediatric Sports Injuries
Moderator: Lt Col Matthew R. Schmitz, MD, FAAP, San Antonio Military Medical Center, JBSA-Fort Sam Houston, TX

3:30 pm Anatomy Of The Pediatric/Adolescent Knee, And Avoiding Physeal Injury During Ligament Reconstruction?
Kevin G. Shea, MD, St. Lukes Clinic Orthopedics, Boise, ID

3:55 pm Discussion

General Session 6: Sports – Sports Injuries
Civilian Moderator: Kevin G. Shea, MD, St. Lukes Clinic Orthopedics, Boise, ID
Military Moderator: Lt Col Matthew R. Schmitz, MD, FAAP, San Antonio Military Medical Center, JBSA-Fort Sam Houston, TX

4:00 pm Incidence Of Anterolateral Ligament Tears In The ACL Deficient Knee - A MRI Study In A Community Population
Lt Col Mark A. Slabaugh, MD, United States Air Force Academy, Colorado Springs, CO

4:06 pm Segond Fracture: A Risk Factor for Anterior Cruciate Ligament Reconstruction Failure?
Capt Christopher L. Gaunder, MD, San Antonio Military Medical Center, San Antonio, TX

4:12 pm Second Generation Autologous Chondrocyte Implantation In The Patella: Short-Term Pain Relief And Functional Outcomes Among U.S. Army Servicemembers
MAJ Brian R. Waterman, MD, William Beaumont Army Medical Center, El Paso, TX

4:18 pm Open Reduction Internal Fixation of Isolated Chondral Fragments Without Osseous Attachment in the Knee: A Case Series
LCDR James Bailey, MD, Duke University, Durham, NC

4:24 pm Discussion

4:30 pm Classification And Analysis Of Attritional Glenoid Bone Loss In Recurrent Anterior Shoulder Instability
CAPT (Ret) Matthew T. Provencher, MD, The Steadman Clinic, Vail, CO

4:36 pm Reliability Of A Simple Calculation For Measuring Glenoid Bone Loss On 3D Computed Tomography (CT) Scans
MAJ Stephen A. Parada, MD, Dwight D. Eisenhower Army Medical Center, Fort Gordon, GA

4:42 pm Biceps Tenodesis Vs. Repair For Type II SLAP Tears In Patients Less Than 30 Years Old
LT Dominic Van Nielen, MD, Naval Medical Center Portsmouth, Portsmouth, VA

4:48 pm Evaluating Glenoid Bone Reaction To Soft Anchors Used For Shoulder Labral Repairs
LT Trevor M. Tompane, MD, MPH, Naval Medical Center San Diego, San Diego, CA

4:54 pm Discussion

5:00 pm Break

Current Concepts
Moderator: Lt Col R. Judd Robins, MD, United States Air Force Academy, Colorado Springs, CO

5:10 pm Individualizing Rehabilitation in Postoperative Care
John M. Tokish, MD, Steadman Hawkins of the Carolinas, Greenville, SC

5:35 pm Discussion

Joint-Service Research Initiative
Moderator: MAJ Jonathan F. Dickens, MD, Walter Reed National Military Medical Center, Bethesda, MD

5:40 pm History
John M. Tokish, MD, Steadman Hawkins of the Carolinas, Greenville, SC

5:43 pm Where We Are Now
MAJ Jonathan F. Dickens, MD, Walter Reed National Military Medical Center, Bethesda, MD

5:46 pm Panel Discussion
Brett A. Freedman, MD, Mayo Clinic, Rochester, MN
Timothy C. Mauntel, PhD, ATC, Walter Reed National Military Medical Center, Bethesda, MD
LTC Benjamin K. Potter, MD, Walter Reed National Military Medical Center, Bethesda, MD
CAPT (Ret) Matthew T. Provencher, MD, The Steadman Clinic, Vail, CO
John M. Tokish, MD, Steadman Hawkins of the Carolinas, Greenville, SC

Thursday, December 15

6:00 am Service Breakouts
Air Force Silver Peak
Army Alpine Ballroom
Navy Monument Peak A

Symposium 7: Hand
Moderator: Maj Peter C. Rhee, DO, MS, San Antonio Military Medical Center, JBSA-Fort Sam Houston, TX

7:00 am Bone and Cartilage Tumors of the Upper Limb: What Everyone Should Know
Peter M. Murray, MD, Mayo Clinic, Jacksonville, FL

7:25 am Discussion

General Session 7: Hand
Civilian Moderator: Peter M. Murray, MD, Mayo Clinic, Jacksonville, FL
Military Moderator: Maj Peter C. Rhee, DO, MS, San Antonio Military Medical Center, JBSA-Fort Sam Houston, TX

7:30 am Can Wrist Computed Tomography Scans Accurately Predict Femoral Neck Osteoporosis?
LT Theodora C. Dworak, MD, Walter Reed National Military Medical Center, Bethesda, MD

7:36 am The Effect Of Skin Pigmentation On Clinical Exam For Determination Of Limb Ischemia In Healthy Controls
MAJ Elizabeth Polfer, MD, Walter Reed National Military Medical Center, Bethesda, MD

7:42 am Outcomes Following Carpal Tunnel Release In Patients Receiving Workers’ Compensation
CPT John Dunn, MD, William Beaumont Army Medical Center, El Paso, TX
*Presented by CPT Richard Van Tienderen, DO

7:48 am The Boxer’s Fracture: Is Reduction With Splint Immobilization Necessary? A Systematic Review
CPT John Dunn, MD, William Beaumont Army Medical Center, El Paso, TX

7:54 am Discussion

8:03 am Epidemiology Of Gunshot Wounds To The Hand
Alexander J. Hutchinson, BS, Texas Tech University Health Sciences Center, El Paso, TX
*Presented by CPT Alicia M. Unangst, DO

8:09 am Use Of BMP In Scaphoid Nonunion. A Systemic Review
CPT Paul L. Lanier, DO, William Beaumont Army Medical Center, El Paso, TX

8:15 am Anatomic Variation Of The Radial Artery Associated With Clinically Significant Ischemia
MAJ Elizabeth Polfer, MD, Walter Reed National Military Medical Center, Bethesda, MD
*Presented by MAJ Jennifer Sabino, MD

8:21 am Discussion

8:30 am Refreshment Break Grand Sierra Ballroom Pre-Function

Rapid Fire Session 3A: Hand Castle Peak A

8:45 am Clinical Outcomes Following Posterior Interosseous Nerve Neurectomy For Intractable Wrist Pain: A Systematic Review
CPT John Dunn, MD, William Beaumont Army Medical Center, El Paso, TX
*Presented by CPT Paul L. Lanier, DO

8:49 am Carpometacarpal Fracture Dislocations In The Military: A Retrospective Review
LCDR Robert O. Boatwright, MD, Naval Medical Center Portsmouth, Portsmouth, VA

8:53 am Utility Of Wrist Computed Tomography For Population-Based Osteoporosis Screening
LT Theodora C. Dworak, MD, Walter Reed National Military Medical Center, Bethesda, MD

8:57 am Discussion

9:00 am Should Arthroscopic Treatment Of Occult Dorsal Wrist Ganglions Be The Gold Standard?
Major Kevin P. Krul, MD, Tripler Army Medical Center, Honolulu, HI

9:04 am Fracture Risk in Ulnohumeral Arthroplasty - How Does Fenestration Size Influence Structural Integrity?
LT Patrick B. Morrissey, MD, Naval Medical Center San Diego, San Diego, CA
*Presented by LT Ryan C. Myers, MD

9:08 am Distal Ulnar Houssnfeld Units Accurately Reflect Forearm Bone Mineral Density
LT Theodora C. Dworak, MD, Walter Reed National Military Medical Center, Bethesda, MD

9:12 am Discussion

Rapid Fire Session 3B: Spine Castle Peak B
Moderators: Lt. Col. James Dunlap, MD, Wright Patterson Air Force Base, Dayton, OH & Cdr. David E. Gwinn, MD, Walter Reed National Military Medical Center, Bethesda, MD

8:45 am Can S2-Alar-Iliac (S2ai) Screws Be Placed Accurately Without Fluoroscopy?
MAJ Daniel G. Kang, MD, Madigan Army Medical Center, Tacoma, WA
*Presented by CPT Christopher Chen, MD

8:49 am Complications And Re-Operation Rate Following Cervical Lateral Mass Screw Fixation
MAJ Daniel G. Kang, MD, Madigan Army Medical Center, Tacoma, WA
*Presented by CPT Christopher Chen, MD

8:53 am Cervical Total Disc Arthroplasty Versus Cervical Fusion For The Treatment Of Cervical Spondylosis: Comparative Outcomes And Impact On Military Aviation Waiverability
LTC John R. Reaume, MD, Dwight D. Eisenhower Army Medical Center, Fort Gordon, GA

8:57 am Discussion

9:00 am Epidemiology Of Lumbago In United States Military Nurses
CPT Mitchell C. Harris, MD, Tripler Army Medical Center, Honolulu, HI

9:04 am Safety And Efficacy Of Using Ultrasound Bone Scalpel For Anterior Cervical Corpectomy
CPT Sally Ann Corey, DO, Dwight D. Eisenhower Army Medical Center, Fort Gordon, GA

9:08 am Direct Dural Wound Vacuum Therapy For Recalcitrant Posterior Instrumented Spinal Fusion: A Case Report And Review Of The Literature
LT Andrew J. Wright, MD, Naval Medical Center San Diego, San Diego, CA

9:12 am Discussion

Rapid Fire Session 3C: Shoulder Reconstruction/Pediatric Monument Peak B
Moderators: MAJ Kelly G. Kilcoyne, MD, William Beaumont Army Medical Center, El Paso, TX & MAJ E’Stephan J. Garcia, MD, William Beaumont Army Medical Center, El Paso, TX
8:45 am  Radiographic Characterization of the B2 Glenoid: The Effect of Computed Tomographic Axis Orientation
Maj Dane H. Salazar, MD, Washington University, St. Louis, MO

8:49 am  Radiographic Characterization of the B2 Glenoid: Is Inclusion of the Entirety of the Scapula Necessary?
Maj Dane H. Salazar, MD, Washington University, St. Louis, MO

8:53 am  Functional Outcomes Following Lateral Ulnar Collateral Ligament Reconstruction For Symptomatic Posterolateral Rotatory Instability In An Athletic Population
CPT Marnia J. Rodriguez, MD, William Beaumont Army Medical Center, El Paso, TX

8:57 am  Discussion

9:00 am  Volumetric Considerations For Valving Long-Arm Casts: The Utility Of The Cast Spacer
CPT K. Aaron Shaw, DO, Dwight D. Eisenhower Army Medical Center, Fort Gordon, GA

9:04 am  Biomechanical Analysis of Retrograde Flexible Intramedullary Nail Constructs in a Simulated Pediatric Femur Fracture Model
Anthony J. Riccio, MD, Texas Scottish Rite Hospital for Children, Dallas, TX

9:08 am  Cast Saw Blades: Does A Particular Blade Reduce The Risk Of Thermal Injury?
Capt Fortune J. Egbulefu, MD, San Antonio Military Medical Center, Fort Sam Houston, TX

9:12 am  Discussion

Rapid Fire Session 3D: Adult Reconstruction
Moderator: Maj Robert J. McGill, MD, Joint Base Andrews, Fort Belvoir, VA

8:45 am  Minimum 25 Year Follow Up Of A Cementless Anatomic Femoral Design: As Good As A Cemented Fixation?
CPT Sean E. Slaven, MD, Walter Reed National Military Medical Center, Bethesda, MD

8:49 am  Modified Frailty Index Is An Effective Risk Assessment Tool In Primary Total Knee Arthroplasty
MAJ Jaime L. Bellamy, DO, Emory University Orthopaedics & Spine Hospital, Atlanta, GA

8:53 am  Can We Eliminate Pre-Operative Flexion Contracture As A Contraindication To Unicompartmental Knee Arthroplasty?
CPT Richard L. Purcell, MD, Walter Reed National Military Medical Center, Bethesda, MD
*Presented by LT Daniel W. Griffin, MD

8:57 am  Discussion

9:00 am  Cost Savings in Orthopaedic Total Joint Arthroplasty Care
LT Daniel J. Houskamp, MD, Naval Medical Center San Diego, San Diego, CA
*Presented by LT Nicholas H. Lake, MD

9:04 am  Kinematic Total Knee Arthroplasty Using Asymmetric Components With Neutral Mechanical Alignment: The Best Of Both Worlds?
LCDR Brian T. Barlow, MD, Naval Medical Center San Diego, San Diego, CA

9:08 am  Total Knee Arthroplasty for Posttraumatic Osteoarthritis in Military Personnel Under Age 50
Running Title: Arthroplasty for PTOA
Capt Andrew S. Murtha, MD, San Antonio Military Medical Center, Fort Sam Houston, TX

9:12 am  Discussion

AAOS Report & Business Meeting
Moderator: Lt Col Mark A. Slabaugh, MD, United States Air Force Academy, Colorado Springs, CO

9:20 am  AAOS Update
Gerald R. Williams Jr., MD, American Academy of Orthopaedic Surgeons President, The Rothman Institute, Philadelphia, PA

9:40 am  Business Meeting

9:50 am  Refreshment Break

Symposium 8: Shoulder
Moderator: LCDR James E. Hammond, MD, Portsmouth Naval Hospital, Suffolk, VA

10:00 am  Shoulder Arthroplasty: Past, Present, and Future
Gerald R. Williams Jr., MD, The Rothman Institute, Philadelphia, PA

10:25 am  Discussion

General Session 8: Shoulder
Civilian Moderator: Gerald R. Williams Jr., MD, The Rothman Institute, Philadelphia, PA
Military Moderator: LCDR James E. Hammond, MD, Portsmouth Naval Hospital, Suffolk, VA

10:30 am  Arthroscopic Versus Open Anterior Shoulder Stabilization: A Prospective Randomized Clinical Trial With 14 Year Follow-up
CPT John D. Johnson, DO, Tripler Army Medical Center, Honolulu, HI

10:36 am  Evaluation Of The Instability Severity Index Score In Predicting Failure Following Arthroscopic Bankart Surgery In An Active US Military Population
CPT Andrew Chan, MD, William Beaumont Army Medical Center, El Paso, TX

10:42 am  Failure And Complication Rates Of Proximal Biceps Tenodesis With Unicortical Suture Button In The Early Postoperative Period
MAJ Jay B. Cook, MD, Winn Army Community Hospital, Fort Stewart, GA
10:48 am  A Prospective Analysis Of Patients With Anterior Versus Posterior Shoulder Instability: A Matched Cohort Examination And Surgical Outcomes Analysis Of 198 Patients
CAPT (Ret) Matthew T. Provencher, MD, The Steadman Clinic, Vail, CO
*Presented by George Sanchez, BS

10:54 am  Discussion

11:00 am  Mid-Term Radiographic Progression of Arthritis in Shoulders with Degenerative Arthritis Rotator Cuff Tears
Maj Dane H. Salazar, MD, Washington University, St. Louis, MO

11:06 am  Surgical Outcomes Following Inpatient Versus Outpatient Total Shoulder Arthroplasty: Characterizing The Patient Demographic
Adam R. Streit, DO, William Beaumont Army Medical Center, El Paso, TX

11:12 am  A Comparison Of “On-Track” And “Off-Track” Assessment With Clinical Failure In A 13-Year Follow-Up Of Open Versus Arthroscopic Shoulder Stabilizations
CPT Liang Zhou, MD, Tripler Army Medical Center, Honolulu, HI

11:18 am  All Arthroscopic Treatment Of Anterior Shoulder Instability In The Setting Of Sub-Critical Glenoid Bone Loss
CPT(P) Michael A. Donohue, MD, Walter Reed National Military Medical Center, Bethesda, MD

11:24 am  Discussion

11:30 am  Scientific E-Poster Session
Castle Peak A, Castle Peak B, Monument Peak B, Pyramid Peak
Poster presenters will be available to answer questions.

12:30 pm  Multimedia Education Session
Grand Sierra Ballroom Pre-Function

Friday, December 16

6:30 am  Scientific E-Poster Session
Castle Peak A, Castle Peak B, Monument Peak B, Pyramid Peak
Poster presenters will be available to answer questions.

Symposium 9: Adult Reconstruction
Moderator: LTC Creighton Tubb, MD, San Antonio Military Medical Center, JBSA-Fort Sam Houston, TX

7:00 am  Reconstructive Challenges In Revision Total Hip Arthroplasty
Wael K. Barsoum, MD, Cleveland Clinic, Cleveland, OH

7:25 am  Discussion

General Session 9: Adult Reconstruction
Civilian Moderator: Wael K. Barsoum, MD, Cleveland Clinic, Cleveland, OH
Military Moderator: LTC Creighton Tubb, MD, San Antonio Military Medical Center, JBSA-Fort Sam Houston, TX

7:30 am  Effect Of Surgical Approach And Intraoperative Imaging On Acetabular Component Alignment In Total Hip Arthroplasty
CAPT Sarah N. Pierrie, MD, Carolinas Medical Center, Charlotte, NC

7:36 am  The Effectiveness Of Combined Thrombin-Collagen And Autologous Platelet-Rich Plasma In Total Hip Arthroplasty, A Prospective, Randomized Controlled Trial
Eric N. Bowman, MD, MPH, Campbell Clinic, Memphis, TN
*Presented by Daniel B. Wells, MD

7:42 am  Use Of Fluoroscopy In Direct Anterior Total Hip Arthroplasty: Technique, Radiation Exposure, And Fluoroscopy Time During The Learning Curve
Maj Andrew S. Malin, MD, Eglin Air Force Base, Valparaiso, FL
*Presented by Maj Matthew C. Mai, MD

7:48 am  Comparison Of Wound Complications And Deep Infections With Direct Anterior And Posterior Total Hip Arthroplasty Approaches In Obese Patients
CPT Richard L. Purcell, MD, Walter Reed National Military Medical Center, Bethesda, MD

7:54 am  Discussion

8:00 am  Liposomal Bupivacaine in Total Hip Arthroplasty: Do the Results Justify the Cost?
Capt Jason A. Beachler Sr., MD, San Antonio Military Medical Center, Fort Sam Houston, TX

8:06 am  Utility Of Intraoperative Fluoroscopic Positioning Of THA Components
CPT Christopher M. Belyea, MD, MBA, Tripler Army Medical Center, Honolulu, HI

8:12 am  Sonication Of Arthroplasty Implants Improves The Diagnostic Accuracy Of Periprosthetic Joint Infection Cultures
Major (Ret) Brian A. Klatt, MD, University of Pittsburgh, Pittsburgh, PA

8:18 am  Modified Frailty Index Is An Effective Risk Assessment Tool In Primary Total Hip Arthroplasty
MAJ Jaime L. Bellamy, DO, Emory University Orthopaedics & Spine Hospital, Atlanta, GA

8:24 am  Discussion

Symposium 10: Spine
Moderator: Lt. Col. James Dunlap, MD, Wright Patterson Air Force Base, Dayton, OH
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<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Presenter/Institution</th>
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<tbody>
<tr>
<td>8:30 am</td>
<td>Surgical Treatment of Subaxial Deformities</td>
<td>James D. Kang, MD, Brigham and Women’s Hospital, Boston, MA</td>
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<td>8:55 am</td>
<td>Discussion</td>
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<td>9:00 am</td>
<td>Refreshment Break</td>
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<tr>
<td>9:15 am</td>
<td>Does Single- Versus Two-Stage Pedicle Subtraction Osteotomy Influence Perioperative Complications?</td>
<td>MAJ Daniel G. Kang, MD, Madigan Army Medical Center, Tacoma, WA</td>
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<tr>
<td>9:21 am</td>
<td>Structural Adaptations Of Paraspinal Musculature In Active-Duty Marines With Intervertebral Disc Degeneration</td>
<td>ENS Jessica R. Stambaugh, BS, University of California, San Diego School of Medicine, San Diego, CA</td>
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<td>9:27 am</td>
<td>Orthopaedics Versus Neurosurgery: Differences In Surgical Outcomes Following Anterior Spinal Fusion</td>
<td>CPT Tyler Trevino, BS, MS, Texas Tech University Health Sciences Center, El Paso, TX</td>
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<td>*Presented by CPT Alicia M. Unangst, DO</td>
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<td>9:33 am</td>
<td>Non-Accidental Spinal Trauma In Very Young Children: A Nationwide Perspective Over A Seven Year Period</td>
<td>CPT Zackary A. Johnson, MD, Tripler Army Medical Center, Honolulu, HI</td>
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<td>9:39 am</td>
<td>Discussion</td>
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<td>9:45 am</td>
<td>Subsidence After Transforaminal Lumbar Interbody Fusion: Effect On Lumbopelvic Sagittal Alignment And Clinical Outcomes</td>
<td>LCDR Theodore J. Steelman, MD, Walter Reed National Military Medical Center, Bethesda, MD</td>
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<td>9:51 am</td>
<td>Lumbar Disc Space Preparation With Cone Beam-Computed Tomography And Navigation: A Cadaveric Study</td>
<td>CPT Richard K. Hurley Jr., MD, San Antonio Military Medical Center, JBSA-Fort San Houston, TX</td>
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<td>9:57 am</td>
<td>The Incidence Of Lumbar Disc Herniation In Military Helicopter Pilots Versus Matched Controls Over A 10 Year Period</td>
<td>CPT James B. Deal, MD, Tripler Army Medical Center, Honolulu, HI</td>
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<td>10:03 am</td>
<td>Diagnosing The Undiagnosed: Osteoporosis In Patients Undergoing Lumbar Fusion</td>
<td>Capt Peter Formby, MD, Walter Reed National Military Medical Center, Bethesda, MD</td>
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<td>*Presented by LCDR Theodore J. Steelman, MD</td>
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**FOOT & ANKLE**

**Poster 1:** Isolated Subtalar Arthrodesis For Avascular Necrosis Of The Talus  
*Captain Travis J. Dekker, MD, Duke University, Durham, NC*

**Poster 2:** Characterization And Incidence Of Missed Posterior Malleolus Fractures  
*CPT Shawn Gee, MD, Tripler Army Medical Center, Honolulu, HI  
* CPT Mitchell C. Harris, MD*

**Poster 3:** Mid-Term Results And Functional Outcomes Of Mini-Open Achilles Tendon Repairs In U.S. Military Service Members  
*CPT Kenneth Heida, MD, William Beaumont Army Medical Center, El Paso, TX*

**Poster 4:** Arthroscopic Debridement And Percutaneous Suture Button Fixation For Treatment Of Chronic Ankle Syndesmosis Injuries In Active Duty Population  
*LT Nicholas P. Perry, MD, Naval Medical Center San Diego, San Diego, CA*

**Poster 5:** Clinical Outcome Following Extracorporeal Shock Wave Therapy For Chronic Planatar Fasciitis  
*CPT Richard L. Purcell, MD, Walter Reed National Military Medical Center, Bethesda, MD*

**Poster 6:** Simple 1-Step Ankle Arthroscopy Distraction  
*CPT Alicia M. Unangst, DO, Fort Bliss, El Paso, TX*

**Poster 7:** Simplified Setup to Achieve Distraction for Toe Arthroscopy  
*CPT Alicia M. Unangst, DO, Fort Bliss, El Paso, TX*

**Poster 8:** Posterior Ankle Arthroscopic Fracture Reduction With Internal Fixation  
*CPT Alicia M. Unangst, DO, Fort Bliss, El Paso, TX*

**INFECTION**

**Poster 9:** Necrotizing Infection Of A Closed Proximal Humerus Fracture  
*LT Erica K. Crump, MD, Naval Medical Center San Diego, San Diego, CA*

**Poster 10:** Community-Acquired MRSA Rotator Cuff Pyomyositis And Scapular Osteomyelitis In Immunocompetent Pediatric Patient  
*LT Nicholas P. Perry, MD, Naval Medical Center San Diego, San Diego, CA*

**ADULT RECONSTRUCTION**

**Poster 11:** Dual Mobility Implants are Cost-Saving for Primary THA: A Cost-Utility Analysis Using Direct and Indirect Costs  
*LCDR Brian T. Barlow, MD, Naval Medical Center San Diego, San Diego, CA*

**Poster 12:** Modified Precautions In Posterior Approach THA: Rapid Recovery And Low Dislocation Rates  
*LCDR Brian T. Barlow, MD, Naval Medical Center San Diego, San Diego, CA*

**Poster 13:** Normalization Of Metal Ion Levels After Revising Metal On Polyethylene Bearings In Total Hip Arthroplasty  
*MAJ Jaime L. Bellamy, DO, Emory University Orthopaedics & Spine Hospital, Atlanta, GA*

**Poster 14:** Screening Dental Disease; Do Race/Income Play a Role?  
*Major (Ret) Brian A. Klett, MD, University of Pittsburgh Department of Orthopaedic Surgery, Pittsburgh, PA*

**BASIC SCIENCE**

**Poster 15:** Optimal Protein Intake in Athletes  
*Cpt Mathew L. Resnick, DO, Westchester General Hospital/ Tinker AFB, Miami, FL*

**OTHER**

**Poster 16:** Iatrogenic Instability Following Hip Arthroscopy: A Series Of Two Cases Treated With Periacetabular Osteotomy  
*Maj Andrew J. Sheean, MD, San Antonio Military Medical Center, San Antonio, TX*

**PEDIATRICS**

**Poster 17:** Benign Acute Childhood Myositis –A Rare Cause Of Abnormal Gait  
*LT Gregory W. Hall, MD, Naval Medical Center Portsmouth, Portsmouth, VA*

**Poster 18:** A Case Report of Talocalcaneal Coalition and Subtalar Ganglion Cyst: 5-year Postoperative Follow-up  
*LT Vanna J. Rocchi, DO, Naval Medical Center San Diego, San Diego, CA*

**Poster 19:** Mechanical Testing Of Epiphysiodesis Screws  
*CPT David J. Tennent, MD, San Antonio Military Medical Center, Ft Sam Houston, TX*

**PRACTICE MANAGEMENT/EDUCATION**

**Poster 20:** Contact Dermatitis Reaction to 2-Octylcyanoacrylate Following Two Orthopaedic Procedures: A Case Series and Literature Review  
*LT Nicholas H. Lake, MD, Naval Medical Center San Diego, San Diego, CA*
Scientific E-Posters  Castle Peak A, Castle Peak B, Monument Peak, Pyramid Peak

**STATION C**  
Monument Peak

**KNEE**  
**Poster 21:** Delayed Osteochondral Allograft Due To New Diagnosis Of Ochronosis  
LT Vanna J. Rocchi, DO, Naval Medical Center San Diego, San Diego, CA  

**SHOULDER/ELBOW**  
**Poster 22:** The Correlation Between CTA, MRA and Arthroscopic Findings in Young Adults with Shoulder Complaints  
Major Oded Hershkovich, MD MHA, Sheba Medical Center, Ramat Gan, Israel  
**Poster 23:** Survey Of Shoulder Arthroplasty Surgeons’ Methods For Infection Avoidance  
MAJ Stephen A. Parada, MD, Dwight D. Eisenhower Army Medical Center, Ft Gordon, GA

**SPINE**  
**Poster 24:** Thoracic Disc Herniation With Concomitant Lumbar Spinal Stenosis Resulting In Epidural Compression Syndrome In A Renal Transplant Patient  
CPT Anthony T. Mustovich, DO, Dwight D. Eisenhower Army Medical Center, Augusta, GA

**TRAUMA**  
**Poster 25:** Understanding the Influence of Malnutrition on Outcomes Following Orthopaedic Trauma: A Systematic Review  
MAJ Jaime L. Bellamy, DO, Emory University Orthopaedics & Spine Hospital, Atlanta, GA

**Poster 26:** 3D Printing In Orthopaedic Trauma Surgery: A Review Of Current Literature  
Capt George A. Cibulas, PharmD, MD, University of Michigan Department of Orthopaedic Surgery, Ann Arbor, MI

**Poster 27:** The Use Of Mini Fragment Plates To Decrease The Rate Of Hardware Removal In Clavicles Treated With Open Reduction Internal Fixation  
LT David A. Feaker Jr, DO, Naval Medical Center Portsmouth, Portsmouth, VA

**Poster 28:** Mechanical Failure of Precice Femoral Lengthening Nail: A Case Report  
LT Wei Wei Wu, MD, Naval Medical Center San Diego, San Diego, CA

**WAR TRAUMA/MILITARY MEDICINE**  
**Poster 29:** The Future of Three-Dimensional Printing in Military Orthopaedic Surgery  
Major Abigail A. Johnson, MA (Cantab) MB BS DMCC, Addenbrooke’s Hospital, Cambridge, UK

**Poster 30:** Description Of The Patient’s Health Profile Veteran PMC Afghanistan Based On An Assessment Of Post-Traumatic Musculoskeletal Injuries  
LTC Marcin M. Wojtkowski, MD, Institute of Military Medicine, Warsaw, Poland

**STATION D**  
Pyramid Peak

**SPORTS INJURIES**  
**Poster 31:** Atlantic Coast Conference Mandatory College Football Medical Observer. A Necessary Addition to the Preexisting Medical Team?  
LCDR James Bailey, MD, Duke University, Durham, NC

**Poster 32:** Morphologic Distribution Of The Anterior Inferior Iliac Spine In Patients With And Without Hip Impingement: Reliability, Validity, And Relationship To Intraoperative Assessment  
LCDR George C. Balazs, MD, Walter Reed National Military Medical Center, Bethesda, MD

**Poster 33:** Correlating Blumensaat’s Line To Native Acl Length For Graft Length Determination In ACL Reconstruction  
LT Alanna B. Balboni, MD, Naval Medical Center Portsmouth, Portsmouth, VA

**Poster 34:** Retrospective Analysis Of Hip Arthroscopy Patients To Analyze Most Frequently Encountered Complications In The Military Population  
LCDR Andrew B. Bernhardson, MD, Naval Medical Center San Diego, San Diego, CA

**Poster 35:** Has There Been A Paradigm Shift In The Treatment Of SLAP Tears? An Investigation Of SLAP Repairs And Biceps Tenodesis In The Young Active Military Population  
CPT(P) Michael A. Donohue, MD, Walter Reed National Military Medical Center, Bethesda, MD

**Poster 36:** Clinical Results Of Subpectoral Biceps Tenodesis Using A Single Unicortical Anchor: A Retrospective Review Of Prospective Data  
MAJ Kelly F. Fitzpatrick, DO, Madigan Army Medical Center, Tacoma, WA

**Poster 37:** Trunk And Lower Extremity Kinematics And Stress Fracture Risk Factors Influence Biomarkers Of Bone Turnover During Cadet Basic Training  
Timothy C. Mauntel, PhD, ATC, Walter Reed National Military Medical Center, Bethesda, MD

**Poster 38:** Ambulatory Physical Activity During The Initial Training Phase In Naval Commando And Submarine Units  
LTC Shachar D. Shapiro, MD, MHA, Israel Defense Force, Medical Corps, Hod Hasharon, Israel

**Poster 39:** Changes In Testosterone Levels After Arthroscopic Surgery: A Pilot Study  
LT Matthew J. Wilson, MD, Naval Medical Center Portsmouth, Portsmouth, VA

**HAND/WRIST**  
**Poster 40:** Pseudoseptic Reaction Following Metacarpophalangeal Pyrocarbon Arthroplasty: Case Report And Operative Treatment  
LT Kyle Mombell, MD, Naval Medical Center San Diego, San Diego, CA
Grand Sierra Ballroom
Meeting Registration, Speaker Ready Area, Welcome Reception, Technical Exhibits, Coffee Breaks and Daily Drawing, Multimedia Education Sessions

Alpine Ballroom
Scientific Program, Army Service Break-Out Session

Tinker’s Knob
Board of Directors Meetings

Castle Peak A-B
Rapid Fire & E-Poster Sessions A & B

Pyramid Peak
Rapid Fire & E-Poster Session D

Emigrant Peak
Stryker Sawbones Lab

Silver Peak
Air Force Service Breakout, Legally Mine Luncheon

Papoose Peak
DePuy Luncheon, Bioventus Luncheon

Cascades
Awards Dinner

EVENTS NOT PICTURED ON THE MAP

Ice Rink
Curling Tournament, Broomball Tournament

Nastar Course (On ridge at the top of Shirley Lake - lift access via Gold Coast chair lift traverse)
Dual Slalom Event