



Gaylord
* NATIONAL HARBOR *
Maryland



20+ AMA PRA Category 1 Credits™

2016 ANNUAL MEETING

Pre-meeting Events

- ◆ Basic Science Focus Forum
- ◆ CPT & ICD-10 Coding Conundrums
- ◆ Grant Writing Workshop
- ◆ International Orthopaedic Trauma Care Forum
- ◆ Orthopaedic Trauma Boot Camp
- ◆ Orthopaedic Trauma for PAs & NPs
- ◆ Residents Comprehensive Fracture Course
- ◆ Young Practitioners Forum



ANNUAL MEETING

Preliminary Program

October 5-8

Register Today at www.ota.org



The Orthopaedic Trauma Association gratefully acknowledges 2015 Research and Education Donors. The continued success and increased impact of the Orthopaedic Trauma Association's research and education effort is dependent upon foundation and industry support. The OTA expresses sincere appreciation to these contributors for their generous financial support.

Platinum Award (\$150,000 - \$249,999)

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Pacira
Stryker
Zimmer Biomet

Silver Award (\$75,000 - \$99,999)

Cardinal Health

Bronze Award (\$50,000 - \$74,999)

Foundation for Orthopedic Trauma

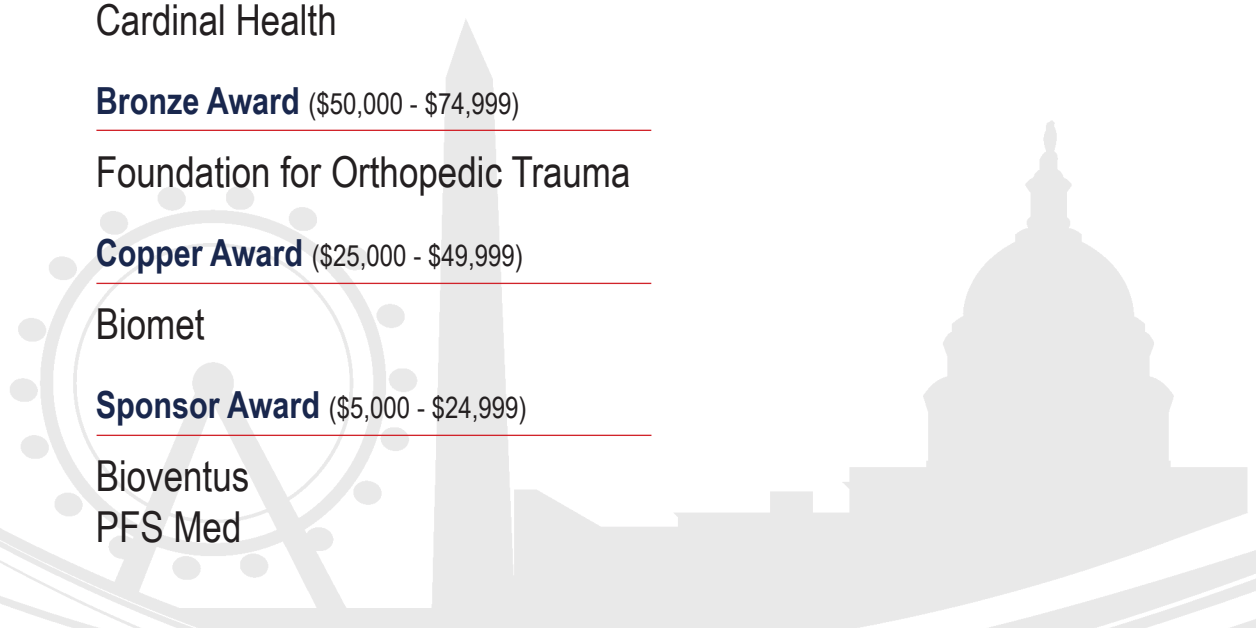
Copper Award (\$25,000 - \$49,999)

Biomet

Sponsor Award (\$5,000 - \$24,999)

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Thank You



Mission Statement

The mission of the Orthopaedic Trauma Association (OTA) is to promote excellence in care for the injured patient, through provision of scientific forums and support of musculoskeletal research and education of Orthopaedic Surgeons and the public.

Vision Statement

The OTA will be the authoritative source for the optimum treatment and prevention of musculoskeletal injury, will effectively communicate this information to the Orthopaedic and medical community and will seek to influence healthcare policy that affect care and prevention of injury.

Value Statement

The OTA is adaptable, forward thinking and fiscally responsible and is composed of a diverse world-wide membership who provide care and improve the knowledge base for the treatment of injured patients. OTA members provide worldwide leadership through education, research and patient advocacy.

CME Credits

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 Orthopaedic Trauma Association. 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 (OTA 2016 Annual Meeting) for a maximum of 20 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

20 AMA PRA Category 1 Credits™ for attending the Annual Meeting. Additional credits if you attend pre-meeting events:

- ◆ Basic Science Focus Forum (11 CME Credits)
- ◆ CPT & ICD-10 Coding Conundrum (6 CME Credits)
- ◆ Grant Writing Workshop (5 CME Credits)
- ◆ International Trauma Care Forum (8.5 CME Credits)
- ◆ Orthopaedic Trauma Boot Camp (12.75 CME Credits)
- ◆ Young Practitioners Forum (4 CME Credits)
- ◆ PA/NP Course (13.75 AAPA Category 1 CME Credits)

Orthopaedic Trauma Association
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Dear Colleagues:

On behalf of the OTA Program Committee and President Steven A. Olson, MD, I am pleased to invite you to the 32nd Annual Meeting of the Orthopaedic Trauma Association (OTA) to be held in National Harbor, Maryland (Washington, DC area). The efforts of our dedicated program planning committee have produced an outstanding meeting that is sure to provide highlights of the latest clinical and research advances in our field.

This year's meeting will highlight four main symposia: the first day will lead off with a discussion of how to optimize amputee care as well as exciting new innovations in amputee care. Our second and third main symposia will investigate the latest developments in "problem fractures" as well as the most recent advances in the management of hip fractures. For a second consecutive year we will feature one large randomized trial as its own symposium and the FAITH trial will have its results presented for the first time at our meeting. Also based on its popular review last year, we are bringing back a single podium session of the committee's "Chairman" papers - elite studies chosen as the best 6 randomized controlled trials submitted this year regardless of topic.

More than 98 podium presentations and 164 posters were selected by the Program Committee from over 800 abstracts submitted. The quality continues to improve at our meeting as over 25% of the podiums this year are randomized trials! Concurrent with the paper sessions, the mini-symposia, case presentations, and skills labs will concentrate on more focused topics, and allow attendees to customize their meeting experience. The scientific program will include the most relevant and scientifically sound research submitted.

We encourage all to arrive early to the Annual Meeting and take full advantage of the pre-meeting courses. See inside for more details:

- ◆ Basic Science Focus Forum chaired by Edward J. Harvey, MD
- ◆ Orthopaedic Trauma Boot Camp chaired by Daniel S. Horwitz, MD and Erik Kubiak, MD
- ◆ PA/NP Course chaired by Michael J. Gardner, MD, Joshua L. Gary, MD, Daniel J. Coll, PA-C, and Dennis C. Gregory, PA-C
- ◆ Grant Writing Workshop – endorsed by the Orthopaedic Research Society and chaired by Todd O. McKinley, MD and Donald D. Anderson, PhD
- ◆ International Orthopaedic Trauma Care Forum chaired by Peter V. Giannoudis, MD
OTA is proud to welcome India as our Guest Nation during a symposium covering knee injuries.
- ◆ The CPT & ICD-10 Coding Course chaired by Paul T. Appleton, MD, and Margi Maley of Karen Zupko & Associates
- ◆ Young Practitioners Forum led by Jodi Siegel, MD and Lisa K. Cannada, MD
- ◆ The OTA Residents Fracture Course chaired by Toni M. McLaurin, MD, and Marcus F. Sciadini, MD, will run concomitant to the Annual Meeting, Wednesday through Friday.

The common feature of each program event is the commitment to providing the highest quality, most interesting and clinically relevant material related to musculoskeletal trauma by world-class faculty and experts. We truly believe that anyone involved in the field will benefit from the 2016 OTA Annual Meeting.

Please consider joining us in National Harbor!

Robert V O'Toole, MD
Program Chair

WELCOME

Dear Colleagues,

It is a true pleasure to welcome you to our nation's capital for the 32nd Annual Meeting of the Orthopaedic Trauma Association. I hope you will consider bringing your family to the meeting and staying through Sunday, as D.C. is truly a great experience for the whole family.

It's important to note that the meeting is being held at the Gaylord Convention Center, which is not in D.C. but is in the National Harbor. The Harbor does have a number of stores and restaurants, but for those seeking a more authentic D.C. area experience, I highly recommend making the short trip to either D.C. proper or Old Town, Alexandria. While D.C. traffic can be impressive, a trip to the National Mall takes only 20 minutes by car or 45 minutes by water taxi. Old Town, Alexandria is only 15 minutes by car or 30 minutes by water taxi. From there, you can continue by water taxi to the National Mall or Georgetown's Waterfront. You can go to <http://www.potomacriverboatco.com/index.php> to learn more about ferries in and out of the National Harbor, including monument tours and a trip to historic Mount Vernon, the home of George Washington. Disappointingly, neither the Alexandria nor Georgetown docks are ADA accessible, however Old Town is only a 15-minute Metrorail ride from the National Mall, and all Metro stations are ADA accessible.




D.C. has enough museums to last a lifetime. The Smithsonian Institute alone has 15 museums currently operating in D.C., plus the National Zoo, all of them with free admission. Ten of those museums are on the National Mall, which is home to or close to numerous major monuments, making the Mall an obvious choice for a day trip. Another good choice for a day trip is a trip to Mount Vernon via water taxi, or renting a car and exploring some of Virginia's Wine Country. Northern Virginia is home to one of the fastest growing wine regions in the country, with a number of notable wineries less than 90 minutes drive

from the National Harbor. A shorter trip would be spending part of the day in Old Town, with its centuries-old historic buildings, numerous restaurants, quaint boutiques and scenic waterfront, before heading back to the National Harbor or continuing into D.C. proper.

Thinking of leaving right after the conference? Why the hurry? In addition to all that D.C. has to offer, those of you spending Sunday in the area will be able to watch the 32nd running of the Army Ten Miler. This is truly one of the most unique races in the country. Come out and watch 20,000 runners, many of them service members and Wounded Warriors, running past many of our nation's most historic monuments.

This meeting is not just about education, it's about the camaraderie of the OTA: reaffirming old friendships and making new ones. I look forward to meeting as many of you as I can in October. Let me know if there's anything I can do to help you enjoy all that this wonderful city has to offer.

Sincerely,



Jean-Claude G. D'Alleyrand, MD
Local Host

Join Us

GENERAL INFORMATION

2016 Program Committee

Robert V. O’Toole, MD, Program Chair
 Michael D. McKee, MD, Program Co-Chair
 Gregory J. Della Rocca, MD
 David J. Hak, MD
 Thomas F. Higgins, MD
 Stephen A. Kottmeier, MD
 Gilbert R. Ortega, MD
 David W. Sanders, MD
 Gerard P. Slobogean, MD

Target Audience

The Orthopaedic Trauma Association (OTA) Annual Meeting is for the benefit of orthopaedic trauma surgeons and related allied health care professionals.

Objectives

After attending the OTA Annual Meeting, participants will be able to:

- ◆ Discuss and become familiar with the most up-to-date clinical and basic science advances related to the practice of orthopaedic trauma
- ◆ Review strategies to optimize management of amputees, as well as identify the most recent innovations in amputee care
- ◆ Generate understanding of the most important emerging controversies in managing the fracture healing process, particularly in “problem” fractures
- ◆ Summarize the most recent advances in the management of femoral neck fractures and understand the current controversies in treating patients with these injuries
- ◆ Apply knowledge of clinical care, controversies, and latest developments in a host of topics related to orthopaedic trauma.

Disclaimer

The material presented at the 32nd Annual Meeting has been made available by the Orthopaedic Trauma Association for educational purposes only. The material is not intended to represent the only, nor necessarily best, method or procedure appropriate for the medical situations discussed, but rather is intended to present an approach, view, statement or opinion of the faculty which may be helpful to others who face similar situations.

The Orthopaedic Trauma Association disclaims any and all liability for injury or other damages resulting to any individual attending the Annual Meeting and for all claims which may arise out of the use of the techniques demonstrated therein by such individuals, whether these claims shall be asserted by physician or any other person.

Disclosure

Presenters are required to disclose whether or not they, or their department, received something of value from a commercial or other party which related directly or indirectly to the subject of their presentation.

This disclosure is indicated in the final program. The OTA does not intend this identification to decrease the value of the presentation or to imply bias. It is intended solely for information.

FDA

All drugs and medical devices used in the United States are administered in accordance with Food and Drug Administration (FDA) regulations. These regulations vary depending on the risks associated with the drug or medical device, the similarity of the drug or medical device to products already on the market, and the quality and scope of clinical data available.

Some drugs or medical devices described or demonstrated in Orthopaedic Trauma Association educational materials or programs have not been cleared by the FDA or have been cleared by the FDA for specific uses only. The FDA has stated that it is the responsibility of the physician to determine the FDA clearance status of each drug or device he or she wishes to use in clinical practice.

GENERAL INFORMATION, continued

Venue

The Gaylord National on the Potomac

The Orthopaedic Trauma Association's 32nd Annual Meeting, all pre-meeting courses and the Comprehensive Fracture Course for Residents will be held at the Gaylord National Resort Hotel and Convention Center on the Potomac in National Harbor, Maryland.

The Gaylord is a spectacular waterfront resort with a stunning 19-story glass atrium and sweeping views of the Potomac River. The award-winning restaurants, 20,000-square foot spa and fitness center and indoor swimming pool are a few favorite guest amenities. The Gaylord is steps away from National Harbor's premier entertainment and shopping district with more than 150 enticing shops and only 8 miles south of the USA Capital. Some of DC's most exciting tours depart from Gaylord National, including trips to Washington's major memorials and monuments and DC@Night, Washington's only downtown night tour. Gaylord National offers its guests convenient access to Washington, DC with an hourly shuttle service and water taxi service to Old Town Alexandria, Mt. Vernon and Georgetown.

Accommodations

The OTA has secured discounted room rates at the Gaylord.

- ◆ Rates: Deluxe Guest Room = \$255.00 + 18% Sales tax
- ◆ The daily rate includes complimentary local calls, high-speed and wireless internet access, daily newspaper and fitness center access.
- ◆ Reservations should be made on-line via the OTA website www.ota.org.
- ◆ OTA 2016 Housing Contact Information with questions after making reservations:
Available Monday-Friday: 8:30am - 9:00pm EST
Toll Free: (877) 632-8165 or OTA@conferencedirect.com
- ◆ **Hotel reservations should be made no later than September 30th.**
- ◆ **Hotel rooms may sell out quickly - don't delay!**

Air Travel

There are 3 major international airports:

- ◆ Ronald Reagan Washington National (DCA) is approximately 8 miles or 15 minutes from the Gaylord; approximately a \$28.00 taxi ride.
- ◆ Washington Dulles International (IAD) located in Dulles, Virginia, approximately 35 miles or 45 minutes West of the Gaylord.
- ◆ Baltimore/Washington International (BWI) is located about 42 miles or 45 minutes North of the Gaylord.

Ground Transportation

Taxi, shuttle and car service are available from all three airports to the hotel.

SuperShuttle

Gaylord's preferred shuttle service to all local airports.

From Reagan National (DCA) to Gaylord National

6:00 am - 8:00 pm - Departs every 20 minutes

Ticket Prices: \$18 one way/ \$33 per person, pre-paid round trip/ \$85 for exclusive van service

From Dulles International Airport (IAD) to Gaylord National

\$45 per passenger/\$125 exclusive van

From Baltimore/Washington Airport (BWI) to Gaylord National

\$45 per passenger/\$125 exclusive

To make your shuttle reservation, call 1-800-660-8000, visit online at www.supershuttle.com or stop by the Transportation Desk located in the Front Lobby.

Express and ExecuCar

Express Eco friendly sedans & ExecuCar private black cars offers non-stop, private transportation to and from all airports, train stations and downtown locations. The service is available 24 hours a day, 7 days a week. Contact transportation desk at 301-965-2081 or email nhtsgaylord@execucar.com to book a car.

Water Taxis

Explore this historic region from the dynamic perspective of its famous river. Potomac Riverboat Company operates a water taxi service connecting Gaylord National to key locations around Washington, D.C., Virginia and Maryland. Cruise to Old Town Alexandria to shop, dine and explore. Visit President George Washington's home at Mount Vernon Estate and Gardens. Or, take a trip to Georgetown and enjoy a breathtaking view of the monuments along the way.

Purchase tickets from the Gaylord National Pier booth or visit the Potomac Riverboat Company website.

D.C. Shuttle Service from Gaylord National

It's easy to visit capital area attractions with daily shuttle services to Union Station and the Welcome Center at 1001 E. Street NW in downtown Washington, D.C. Departs 7 days a week. Tickets can be purchased at Gaylord National's Concierge Desk or by calling 202-969-1437.

MEETING AT A GLANCE

Wednesday, October 5, 2016

ORTHOPAEDIC TRAUMA BOOT CAMP

- 7:00 am - 10:20 am Trauma Boot Camp Presentations
- 10:20 am - 11:00 am Practical Technique Labs with Case Discussions
- 11:00 am - 12:35 pm Trauma Boot Camp Presentations
- 12:35 pm Lunch and Cases
- 1:25 pm - 2:50 pm Trauma Boot Camp Presentations
- 3:00 pm - 3:40 pm Practical Technique Labs with Case Discussions
- 3:40 pm - 4:30 pm Trauma Boot Camp Presentations
- 4:30 pm Adjourn

PA/NP COURSE

- 7:00 am - 10:00 am PA/NP Course Presentations
- 10:15 am - 11:45 am Skills Labs
 - Femoral Nail Skills Lab
 - Lower Extremity/External Fixation Skills Lab
- 11:45 am - 1:15 pm Lunch and PAs/NPs in Orthopaedics: Rules, Reimbursement and Realities
Tricia Marriott, PA-C, MPAS, MJ
- 1:15 pm - 3:45 pm PA/NP Course Presentations
- 4:00 pm - 5:30 pm Skills Labs
 - Suturing Skills Lab
 - Distal Humerus Plating Skills Lab
- 5:30 pm - 6:30 pm Reception

INTERNATIONAL TRAUMA CARE FORUM

- 7:30 am Welcome
- 7:35 am - 8:05 am Symposium 1
- 8:05 am - 8:35 am Paper Session 1: Pelvis & Acetabulum
- 8:35 am - 9:05 am Paper Session 2: Experimental Research
- 9:20 am - 9:50 am Symposium 2
- 9:50 am - 10:20 am Paper Session 3: Trauma Reconstruction
- 10:20 am - 10:40 am Keynote Lecture: *Dr. Sushrut Babhulkar*
- 10:40 am - 11:25 am Symposium 3: Guest Nation (India)
- 11:25 am - 11:55 am Free Paper Session 4: Best of the Best
- 11:55 am - 12:05 pm SIGN Update
- 12:05 pm - 12:15 pm Special Interest Lecture
- 12:15 pm - 1:15 pm Industry Symposia Luncheon
- 1:20 pm - 1:50 pm Paper Session 5: Polytrauma
- 1:50 pm - 2:30 pm Paper Session 6: Femoral Fractures
- 2:35 pm - 3:45 pm Joint Session with Basic Science Focus Forum
- 3:55 pm - 4:25 pm Paper Session 7: Open Fractures
- 4:25 pm - 4:50 pm Symposium 4
- 4:50 pm - 5:30 pm Paper Session 8: General Trauma Topics
- 5:30 pm - 6:30 pm International Poster Reception

Wednesday, October 5, 2016, continued

BASIC SCIENCE FOCUS FORUM

- 7:30 am Introduction
- 7:35 am - 8:45 am Symposium 1
 - Biomechanics-Hot Topics 2016
- 8:55 am - 9:55 am Paper Session 1: Applied Biomechanics
- 9:55 am - 11:05 am Symposium 2
 - Outside the Bone - What is Happening
- 11:15 am - 11:55 am Paper Session 2: The Science of Trauma
- 12:15 pm - 1:15 pm International Industry Lunch
- 1:25 pm - 2:35 pm Symposium 3
 - Selected Topics in Trauma
- 2:35 pm - 3:45 pm Symposium 4
 - Fracture Healing Adjuncts- The World's Perspective
- 3:55 pm - 4:55 pm Paper Session 3: New Approaches for Bone Healing
- 4:55 pm Adjourn for the Day

GRANT WRITING WORKSHOP

- 7:30 am - 8:00 am Keynote – *Ellen MacKenzie, PhD*
“Tricks of the Trade – What I've Learned Over the Years about Securing Grant Funding”
- 8:00 am - 11:00 am Anatomy of a Grant Sessions I – IV
- 11:00 am - 12:00 pm First Grant Funding Tips and Proposal Mistakes
- 12:00 pm - 12:45 pm Working Lunch: Grant Review Process

CPT & ICD-10 CODING CONUNDRUMS

- 9:00 am – 12:00 pm ICD-10-CM
- 1:00 pm – 4:00 pm Current Procedural Terminology

Industry Symposia - Registration Required

Wednesday, October 5, 6:30 pm - 8:00 pm

7:00 pm - 8:00 pm Yoga

Thursday, October 6, 2016

7:00 am - 10:00 am **Bicycling Event: “Tour de Bone”**

YOUNG PRACTITIONERS FORUM

- 6:30 am - 10:15 am Fellowship, Career Strategy, Skills, and Communication Presentations
- 10:16 am - 10:43 am Keynote – *James A. Goulet, MD*
- 10:44 am - 10:50 am Questions and Wrap Up

ORTHOPAEDIC TRAUMA BOOT CAMP

- 7:00 am - 9:00 am Trauma Boot Camp Presentations
- 9:00 am - 9:40 am Case Presentations - Tibial Malreduction, Nonunion, and Early Failures
- 10:00 am - 11:00 am Trauma Boot Camp Presentations
- 11:00 am Adjourn

PA/NP COURSE

- 7:00 am - 8:15 am PA/NP Course Presentations
- 8:30 am - 11:00 am Case Discussions
- 11:00 am ADJOURN to Industry Symposia

MEETING AT A GLANCE, continued

Thursday, October 6, 2016, continued

BASIC SCIENCE FOCUS FORUM

- 7:30 am Introduction
- 7:35 am - 8:25 am **Symposium 5**
Patient Related Outcomes-Helpful or Not so Much?
- 8:25 am - 8:58 am **Paper Session 4: How We Measure Outcomes**
- 9:05 am - 10:00 am **Symposium 6**
The Basics: Principal Based Management
- 10:00 am - 11:00 am **Paper Session 5: New Approaches to Healing**
- 11:00 am ADJOURN to Industry Sessions

Industry Symposia

Thursday, October 6, 11:15 am - 12:45 pm

Registration Required - Boxed lunch available

Acumed	Skeletal Dynamics
DePuy Synthes	Ziehm Imaging
Nuvasive	Zimmer Biomet

ANNUAL MEETING

- 1:00 pm **Welcome and Donor Awards**
- 1:20 pm - 2:50 pm **Symposium I**
A Primer on Prosthetics, Advanced Orthotics and Amputee Care for the Orthopaedic Trauma
- 3:20 pm - 4:30 pm **Paper Session 1**
Program Committee Highlight Papers
- 4:11 pm - 4:26 pm **Symposium II**
World Premier of the FAITH Hip Fracture Trial
- 4:30 pm - 5:00 pm **President's Message**
Steven A. Olson, MD
OTA President 
- 5:00 pm - 6:00 pm **Business Meeting**
- 6:00 pm - 8:00 pm **Welcome Reception & Auction**
Gaylord National Harbor Orchard Terrace


Friday, October 7, 2016

6:00 am - 7:00 am **Yoga**

ANNUAL MEETING

- 6:30 am - 7:30 am **Mini Symposia & Case Presentations**
- 7:45 am - 9:25 am **Paper Session 2**
Tibial Shaft, Distal Femur, Knee
- 8:00 am - 9:00 am **Skills Labs**
Fixation of Proximal Humeral Fractures
SIGN
- 8:00 am - 9:30 am **Mini Symposia**
- 9:55 am - 11:15 am **Symposium III**
The Problems and Solutions in 2016!
- 11:15 am - 11:45 am  **Guest Nation Presentation**
Evolution of Trauma Care in India
Professor Sudhir K. Kapoor

Friday, October 7, 2016, continued

- 11:45 am - 12:15 pm **John Border, MD**
Memorial Lecturer
Keith A. Mayo, MD 
- 12:15 pm - 1:15 pm Lunch
New Member Luncheon
Women in Orthopaedic Trauma Luncheon
- 12:30 pm - 1:15 pm **Lunchtime Guided Poster Tours**
(PT1) Hip/Femur (PT2) International
- 1:15 pm - 2:35 pm **Paper Session 3**
Acetabulum, Pelvis, and Spine
- 1:15 pm - 2:15 pm **Skills Labs**
Distal Femur Plating
Clavicle and AC Joint Fixation
- 1:15 pm - 2:45 pm **Mini Symposia**
- 2:35 pm - 3:38 pm **Paper Session 4:**
Upper Extremity I: Humeral Shaft, Elbow, Wrist
- 4:10 pm - 5:30 pm **Mini Symposia**
- 4:16 pm - 5:36 pm **Paper Session 5:**
Non-union and General Interest I
- 5:36 pm ADJOURN to Guided Poster Tours
- 5:36 pm - 6:30 pm **Military Reception**
- 5:40 pm - 6:15 pm **Suds n' Science Guided Poster Tours**
(PT3) Foot/Ankle (PT4) General Interest

Industry Symposia - Registration Required

Friday, October 7, 6:30 pm - 8:00 pm

Zimmer Biomet

Saturday, October 8, 2016

6:00 am - 7:00 am **Tai Chi**

ANNUAL MEETING

- 6:30 am - 7:30 am **Mini Symposia & Case Presentations**
- 7:45 am - 9:00 am **Symposium IV**
Femoral Neck Fractures
- 9:00 am - 10:15 am **Paper Session 6**
Hip Fractures: Young and Old
- 9:10 am - 10:10 am **Skills Lab**
Intramedullary Nailing of Proximal Tibia Fractures
- 9:10 am - 10:25 am **Mini Symposia**
- 10:45 am - 12:15 pm **Mini Symposia**
- 10:45 am - 12:28 pm **Paper Session 7**
Pain Management, Pediatrics and Infection
- 12:30 pm Lunch - Exhibit Hall closes at 1:30pm
- 12:30 pm - 1:15 pm **Lunchtime Guided Poster Tours**
(PT5) Knee/Tibia
(PT6) Upper Extremity
- 1:30 pm - 2:39 pm **Paper Session 8**
Upper Extremity II: Scapula, Clavicle, Prox. Humerus
- 1:30 pm - 2:40 pm **Mini Symposia**
- 3:00 pm - 5:10 pm **Paper Session 9**
Foot & Ankle, Amputation, Open Fractures and General Interest II
- 5:10 pm ADJOURN

GRANT WRITING WORKSHOP



Endorsed by Orthopaedic Research Society

Wednesday, October 5, 2016

**Todd O. McKinley, MD &
Donald D. Anderson, PhD**
Program Chairs

Attendees of this activity can earn up to
5 AMA PRA Category 1 Credits™

Target Audience

This workshop is designed for anyone who is interested in writing competitive peer-reviewed grants. It is particularly suited for younger faculty, trauma fellows, and senior level residents who are going to pursue a career in orthopaedic trauma. The workshop will focus on securing entry-level grants (e.g., OTA-sponsored grants) and aiming toward later securing secondary higher-level funding (NIH or DoD).

Learning Objectives

Upon successful completion of the Grant Writing Workshop, you will be able to:

- ◆ Identify the key components of writing a successful research grant
- ◆ Explain the grant review process procedures and establish protocols for transfer

Faculty

Donald D. Anderson, PhD Todd O. McKinley, MD
Lynne Jones, MS, PhD Saam Morshed, MD, PhD, MPH
Dominik Haudenschild, PhD Emil H. Schemitsch, MD
Ellen MacKenzie, PhD

Agenda

- 6:45 am **Registration and Continental Breakfast**
- 7:20 am **Introduction**
Brett D. Crist, MD
Chair, OTA Research Committee
- 7:30 am – 8:00 am **Keynote**
Ellen MacKenzie, PhD
Principal Investigator, Major Extremity Trauma Research Consortium:
“Tricks of the Trade – What I’ve Learned Over the Years about Securing Grant Funding”
- 8:00 am – 8:40 am **Anatomy of a Grant I: Writing a Compelling Aims Page**
- 8:40 am – 9:20 am **Anatomy of a Grant II: Crafting Background and Preliminary Data**
- 9:20 am – 10:00 am **Anatomy of a Grant III: Detailing Methods / Formulating Contingencies**
- 10:00 am – 10:30 am Refreshment Break
- 10:30 am – 11:00 am **Anatomy of a Grant IV: Strong Collaborations and Budgeting**
- 11:00 am – 11:30 am **The Five Most Important Tips for Getting your First Grant Funded**
- 11:30 am – 12:00 pm **The Five Biggest Mistakes in Preparing your First Grant Proposal**
- 12:00 pm – 12:45 pm **Working Lunch: Grant Review Process**
- 12:45 pm – 1:00 pm **Summary**
- 1:00 pm **Adjourn**

CPT & ICD-10 CODING CONUNDRUMS

Wednesday, October 5, 2016

Margaret Maley, BSN, MS, Senior Consultant,
 KarenZupko & Associates, Inc.

Paul Appleton, MD, Course Chair

Attendees of this activity can earn up to
6 AMA PRA Category 1 Credits™

Overview

Margaret Maley from KarenZupko & Associates, Inc. returns to OTA just as Medicare and other payers are “turning up the heat” on diagnosis coding requiring more specific documentation and reporting of ICD-10-CM codes! Maley brings KZA’s popular CPT and ICD-10 Coding Conundrums course. This information intense format has been edited to cover the most confounding areas of CPT and ICD-10-CM coding facing orthopaedic trauma surgeons and their staff. Using concrete examples and practical tools, this blended CPT/ICD-10 course offers a terrific value investment in terms of time and money. The course includes KZA’s popular workbook full of CPT and ICD-10 coding advice specific to trauma surgeons, “flashcards” essential for having specific diagnosis documentation that can be down loaded to your phone or hand held device.

About the Speaker

Margaret Maley brings 35 years of orthopaedic experience to her clients working with KarenZupko & Associates as a consultant and speaker for 20 years. With a B.S.N. from The University of Illinois and Master’s degree from Rush University, Ms. Maley began her career in Chicago as a clinical nurse specialist managing several FDA studies. Moving to Houston in 1986, she transitioned to the business side of orthopaedics. “Front-line” experience managing orthopaedic practices gives her unique insight into the challenges facing orthopaedic surgeons and their staff on a daily basis. She is acutely aware of the importance of correct coding and accurate documentation for proper reimbursement and to minimize the risk of audit. She is recognized by her peers as a skilled communicator and for being able to sort out difficult orthopaedic coding and reimbursement issues. Ms. Maley’s fast paced humorous presentations make her a favorite of surgeons, non-physician providers, administrators and staff.



Areas of Coding and Reimbursement Expertise

- ◆ Adult Reconstruction
- ◆ Sports
- ◆ Trauma
- ◆ Arthroscopy
- ◆ Pediatric Orthopaedics
- ◆ Tumor
- ◆ Medical Necessity
- ◆ Evaluation & Management

Margaret is an instructor for the national coding and reimbursement workshops sponsored by the American Academy of Orthopaedic Surgeons with extensive experience working with private practices, employed physicians, academic orthopaedic departments, state orthopaedic societies, and as a featured speaker for: AAOS Annual Meeting, Orthopaedic Trauma Association, Musculoskeletal Tumor Society, The American Association of Hip and Knee Surgeons, Pediatric Orthopaedic Society of North America, The Western Orthopaedic Association, Gait and Clinical Movement Analysis Society.

Learning Objectives

Upon successful completion of this course, participants will be able to:

- ◆ Define what is included in global fracture care
- ◆ Describe the difference between coding rules in CPT, the AAOS GSDG, and Medicare CCI edits (used by many private payers)
- ◆ Explain the importance of appealing claims incorrectly denied
- ◆ Demonstrate the proper use of the modifier 25
- ◆ Use the “slim guide” to identify the category (first 3 characters) of ANY ICD-10 code to describe a traumatic injury
- ◆ Comprehend the correct use of the 7th character for active treatment of a fracture
- ◆ Describe the importance of reporting co-morbid conditions with the most specific diagnosis code

CPT & ICD-10 CODING CONUNDRUMS, continued

Course Agenda

8:00 am Registration

9:00 am - 12:00 pm

ICD-10-CM

What is Medical Necessity?

- How do Payers Use it to Deny Claims?
- How Do You Document It?

Injury Coding made less Painful

Fantastic Fracture Documentation

- Specifics Required to Report Your Services
- Understanding the 7th Character
- Defining Delayed Union, Non-union and Malunion

Assigning a Diagnosis Code to Co-morbid Conditions

- When and What Ones?

External Cause Codes: When Do They Help your Cause?

Patient Noncompliance: Documenting and Reporting It

What is the Difference between Aftercare and Follow-up?

1:00 pm - 4:00 pm

Current Procedural Terminology

Brief Overview of Relative Value Units (RVU's)

- How they Create a Fee Schedule
- How they Work for Employed Physicians

CPT, AAOS GSDG, and Medicare CCI Edits

- What is the Difference and What Should We Use?

Fracture Care

- Itemized vs Global Reporting
- Are you being Paid for Casting Supplies and Replacement Casts?
- Can you Report the E&M Separately?
- Medicare Rule for Fractures Treated with a Single Cast

Modifier 58: Staged Procedures Used to Report Complicated Fracture Treatment

Modifier 59: How Do You Know When to Use It?

- Is There a Difference between Medicare and Private Payers?
- What about those X Modifiers?

Appeal Strategies: How and When Should We Appeal a Denied Claim?

Modifier 25 Significant Separate Service

- Can you Report an E&M with a Joint Injection?



ORTHOPAEDIC TRAUMA FOR PAs and NPs

October 5 – 6, 2016

Michael J. Gardner, MD, Joshua L. Gary, MD,
Daniel J. Coll, MHS, PA-C
& Dennis C. Gregory, PA-C, Program Chairs

Target Audience

This course is intended for PAs and NPs who are earlier in their careers or experience of treating orthopaedic trauma while practicing in general orthopaedics, taking acute orthopaedic call with inpatient/outpatient or caring for orthopaedic injuries in ER/UC/General Trauma services.

Presenters will discuss the foundations of acute care and evaluation of various skeletal injuries, operative positioning and fixation, and postoperative care and course of healing.

ALL levels of experience PA's and NP's are welcome and in order to allow attendees to find the most appropriate curriculum for their experience. With PA and NP course registration attendees can attend general session courses, morning case and clinical presentations, and workshops.

PA's and NP's focused in orthopaedic trauma will find this a good foundation but we also highly recommend attending our other OTA course options of Resident Comprehensive Fracture and Advanced Trauma Courses, Boot Camp, and the Annual Meeting General Session.



This program has been reviewed and is approved for a maximum of **13.75 hours** of **AAPA Category 1 CME credit** by the Physician Assistant Review Panel. Physician assistants should claim only those hours actually spent participating in the CME activity.

This program was planned in accordance with AAPA's CME Standards for Live Programs and for Commercial Support of Live Programs.

Learning Objectives

Attendees of the Orthopaedic Trauma for PAs and NPs course will:

- ◆ Discuss compartment syndrome monitoring and treatment options.
- ◆ Discuss recognition of open fracture patterns and initial stabilization.
- ◆ Discuss incidence of osteoporosis, at risk patient populations, their evaluation and treatment.
- ◆ Review concepts of primary and secondary bone healing.
- ◆ Recognize fracture patterns to optimize provisional and definitive fixation.
- ◆ Identify pediatric elbow fracture types with indications for operative vs. non-operative treatment.
- ◆ Understand best practices in perioperative infection risk management.
- ◆ Review fixation techniques and indications for fracture stabilization.
- ◆ Discuss current advances in treatment of clavicle and proximal humerus fractures.
- ◆ Review the known intraoperative and post-operative complications of various techniques for amputations.
- ◆ Identify and review various surgical approaches, multiple implant/fixation options, and controversies in managing hindfoot injuries.
- ◆ Identify and review various surgical approaches, multiple implant/fixation options, and controversies in managing ankle injuries.

Agenda

Wednesday, October 5, 2016

7:00 am - 7:05 am **Introduction**
Michael J. Gardner, MD

7:05 am - 9:00 am **Session #1**
General Topics 1

7:05 am - 7:20 am **Compartment Syndrome**
Michael J. Beltran, MD

7:20 am - 7:35 am **Open Fractures**
Chinedu C. Nwosa, MD

7:35 am - 7:50 am **Osteoporosis**
Debra Sietsema, PhD, RN

7:50 am - 8:00 am Discussion
Faculty

8:00 am - 8:25 am **Fracture Healing**
Saam Morshed, MD, PhD

8:25 am - 8:50 am **Fixation Theories**
Bryan W. Ming, MD

8:50 am - 9:00 am Discussion
Faculty

9:00 am - 10:00 am **Session #2**
General Topics 2

9:00 am - 9:20 am **Common Pediatric Fractures (SCH, BBFA, Femur)**
John P. Ketz, MD

9:20 am - 9:40 am **Musculoskeletal Infection**
TBD

9:40 am - 10:00 am **Shaft Fractures (Humerus, Femur, Tibia)**
David Leu, MD

10:00 am - 10:15 am Refreshment Break

10:15 am - 11:45 am **Skills Labs 1 and 2**
2 labs with 40 min. rotation sessions.
10 minute break in between.

Femoral Nail Skills Lab
Lab Leader: *David Leu, MD*

Lower Extremity/External Fixation Skills Lab
Lab Leader: *Michael J. Gardner, MD*

11:45 am - 1:15 pm **Lunch**
and PAs/NPs in Orthopaedics: Rules, Reimbursement and Realities
Tricia Marriott, PA-C, MPAS, MJ

ORTHOPAEDIC TRAUMA FOR PAs and NPs, continued

Wednesday, October 5, 2016, cont'd

1:15 pm - 2:30 pm **Session #3**
Upper Extremity

1:15 pm - 1:35 pm **Shoulder Girdle Fractures**
(Clavicle, Proximal Humerus)
Jeffrey O. Anglen, MD

1:35 pm - 1:55 pm **Elbow Fractures**
(Distal Humerus, Radial Head, Terrible Triad)
Lisa K. Cannada, MD

1:55 pm - 2:15 pm **Both Bone Forearm Fractures and Distal Radius**
David A. Fuller, MD

2:15 pm - 2:30 pm Discussion
Faculty

2:30 pm - 3:45 pm **Session #4**
Pelvis, Hip, and Knee

2:30 pm - 2:50 pm **Pelvic Ring Disruption/Acetabular Fractures**
Cory A. Collinge, MD

2:50 pm - 3:10 pm **Proximal Femur Fractures**
(Femoral Neck and IT Femur)
Laura S. Pheiffer, MD

3:10 pm - 3:30 pm **Articular Injuries about the Knee**
(Distal Femur and Tibial Plateau)
Joshua L. Gary, MD

3:30 pm - 3:45 pm Discussion
Faculty

3:45 pm - 4:00 pm Refreshment Break

4:00 pm - 5:30 pm **Skills Labs 3 and 4**
 2 labs with 40 min. rotation sessions.
 10 minute break in between.

Suturing Skills Lab
 Lab Leader: *Drew Sanders, MD*

Distal Humerus Plating Skills Lab
 Lab Leader: *Lisa K. Cannada, MD*

5:30 pm - 6:30 pm **Reception**

Thursday, October 6, 2016

7:00 am - 8:15 am **Session #5**
Foot and Ankle

7:00 am - 7:20 am **Ankle Fractures**
(Pilon and Rotational Ankle Injuries)
Lori K. Reed, MD

7:20 am - 7:40 am **Hindfoot Fracture**
(Calcaneus and Talus Fractures)
Derek G. Dombroski, MD

7:40 am - 8:00 am **Amputations**
Christiaan N. Mamczak, DO

8:00 am - 8:15 am Discussion
Faculty

8:15 am - 8:30 am Refreshment Break

8:30 am - 11:00 am **Case Discussions**
 Submit your difficult cases to ota@ota.org
 for this interactive discussion.

Daniel J. Coll, PA-C
Joshua L. Gary, MD
Dennis C. Gregory, PA-C

11:00 am **Adjourn to Industry Sessions**

BASIC SCIENCE FOCUS FORUM

2016 Basic Science Committee

Edward J. Harvey, MD, Chair
Mohit Bhandari, MD; Joseph Borrelli Jr, MD;
Aaron Nauth, MD; Todd O. McKinley, MD;
Emil H. Schemitsch, MD; Brett D. Crist, MD

Attendees of this activity can earn up to
11 AMA PRA Category 1 Credits™

Target Audience

Academic orthopaedic surgeons, community surgeons with an interest in clinically relevant basic science, basic and clinical researchers, residents and fellows will benefit most from this Basic Science Focus Forum.

Learning Objectives

Upon successful completion of the Basic Science Focus Forum, you will be able to:

- ◆ Summarize the complex physiological issues associated with polytrauma patients
- ◆ Outline the biomechanical principles in directed fixation for controversial fractures and subluxations
- ◆ Identify other musculoskeletal conditions we need to treat in musculoskeletal health
- ◆ Describe the changing treatment and diagnostic parameters for critical size bone defects
- ◆ Explain the clinical outcome quality associated with patient related scores
- ◆ Discuss current concepts in nonunion management

Wednesday, October 5, 2016

7:30 am **Introduction**
Edward J. Harvey, MD

7:35 am - **Symposium 1**
8:45 am **Biomechanics-Hot Topics 2016**
Moderators: **Edward J. Harvey, MD**
Brett D. Crist, MD

7:35 am **No-Motion, Micro-Motion and Macro-Motion: What is Going on at the Fracture?**
Mitchell Bernstein, MD

7:50 am **Why I Still Use Plates for Intertrochanteric Femur Fractures**
Mark A. Lee, MD

8:05 am **When Should We Weight Bear Lower Extremity Periarticular Fractures- Science behind the Anecdote**
John D. Adams, MD

8:20 am **High Energy Young Femoral Neck Fractures-The Unsolved Fracture**
Christopher Finkemeier, MD

8:35 am Discussion

8:45 am Refreshment Break

8:55 am - **Paper Session 1**
9:55 am **Applied Biomechanics**
Moderators: **Brett D. Crist, MD**
Mark A. Lee, MD

8:55 am **Overview**
Brett D. Crist, MD

9:00 am **Paper 1**
Dynamization of Simple Fractures with Active Locking Plates Delivers Faster and Stronger Healing Relative to Conventional Compression Plating
Michael Bottlang, PhD;
Stanley Tsai, MS; Emily Bliven, MS; Brigitte von Rechenberg, MD; Julia Henschel, BS; Peter Augat, PhD; Daniel Fitzpatrick, MD; Steven Madey, MD

9:06 am **Paper 2**
Vascular Anatomy of the Medial Femoral Neck and Implications for Surface Plate Fixation- Preliminary Results
Sara Putnam, MD; Cory Collinge, MD; Michael Gardner, MD; William Ricci, MD; Christopher McAndrew, MD, MSc

9:12 am **Paper 3**
A Biomechanical Comparison of Intrapelvic and Extrapelvic Fixation for Associated Acetabular Fractures of the Quadrilateral Plate
Sharon Babcock, MD; *Gregory Gillispie, BS; Philip Brown, PhD; Kyle McNamara, BS; Arun Aneja, MD; Joel Stitzel, PhD; Eben Carroll, MD*

9:18 am Discussion

9:28 am **Paper 4**
A New and More Sensitive View for the Detection of Syndesmotic Instability
Nayla G. Papadopoulos, MD;
Georges-Yves Laflamme, MD; Jérémie Ménard, Ing; Stéphane Leduc, MD; Dominique Rouleau, MD; Jonah Hebert-Davies, MD; Marie-Lyne Nault, MD

9:34 am **Paper 5**
Reducing the Syndesmosis Under Direct Vision: Where Should I Look?
Paul Tornetta III, MD; Mark Yakovonis, MD; David Veltre, MD; Anjan Shah, MD

BASIC SCIENCE FOCUS FORUM, continued

Wednesday, October 5, 2016, cont'd

9:40 am **Paper 6**
**Location Location Location:
 Does the Distance of Fixation
 from the Plafond Affect
 Reduction of the Syndesmosis?**
*Michael Beebe, MD; Kyle Stoops, MD;
 Sean Lannon, MD; Charles Clark, MD;
 David Watson, MD; Paul Toretta, MD;
 Roy Sanders, MD; Hassan Mir, MD;
 Anjan Shah, MD*

9:46 am Discussion

9:55 am - **Symposium 2**
 11:05 am **Outside the Bone-
 What is Happening**
 Moderators: *Emil H. Schemitsch, MD
 Stephen L. Kates, MD*

9:55 am **Osteoporosis Management:
 What the Trauma Surgeon
 Needs to Know!**
Stephen L. Kates, MD

10:10 am **The Trauma Patient with a
 Fracture: Role of
 Vitamin C and D**
Brad A. Petrisor, MD

10:25 am **Atypical Fractures:
 Best Practices in 2016**
Sanjit R. Konda, MD

10:40 am **Nonunions: How Important is
 Nutrition and Medical
 Management?**
Michael D. McKee, MD

10:55 am Discussion

11:05 am Refreshment Break

11:15 am - **Paper Session 2**
 11:55 am **The Science of Trauma**
 Moderators: *Edward J. Harvey, MD
 CAPT. Eric A. Elster, MD, FACS, MC, USN*

11:15 am **Overview**
Edward J. Harvey, MD

11:20 am **Paper 7**
**The Severity of Compartment Syndrome-
 Associated Microvascular Dysfunction May
 Be Diminished by the Neutralization of
 Pro-Inflammatory Cytokines**
*Erin Donohoe, MB; David Sanders, MD;
 Aurelia Bihari, MS; Abdel-Rahman Lawendy, MD*

11:26 am **Paper 8**
**The Dose-response Effect of Ketotifen
 Fumarate on Substance P-containing Nerves
 Mast Cells and Myofibroblasts in
 Post-traumatic Joint Contractures**
*Prism Schneider, MD; Herman Johal, MD;
 Mei Zhang, PhD; David Hart, PhD;
 A. Befus, PhD; Paul Salo, MD; Cun-Yi Fan, PhD;
 Xiangdang Liang, PhD; Kevin Hildebrand, MD*

11:32 am **Paper 9**
**Reamed Intramedullary Nailing Affects
 Trauma-induced Coagulopathy Based on
 Thrombelastography**
*Prism Schneider, MD; Elizabeth Davis, BS;
 Matthew Galpin, RC; Robert Hudson, BS;
 Patrick Mitcham, BS; Mark Prasarn, MD;
 Joshua Gary, MD*

11:38 am **Paper 10**
**Compartment Release in Austere Locations
 (CORAL): A Pilot Study of Tele-surgery for
 Compartment Syndrome**
*Max Talbot, MD; Rudolph Reindl, MD;
 Gregory Berry, MD; Homer Tien, MD;
 Gerard Slobogean, MD; Edward Harvey, MD;
 CORAL Collaborators*

11:44 am Discussion

12:15 pm - 1:15 pm **International Industry Lunch**

1:25 pm - **Symposium 3**
 2:35 pm **Selected Topics in Trauma**
 Moderators: *Todd O. McKinley, MD
 CAPT. Eric A. Elster, MD, FACS, MS, USN*

1:25 pm **War Extremity Wounds**
Jonathan A. Forsberg, MD

1:40 pm **Clinical Science Learned from
 War Wounds**
Benjamin Kyle Potter, MD

1:55 pm **Advancements in Soft Tissue
 Techniques**
Ian L. Valerio, MD

2:10 pm **Osteoingrated Prostheses**
Kevin Tetsworth, MD

2:25 pm Discussion

BASIC SCIENCE FOCUS FORUM, continued

2:35 pm - **Symposium 4**
3:45 pm **Fracture Healing Adjuncts-
The World's Perspective**

Moderators: **Joseph Borrelli Jr, MD**
Peter V. Giannoudis, MD

2:35 pm **Introduction**

Joseph Borrelli Jr, MD

2:40 pm **Is there a Role for Allograft?**

Gerhard Schmidmaier, MD

2:50 pm **Induced Membrane Technique:
What Have We Learned?**

Peter V. Giannoudis, MD

3:00 pm **Titanium Cages:**

How We Can Enhance Their Success
Ronald W. Lindsey, MD

3:10 pm **Intramedullary Lengthening Devices:
Do They Always Work?**

Christian Krettek, MD

3:20 pm **Bone Transport and Treatment of the
Docking Site: My Preferred Method**

David W. Lowenberg, MD

3:30 pm Discussion

3:45 pm Refreshment Break

3:55 pm - 4:55 pm **Paper Session 3**
**New Approaches for
Bone Healing**

Moderators: **Joseph Borrelli Jr, MD**
Peter V. Giannoudis, MD

3:55 pm **Overview**

Peter V. Giannoudis, MD

4:00 pm **Paper 11**

**Acceleration of Fracture Healing Modulated
by Compounds that Stimulate Inducible
Nitric Oxide Synthase**

Rebecca Rajfer Trueblood, MD; Ayhan Kilic, MD;
Su Hlaing, BS; Leah Schulte, MD;
Andrew Neviasser, MD; Edward Ebramzadeh, PhD;
Monica Ferrini, PhD; Sang Hyun Park, PhD

4:06 pm **Paper 12**

**Doxycycline-Loaded Coaxial Nanofiber
Coating Enhances Osseointegration and
Inhibits Infection**

David Markel, MD; Wei Song, PhD; Shi Tong, MS;
Nancy Jackson, PhD; Chris Bergum, MS;
Jeffrey Flynn, PhD; Weiping Ren, MD

4:12 pm **Paper 13**

**Three Dimensional Printed Scaffolds for
Segmental Defects in Long Bones**

Sandeep Pandit, MD; Todd Goldstein, PhD;
James Mullen, MD; Mikael Starecki, MD;
Lewis Lane, MD; Daniel Grande, PhD;
Katy Nellans, MD

4:18 pm Discussion

4:28 pm **Paper 14**

**Investigating an Endothelial
Progenitor Cell Dose Response
for the Healing of Critical Size
Bone Defects**

David Ramnarain, MSc;
Charles Godbout, PhD;
Emil Schemitsch, MD;
Aaron Nauth, MD

4:34 pm **Paper 15**

**The Impact of Surgical Fixation
on Fracture Healing:
Radiographic Analysis of a Novel
Fracture Model in Rats**

Alejandro Marquez-Lara, MD;
Ian Hutchinson, MD;
Thomas Smith, PhD; Anna Miller, MD

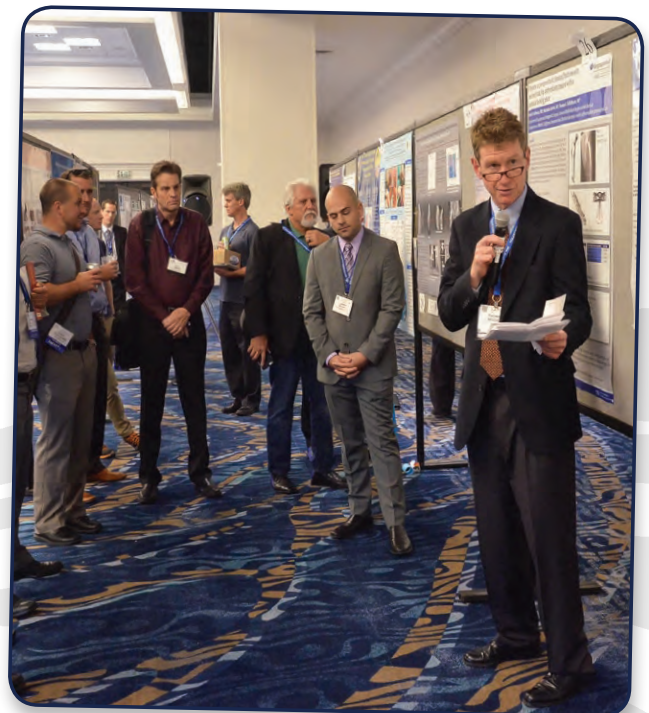
4:40 pm **Paper 16**

**Assessment of RIA Filtrate
Osteoinductive Potential in an
Ectopic in vivo Model**

Alexander Wessel, MD;
James Stannard, MD;
James Cook, DVM; Brett D Crist, MD;
Gregory Della Rocca, MD

4:46 pm Discussion

4:55 pm Adjourn for the Day



BASIC SCIENCE FOCUS FORUM, continued

Thursday, October 6, 2016

7:30 am Introduction
 Edward J. Harvey, MD

7:35 am - **Symposium 5**
 8:25 am **Patient Related Outcomes- Helpful or Not so Much?**

Moderators: *William T. Obremskey, MD*
Douglas W. Lundy, MD

7:35 am **Are the Currently Available PROs Adequate for Research in Orthopaedic Trauma?**
Thomas F. Higgins, MD

7:45 am **Which PROs are the most Appropriate for Outcomes in Trauma and How Do We Account for the Lack of Pre-Injury Measures?**
William T. Obremskey, MD

7:55 am **Mobility as Validated PRO for an Assessment of General Health**
Janet A. Prvu Bettger, ScD, FAHA

8:05 am **How PROs will be used by Others: Granting Agencies, Insurers, FDA, CMS, NQF**
Mark S. Vrahas, MD

8:15 am Discussion

8:25 am - **Paper Session 4**
 8:58 am **How We Measure Outcomes**
 Moderator: *Douglas W. Lundy, MD*

8:25 am **Overview**
Douglas W. Lundy, MD

8:30 am **Paper 17**
Does the Modified RUST Score Correlate with the Biomechanical Properties of Bone? Evaluation in a Murine Model
Paul Tornetta III, MD; Margaret Cooke, MD; Amira Hussein, PhD; Jody Litrenta, MD; William Ricci, MD; Jason Nascone, MD; Robert O'Toole, MD; Louis Gerstenfeld, PhD

8:36 am **Paper 18**
Does a Patient's Self-Reported Ability to Weightbear Immediately After Injury Predict Stability for Ankle Fractures?
Bonnie Chien, MD; Kurt Hofmann, MD; Mohammad Ghorbanhoseini, MD; David Zurakowski, PhD; Edward Rodriguez, MD; Paul Appleton, MD; John Ellington, MD; John Kwon, MD

8:42 am **Paper 19**
Health-Related Quality of Life Following Operative Management of Open Fractures
Brad Petrisor, MD; Kyle Jeray, MD; Sheila Sprague, PhD; Paula McKay, BSc; Gordon Guyatt, MD; Stephen D. Walter, BSc; Emil Schemitsch, MD; Susan Liew, MD; Diane Heels-Ansdell, MSc; Sun Makosso-Kallyth, PhD; Mohit Bhandari, MD; FLOW Investigators

8:48 am Discussion

8:58 am Refreshment Break

9:05 am - **Symposium 6**
 10:00 am **The Basics: A Principle Based Approach to Nonunion Management**

Moderators: *Aaron Nauth, MD*
Philipp Leucht, MD

9:05 am **Managing Infection in the Setting of Non-Union**
Paul Tornetta III, MD

9:14 am **Bone Grafting: What is the Ideal type?**
Philipp Leucht, MD

9:23 am **Biological Therapies for Non-Union**
Michael J. Gardner, MD

9:32 am **Cell-based Therapies for Non-Union Management**
Mark A. Lee, MD

9:41 am **Metabolic Workup of Non-Union**
Mark R. Brinker, MD

9:50 am Discussion

10:00 am - **Paper Session 5**
 11:00 am **New Approaches to Healing**
 Moderators: *Aaron Nauth, MD*
Philipp Leucht, MD

10:00 am **Overview**
Aaron Nauth, MD

10:05 am **Paper 20**
Selective Serotonin Reuptake Inhibitors Impair Fracture Healing
Vivian Bradaschia Correa, DDS; Devan Mehta, BS; Anna Josephson, BS; Jason Huo, BS; Matthew Mizrahi, BS; Kenneth Egol, MD; Philipp Leucht, MD

10:11 am **Paper 21**
Pharmacokinetics of Depot Administered Vancomycin Powder in a Rat Femur Fracture Model: Retention Time is Brief
Zachary Working, MD; Hunter Frederiksen, BS; Alex Drew, BS; Catherine Loc Carrillo, PhD; Erik Kubiak, MD

BASIC SCIENCE FOCUS FORUM, continued

Thursday, October 6, 2016, cont'd

10:17 am **Paper 22**
The Effect of Timing of Aminobisphosphonate Therapy on Fracture Healing: A Rabbit Osteoporosis Model
Jesse Otero, MD; Rory Metcalf, BS; Nicole Watson, PhD; Emily Peterson, DVM; Douglas Fredericks, MD; Michael Wiley, MD

10:23 am Discussion

10:33 am **Paper 23**
Propionibacterium Acnes Colonization Impairs Fracture Healing in a Rat Model of an Open Femur Fracture Treated with Intramedullary Fixation
Robert Duerr, MD; Mark Longwell, BS; Michael Florack, MD; Laura Nistico, PhD; Daniel Altman, MD; Gregory Altman, MD; Rachael Kreft

10:39 am **Paper 24**
Impedance Measurements Correlate to Callus Maturation of Mice Tibia Fractures
Monica Lin, BS; Frank Yang, BS; Safa Herfat, PhD; Chelsea Bahney, PhD; Michel Maharbiz, PhD; Meir Marmor, MD

10:45 am Discussion

11:00 am **Adjourn to Industry Symposia**

Are you interested in joining OTA colleagues to participate in a research study group and/or multi-center clinical research project?



If the answer is yes, join us for an OTA Research Town Meeting!

Wednesday, October 5, 2016
6:00 pm – 7:00 pm
(Room TBD)



INTERNATIONAL ORTHOPAEDIC TRAUMA CARE FORUM

2016 International Committee

Peter V. Giannoudis, MD, Chair
Ney Amaral, MD; Fernando de la Huerta, MD;
Theodore Toan Le, MD; Amir M. Matiyahu, MD;
Cyril Mauffrey, MD; Hans-Christoph Pape, MD;
Presidential Consult - Thomas A. (Toney) Russell, MD

Attendees of this activity can earn up to
8.5 AMA PRA Category 1 Credits™

Target Audience

The The Orthopaedic Trauma Association (OTA) International Orthopaedic Trauma Care Forum is for the benefit of orthopaedic trauma surgeons and related allied health care professionals with an interest in international trauma healthcare.

Learning Objectives

Attendees of the International Orthopaedic Trauma Care Forum will:

- ◆ Distinguish different methods of treating fracture and trauma complications from around the world
- ◆ Describe unique approaches to manage neglected neck of femur fractures in India
- ◆ Explain increased knowledge and understating of international clinical research
- ◆ Discuss different techniques of managing bone defects
- ◆ Recognize and avoid complications when treating proximal femoral fractures
- ◆ Describe ways to manage complex fractures around the knee joint.

Agenda

Wednesday, October 5, 2016

7:30 am - 7:35 am **Welcome**
Peter V. Giannoudis, MD, Chair

7:35 am - **Symposium 1**
8:05 am **Surgical Techniques**
Pilon Injuries:
Current Insights

Moderator: **Christian Krettek, MD**
João Antonio Matheus Guimarães, MD

7:35 am **Introduction**

7:37 am **Ligamentotaxis: How I Do It**
Sudhir K. Kapoor, MD

7:47 am **Posterior Approach:**
When and How?
R. Malcolm Smith, MD

7:57 am Discussion

8:05 am - **Free Paper Session 1**

8:35 am **Pelvis & Acetabulum**

Moderators: **Amir M. Matiyahu, MD**
Sushrut S. Babhulkar, MD

8:05 am **Paper 1**

Reconstruction of Pelvic Fractures:
Prevalence, Characteristics and Risk Factors
Predisposing to Deep Infection

Peter V. Giannoudis, MD; Theodoros Tosounidis, MD;
Robert West, MSc; Nikolaos Kanakaris, MD
Leeds, United Kingdom

8:13 am **Paper 2**

3D-Navigation Reduces Radiation Exposure
and Operative Time in Lumbopelvic Fixations
Martin Hoffmann, MD; Thomas Schildhauer, MD
Bochum, Germany

8:21 am **Paper 3**

Characterising the Impact of Becoming a
Major Trauma Centre on Pelvic & Acetabular
Workload Over a 5 Year Timeframe –
Centralised Trauma Care at What Cost?
Elizabeth Hadija Tissingh, MBBS, MRCS;
Holly Weaver, MB BChir MA (Cantab);
Peter Hull, FRCS; Julian Owen, FRCS;
Andrew Carrothers, FRCS
Cambridge, United Kingdom

8:29 am Discussion

8:35 am - **Free Paper Session 2**

9:05 am **Experimental Research**

Moderators: **Paulo Roberto Lourenco, MD**
Hans-Christoph Pape, MD

8:35 am **Paper 4**

The Computational Analysis of Safe Zone
of Antegrade Lag Screw for Posterior
Column Fixation through Anterior Approach
in Acetabular Fractures: Cadaveric Study
Gu-Hee Jung, MD; Young-Soo Byun, MD;
Yongkoo Lee, PhD; Ji-Wan Kim, MD, PhD
Jinju City, South Korea

8:43 am **Paper 5**

The Impact of Intramedullary Nailing and a
Femur Fracture on Neutrophil Activation
in Rats
Michel Teuben, MD; Martijn Hofman, MD;
Roman Pfeifer, MD; Johannes Greven, MSc;
Frank Hildebrand, MD; Hans-Christoph Pape, MD;
Aachen, Germany

8:51 am **Paper 6**

Transient Existence of Trauma-induced
Multipotential Stromal Cells in the
Circulatory System
Sarah Churchman, PhD;
Peter V. Giannoudis, MD; Paul Emery, MD;
Elena Jones, PhD; Dennis McGonagle, PhD
Leeds, United Kingdom

8:59 am Discussion

9:05 am Refreshment Break

INTERNATIONAL ORTHOPAEDIC TRAUMA CARE FORUM, continued

Wednesday, October 5, 2016, cont'd

9:20 am - **Symposium 2**
9:50 am **Proximal Femoral Fractures:
All I Need to Know**

Moderator: **David J. Hak, MD**
Sunil Kulkarni, MD

9:20 am **Introduction**

9:22 am **Petrochanteric Fractures: Dos and Don'ts**
Amir M. Matityahu, MD

9:32 am **Failed Subtrochanteric Fracture:
How Do I Decide What to Do?**
Gerald E. Wozasek, MD

9:42 am **Discussion**

9:50 am - **Free Paper Session 3**
10:20 am **Trauma Reconstruction**

Moderators: **Fernando de la Huerta, MD**
Enrique Guerado, MD

9:50 am **Paper 7**
**Minimally Invasive Plate Osteosynthesis for
Hypertrophic Nonunion: An Alternative
Method of Exchange Nailing**
*Joon-Woo Kim, MD; Chang-Wug Oh, MD;
Ki-Chul Park, MD; Kyeong-Hyeon Park, MD
Daegu, South Korea*

9:58 am **Paper 8**
**The Treatment of Infra-Isthmal Femoral Shaft
Nonunions Using Simple Exchange Nailing
with Poller Screws or Additional Interlocking
Screws**
*Yong-Cheol Yoon, MD; Jong-Keon Oh, MD;
Chang-Wug Oh, MD; Jae-Ang Sim, MD;
Kyu Tae Hwang, MD
Incheon, South Korea*

10:06 am **Paper 9**
**Transcutaneous Endo-Prosthetic
Reconstruction of Devastating Lower Limb
Military and Terrorist Blast Injuries**
*Kevin Tetsworth, MD; Munjed Al Muderis, FRACS;
Vaida Glatt, PhD
Brisbane, Queensland, Australia*

10:14 am **Discussion**

10:20 am - **Keynote Lecture**
10:40 am **Dr. Sushrut Babhulkar**
**Delayed Presentation of Neck
of Femur Fractures: Algorithm of
Management and Outcomes**

Moderators: **Steven A. Olson, MD**
Peter V. Giannoudis, MD

10:40 am - **Symposium 3**
11:25 am **Guest Nation (India)**

Moderators: **Steven A. Olson, MD**
Theodore Miclau, III, MD

10:40 am **Posterior Shearing Tibial
Plateau Injuries**
Amit Ajgaonkar, MD

10:50 am **Hoffa Fractures**
Ney Amaral, MD

11:00 am **Floating Knee Injuries**
Sunil Kulkarni, MD

11:10 am **Distal Femoral Fractures
Associated with Knee
Dislocations**
Craig S. Roberts, MD

11:20 am **Discussion**
All Faculty

11:25 am - **Free Paper Session 4**
11:55 am **Best of the Best**

Moderators: **Paul Tornetta III, MD**
Sudhir Kapoor, MD
Thomas A. (Toney) Russell, MD

11:25 am **Paper 10**
**Analysis of Partial Weight
Bearing after Surgical Treatment
in Patients with Injuries of the
Lower Extremity**
*Alexander Eickhoff, MD; Carina Fiedler, MPH;
Florian Gebhard, MD
Ulm, Germany*

11:33 am **Paper 11**
**Posteromedial Approach Combined with
Fibular Osteotomy for the Treatment of
Posterior Column Tibial Plateau Fractures**
*Yan Zhuang, MD; Pengfei Wang, MD;
Kun Zhang, MD; Binfei Zhang, MD
Xi'an City, China*

11:41 am **Paper 12**
**A Comparative Study of Intermittent
Indigenous Negative Pressure Wound
Therapy and Conventional Gauze Dressing of
Contaminated Soft Tissue Injuries in Cases
of High Energy Trauma**
*Devwart Kaushik, MBBS MS(ORTHO);
Rakesh Kumar, MBBS MS (ORTHO)
New Delhi, India*

11:49 am **Discussion**

11:55 am - **SIGN Update**
12:05 pm **Anthony Maina, MD - Kjabe Kenya**
**Bone Transport Over Nail (BTON) for
Posttraumatic Bone Infections with
Segmental Deficiencies**

INTERNATIONAL ORTHOPAEDIC TRAUMA CARE FORUM, continued

Wednesday, October 5, 2016, cont'd

12:05 pm -
12:15 pm

**Special Interest
Lecture**

Professor Horacio Caviglia
**Haemophilia and Fracture
Fixation: Lessons Learned**

12:15 pm - 1:15 pm

**Industry Symposium
Luncheon**
(No CME credits offered)



12:15 pm - 12:45 pm **Can a proximal femoral nail be less: simple, minimal invasive, intuitive and fast? The story of EBA2**

Speaker: Peter V. Giannoudis, MD
Academic Department of Trauma & Orthopaedic Surgery
University of Leeds, Leeds, UK



12:45 pm - 1:15 pm **Evidence based treatment in fragility hip fractures.**

Speaker: TBD

1:20 pm - **Free Paper Session 5**
1:50 pm **Polytrauma**

Moderators: *Daniel S. Horwitz, MD*
Theodore Toan Le, MD

1:20 pm **Paper 13**

Prognostic Accuracy of Acid Base Changes in Polytraumatized Patients – Comparison Between EAC and Established Scoring Systems

Hagen Andruszkow, MD; Frank Hildebrand, MD; Roman Pfeifer, MD; Hans-Christoph Pape, MD

1:28 pm **Paper 14**

Management of Polytrauma Patients: Is There a “Weekend Effect”?

Vasileios Giannoudis, MRes; Michalis Panteli, MD; Ian Barlow, BSc; Peter V. Giannoudis, MD

1:36 pm **Paper 15**

Body Composition and Its Effect on the Badly Injured

David Bryson, MBChB, MRCS; Katie Rollins, MBBS; Dileep Lobo, MBBS; Ben Ollivere, FRCS
Nottingham, United Kingdom

1:44 pm Discussion

1:50 pm - **Free Paper Session 6**

2:30 pm **Femoral Fractures**

Moderators: *Ronald W. Lindsey, MD*
Florian T. Gebhard, MD

1:50 pm **Paper 16**

Starting Point for Trochanteric Intramedullary Femoral Nailing with the SIGN Nail and Impact on Patient Outcomes: A Prospective Observational Study

Hao-Hua Wu, BA; Mohamed Mustafa, MD; Edmund Eliezer, MD; Billy Haonga, MD; Saam Morshed, MD; David Shearer, MD
Dar es Salaam, Tanzania

1:58 pm **Paper 17**

Outcome of Interprosthetic Femoral Fractures with Retained Total Hip- and Knee Arthroplasty Treated with Polyaxial Locking Plates

Martin Hoffmann, MD; Sebastian Lotzien, MD; Thomas Schildhauer, MD
Bochum, Germany

2:06 pm **Paper 18**

Treatment of Infraisthmal Femoral Fracture with Intramedullary Nail: Is Retrograde Nailing Better Option than Antegrade Nailing?

Joon-Woo Kim, MD; Chang-Wug Oh, MD; Jong-Keon Oh, MD; Kyeong-Hyeon Park, MD
Daegu, South Korea

2:14 pm **Paper 19**

Outcomes in Young Hip Fracture Patients

Tim Coughlin, BM; Gillian Janes, RGN; Jessica Nightingale, BSc; Christopher Moran, MD; Daren Forward, MD; Ben Ollivere, FRCS
Nottingham, United Kingdom

2:22 pm Discussion

2:35 pm - **Joint Session with Basic Science**
3:45 pm **Focus Forum: Treatment of Bone Defects: Current Insights**

Moderators: *Joseph Borrelli Jr, MD*
Peter V. Giannoudis, MD

2:35 pm **Introduction**

Joseph Borrelli Jr, MD

2:40 pm **Is There a Role for Allograft?**

Professor Gerhard Schmidmaier

2:50 pm **Induced Membrane Technique: What Have We learned?**

Peter V. Giannoudis, MD

3:00 pm **Titanium Cages: How Can We Enhance their Success?**

Professor Ronald W. Lindsey

3:10 pm **Intramedullary Lengthening Devices: Do They Always Work?**

Professor Christian Krettek

3:20 pm **Bone Transport and Treatment of the Docking Site: My Preferred Method**

Dr. David Lowenberg

3:30 pm **Questions**

INTERNATIONAL ORTHOPAEDIC TRAUMA CARE FORUM, continued

Wednesday, October 5, 2016, cont'd

3:45 pm Refreshment Break

3:55 pm - **Free Paper Session 7**

4:25 pm **Open Fractures**

Moderators: **João Matheus Guimarães, MD**
Richard E. Buckley, MD

3:55 pm **Paper 20**
External Fixator as a Primary and Definitive Treatment for Open Fractures in Disasters and Conflicts Time

Abduljabbar Alhammoud, MD; Mason Al Nouri; Mahmood Ali Arbash; Bakry Mazz, MD
Doha, Qatar

4:03 pm **Paper 21**
The Adjunctive Use of Calcium Sulfate Antibiotic Beads in the Prevention and Treatment of Osteomyelitis in Open Fractures of the Lower Limb

Joshua Ong, MB; Dimitrios Giotikas, MD; Andrew Carrothers, FRCS; Gooding Christopher, BSc; Alan Norrish, BSc; Matija Krkovic, MD
Cambridge, United Kingdom

4:11 pm **Paper 22**
Staged Minimally Invasive Plate Osteosynthesis of Proximal Tibial Fracture with Acute Compartment Syndrome

Joon-Woo Kim, MD; Chang-Wug Oh, MD; Jong-Keon Oh, MD; Kyeong-Hyeon Park, MD
Daegu, South Korea

4:25 pm - **Symposium 4**
4:50 pm **My Worst Case: When Things Go Wrong, Then What?**

Moderators: **Brent L. Norris, MD**
William M. Ricci, MD

Speaker A: **Cyril Mauffrey, MD**

Speaker B: **Victor de Ridder, MD**

4:50 pm - **Free Paper Session 8**
5:30 pm **General Trauma Topics**

Moderators: **Timothy Chesser, MD**
Theodoros H. Tosounidis, MD

4:50 pm **Paper 23**
Orthopaedic Trauma in the Developing World: Where are the Gaps in Research and What Can be Done?

Hao-Hua Wu, BA; Brian Cunningham, MD; Max Liu, BA; Kushal Patel, MD; Amber Caldwell, BA; David Shearer, MD; Saam Morshed, MD; Theodore Miclau III, MD
Institute for Global Orthopaedics and Traumatology, UCSF OTI

4:58 pm **Paper 24**
Complications after Operative Treatment of Femoral Shaft Fractures in Childhood and Adolescence

Christiane Kruppa, MD; Gabriele Wiechert, MD; Thomas Schildhauer, MD; Marcel Dudda, MD
Bochum, Germany

5:06 pm **Paper 25**
Quality of Life After Plating of Midshaft Clavicle Fractures

Rens van der Linde, MD; Sven van Helden, MD
Zwolle, Netherlands

5:14 pm **Paper 26**
Syndesmosis Reduction and Fixation Using Intraoperative 3D Imaging

Morad Mohamad, MD; Victor Dubois-Ferrière, MD
Genève, Switzerland

5:22 pm Discussion

5:30 pm - **International Poster**

6:30 pm **Reception**

RESIDENTS COMPREHENSIVE FRACTURE COURSE

Wednesday – Friday,
October 5 – 7, 2016

Toni M. McLaurin, MD & Marcus F. Sciadini, MD,
Program Chairs

Course Description

The Residents Comprehensive Fracture Course will be presented in six (6) separate small group modules, with 22 - 24 residents and 5 experienced faculty educators per module.

The modules will have a rapid-fire series of mini-lectures, an extensive open case-based discussion, video demonstrations of techniques, and hands-on skills lab exercises. Modules will cover fundamental principles of fracture care distributed among six topics: articular, diaphyseal, foot & ankle, geriatrics, pediatrics, and pelvis/polytrauma/acetabulum, plus a lunch-time spine session.

This course offers pre-course educational on-demand video materials. Details will be sent with registration confirmation as well as an online basic science pre-test and an onsite clinical post test.

Target Audience

This course is targeted for PGY2 – PGY4's, others who feel they will benefit will not be excluded. Attendance is limited, so early registration is recommended.

Lunch / Spine Symposium

Faculty: **Timothy A. Moore, MD**
Richard J. Bransford, MD
John C. France, MD



Modules

Module One

Articular Fractures

Module Leaders: **Frank A. Liporace, MD**
Timothy S. Achor, MD

Topics

Distal Humerus

Anatomy/Approaches (incl. Osteotomy) Reduction and Implant Techniques *Post-Operative Treatment Total Elbow Arthroplasty*

Elbow

Anatomy and Radiographs Monteggia Fractures *Olecranon Fractures Terrible Triad*

Tibial Plateau

Fragment Specific Fixation Medial/Posteromedial Fragment Treatment Algorithms: Low Energy - High Energy *Classification Lateral Articular Fragment*

Supracondylar Femur

ORIF - Intramedullary Nailing Implant Position and Surgical Techniques *Anatomy Radiography*

Case-Based Discussions

Intra-articular Distal Humerus Fracture	Monteggia Fracture
Olecranon Fracture	Terrible Triad
Intercondylar Femur Fracture	Lateral Plateau Fracture
Bicondylar Plateau Fracture	B3 Distal Femur Fracture

Hands-on Skills Labs

Olecranon Tension Banding and Plating	Tibial Plateau
Supracondylar Femur	

Module Two

Diaphyseal Fractures

Module Leaders: **Michael P. Leslie, DO**
David B. Weiss, MD

Lectures/Case-Based Discussions

Primary Bone Healing vs. Callus	Plating Mechanics
Intramedullary Nail Mechanics	Failed Fixation

Hands-on Skills Labs

Intramedullary Nailing Proximal Tibia Fracture
Lag Screw / Compression Plating Radius and Bridge Plating Ulna
(Open Reduction Internal Fixation Forearm Fracture)

RESIDENTS COMPREHENSIVE FRACTURE COURSE, continued

Module Three

Foot and Ankle

Module Leaders: **S. Andrew Sems, MD**
Christopher M. McAndrew, MD

Topics

Ankle Fractures
Tibial Pilon Fractures

Talus Fractures
Calcaneus

Lectures/Case-Based Discussions

Classic Maissonneuve Injury
Trimalleolar with Displaced Posterior Malleolus
Low Energy - Partial Articular Fracture
High Energy - AO/OTA 43.C3 with Staged External/Internal Fixation
Definitive Treatment with External Fixation
Hawkins II Talar Neck Fracture
Hawkins III Talar Neck Fracture with Involvement of Talar Body
LisFranc
Sanders II Joint Depression
Sanders IV Fracture with Blood-filled Blisters in
60 Year Old Roofer who Smokes
Mid-Foot/Tarso-Metatarsal
Divergent Lisfranc Injury
Subtle Lisfranc Injury
Multiple Displaced Metatarsal Shaft Fractures

Hands-on Skills Labs/Videos

Trimalleolar Ankle Fracture with Unstable Syndesmosis
External Fixation of a Comminuted Pilon Fracture

Module Four

Geriatric

Module Leaders: **Charisse Y. Sparks, MD**
Carla S. Smith, MD

Lectures

Periprosthetic Fracture Management
Intertrochanteric Hip Fractures
Osteoporosis Evaluation and Management

Femoral Neck
Locked Plating Basics

Case-Based Discussions

Femoral Neck
Periprosthetic Femur Fractures
Distal Radius

Intertrochanteric
Distal Humerus
Proximal Humerus

Surgical Video

Proximal Humerus Fracture Locked Plating

Hands-on Skills Labs

Sliding Hip Screw
Distal Radius

IM Hip Nail

Module Five

Pediatrics

Module Leaders: **Anthony I. Riccio, MD**
R. Lane Wimberly, MD

Lectures

Unique Aspects of Children's Fractures
Timing of Children's Fractures

Case-Based Discussions

Distal Humerus
Forearm
Femur
Intra-articular

Videos

Forearm Fracture Reduction
Spica Casting

Hands-on Skills Labs/Videos

Closed Reduction and Percutaneous Pinning of
Supracondylar Humerus Fracture
Flexible Elastic Nailing of Femoral Shaft Fracture

Presented in partnership with OTA and POSNA



Module Six

Polytrauma, Pelvis and Acetabulum

Module Leaders: **Christina Boulton, MD**
Conor Kleweno, MD

Lectures

Damage Control and Hemodynamic Stabilization
Open Fractures
Pelvic Ring Injuries – Stability and Reduction
Stable LCI Type Injury - Nonoperative Principles
Pelvic Radiographs & SI Screws
Radiograph & Model Interpretation Session

Case-Based Discussions

Polytrauma Patient Open Fractures
Vertical Shear or Unstable Pelvis

Surgical Video

Sheet Wrap / Pelvic Binder

Hands-on Skills Labs

Supra-acetabular & Iliac Crest Pelvic Ex Fix
Pubic Diastasis with Symphyseal Plate

ORTHOPAEDIC TRAUMA BOOT CAMP

Daniel S. Horwitz, MD & Erik Kubiak, MD
 Program Chairs

Attendees of this activity can earn up to
12.75 AMA PRA Category 1 Credits™

Target Audience

This course is intended for the practicing orthopaedic surgeon who takes emergency room or trauma call. Current techniques in orthopaedic care will be stressed with attention to appropriate soft tissue management and up-to-date implant selection. Case discussions will be used for interactive learning and audience participation..

Learning Objectives

Upon successful completion of this course, you will be able to:

- ◆ Review current indications for operative and non-operative treatment of fractures and dislocation
- ◆ Summarize the intraoperative techniques and complication related to simple and complex fracture management
- ◆ Demonstrate appropriate surgical techniques, approaches and implant selections for fracture care

Agenda

Wednesday, October 5, 2016

6:30 am **Registration and Breakfast**

7:00 am **Welcome**
Daniel S. Horwitz, MD
Erik Kubiak, MD

Upper Extremity

Moderator: **Thomas F. Varecka, MD**

- 7:05 am **Plating Clavicle Fractures - When and How**
Steven J. Morgan, MD
- 7:25 am **Nailing and Plating Proximal Humerus Fractures - When and How**
William M. Ricci, MD
- 7:45 am **Distal Humerus Fractures Plating - When and How**
James A. Goulet, MD
- 8:05 am **Distal Radius Fractures - Always Volar? Graft? 2nd Plate?**
Thomas F. Varecka, MD
- 8:25 am Questions / Discussion
- 8:35 am **Case Presentations to Panel**
James A. Goulet, MD

Orthopaedic Urgencies/ Emergencies

Moderators: **Hassan R. Mir, MD, MBA, FACS**
J. Tracy Watson, MD

- 9:00 am **Getting Through the Night - What Needs to Go in the Dark**
Hassan R. Mir, MD, MBA, FACS
- 9:20 am **Case Presentations**
Open Fractures, Orthobiologics
J. Tracy Watson, MD
- 10:00 am Refreshment Break

10:20 am **Practical Technique Lab with Case Discussions – Proximal Humerus Fractures**

Lab Leader: **Frank A. Liporace, MD**

Practical Technique Lab with Case Discussions – Distal Humerus

Lab Leader: **Erik Kubiak, MD**

Hip Fractures

Moderator: **Frank A. Liporace, MD**

- 11:00 am **Intertrochanteric Fractures - When to Plate? When to Nail Short?**
Jeffrey O. Anglen, MD
- 11:20 am **Subtrochanteric Fractures - Techniques for Reduction and Fixation**
J. Tracy Watson, MD
- 11:40 am **Femoral Neck Fractures - Elderly**
Frank A. Liporace, MD
- 12:00 pm **Femoral Neck Fractures - Young**
Robert F. Ostrum, MD
- 12:20 pm Questions / Discussion
Jeffrey O. Anglen, MD
J. Tracy Watson, MD
Frank A. Liporace, MD
Robert F. Ostrum, MD
- 12:35 pm Lunch and Cases
Daniel S. Horwitz, MD and Erik Kubiak, MD

Femoral Shaft / Supracondylar Femur Fractures

Moderator: **Clifford B. Jones, MD**

- 1:25 pm **Pelvic Fractures- What is Stable, What Will/Could Fool You**
Erik Kubiak, MD
- 1:45 pm **Femoral Nailing - Where to Start, Tips and Tricks**
Peter V. Giannoudis, MD
- 2:05 pm **Periprosthetic Fractures Around TKA**
Clifford B. Jones, MD

ORTHOPAEDIC TRAUMA BOOT CAMP, continued

Wednesday, October 5, 2016, cont'd

- 2:25 pm **SC Femur Fractures - Techniques for Intra-articular Reduction and Fixation**
Timothy S. Achor, MD
- 2:45 pm Questions and Discussion
Erik Kubiak, MD
Peter V. Giannoudis, MD
Clifford B. Jones, MD
Timothy S. Achor, MD
- 2:55 pm Travel to Labs

3:00 pm **Practical Technique Lab with Case Discussions – Pilon Fractures**

Lab Leader: **Saqib Rehman, MD**

Practical Technique Lab with Case Discussions – Extended Nailing - Tibial Shaft

Lab Leader: **Michael Suk, MD, JD**

Knee

Moderator: **Daniel S. Horwitz, MD**

- 3:40 pm **Spanning Ex-Fix - When and How**
Saqib Rehman, MD
- 4:00 pm **Extensor Mechanism Injury - How to Fix**
Michael Suk, MD, JD
- 4:20 pm Question and Discussion
Daniel S. Horwitz, MD
Saqib Rehman, MD
Michael Suk, MD, JD
- 4:30 pm Adjourn

Thursday, October 6, 2016

6:30 am **Breakfast**

Tibia

Moderator: **Philip R. Wolinsky, MD**

- 7:00 am **Case Presentations - Hip, Femur, Knee**
Daniel S. Horwitz, MD
- 7:40 am **Tibial Shaft - Proximal and Distal Fractures**
Paul Tornetta III, MD
- 8:00 am **Plateau Fractures - Techniques for Reduction, Choice of Approach and Implant**
Amer J. Mirza, MD
- 8:20 am **Pilon Fractures - Common Sense Approach to the Simple Patterns**
Philip R. Wolinsky, MD
- 8:40 am Questions and Discussion
Amer J. Mirza, MD
J. Tracy Watson, MD
Philip R. Wolinsky, MD
- 9:00 am **Case Presentations - Tibial Malreduction, Nonunion, and Early Failures**
Amer J. Mirza, MD
J. Tracy Watson, MD
Philip R. Wolinsky, MD
- 9:40 am Refreshment Break

Foot and Ankle

Moderator: **Joshua Langford, MD**

- 10:00 am **Ankle Fractures in the Elderly, Osteoporotic, and Neuropathic Patient**
Daniel S. Horwitz, MD
- 10:20 am **Hindfoot and Midfoot Fracture/Dislocation - How and When to Temporize**
Joshua Langford, MD
- 10:40 am Cases and Discussion
Daniel S. Horwitz, MD
Joshua Langford, MD
- 11:00 am Adjourn

YOUNG PRACTITIONERS FORUM

Lisa K. Cannada, MD & Jodi A. Siegel, MD
Program Chairs

Attendees of this activity can earn up to
4 AMA PRA Category 1 Credits™

Target Audience

This course is designed for orthopaedic residents, fellows, and young practitioners to promote career planning and development during residency and selection of best practice environment.

Learning Objectives

Attendees of the Young Practitioners Forum will:

- ◆ Illustrate the fellowship application process and maximize the fellowship year experience
- ◆ Identify important strategies for building your career
- ◆ Discuss an understanding of skills to succeed in a trauma practice
- ◆ Apply effective communication techniques

Agenda

Thursday, October 6, 2016

- 6:00 am **Registration and Continental Breakfast**
- 6:30 am **Current State of Affairs: Trauma Stats from 2016 Match and Post Fellow Survey**
Jodi A. Siegel, MD
- 6:36 am **Navigating the Fellowship Match Process**
Christopher Domes, MD
- 6:44 am **Transitioning from a Buddy to a Fellow to an Attending: Tips on Handling the Residents**
Clay A. Spittler, MD
- 6:56 am **From Good to Great: What Makes a Great Fellow**
Andrew N. Pollak, MD
- 7:05 am **Cheat Sheet for Your First 3 Years in Practice (What I Wish I Knew Then!)**
Reza Firoozabadi, MD
- 7:15 am **The Orthopaedic Trauma Surgeon at a Level 2 Center: What's it Like**
Emily S. Benson, MD
- 7:26 am **Networking & Mentoring: Why Should I Care?**
Samir Mehta, MD

- 7:36 am **Building Your Toolbox: Developing an Elective Practice**
Michael S. Kain, MD
- 7:47 am - 7:57 am **Social Media: How to Manage my Online Footprint**
TBA
- 7:58 am - 8:18 am **PANEL: Planning your Career: Making It What You Want and How to Get There**
Joshua L. Gary, MD
Daniel J. Stinner, MD
Michael T. Archdeacon, MD
- 8:19 am - 8:29 am Questions
- 8:30 am - 8:45 am Refreshment Break
- 8:46 am - 8:56 am **Common Sense Lessons for Your Career & Life**
Robert F. Ostrum, MD
- 8:57 am - 9:07 am **The Little Things that Matter**
J. Tracy Watson, MD
- 9:08 am - 9:28 am **Having It All: Work/Life Balance**
Lisa K. Cannada, MD
Laura S. Phieffer, MD
Theodore Miclau, III, MD
- 9:29 am - 9:39 am Questions
- 9:40 am - 9:47 am **Can I Be a Fracture Surgeon? Trauma Surgery without Pelvic and Acetabular Work**
William T. Obrebsky, MD
- 9:48 am - 10:04 am **Contracts, Houses and Common Sense Advice**
Roy Sanders, MD
- 10:05 am - 10:15 am **CHIP, MACRA Other Acronyms and Government Rules Affecting Practice: Defined!!!**
A. Alex Janghir, MD
- 10:16 am - 10:43 am **KEYNOTE**
James A. Goulet, MD
We Always Teach the Surgery... Now the Art of Being Effective in Clinic
 - How Do I Handle the Mounds of Paperwork?
 - My Patients All Want Refills
 - PROS
 - Do All Patients Need X-rays in their First Post-op Visit?
- 10:44 am - 10:50 am Questions and Wrap Up

Thursday, October 6, 2016

1:00 pm **Welcome and Donor Awards**
Steven A. Olson, MD
President
Robert V. O'Toole, MD
Program Committee Chair
Jean-Claude Gregoire D'Alleyrand, MD
Local Host

1:15 pm **OTA Honorary Member Acknowledgment**
Prof. Dr. med. Dr. h.c. Stephan M. Perren

1:20 pm - **Symposium I**
 2:50 pm **A Primer on Prosthetics, Advanced Orthotics and Amputee Care for the Orthopaedic Trauma Surgeon Sponsored by the Society of Military Orthopaedic Surgeons**

Moderator: **Christopher T. LeBrun, MD**
 Faculty: *Jean-Claude G. D'Alleyrand, MD*
Joseph R. Hsu, MD
Ellen Mackenzie, PhD
Paul F. Pasquina, MD
Benjamin K. Potter, MD

This symposium will educate the orthopaedic trauma surgeon on current issues and recent advances in the care of patients with amputation. An emphasis is placed on clinically useful basic concepts of contemporary prosthetics and advanced orthotics. The modern literature on outcomes following major limb trauma sustained in the military and civilian populations will be reviewed. Methods to avoid and optimize the management of complications in amputees will be discussed.

Learning Objectives

- ◆ Review contemporary prosthetic and advanced orthotic components and design.
- ◆ Compare and contrast the results from the LEAP and METALS studies.
- ◆ Discuss strategies to avoid and optimize management of common preprosthetic and postprosthetic complications. Highlight recent innovations in amputee care.

1:20 pm **Introduction:** *Christopher T. LeBrun, MD*
 1:25 pm **Overview of Prosthetic Components and Design**
Paul F. Pasquina, MD
 1:40 pm **Limb Salvage vs. Amputation LEAP/METALS**
Ellen Mackenzie, PhD
 1:55 pm **Integrated Orthotic and Rehabilitation Initiative**
Joseph R. Hsu, MD
 2:05 pm **Prevention and Management of Common Complications in Amputees**
Benjamin K. Potter, MD
 2:20 pm **New Horizons in Amputee Care**
Jean-Claude G. D'Alleyrand, MD
 2:35 pm **Symposium Panel, Case Presentations, Discussion, Questions**

2:50 pm Refreshment Break (exhibit hall opens at 2:30)

3:20 pm - **Paper Session 1**
 4:30 pm **"Program Committee Highlight Papers: High Level Randomized Controlled Trials"**

Moderators: **Robert V. O'Toole, MD**
Michael D. McKee, MD

3:20 pm **Paper 26**
Better Clinical and Radiographic Outcomes with Suture Endobutton Compared to Syndesmotic Screw in Treatment of Syndesmotic Injuries – A Randomized Controlled Trial
Mette Andersen, MD; Frede Frihagen, MD; Johan Hellund, MD; Jan Erik Madsen, MD; Wender Figved, MD

3:26 pm **Paper 27**
Single versus Continuous Nerve Block for Extremity Fractures: A Comparative Study
Abhishek Ganta, MD; David Ding, MD; Nina Fisher, BS; Sudheer Jain, MD; Nirmal Tejwani, MD

3:32 pm Discussion

3:37 pm **Paper 28**
Plate Fixation versus Nonoperative Treatment for Displaced Midshaft Clavicular Fractures: A Multicenter Randomized Controlled Trial
Sarah Woltz, MD; S. Stegeman, MD; P. Krijnen, PhD; Bart van Dijkman, MD; Thom van Thiel, MD; N.W.L. Schep, MD; Piet de Rijcke, MD; Jan Paul Frolke, MD; I.B. Schipper, MD

3:43 pm **Paper 29**
Simple Decompression vs Anterior Transposition of the Ulnar Nerve for Distal Humerus Fractures Treated with Plate Fixation - A Multi Centre Randomized Controlled Trial
Emil Schemitsch, MD; Niloofar Dehghan, MD; Milena Vicente; Aaron Nauth, MD, FRCS; Jeremy Hall; Michael McKee, MD; COTS (Canadian Orthopaedic Trauma Society)

3:49 pm Discussion

Annual Meeting – Program Committee
 Thursday, October 6

2016 OTA ANNUAL MEETING, continued

Thursday, October 6, 2016, cont'd

3:54 pm **Paper 30**
EUSOL® Versus Antibiotic Loaded Collagen Granules (Co-Mupimet®) as a Dressing Agent in the Management of Traumatic Wounds
Rajiv Maharjan, MD; Amit Shah, MD; Pashupati Chaudhary, MS

4:00 pm **Paper 31**
Tranexamic Acid Safely Reduced Blood Loss in Hip Arthroplasty for Acute Femoral Neck Fracture
Chad Watts, MD; Matthew Houdek, MD; Stephen Sems, MD; William Cross, MD; Mark Pagnano, MD

4:06 pm Discussion

4:11 pm - **Symposium II**
4:26 pm **World Premier of the Multinational FAITH Hip Fracture Trial: And the Answer is...?**

4:11 pm Introduction: *Mohit Bhandari, MD*

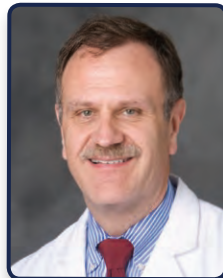
4:14 pm **FAITH Trial Presentation:**
Marc F. Swiontkowski, MD

Paper 32
Fixation using Alternative Implants for the Treatment of Hip Fractures: A Large Blinded International Multi-Centre Randomized Trial
FAITH Investigators

4:22 pm Discussion

4:30 pm - **President's**
5:00 pm **Message**
Of Mysteries, Mentors, and Things that Make a Trauma Career

Steven A. Olson, MD
OTA President



5:00 pm - **Business Meeting**
6:00 pm (Members Only)

6:00 pm - **Welcome Reception**
8:00 pm **Gaylord National Harbor Orchard Terrace**
Join your colleagues for cocktails and hors d'oeuvres on the Orchard Terrace of the Gaylord National Harbor, just outside the exhibit hall.

Friday, October 7, 2016

6:30 am - **Concurrent Breakout Sessions**
7:30 am **Mini Symposium**

Limb Reconstruction in Crisis and Conflict Related Injuries

Moderator: *Daniel J. Stinner, MD, MAJ*

Faculty: *Michael J. Beltran, MD*
Cory A. Collinge, MD
Joseph R. Hsu, MD
Christopher S. Smith, MD, LCDR

Penetrating and high-energy traumatic injuries continue to be the primary source of morbidity in survivors of crisis and conflict. Some evidence does exist from recent conflict to help guide management and decrease morbidity. Also, we will demonstrate techniques to limit infection and reconstruct bone defects.

Learning Objectives

- ◆ Understand the pathophysiology and initial management of patients sustaining penetrating injuries.
- ◆ Research basic infection prevention principles and build upon that knowledge with newer, advanced infection prevention techniques.
- ◆ Apply skeletal reconstruction techniques taking into account injury pattern, environment, and limited resources.

Case Presentation

Distal Radius Fractures: Stand Up and Take Charge for Best Results

Moderator: *Lisa K. Cannada, MD*

Faculty: *Frank A. Liporace, MD*
David A. Fuller, MD

Distal radius fractures are dealt with by a variety of orthopaedic specialists. The Orthopaedic trauma surgeon may encounter a gamut of fracture types ranging from elderly, low energy injuries to multi-trauma falls. This session will review cases and different approaches to similar fracture patterns.

Learning Objectives

- ◆ Articulate the benefits of differing fixation strategies for high energy distal radius fractures.
- ◆ Discuss how the type of fixation used affects weight bearing for the upper extremity.
- ◆ List the complications which can occur after this "simple" fracture fixation and how to maximize outcomes.

Case Presentation

Pelvis and Acetabulum Fractures

Moderator: *Paul Tornetta III, MD*

Faculty: *Hassan Riaz Mir, MD, MBA*
Daniel S. Horwitz, MD
Theodore T. Manson, MD
David C. Templeman, MD

Cases will be presented that highlight the initial management, operative treatment options, and expected outcomes of pelvic and acetabular fractures. An expert panel will provide personal insight and varying options for these injuries. The session is interactive and participants will give their viewpoints during each case.

2016 OTA ANNUAL MEETING, continued

Friday, October 7, 2016, cont'd

6:30 am - **Concurrent Breakout Sessions, cont'd**
7:30 am **Mini Symposium**

How to Improve the Results in Tibia Plateau Fractures

Moderator: **Utku Kandemir, MD**
Faculty: *Jackson Lee, MD*
Saam Morshed, MD

Tibia plateau fractures may result in excellent or poor outcomes. Knowledge of surgical approaches, reduction and fixation techniques, post-operative rehabilitation, and management of complications is critical in order to achieve best outcome.

Learning Objectives

- ◆ Outline the right surgical approach.
- ◆ Identify aids of reduction, bone void fillers.
- ◆ Identify fixation techniques (place, type of construct)

7:45 am - **Paper Session 2**
9:25 am **Tibial Shaft, Distal Femur, Knee**

Moderators: **David J. Hak, MD**
Cyril Mauffrey, MD

7:45 am **Paper 33**
Parapatellar Semi-Extended and Flexed Knee Tibial Nailing Techniques are Equivalent in Regards to Knee Pain: A Randomized Controlled Trial
David Rothberg, MD; Ami Stuart, PhD; Angela Presson, PhD; Thomas Higgins, MD; Erik Kubiak, MD

7:51 am **Paper 34**
Is Septic Knee Arthritis a Realistic Concern Following Suprapatellar Nailing of Open Tibia Fractures?
Frances Broghammer, BS; John Scolaro, MD; Caroline Tougas, MD; Luke Nicholson, MD; Geoffrey Marecek, MD

7:57 am **Paper 35**
Effect of Infrapatellar Nerve Block on Chronic Anterior Knee Pain After Tibial Nailing: A Randomized Double-Blind Placebo-Controlled Study (INCOP)
M.S. Leliveld, MD; S.J. M. Kamphuis; M.H.J Verhofstad, MD

8:03 am Discussion

8:08 am **Paper 36**
LIPUS Health Utility and Economic Analysis
Paul Tornetta III, MD; Jason Busse, DC; Mohit Bhandari, MD; Gordon Guyatt, MD; Thomas Einhorn, MD; James Heckman, MD; Kwok-Sui Leung, MD; Emil Schemitsch, MD; Stephen D. Walter, PhD; Natasha Burke, MSc; Rob Hopkins, PhD

8:14 am **Paper 37**
The Trajectory of Short and Long Term Functional Recovery of Tibial Shaft Fractures Following Intramedullary Nail Fixation
Sebastian Ko, MD; Peter O'Brien, MD; Pierre Guy, MD; Henry Broekhuysse, MD; Piotr Blachut, MD; Kelly Lefavre, MD

8:20 am **Paper 38**
Progression of Healing Using RUST: Can We Eliminate The Cost of Early Radiographs?
Robert Wojahn, MD; Torgom Abraamyan, BS; Amanda Spraggs-Hughes, BS, MA; Michael Gardner, MD; William Ricci, MD; Christopher McAndrew, MD;

8:26 am Discussion

8:31 am **Paper 39**
Percutaneous or Open Reduction of Closed Tibial Shaft Fractures During Intramedullary Nailing Does Not Increase Wound Complications Infection or Nonunion Rates
Darryl Auston, MD; Jordan Meiss, MD; Rafa Serrano, MD; Brian Kistler, MD; Thomas Sellers, MD; Michael Beebe, MD; Jonathan Quade, MD; Timothy Hoggard, BS; Benjamin Maxson, DO; Anthony Infante, DO; David Watson, MD; Anjan Shah, MD; Hassan Mir, MD

8:37 am **Paper 40**
Radiographic Investigation of the Distal Extension of Fractures into the Articular Surface of the Tibia (The RIDE FAST Study)
Lucas Marchand, MD; Ajinkya Rane, MD; Zachary Working, MD; Lance Jacobson, MD; Erik Kubiak, MD; Thomas Higgins, MD; David Rothberg, MD

8:43 am **Paper 41**
Extreme Nailing: Is It Safe to Allow Immediate Weightbearing of Extraarticular Distal Tibia Fractures (OTA 43-A) Treated with IM Fixation?
Michael Beebe, MD; Rafael Serrano-Riera, MD; Jonathan Quade, MD; Darryl Auston, MD; Anthony Infante, DO; Anjan Shah, MD; Benjamin Maxson, DO; David Watson, MD; Roy Sanders, MD; Hassan Mir, MD

8:49 am Discussion

Annual Meeting — Tibial Shaft / Distal Femur / Knee
Friday, October 7

2016 OTA ANNUAL MEETING, continued

Friday, October 7, 2016, cont'd

8:54 am **Paper 42**
In-vivo Stiffness Measurements for Distal Femur Fractures Fixed with Locked Plating
Christopher Parks, MD; Michael Gardner, MD; William Ricci, MD; Christopher McAndrew, MD

9:00 am **Paper 43**
The Effect of Coronal Plane Angulation on the Outcomes of Operatively Treated Distal Femur Fractures
Paul Tometta III, MD; Margaret Cooke, MD; Kenneth Egol, MD; Clifford Jones, MD; Janos Ertl, MD; Brian Mullis, MD; Ed Perez, MD; Cory Collinge, MD; Robert Ostrum, MD; Catherine Humphrey, MD; Robert Dunbar, MD; William Ricci, MD; Laura Phieffer, MD; David Teague, MD; Christopher Born, MD; Alan Zonno, MD; Judith Siegel, MD; Henry Sagi, MD; Andrew Schmidt, MD; Stephen Sems, MD; Darin Friess

9:06 am **Paper 44**
Should We Throw Away the External Fixator for Knee Dislocations?
Robert Corey, MD; Nathan Park, BS; Scott Kaar, MD; Lisa Cannada, MD

9:12 am **Paper 45**
Fixed Angle Locking Plate Fixation of Complex Comminuted Patellar Fractures
Tyler Moore, MD; Bharat Sampathi, BA; Martin Tynan, MD; David Zamorano, MD; John Scolaro, MD

9:18 am Discussion

9:25 am Refreshment Break

8:00 am - **Concurrent Breakout Sessions**
9:00 am **Skills Lab**
Fixation of Proximal Humeral Fractures

Lab Leader: **Andrew R. Fras, MD**
Faculty: **TBD**

This lab will demonstrate a number of technical principles that are within the surgeon's control (i.e., accurate reduction, nor varus alignment, placement of a calcar screw) that can minimize mechanical failure after proximal humeral fracture fixation.

Learning Objectives

- ◆ Identify fracture indications for fixation of proximal humeral fractures, especially in the elderly.
- ◆ Recognize technical factors during fixation that minimize the risk of mechanical construct failure.
- ◆ Apply implant design features that are optimal for different fracture types.



8:00 am - **Skills Lab**

9:00 am **SIGN Fracture Care International**

Lab Leader: **Lewis G. Zirkle Jr., MD**
SIGN Fracture Care International

The SIGN Fracture Care International (SIGN) IM Nail interlocking screw system is designed for use in developing countries and for surgeons everywhere who should like to avoid radiation from use of C-arm. The distal interlocking screws can be placed consistently and quickly using a mechanical technique which has been used in 177,000 fractures of long bones. The goal of SIGN nail sawbones skills labs is to learn SIGN technique for stabilization of tibia and femur fractures. Table instructors will include surgeons who are OTA-SIGN scholars.

Learning Objectives

- ◆ Identify the difference in performing IM nail interlocking screw fixation without power or C-arm.
- ◆ Evaluate the use of mechanical methods to ream in place distal interlocking screws using SIGN technique.
- ◆ Discuss the different long bones that can be treated with the same nail and instrument set.

8:00 am - **Concurrent Breakout Sessions**
9:30 am **Mini Symposium**

Proximal Humerus Fractures: Optimizing Surgical Management and Technique in 2016

Moderator: **Emil H. Schemitsch, MD**
Faculty: **Nilofar Dehghan, MD**
Edward J. Harvey, MD
Aaron Nauth, MD
Michael D. McKee, MD

Proximal humerus fractures are increasing in frequency and complexity. The failure rate of operative intervention remains higher than that seen with other fractures and there remains significant room for improvement in the care of these injuries. A primary goal of the symposium will be to achieve consensus opinions on many current issues and controversies regarding the treatment of proximal humerus fractures.

Learning Objectives

- ◆ Identify which proximal humerus fractures need surgery.
- ◆ Describe how to optimize fixation of proximal humerus fractures.
- ◆ Explain how to manage complications following proximal humerus surgery.

2016 OTA ANNUAL MEETING, continued

Friday, October 7, 2016, cont'd

8:00 am - **Concurrent Breakout Sessions, cont'd**
9:30 am **Mini Symposium**

Minute to Win-It "Crises in Health Policy"

Moderator: **Douglas W. Lundy, MD**

Faculty: *Bruce D. Browner, MD*
John D. Campbell, MD
A. Alex Jahangir, MD
Clifford B. Jones, MD
Gerald J. Lang, MD
Manish K. Sethi, MD
Michael Suk, MD, JD
Todd A. Swenning, MD
Nirmal C. Tejwani, MD

This mini-symposia will, in rapid-fire progression outline the major policy issues that will affect the practice of orthopaedic trauma and summarize how we should meet these challenges. Each speaker will quickly summarize the issue and what we should do about it.

Learning Objectives

- ◆ Learn how MACRA will affect the delivery of healthcare in the US.
- ◆ Summarize MIPS, value based medicine and the physician's role in this program.
- ◆ Assess the issues associated with the APM pathway and the benefits to orthopaedic surgeons.

Mini Symposium

Mangled Extremity Evaluation and Management

Moderator: **Raymond A. Pensey, MD**

Faculty: *Michael J. Bosse, MD*
L. Scott Levin, MD
Benjamin K. Potter, MD

This Symposium will provide the audience with an understanding of the best available evidence in guiding treatment for limb salvage vs amputation. The Symposium will also provide the audience with a review of the basic and advanced treatment options for both skeletal and soft tissue reconstruction, to include pitfalls and pearls.

Learning Objectives

- ◆ Describe initial triage and management of the mangled extremity.
- ◆ Summarize recent evidence regarding the risk - benefit ratio for limb salvage vs amputation.
- ◆ Show various examples of beginner, intermediate, and advanced techniques for limb salvage.

Mini Symposium

From Good to Great: Improving your Treatment of Femoral Head Fractures

Moderators: **Jaimo Ahn, MD; John A. Scolaro, MD**

Faculty: *David L. Helfet, MD*
Mark C. Reilly, MD
Milton L. Routt, MD
H. Claude Sagi, MD
Mark S. Vrahas, MD

So you think you're a pretty good trauma surgeon. You're on the steep part of the learning curve and feeling like you're doing okay. Sometimes, things go smooth in the OR and your reductions look "perfect." Sometimes they don't quite go so fantastic and, to top it all off, you're not always sure why or how to make it better. We've assembled some of our most trusted and experienced hip surgeons to help get you from good to great.

Learning Objectives

- ◆ Apply rationale for when to operate and when to leave it alone.
- ◆ Show the utility of anterior and posterior approaches to the femoral head surface; and incorporate techniques for better execution.
- ◆ Summarize nuances of options for femoral head fixation.

9:55 am - **Symposium III**
11:15 am **Fracture Healing Controversies: The Problems and Solutions You Need to Know About in 2016!**

Moderator: **Emil H. Schemitsch, MD**

Faculty: *Mohit Bhandari, MD*
Kenneth A. Egol, MD
Michael D. McKee, MD
Aaron Nauth, MD
Paul Tornetta III, MD

There continues to be a significant burden of disease associated with delayed and nonunion of fractures. The assessment of fracture healing remains controversial. A primary goal of the symposium will be to achieve consensus opinions on many current issues and controversies regarding the treatment of these problem injuries. This will have important implications given the impact on patient outcomes.

Learning Objectives

- ◆ To improve understanding of the fracture healing process.
- ◆ To achieve consensus regarding best evidence for management of problem fractures.
- ◆ To achieve consensus regarding best evidence for augmentation of fracture repair.

Fracture Union: Can it be Defined and Predicted?

Paul Tornetta III, MD

Critical Size Defects: Is There a Consensus on Diagnosis and Treatment?

Emil H. Schemitsch, MD

(continued)

2016 OTA ANNUAL MEETING, continued

Friday, October 7, 2016, cont'd

9:55 am - **Symposium III**
11:15 am **Fracture Healing Controversies (cont'd)**

Atypical Femur Fractures: How to Improve Surgical Outcomes!
Kenneth A. Egol, MD

The Infected Fracture: Is There a Gold Standard for Management?
Michael D. McKee, MD

The Extreme Fragility Fracture: What I Do Differently!
Aaron Nauth, MD

Augmentation of Fracture Repair: Is Anything Ready for Prime Time?
Mohit Bhandari, MD

Cases, Questions, Discussion, Consensus:
All Faculty

11:15 am - 11:45 am **Guest Nation Introduction**
Steven A. Olson, MD, OTA President

Guest Nation Presentation

2016 Guest Nation - India

Evolution of Trauma Care in India: Current Status and Future Directions



Professor Sudhir K. Kapoor
Hon. Treasurer Indian Orthopaedic Association (IOA); Dean, ESI Post Graduate Institute of Medical Sciences and Research; Professor & HOD Orthopaedics, New Delhi, Delhi, INDIA

It is a great honor to welcome Professor Sudhir Kapoor, President, Indian Orthopaedic Association, along with members of the Indian Orthopaedic Association and the Indian Trauma Society.

The Guest Nation program was initiated in 2011 in recognition of the importance and benefits of sharing knowledge and experience with international colleagues.

11:45 am - 12:15 pm **John Border, MD Memorial Lecturer**

Keith A. Mayo, MD
Medical Director, Hansjörg Wyss Hip & Pelvis Center Seattle, Washington



This lectureship was established to honor the memory of Dr. John Border. John Border was instrumental in the development of modern trauma care and in particular, modern orthopaedic trauma care. He was the pioneer in the concept of total care and the implications of the orthopaedic injuries on the total management of the trauma patient. He was also a surgeon scientist, using both his clinical observations and basic science research to further his patient care in Orthopaedic Trauma.

12:15 pm - 1:15 pm Lunch



New Member Luncheon
Women in Orthopaedic Trauma Luncheon

12:30 pm - 1:15 pm

Lunchtime Guided Poster Tours

(PT1) Hip/Femur

Guide: *Thomas F. Higgins, MD*

(PT2) International

Guide: *Peter V. Giannoudis, MD*

1:15 pm -

Paper Session 3

2:35 pm

Acetabulum, Pelvis, and Spine

Moderator:

David W. Sanders, MD

Pierre Guy, MD

1:15 pm

Paper 46

ORIF vs Arthroplasty of Geriatric Acetabular Fractures

Theodore Manson, MD; Robert O'Toole, MD

1:21 pm

Paper 47

Risk Factors for Early Reoperation Following Operative Treatment of Acetabular Fractures

Anthony Ding, MD; Robert O'Toole, MD; Renan Castillo, PhD; George Reahl, BS; Ryan Montalvo, BS; Marcus Sciadini, MD; Jason Nascone, MD; Theodore Manson, MD

1:27 pm

Discussion

1:32 pm

Paper 48

Does Prehospital Spinal Immobilization Influence Inhospital Decision to Obtain Imaging after Trauma?

Joseph Drain, BS; Timothy Moore, MD; Heather Vallier, MD

1:38 pm

Paper 49

A Randomized Controlled Clinical Trial of Indigenized Innovative Negative Pressure Device for the Management of Stage 3 and 4 Pressure Ulcer in Traumatic Paraplegia Patients

Rajeshwar Srivastava, MS; Mukesh Dwivedi, PhD Scholar; Amit Bhagat, PhD Scholar; Saloni Raj, MBBS;

1:44 pm

Paper 50

Indications for CT-Angiography of the Vertebral Arteries after Trauma

Joseph Drain, BS; Douglas Weinberg, MD; Timothy Moore, MD; Heather Vallier, MD

1:50 pm

Discussion

1:55 pm

Paper 51

A Randomised Control Trial Using Neuromuscular Electrical Stimulation with Pelvic Fracture Rehabilitation: An Interim Analysis

Jessica Rich, MRes; Peter Bates, FRCS; Paul Culpan, BSc

2016 OTA ANNUAL MEETING, continued

Friday, October 7, 2016, cont'd

2:01 pm **Paper 52**
Relationship of Sacral Fractures to Nerve Injury: Is the Denis Classification Still Accurate?
Jannat Khan, BS; Alejandro Marquez-Lara, MD; Anna Miller, MD

2:07 pm Discussion

2:12 pm **Paper 53**
Does Operative Intervention Provide Early Pain Relief for Patients with Un-Displaced Unilateral Sacral Fractures?
Paul Tometta III, MD; Julie Agel, ATC; Anna Miller, MD; Joshua Gary, MD; Clifford Jones, MD; Jason Lowe, MD; Darin Friess, MD; Ross Leighton, MD; William Ricci, MD; Erik Kubiak, MD; Laurence Kempton, MD; Heather Vallier, MD; Brian Mullis, MD; Sean Nork, MD; Zachary Roberts, MD

2:18 pm **Paper 54**
INFIX vs. Plating for Pelvic Fractures with Symphyseal Disruption
Rahul Vaidya, MD; Adam Martin, MD; Matthew Roth, MS; Frederick Tonnos, DO; Kerellos Nasr, MD

2:24 pm **Paper 55**
Predictors of Unplanned Reoperation after Operative Treatment of Pelvic Ring Injuries
George Ochenjele, MD; Kristoff Reid, MD; Renan Castillo, MD; Carrie Schoonover, BS; Ryan Montalvo, BS; Theodore Manson, MD; Marcus Sciadini, MD; Jason Nascone, MD; Robert O'Toole, MD;

2:30 pm Discussion

1:15 pm - **Concurrent Breakout Sessions**
 2:15 pm **Skills Lab**

Distal Femur Plating

Lab Leader: **Gerard P. Slobogean, MD**

Fractures of the distal femur can be challenging. This lab will examine the indications for nailing versus plating, and focus on techniques for obtaining an accurate reduction. Newer plate/screw technologies that may minimize deformity and enhance the healing of these difficult injuries will be demonstrated.

Learning Objectives

- ◆ Describe the indications for plating versus intramedullary nailing for fractures of the distal femur.
- ◆ Identify techniques to establish optimal fracture reduction in a minimally invasive approach.
- ◆ Illustrate how newer plate/screw fixation methods may improve the biology of distal femoral fracture healing.

1:15 pm - **Skills Lab**

2:15 pm **Clavicle and AC Joint Fixation**

Lab Leader: **Michael D. McKee, MD**

The indications and surgical techniques for primary fixation of displaced clavicle fractures remain controversial. This lab will define surgical indications, surgical approach (superior or anterior), and implant choice. Precontoured plate and hook plate fixation of injuries to the distal shoulder girdle (distal clavicle, AC joint) will also be discussed.

Learning Objectives

- ◆ Identify patient and fracture indications for fixation of acute, displaced mid-shaft fractures of the clavicle.
- ◆ Describe the surgical approach and fixation options for fixation of displaced clavicular fractures.
- ◆ Demonstrate the technical aspects that minimize the success rate of hook plate fixation for acromioclavicular (AC) joint disruptions.

1:15 pm - **Concurrent Breakout Sessions**

2:45 pm **Mini Symposium**

Fragility Fractures and Bone Health: What You Need to Do to Establish and Run a Fragility Fracture Program

Moderator: **James A. Goulet, MD**

Faculty: *Kyle J. Jeray, MD; Clifford B. Jones, MD; Joseph M. Lane, MD; Debra Sietsema PhD, RN; Marc F. Swiontkowski, MD*

Orthopaedic surgeons are confronting a higher frequency of fragility fractures in their practices, as well as a considerably higher expectation that their practices will diagnose and treat the underlying basis of fragility fractures in their practices. This mini-symposium will expose attendees to methods for managing fragility fractures, and will review successful strategies for establishing and running their own fragility fracture services.

Learning Objectives

- ◆ Describe the size and scope of fragility fracture epidemic, and the impact of treatment.
- ◆ Identify methods for managing current fragility fractures and preventing future fragility fractures.
- ◆ Create an appreciation of successful strategies for establishing and running their own fragility fracture services.



Annual Meeting – Acetabulum / Pelvis / Spine
Friday, October 7

2016 OTA ANNUAL MEETING, continued

Friday, October 7, 2016, cont'd

1:15 pm - **Concurrent Breakout Sessions, cont'd**
2:45 pm **Mini Symposium**

Getting It Out: The Trials and Tribulations of Hardware Removal

Moderator: **David J. Hak, MD**
Faculty: *Christian Krettek, MD*
Cyril Mauffrey, MD, FACS, FRCS
Greg M. Osgood, MD

Hardware removal is one of the most frequent surgical procedures we perform, yet it can pose an unpredictable level of surgical difficulty. While it may be true that no one looks good removing hardware, some who are unprepared can look a lot worse. Techniques, tips and tricks for removal of various implants will be highlighted.

Learning Objectives

- ◆ Identify the indications and benefits of hardware removal.
- ◆ Review tips and techniques for removal on intramedullary nails.
- ◆ Explain tips and techniques for solutions to problems encountered during routine hardware removal.

Mini Symposium

Treatment of Complex Knee Dislocations

Moderator: **William T. Obrebsky, MD**
Faculty: *Frank R. Avilucea, MD*
William H. Harvin, MD
James P. Stannard, MD

Incidence and associated injuries as well as emergent management will be reviewed. Treatment options for repair and/or reconstruction of multiple ligament tears and associated injuries will be explained. Complications and expected results will be discussed.

Learning Objectives

- ◆ Define incidence and associated injuries as well as emergent treatment.
- ◆ List treatment options and timing for repair and/or reconstruction.
- ◆ Explain complications and outcomes of treatments.

2:35 pm - **Paper Session 4:**
3:38 pm **Upper Extremity I:
Humeral Shaft, Elbow, Wrist**

Moderators: **Robert V. O'Toole, MD**
Gregory J. Della Rocca, MD

2:35 pm **Paper 56**
The Post-Sarmiento Era: Is It Time to Re-Think Expectations of Functional Bracing for Humeral Shaft Fractures?
Rafael Serrano-Riera, MD;
Benjamin Maxson, DO; Anthony Infante, DO;
David Watson, MD; Roy Sanders, MD;
Hassan Mir, MD; Anjan Shah, MD;

2:41 pm **Paper 57**
A Firm Shake Leads to a Strong Union: Stability Six Weeks following Humeral Shaft Fracture Predicts Healing
Adam Driesman, BA, Nina Fisher, BS;
Sanjit Konda, MD; Kenneth Egol, MD

2:47 pm Discussion

2:52 pm **Paper 58**
A Prospective Randomized Trial of Non-Operative versus Operative Management of Olecranon Fractures in the Elderly
Andrew Duckworth, MBChB;
Nicholas Clement, MRCSEd;
Jane McEachan, FRCSEd; Timothy White, MD;
Charles Court-Brown, MD;
Margaret McQueen, MD

2:58 pm **Paper 59**
Comparison of the Henry vs. Thompson Approaches for Fixation of Proximal Radial Shaft Fractures: A Multicenter Study
Paul Tornetta III, MD; Jesse Dashe, MD;
Robert Parisien, MD; Brett Murray, BS;
Andrew Marcantonio, DO; Kate Belluvue, MD;
Reza Firoozabadi, MD; Garbriel Merlin, MD;
Samuel Klatman, MD; Mary George, MD;
Peter Krause, MD; Alex Sadauskas, BS;
Lisa Cannada, MD; John Ruder, MD;
CAPT (ret) Michael Bosse, MD;
Barbara Steverson, RN; Philip Fontenot, MD;
Shaan Patel, MD; Hassan Mir, MD;
Harish Kempegowda, MD; Daniel Horwitz, MD;
Jerald Westberg, MD; Benjamin Sandberg, MD;
Anna Miller, MD; Alexandra Goodwin, MD

3:04 pm **Paper 60**
A Prospective Randomized Trial of Plate Fixation versus Tension Band Wire for Olecranon Fractures
Andrew Duckworth, MBChB;
Nicholas Clement, MRCSEd; Timothy White, MD;
Charles Court-Brown, MD;
Margaret McQueen, MD

2016 OTA ANNUAL MEETING, continued

Friday, October 7, 2016, cont'd

3:10 pm **Paper 61**
Long-Term Outcomes of Total Elbow Arthroplasty for Distal Humeral Fracture: Results from a Prior Randomized Clinical Trial
Niloofer Dehghan, MD; Matthew Furey, MD; Emil Schemitsch, MD; Christine Schemitsch, BS; Michael McKee, MD

3:16 pm Discussion

3:21 pm **Paper 62**
Intraoperative O-arm Imaging of AO-OTA C2 and C3 Distal Radius Fractures Identifies Malreduced Final Reductions in up to 30% of Cases
Brian Vickaryous, MD; J Dean Cole, MD; Bob Meuret, MD

3:27 pm **Paper 63**
Digital Edema Predicts Early Progression to Functional Plateau Following Volar Locked Plating for Distal Radius Fractures
Michael Maceroli, MD; Edward Shields, MD; John Ketz, MD; John Elfar, MD; Jonathan Gross, MD; Warren Hammert, MD

3:33 pm Discussion

3:40 pm Refreshment Break (Hall open 3:30 pm-6:15 pm)

4:10 pm - **Concurrent Breakout Sessions**
5:30 pm **Mini Symposium**

**Syndesmosis Injury:
How Times have Changed**

Moderator: **Lisa K. Cannada, MD**
Faculty: *Samuel Adams, MD
Thomas Jones, MD
Seth R. Yarboro, MD
Robert D. Zura, MD*

The syndesmosis is now not overlooked as an important component of a good result in ankle fracture fixation. Fixation has evolved along with techniques to improve results. This symposium will provide up-to-date tips and tricks on this important topic.

Learning Objectives

- ◆ Describe the current complications of ankle fractures with syndesmosis injuries.
- ◆ List the pros and cons of open reduction of the syndesmosis joint.
- ◆ Discuss the current types of syndesmosis fixation.

Mini Symposium

ORIF versus Acute Arthroplasty for Common Extremity Injuries: What Does Evidence-based Medicine Tell Us?

Moderator: **Emil H. Schemitsch, MD, FRCSC**
Faculty: *Hans J. Kreder, MD, FRCSC
Michael D. McKee, MD, FRCSC
Aaron Nauth, MD, FRCSC
Andrew H. Schmidt, MD, FRCSC*

Increasingly, evidence based medicine (EBM) is being promoted by various groups as the standard to define clinical care. This symposium will illustrate how the use of currently available EBM studies can aid in decision-making with regards to treatment of common extremity injuries with ORIF versus acute arthroplasty.

Learning Objectives

- ◆ Identify the indications for ORIF vs acute arthroplasty for fractures of the proximal humerus and the elbow.
- ◆ Describe the indications for ORIF vs acute arthroplasty for fractures of the acetabulum.
- ◆ Explain the indications for ORIF vs acute arthroplasty for fractures around the knee.

Mini Symposium

Techniques and Controversies in Treatment of Acetabular Fractures

Moderator: **Marcus F. Sciadini, MD**
Faculty: *Michael T. Archdeacon, MD
Tim Chesser, MB, BS, FRCS
Conor P. Kleweno, MD
Mark C. Reilly, MD
Adam J. Starr, MD*

This will be a case-based discussion of alternative options for the treatment of challenging acetabular fractures. Faculty are chosen with many different and often contradictory perspectives on the treatment alternatives for these difficult fractures, including the surgical approach, surgical strategy, positioning of the patient and the use of specially-designed or custom implants or instruments. The goal is to generate a lively discussion and debate regarding the relative benefits and drawbacks to the various perspectives presented with audience feedback and participation welcomed and anticipated.

Learning Objectives

- ◆ Compare and contrast strengths and weaknesses of alternative surgical approaches to complex acetabular fractures (eg: ilioinguinal vs AIP).
- ◆ Identify treatment strategies for geriatric acetabular fractures (eg: ORIF vs arthroplasty vs percutaneous fixation).
- ◆ Explain the utility of specialty implants, instruments and techniques in the treatment of complex acetabular fractures.

Annual Meeting – Upper Extremity I
Friday, October 7

2016 OTA ANNUAL MEETING, continued

Friday, October 7, 2016, cont'd

4:16 pm - **Paper Session 5:**
5:36 pm **Non-union and General Interest I**

Moderator: **Thomas F. Higgins, MD**
Christopher Doro, MD

4:10 pm **Paper 64**
Taylor Spatial Frame Stacked Transport for Tibial Infected Nonunions with Bone Loss: Long Term Functional Outcomes
Joshua Napora, MD; Douglas Weinberg, MD; Blake Eagle; Bram Kaufman, MD; John Sontich, MD

4:16 pm **Paper 65**
Can a Tibia Shaft Nonunion Be Predicted at Initial Fixation? Applying the Nonunion Risk Determination (NURD) Score to the SPRINT Trial Database
Gerard Slobogean, MD; Kevin O'Halloran, MD; Nathan O'Hara, MHA; Renan Castillo, PhD; Sheila Sprague, PhD; Mohit Bhandari, MD; Robert O'Toole, MD; SPRINT Investigators

4:22 pm Discussion

4:27 pm **Paper 66**
Patient Reported Pain Following Successful Nonunion Surgery: Can We Completely Eliminate It?
Nina Fisher, BS; Adam Driesman, BA; Sanjit Konda, MD; Kenneth Egol, MD

4:33 pm **Paper 67**
Intertrochanteric Osteotomy for Femoral Neck Non-union: Does Undercorrection "Result in an Acceptable Rate of Femoral Neck Union?"
Brandon Yuan, MD; David Shearer, MD; David Barei, MD; Sean Nork, MD

4:39 pm **Paper 68**
Any Cortical Bridging Predicts Healing of Supracondylar Femur Fractures
Patrick Strotman, MD; Madhav Karunakar, MD; Tammy Rhoda, MPH; Rachel Seymour, PhD; William Lack, MD

4:45 pm Discussion

4:50 pm **Paper 69**
Are Large Clinical Trials in Orthopaedic Trauma Justified?
Sheila Sprague, PhD; Paul Tornetta III, MD; Gerard Slobogean, MD; Nathan O'Hara, MHA; Paula McKay, BSc; Diane Heels-Ansdell, MSc; Brad Petrisor, MD; Kyle Jeray, MD; Emil Schemitsch, MD; David Sanders, MD; Mohit Bhandari, MD; FLOW Investigators

4:56 pm **Paper 70**
An Evaluation of the Relationship between 6-week Post-Discharge Risk Classification and 6-month Outcomes Following Orthopaedic Trauma
Renan Castillo, MD; Kristin Archer, PhD; CAPT (ret) Michael Bosse, MD; Robert Hymes, MD; Andrew Pollak, MD; Heather Vallier, MD; Anna Bradford, PhD; Susan Collins, MSc; Katherine Frey, RN; Yanjie Huang, ScM; Daniel Scharfstein, ScD; Elizabeth Wysocki, MS; Stephen Wegener, PhD; Ellen MacKenzie, PhD; (Consortium) METRC

5:02 pm Discussion

5:07 pm **Paper 71**
Are Early Career Orthopaedic Trauma Surgeons Performing Enough Complex Trauma Surgery?
Jacob Gire, MD; Michael Gardner, MD; Alex Harris, PhD; Julius Bishop, MD

5:13 pm **Paper 72**
Management of Complex Orthopaedic Trauma – Is the Balance Shifting Away from Level I Trauma Centers?
Meir Marmor, MD; Saam Morshed, MD; Arash Rezaei

5:19 pm **Paper 73**
Surgical Management and Reconstruction Training (SMART) Course for International Orthopedic Surgeons: Saving Limbs after Traumatic Injury
Hao-Hua Wu, BA; Kushal Patel, MD; Amber Caldwell, BA; Richard Coughlin, MD; Scott Hansen, MD; Joseph Carey, MD

5:25 pm **Paper 74**
"Red-Yellow-Green": Effect of an Initiative to Guide Surgeon Choice of Orthopaedic Trauma Implants
Kanu Okike, MD; Rachael Pollak, BA; Robert O'Toole, MD; Andrew Pollak, MD

5:31 pm Discussion

5:36 pm ADJOURN to Poster Tours

5:36 pm - 6:30 pm **Military Reception**
(All Active Duty Military, Retired Military, and Landstuhl Distinguished Visiting Scholar participants are welcome to attend.)

5:40 pm - 6:15 pm **Suds n' Science Guided Poster Tours**
(PT3) **Foot/Ankle**
Guide: **Paul Tornetta III, MD**
(PT4) **General Interest**
Guide: **Michael J. Gardner, MD**

2016 OTA ANNUAL MEETING, continued

Saturday, October 8, 2016

6:30 am - **Concurrent Breakout Sessions**

7:30 am **Case Presentation**

Distal Humerus Fractures: Tips and Tricks

Moderator: **Utku Kandemir, MD**

Faculty: *Michael J. Gardner, MD*

John T. Gorczyca, MD

Michael D. McKee, MD

Milan K. Sen, MD

Treatment of Distal Humerus fractures may result in excellent or poor outcomes. Knowledge of surgical approaches, reduction and fixation techniques, and postoperative management is critical in order to achieve best outcome. This case-based panel discussion will be held specifically addressing the approaches, fractures with intraarticular comminution, fractures with extension into the shaft, coronal shear fractures, ulnar nerve management and postoperative management.

Learning Objectives

- ◆ List pros and Cons of Different Surgical Approaches.
- ◆ Discuss tips of Reduction and Fixation Techniques.
- ◆ Discuss postoperative rehabilitation.

Mini Symposium

Developing and Maintaining a Successful Clinical Research Program

Moderator: **Heather A. Vallier, MD**

Faculty: *Julie Agel, ATC*

Mary A. Breslin, BA

William T. Obrebsky, MD

This mini-symposium is designed for practitioners, research personnel, and physicians in training who aspire to develop a successful clinical research program. Key elements and resources will be described. Efficient and compliant data management strategies will be reviewed. Funding sources will be discussed. Opportunities for collaboration and growth will be demonstrated.

Learning Objectives

- ◆ Develop personnel, infrastructure, and other resources to establish a clinical research program.
- ◆ Describe roles, responsibilities, and important attributes of a productive research coordinator.
- ◆ Identify opportunities for research collaboration, and demonstrate strategies for participation and funding.
- ◆ Develop compliant and efficient data management systems.

Mini Symposium

Pelvic Ring Disruption Decision Making: Deciding What Needs Fixed and How

Moderator: **Jason W. Nascone, MD**

Faculty: *Pierre Guy, MD*

H. Claude Sagi, MD

Adam J. Starr, MD

Case based discussion of pelvic ring disruptions with thought leaders in the field. Participants should expect in-depth discussion of evaluation of stability and how it relates to overall management of these difficult injuries. The panel will also explore regional differences in treatment philosophies as well as different options for fixation.

Learning Objectives

- ◆ Discuss appropriate assessment of pelvic ring injuries.
- ◆ Describe stability of pelvic ring as it relates to management.
- ◆ Summarize various options available to regain or maintain stability of the pelvic ring.

Case Presentation

A Piece of Tibia is Missing, What are My Options?

Moderator: **Cyril Mauffrey, MD**

Faculty: *Gregory J. Della Rocca, MD*

Peter V. Giannoudis, MD

Kyros R. Ipaktchi, MD

Post-traumatic segmental tibial defects are common and require a well planned treatment strategy. In this case based discussion we focus on surgical treatment strategies to reconstruct such defects using the induced membrane technique. Our cases will highlight strategies to reduce failures such as innovative ways of fixation as well as what to do when things go wrong. We will conclude with "simple" soft tissue coverage procedures that can be performed by non microvascular surgeons in the community.

Learning Objectives

- ◆ Identify various treatment strategies to reconstruct bony defects.
- ◆ Describe the importance of staged treatment.
- ◆ Explain simple options to cover soft tissue defects.

2016 OTA ANNUAL MEETING, continued

Saturday, October 8, 2016, cont'd

7:45 am - **Symposium IV**
9:00 am **Femoral Neck Fractures:
Who to Fix, Who to Replace,
and How to Do It**

Moderator: **Theodore T. Manson, MD**
Faculty: *Joshua L. Gary, MD*
Dean G. Lorch, MD
Andrew H. Schmidt, MD
Gerard P. Slobogean, MD

This symposium will aid in preoperative decision making as well as intra-operative techniques for treatment of femoral neck fractures in the young and old. Specific lectures on techniques for ORIF of both young and older patients will be reviewed. In addition, techniques for achieving the best outcomes with the use of arthroplasty in older patients will be covered.

Learning Objectives

- ◆ Explain whether patient should be treated with ORIF or Arthroplasty.
- ◆ Apply recent advances in ORIF of femoral neck fractures.
- ◆ Use recent advances in arthroplasty for femoral neck fractures.

- 7:45 am **Decision Making for Femoral Neck Fractures, Who Should We Fix and Who Should We Replace?**
Gerard P. Slobogean, MD
- 7:55 am **Decision Making for Femoral Neck Fractures-Does Fixation Construct Matter or Is It All in the Reduction?**
Joshua L. Gary, MD
- 8:05 am **Surgical Techniques for Reduction and Fixation of Femoral Neck Fractures in both Young and Old Patients?**
Dean G. Lorch, MD
- 8:20 am **Decision Making for Older Femoral Neck Fractures-Who Gets a Hemi and Who Gets a Total Hip? Do I Use Cement or Press Fit?**
Andrew H. Schmidt, MD
- 8:35 am **Surgical Techniques for Total Hip Replacement for Femoral Neck Fracture:**
Theodore T. Manson, MD
- 8:50 am **Case Presentations**
All Faculty

9:00 am - **Paper Session 6**
10:15 am **Hip Fractures: Young and Old**
Moderators: **Gilbert R. Ortega, MD**
Holly Tyler-Paris Pilson, MD

9:00 am **Paper 75**
Failure Patterns of Young Femoral Neck Fractures: Which Complication Should We Choose?
David Stockton, MD; Karan Dua, MD; Peter O'Brien, MD; Andrew Pollak, MD; Gerard Slobogean, MD

9:06 am **Paper 76**
Open Reduction Internal Fixation vs. Closed Reduction Internal Fixation in Treatment of Young Adults with Femoral Neck Fractures: A Multicenter Retrospective Cohort Study
Keisuke Ishii, MD; *Hao-Hua Wu, BA; Paul Tornetta III, MD; Darin Friess, MD; Clifford Jones, MD; Ross Leighton, MD; Ari Levine, MD; Jeff Maclean, MD; Brian Mullis, MD; William Obremskey, MD; Robert Ostrum, MD; Anas Saleh, MD; Andrew Schmidt, MD; David Teague, MD; Antonios Tsismenakis, MD; Saam Morshed, MD*

9:12 am **Paper 77**
Immediate Weight Bearing as Tolerated has Improved Outcomes Without an Increased Risk of Reoperation after Intramedullary Fixation for Subtrochanteric Fractures Compared to Modified Weight Bearing
Brian Cunningham, MD; David Shearer, MD; Brian Miller, MD; Saif Zaman, MD; Hrayr Basmajian, MD; Ryan Montalvo, BS; George Reahl, BS; Ryan McLemore, PhD; Henry Sagi, MD; Robert O'Toole, MD; William Obremskey, MD

9:18 am Discussion

9:23 am **Paper 78**
Is Vitamin D Associated with Improved Physical Function and Reduced Re-Operation Rates in Elderly Patients with Femoral Neck Fractures Treated with Internal Fixation?
Sheila Sprague, PhD; Gerard Slobogean, MD; Earl Bogoch, MD; Brad Petrisor, MD; Alisha Garibaldi, MSc; Nathan O'Hara, MHA; Mohit Bhandari, MD; FAITH Investigators

9:29 am **Paper 79**
Predictors of Cephalomedullary Nail Failure in the Treatment of Intertrochanteric Hip Fractures
David Ciuffo, MD; *Douglas Zaruta, MD; Jason Lipof, MD; John Gorczyca, MD; Catherine Humphrey, MD; Gillian Soles, MD; Kyle Judd, MD; John Ketz, MD*

2016 OTA ANNUAL MEETING, continued

Saturday, October 8, 2016, cont'd

9:35 am **Paper 80**
Frailty is a Better Marker than Age in Predicting Post-Operative Mortality and Complications Following Pelvis and Lower Extremity Trauma
Cathy (CatPhuong) Vu, BS; Robert Runner, MD; William Reisman, MD; Mara Schenker, MD

9:41 am Discussion

9:46 am **Paper 81**
Hip Fracture Patient on Warfarin: Is Delay of Surgery Necessary?
Matthew Cohn, BS; Ashley Levack, MD; Nikunj Trivedi, BS; Jordan Villa, MD; Joseph Koresse, BS; David Wellman, MD; John Lyden, MD; Dean Lorich, MD; Joseph Lane, MD

9:52 am **Paper 82**
Can Evidence-Based Guidelines Decrease Unnecessary Echocardiograms for Pre-Operative Evaluation of Hip Fracture Patients?
Chris Adair, MD; Eric Swart, MD; Rachel Seymour, PhD; Joshua Patt, MD; Madhav Karunakar, MD

9:58 am **Paper 83**
Hip Arthroplasty for Fracture vs. Elective Patients: One Bundle Does Not Fit All
Siddharth Mahure, MD; Richard Yoon, MD; Lorraine Hutzler, MS; Nirmal Tejwani, MD; Frank Liporace, MD; Joseph Bosco, MD; Kenneth Egol, MD

10:04 am **Paper 84**
Effect of Hospital and Surgeon Volume on Mortality After Hip Fracture
Kanu Okike, MD; Priscilla Chan, BS; Liz Paxton, MA

10:10 am Discussion

9:10 am - **Concurrent Breakout Sessions**
 10:10 am **Skills Lab**

Lab Leader: **Paul Tornetta III, MD**

Proximal tibia fractures represent a challenge for the orthopaedist. This hands-on lab will focus on topics such as indications, surgical approach (including supra-patellar), start point, reduction maneuvers, blocking screws and nail choice to enhance the ability to obtain and maintain a satisfactory reduction.

Learning Objectives

- ◆ Identify the indications for the use of intramedullary nailing for a proximal tibial fracture
- ◆ Describe the surgical approach options for proximal tibial intramedullary nailing.
- ◆ Practice the technical aspects of reduction and nail insertion to minimize the potential for deformity.

10:15 am Refreshment Break

9:10 am - **Concurrent Breakout Sessions**
 10:25 am **Mini Symposium**

Rib Fracture Fixation and the Surgical Management of Flail Chest Injuries: State of the Art

Moderator: **Michael D. McKee, MD**

Faculty: **Gerard P. Slobogean, MD**

Aaron Nauth, MD

Niloofer Dehghan, MD

Emil H. Schemitsch, MD

Rib fracture fixation in the setting of the flail or unstable chest wall injuries in trauma patients is gaining in popularity. Although it is a non-traditional area of surgical fixation, there is some preliminary evidence that stabilization of flail chest injuries may significantly decrease patient morbidity and improve outcomes. Increasingly, orthopaedic trauma surgeons are becoming involved in the surgical management and care of these patients. This symposium will examine the history, techniques, current status, and future of rib fracture fixation.

Learning Objectives

- ◆ Explain the theory and evidence behind the introduction of rib fracture fixation surgery for unstable chest wall injuries.
- ◆ Identify an understanding of the current indications and surgical strategies for the fixation of unstable chest wall injuries.
- ◆ Describe the role of randomized clinical trials in the introduction of new surgical techniques / technology.

Mini Symposium

Translational Research and Future Technologies in Orthopaedic Trauma Infections

Moderator: **Mark E. Shirliff, PhD**

Faculty: **Joseph C. (Josh) Wenke, PhD**

Robert V. O'Toole, MD

This symposium will introduce the biofilm concept of infection and how this microbial mode of growth can be used to develop translational diagnostics and preventative strategies in orthopaedic trauma infections. Experts in basic and clinical translational research will present applicable studies and technologies.

Learning Objectives

- ◆ Describe recent translational research and available technologies that will soon be available to practicing orthopaedic and infectious disease physicians.
- ◆ Discuss the biofilm mode of growth.
- ◆ List prevention and diagnostic strategies in orthopaedic infection.

Annual Meeting – Hip Fractures / Breakout Sessions
 Saturday, October 8

2016 OTA ANNUAL MEETING, continued

Saturday, October 8, 2016, cont'd

9:10 am - **Concurrent Breakout Sessions**
10:25 am **Mini Symposium**

Critical Aspects of Orthopaedic Trauma in 2016 that can Impact Your Financial Future

Moderator: **Peter L. Althausen, MD**

Faculty: *Timothy J. Bray, MD*
J. Scott Broderick, MD, MPH
Chris McBride, MBA
Justin Walker, MD
Anthony Williams ChFC, RFC, CLU

The objective of this symposium is to provide orthopaedic trauma surgeons with an overview of the most important economic aspects of Orthopaedic Trauma which can affect all of us over the coming year. It is vital that we all understand the economic opportunities that exist nationwide to support our trauma systems, private practices, hospitals and personal finances.

Learning Objectives

- ◆ Describe how to maximize the financial aspects of your trauma system both in your hospital and private practice.
- ◆ Explain the financial impact of new Medicare programs and hospital agreements.
- ◆ Review the basics of personal finance to protect your assets and maximize the benefit of your hard work.

10:25 am Refreshment Break - Visit Technical Exhibits



10:45 am - **Concurrent Breakout Sessions**
12:15 pm **Mini Symposium**

The 8 Practices of Highly Successful Surgeons

Moderator: **Jeffrey M. Smith, MD**

Faculty: *Philip Stahel, MD*

A rewarding and fulfilling surgical practice is more than the next surgical procedure. Athletes, performers, business owners and other professionals create a high level of success that is sustainable when they spend a comparable amount of time and energy learning, understanding and implementing practices that address areas beyond their specific trade or skill. This program gives an overview of the 8 essential practices and demonstrates where our standard training methods in medical school, residency, fellowship and practice actually lead to burnout or less fulfilling practice survival skills. This interactive session will also help each surgeon create action plans to create best practices for a sustainable lifestyle-friendly practice starting with energy and wellness, work-life balance, and complex problem solving (EMR, staff turnover, surgery scheduling, dealing with administrators, and so on).

Learning Objectives

- ◆ Identify the 8 Practices of Highly Successful Surgeons and understand why knowledge of these are your empowerment to create a sustainable and fulfilling surgical practice.
- ◆ Create an implementation plan to apply the 8 practices to your daily life and begin to see results of your efforts.
- ◆ Set up and master the 8 practices so they become engrained in your being so will live a balanced life with sustainable and fulfilling surgical practice and career.

Mini Symposium

Elbow Trauma: How to Maximize Outcome

Moderator: **William T. Obremskey, MD**

Faculty: *Lisa K. Cannada MD*
Chad M. Corrigan, MD
Niloofer Dehghan, MD, FRCSC
Michael D. McKee, MD, FRCSC
Emil H. Schemitsch, MD, FRCSC

We will review technique and tips for fixation of supracondylar distal humerus fractures. Tips and decision making will also be reviewed for elbow fracture dislocations. Decision making and stabilization for lateral and medial approaches for joint stabilization will be discussed.

Learning Objectives

- ◆ Identify techniques and tricks for distal humerus fracture internal fixation.
- ◆ Describe techniques and tricks for elbow fracture dislocations.
- ◆ Review recognition and stabilization of complex elbow dislocations.

2016 OTA ANNUAL MEETING, continued

Saturday, October 8, 2016, cont'd

10:45 am - **Paper Session 7**
12:28 pm **Pain Management, Pediatrics,
and Infection**

Moderator: **Michael D. McKee, MD**
Hassan R. Mir, MD

10:45 am **Paper 85**
**Efficacy of Peri-Incisional Multimodal Drug
Injection Following Operative Management
of Femur Fractures**
Daniel Koehler, MD; Larry Marsh, MD;
Matthew Karam, MD; Catherine Fruehling, BA;
Michael Willey, MD

10:51 am **Paper 86**
**Are Continuous Femoral Nerve Catheters
Beneficial for Pain Management After
Operative Fixation of Tibial Plateau
Fractures? A Randomized Trial**
Paul Tornetta III, MD; Margaret Cooke, MD;
Tyler Welch, MD; Oleg Gusakov, MD


10:57 am Discussion

11:02 am **Paper 87**
**Patient Coping and Expectations About
Recovery Predict Development of Chronic
Post-Surgical Pain Pain Interference and
Reduced Quality of Life After Traumatic
Open Extremity Fracture**
Jason Busse, DC; Sun Makosso-Kallyth, PhD;
Brad Petrisor, MD; Kyle Jeray, MD;
Ted Tufescu, MD; Georges-Yves Laflamme, MD;
Paula McKay, BSc; Randi McCabe, PhD;
Yannick Le Manach, MD; Mohit Bhandari, MD;
FLOW Investigators

11:08 am **Paper 88**
**Is Scheduled Perioperative Intravenous
Acetaminophen Use In Geriatric Hip
Fractures Cost-Effective?**
Alan Edwards, MD; Alexander Bollinge, MD;
Thomas Wenzlick, BS; Terrence Endres, MD

11:14 am **Paper 89**
**Continuous Infraclavicular Brachial Plexus
Block Versus Single Shot Nerve Block for
Distal Radius Surgery: A Prospective
Randomized Comparative Trial**
Abhishek Ganta, MD; David Ding, MD;
Nina Fisher, BS; Sudheer Jain, MD;
Nirmal Tejwani, MD

11:20 am Discussion

11:25 am **Paper 90**
**Best Trauma Paper
of the 2016 POSNA
Annual Meeting** 
**Functional Bracing for Treatment of
Pediatric Diaphyseal Femur Fractures:
An Alternative to Spica Casting**
Andrea S. Kramer, MD; Colin Woon, MD;
David Speers, CPO, LPO

11:31 am **Paper 91**
**Randomized Controlled Trial Comparing the
Outcome of Titanium Elastic Nailing Versus
Stainless Steel Nailing in the Management of
Pediatric Diaphyseal Femur Fractures**
Rajiv Maharjan, MD; Kumud Limbu, MD;
Raju Rijal, MD

11:37 am **Paper 92**
**Comparison of the Outcome of Above-Knee
and Below-Knee Cast for Isolated Tibial Shaft
Fractures in Children – a Randomized Trial**
Rajiv Maharjan, MD; Amit Limbu, MD;
Shiva Paneru, MD

11:43 am Discussion

11:48 am **Paper 93**
**Pediatric Supracondylar Humerus
Fractures: Does After-hours
Treatment Influence Outcomes?**
Gabrielle Paci, MD;
Kali Tileston, MD; John Vorhies, MD;
Julius Bishop, MD

11:54 am **Paper 94**
**Pulseless Supracondylar
Humerus Fracture with AIN or
Median Nerve Injury –
An Absolute Indication for
Open Reduction?**
Paul Choi, MD; Liam Harris, BS;
Alexander Broom, BA;
Joseph Yellin, BA; Ashley Miller, BS;
John Roaten, MD;
Jeffrey Sawyer, MD;
Patrick Whitlock, MD;
Alexandre Arkader, MD;
John Flynn, MD; David Skaggs, MD

12:00 pm Discussion

Annual Meeting – Pain Management / Pediatrics / Infection
Saturday, October 8

2016 OTA ANNUAL MEETING, continued

Saturday, October 8, 2016, cont'd

12:05 pm **Paper 95**
Clinical Validation of a Novel ELISA Serum Assay Test for Detection of Staphylococcus aureus Biofilm Antibodies in Serum of Orthopedic Trauma Patients
Janet Harro, PhD; Ryan Montalvo, BS; Theodore Manson, MD; Robert O'Toole, MD; Manjari Joshi, MD; Timothy Zerhusen, BS; Roman Natoli, MD; Mark Shirliff, PhD

12:11 pm **Paper 96**
Intraoperative Temperature in Hip Fractures: Effect on Complications and Outcome
Andrew Pepper, MD; Nicholas Frisch, MD; Stuart Guthrie, MD; Craig Silverton, DO

12:17 pm **Paper 97**
Nasal Decolonization with Povidone-Iodine Decreases Surgical Site Infection in the Elderly with Intracapsular Femur Fractures
Rafael Serrano-Riera, MD; Anthony Infante, DO; Benjamin Maxson, DO; Anjan Shah, MD; Roy Sanders, MD; Hassan Mir, MD; David Watson, MD

12:23 pm Discussion

12:30 pm Lunch - Exhibit Hall closes at 1:30pm

12:30 pm - **Lunchtime Guided Poster Tours**

1:15 pm (PT5) **Knee/Tibia**
Guide: *J. Tracy Watson, MD*

(PT6) **Upper Extremity**
Guide: *Michael D. McKee, MD*

1:30 pm - **Paper Session 8**
2:39 pm **Upper Extremity II: Scapula, Clavicle, Proximal Humerus**

Moderator: **Gerard P. Slobogean, MD**
Frank A. Liporace, MD

1:30 pm **Paper 98**
Should Displaced Scapular Body Fractures Be Operatively Treated? A Randomized Controlled Trial
Clifford Jones, MD; Debra Sietsema, PhD; James Ringler, MD; Terrence Endres, MD

1:36 pm **Paper 99**
5-10 Year Outcomes of Operatively Treated Scapula Fractures
Jeffrey Gilbertson, BA; Joscelyn Tatro, MS; Lisa Schroder, BS; Peter Cole, MD

1:42 pm Discussion

1:47 pm **Paper 100**
Plate Fixation Does Not Beat Nonoperative Treatment for Displaced Midshaft Clavicular Fractures: A Meta-Analysis of Randomized Controlled Trials
Sarah Woltz, MD; P. Krijnen, PhD; I.B. Schipper, MD;

1:53 pm **Paper 101**
Operative Treatment of Displaced Midshaft Clavicle Fractures: Have Evidence-Based Recommendations Changed Practice Patterns?
Prism Schneider, MD; Julie Agel, ATC; Richard Bransford, MD; Edward Harvey, MD

1:59 pm **Paper 102**
Midshaft Clavicle Fractures: A Meta-Analysis Comparing Surgical Fixation via Anteroinferior Plating vs. Superior Plating
Alex Nourian, BS; Satvinder Dhaliwal, MPH; Sitaram Vangala, MS; Peter Vezeridis, MD

2:05 pm Discussion

2:10 pm **Paper 103**
Pre-operative Humeral Head Thickness Predicts Screw Cutout After Locked Plating of Proximal Humerus Fractures
Lorraine Stern, MD; John Gorczyca, MD

2:16 pm **Paper 104**
Proximal Humerus Fracture Fixation Failure: A Retrospective Review
John Williams, MD; William Uffmann, MD; Joshua Harmer, BS; Robert Tashjian, MD; Erik Kubiak, MD

2:22 pm **Paper 105**
Reverse Shoulder Arthroplasty for Proximal Humerus Fractures: Outcomes Comparing Primary Reverse Arthroplasty for Fracture versus Reverse Arthroplasty After Failed Osteosynthesis
Steven Shannon, MD; Eric Wagner, MD; Matthew Houdek, MD; William Cross, MD; Joaquin Sanchez-Sotelo, MD

2:28 pm **Paper 106**
Intermediate to Long Term Outcomes Following Initial Treatment of Proximal Humerus Fractures in Ontario Canada: A Population Based Retrospective Cohort
Lauren Nowak, MSc; Michael McKee, MD; Aaron Nauth, MD; Milena Vicente, RN; Marissa Bonyun, MD; Emil Schemitsch, MD

2:34 pm Discussion

2016 OTA ANNUAL MEETING, continued

Saturday, October 8, 2016, cont'd

1:30 pm - **Concurrent Breakout Sessions**
2:40 pm **Mini Symposium**

How to Use Ring Fixators (TSF and Ilizarov) for Tibia Fractures

Moderator: **Theodore T. Manson, MD**

Faculty: *Joseph R. Hsu, MD*
Stephen M. Quinnan, MD
Robert V. O'Toole, MD

Designed for the practicing surgeon caring for tibial fractures, this session will allow adaptation of ring fixators (Taylor Spatial Frame and Ilizarov Frames) into your practice. Basics of safe and easy frame application will be reviewed as well as strategies to treat tibial plateau and pilon fractures as well as bone transport and grafting for tibial defects. The surgeon should at the completion of the course have the cognitive skill set for basic bone transport as well as straightforward tibial plateau and pilon fractures using ring fixator frames.

Learning Objectives

- ◆ Describe the basics of ring fixator application.
- ◆ Treat tibial plateau and pilon fractures using a ring fixator.
- ◆ Use ring fixators to treat tibial bone loss.

Mini Symposium

Lower Extremity Arthroplasty: Unreconstructable Articular Fractures, Periprosthetic Fractures, and Failed Fixation

Moderator: **Adam Sassoon, MD**

Faculty: *George J. Haidukewych, MD*
Conor P. Kleweno, MD
William M. Ricci, MD
Emil H. Schemitsch, MD

This session will highlight clinical indications, technical pearls, and potential pitfalls related to lower extremity arthroplasty in the treatment of unreconstructable periarticular fractures, periprosthetic fractures, and failed fracture fixation.

Learning Objectives

- ◆ Identify the indications for primary arthroplasty in the definitive treatment of severe and unreconstructable periarticular fractures.
- ◆ Identify which periprosthetic fractures require revision arthroplasty in conjunction with fracture fixation and technical pearls for dealing with this demanding problem.
- ◆ Recognize arthroplasty as a salvage option in the setting of failed fixation, non-unions, and malunions.

2:40 pm Refreshment Break - NO EXHIBITS

3:00 pm - **Paper Session 9**
5:10 pm **Foot & Ankle, Amputation,
Open Fractures and
General Interest II**

Moderators: **Stephen A. Kottmeier, MD**
Clifford B. Jones, MD

3:00 pm **Paper 107**
Can You Drive Before You Walk?
**Driving Tests for Patients with Surgically
Treated Ankle Fractures**
Sean Ho, MBBS;
Mei Leng Chan, Doctor of Philosophy (OT);
Ernest Kwek, FRCS

3:06 pm **Paper 108**
**PROMIS Computer Adaptive Tests Compared
with Time To Brake in Patients with Complex
Lower Extremity Trauma**
Seewan Kim, BS; Daniel Wiznia, MD;
Leon Averbukh, BS; Andrea Torres, BS;
Edward Kong, BS; Chang-Yeon Kim, BS;
Michael Leslie, DO

3:12 pm **Paper 109**
**Serial Radiographs Do Not
Change the Clinical Course of
Non-Operative Stable Weber B
Ankle Fractures**
Lucas Marchand, MD;
Zachary Working, MD;
Ajinkya Rane, MD;
Lance Jacobson, MD;
Erik Kubiak, MD;
Thomas Higgins, MD;
David Rothberg, MD

3:18 pm **Paper 110**
**Equivalent Functional Outcomes
Following Injury Specific Fixation
of Posterior Malleolar Fractures
and Equivalent Ligamentous
Injuries**
Ashley Levack, MD;
Stephen Warner, MD;
Elizabeth Gausden, MD;
David Helfet, MD; Dean Lorich, MD

3:24 pm Discussion

3:29 pm **Paper 111**
**Articular Inflammatory Cytokine
Response is Greater in Acute
Plafond Fractures than in Acute
Tibial Plateau Fractures**
Justin Haller, MD;
Lucas Marchand, MD;
David Rothberg, MD;
Erik Kubiak, MD;
Thomas Higgins, MD

Annual Meeting — Foot & Ankle / Amputation / Open Fr
Saturday, October 8

2016 OTA ANNUAL MEETING, continued

Saturday, October 8, 2016, cont'd

3:35 pm **Paper 112**
Negative Pressure Therapy Dressings versus Standard Dressings for Closed Calcaneus Fractures: Preliminary Results of a Prospective Randomized Study of Wound Complications
Camille Connelly, MD; Michael Archdeacon, MD; Amanda Schroeder, MD

3:41 pm **Paper 113**
Treatment of Primary Ligamentous Lisfranc Injuries: Comparison between Screw Fixation and Tightrope Fixation
Harish Kempegowda, MD;
Shannon Alejandro, MD; Amrut Borade, MD; Benjamin Wagner, MD; Jove Graham, PhD; Gerard Cush, MD; James Gotoff, BS; Daniel Horwitz, MD

3:47 pm Discussion

3:52 pm **Paper 114**
An Osseointegrated Percutaneous Prosthetic System for Treatment of Transfemoral Amputees: Medium and Projected Long-Term Follow-Up
Örjan Berlin, MD; *Kerstin Hagberg, PT; Katarzyna Kulbacka-Ortiz; Rickard Brånemark, MD*

3:58 pm **Paper 115**
Improved Function and QoL Following Osseointegrated Reconstruction of Post-Traumatic Amputees
Vaida Glatt, PhD; Munjed Al Muderis, FRACS; Kevin Tetsworth, MD

4:04 pm Discussion

4:09 pm **Combined Presentation of Papers 116 & 117**
Prognostic Factors for Predicting Re-Operations after Operative Management of Open Fractures
Mohit Bhandari, MD; Kyle Jeray, MD; Brad Petrisor, MD; Jeffrey Anglen, MD; Gregory Della Rocca, MD; PJ Devereaux, MD; Diane Heels-Ansdell, MSc; Clifford Jones, MD; Hans Kreder, MD; Susan Liew, MD; Kim Madden, MSc; Sun Makosso-Kallyth, PhD; Paula McKay, MD; Steven Papp, MD; Parag Sancheti, MD; Emil Schemitsch, MD; Sheila Sprague, MD; Stephanie Tanner, MS; Paul Tornetta III, MD; Ted Tufescu, MD; Stephen D. Walter, BSc; Gordon Guyatt, MD; FLOW Investigators

What Factors are Associated with Infection in Open Fractures? A Predictive Model Based on a Prospective Evaluation of 2338 Patients
Paul Tornetta III, MD; Gregory Della Rocca, MD; Saam Morshed, MD; Clifford Jones, MD; Diane Heels-Ansdell, MSc; Sheila Sprague, PhD; Brad Petrisor, MD; Kyle Jeray, MD; Mohit Bhandari, MD; FLOW Investigators

4:15 pm **Paper 118**
A Pilot Randomized Clinical Trial to Compare Intramedullary Nailing to Uniplanar External Fixation for Open Tibial Shaft Fractures in Tanzania
Max Liu, BA; David Shearer, MD; Kurt Yusi, MD; Saam Morshed, MD; Edmund Eliezer, MD; Billy Haonga, MD

4:21 pm **Paper 119**
Clinically Important Subgroups within a Large Cohort of Gustilo Type IIIB Open Tibia Fractures: An Analysis of Surgical Re-Hospitalizations
Reza Firoozabadi, MD; *Renan Castillo, MD; Robert O'Toole, MD; Anthony Carlini, PhD; CAPT (ret) Michael Bosse, MD; METRC Consortium*

4:27 pm Discussion

4:32 pm **Paper 120**
Operative Stabilization of Unstable Flail Chest Injuries Reduces Mortality to that of Stable Chest Wall Injuries
Niloofer Dehghan, MD; *Emil Schemitsch, MD; Milena Vicente, RN; Aaron Nauth, MD; Michael McKee, MD*

4:38 pm **Paper 121**
Influence of Timing of Femur Fracture Fixation on Outcomes Following Major Trauma
James Byrne, MD; *Avery Nathens, MD; David Gomez, MD; Richard Jenkinson, MD*

4:42 pm Discussion

2016 OTA ANNUAL MEETING, continued

Saturday, October 8, 2016, cont'd

- 4:47 pm **Paper 122**
Prospective Evaluation of PTSD and Depression in Orthopedic Injury Patients With and Without Concomitant Traumatic Brain Injury
Jaicus Solis, MD; Alan Jones; Kenleigh Roden-Foreman, BA; Evan Rainey, MS; Monica Bennett, PhD; Michael Foreman; Ann Marie Warren, PhD
-
- 4:53 pm **Paper 123**
Combined Orthopaedic and Vascular Injuries: A Multicenter Analysis
Paul Torretta III, MD; Amir Shahien, MD; Matthew Sullivan, MD; Reza Firoozabadi, MD; Keyin Lu, BS; Lisa Cannada, MD; Mark Timmel, BS; Ashley Ali, MD; Kasey Bramlett, PA-C; Andrew Marcantonio, DO; Megan Flynn, MD; Heather Vallier, MD; Rick Nicolay, BS; Brian Mullis, MD; Alexandra Goodwin, MD; Anna Miller, MD; Peter Krause, MD; Hassan Mir, MD
-
- 4:59 pm **Paper 124**
MRI of Trauma Patients Treated with Contemporary External Fixation Devices is Without Significant Adverse Events: A Multicenter Study
Brett Hayden, MD; Raminta Theriault, BS; Kasey Bramlett, PA-C; Robert Lucas, BA; Michael McTague, MD; Robert Ward, MD; Michael Weaver, MD; Andrew Marcantonio, DO; Scott Ryan, MD
-
- 5:06 pm Discussion
-
- 5:10 pm ADJOURN

See you next year!
2017 OTA Annual Meeting
October 11 - 14
Vancouver, CANADA



Special Events

Guests of meeting attendee are invited, but must register.

Yoga: Surgeon Fitness, Mindfulness and Recharge

Event Coordinator: Jeffrey M. Smith, MD

Wednesday, October 5	7:00 pm - 8:00 pm	\$20
Friday, October 7	6:00 am - 7:00 am	\$20

Research shows that exercise and the practice of some form of mindfulness is a helpful approach to reducing stress and burnout. Yoga is a great opportunity for the combination. Join your fellow surgeons looking to recharge for a more positive learning experience at the annual meeting. GUESTS are welcome. We will provide for a trained instructor in hatha / vinyasa yoga, a bottle of water, towel or yoga mat, and one-hour class. Instruction will be provided for the span of beginner to advanced levels.

Tai Chi for Surgeons

Event Coordinator: Jeffrey M. Smith, MD

Faculty: Jeffrey O. Anglen, MD and Wade R. Smith, MD

Saturday, October 8	6:00 am - 7:00 am	\$20
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Research shows that exercise and the practice of some form of mindfulness is a helpful approach to reducing stress and burnout; Tai Chi is a great opportunity for the combination!

Join your fellow surgeons looking to recharge for a more positive learning experience at the annual meeting. GUESTS are welcome.

Instruction for 50-60 minutes provided for the span of beginner to advanced levels.

Bicycling Event (2 hour ride): Second Annual "Tour de Bone"

Event Coordinator: Jeffrey M. Smith, MD

Faculty: Andrew H. Schmidt, MD and Amir M. Matityahu, MD

Thursday, October 6	7:00 am - 10:00 am	\$25
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Multiple studies show the benefits of aerobic exercise and learning capacity and memory. What better way to start off your OTA educational meeting! Join your fellow surgeons and GUESTS to explore these benefits. Attendees will be referred to <http://www.bigwheelbikes.com/> for direct payment and reservation of bikes ranging from \$35 to \$75/bike, which will cover rental, helmet, locks, and individual fitting as needed. The fee charged by the OTA will cover a bottle of water and organizational costs such as delivery and pickup of bikes at the arranged meeting point. This event is subject to cancellation if poor weather, but if so, we will still meet to discuss opportunities for future events.

Annual Meeting — Special Events
 Saturday, October 8



INDUSTRY SYMPOSIA

Industry Symposia Registration

Meeting and course participants are invited to attend Industry Symposia at no additional charge.

- ◆ Visit www.ota.org for updates.
- ◆ No CME credits earned for Industry Symposia.
- ◆ Industry Symposia FILL QUICKLY and may not be available to on-site registrants. Ensure your space - register early.
- ◆ Choose the Symposia in order of your preference on the registration form (Page 49).
- ◆ Check for new sessions and updated descriptions online.

Thursday, October 6, 2016

11:15 am - 12:45 pm – **Registration Required**
(Boxed lunch available)

(IS1) **DePuy Synthes Trauma Industry Session 1**



(IS2) **DePuy Synthes Trauma Industry Session 2**



CME credits are not available.
Absolutely no recording (audio or video) or photography is permitted.

Thursday, October 6, 2016, continued

11:15 am - 12:45 pm – **Registration Required**
(Boxed lunch available)

(IS4) **Zimmer Biomet Session**



How to Get Better Outcomes with Proximal Humerus Fractures

Faculty: Paul Kiritsis, MD

Discussion on proximal humerus fractures, the importance of utilizing an anatomic 135° neck shaft angle with internal subchondral support, and features and benefits of the NEW Zimmer Biomet A.L.P.S.® Proximal Humerus Plating System.

(IS5) **Ziehm Imaging Industry Session**



Game Changing Technology for Mobile Intraoperative 3D Imaging in Trauma Surgery

Faculty: Milton J. Routt, MD

Orthopedic Trauma Specialist,
Memorial Hermann Texas Medical Center

(IS6) **Skeletal Dynamics Industry Session**



Internal Joint Stabilizer for the Management of Elbow Instability

Faculty: Jorge L. Orbay, MD

Lecture and surgical demonstration of a new and novel internal device for the management of unstable elbows.

INDUSTRY SYMPOSIA, continued

Thursday, October 6, 2016, continued

11:15 am - 12:45 pm – **Registration Required**
(Boxed lunch available)

(IS7) **Nuvasive Industry Session**



Remote Controlled Intramedullary Limb Lengthening Solution for the Orthopedic Trauma Surgeon

Faculty: J. Tracy Watson, MD; S. Robert Rozbruch, MD;
Austin T. Fragomen, MD; Mitchell Bernstein, MD

Discussion on the latest advancement in limb lengthening surgery with an intramedullary device. This session will include case examples, tips and tricks and how to avoid complications. The PRECICE Intramedullary Limb Lengthening System is a novel adjustable state-of-the-art device that utilizes a remote control to non-invasively lengthen the femur or tibia.

(IS8) **Acumed Industry Session**



New Solutions in Ankle Fracture Fixation

This one and half hour course will guide attendees through current challenges facing orthopaedic surgeons. Expert faculty will discuss advanced treatment options and provide case examples for minimally invasive surgical techniques. The hands-on cadaveric portion allows attendees to try and compare different fixation options for ankle injuries. This course will cover everything from pathology to advanced surgical techniques on the following topics:

- Applications for Lateral and Medial Malleous Fractures
- Posterior Pilon Fracture Repair

(IS10) **Cara Therapeutics Industry Session**



Moving Beyond Mu with Kappa Opioid Receptor Agonists – Leaving the Baggage Behind

Faculty: Hassan R. Mir, MD, MBA, FACS
Joseph W. Stauffer, DO, MBA

Learn about a novel peripherally acting kappa opioid receptor agonist, CR845, which is in phase 3 trials for postoperative pain (IV) and phase 2 trials for chronic pain (oral). Its unique pharmacologic properties produce analgesia with low abuse potential and little-to-no mu opioid side effects like nausea/vomiting and respiratory depression.

Friday, October 7, 2016

6:30 pm - 8:00 pm – **Registration Required**

(IS9) **Zimmer Biomet Industry Session**



A New Option in Hip Fracture Treatment: Augmented Fixation with the N-Force Fixation System

Attendees will view a hip fracture moderated surgery using the first augmented fixation system for fracture fixation which integrates fenestrated screws and a bone substitute material (BSM) into a single construct.

N-Force Fixation System® is a trademark of InnoVision, Inc.

(IS11) **Legally Mine Industry Session**



LEGALLY MINE

Keys to Locking Out Lawsuits and Lowering Taxes

Faculty: Art McOmber

Through this course attendees will truly understand exactly how, why and where legal entities should be used for both lawsuit prevention and income tax reduction. The course is given in plain English and when done most attendees understand the proper use of legal tools for the first time in their lives. The mission of Legally Mine is to empower members of the healthcare and business communities with the knowledge and tools to protect their assets from lawsuits, legitimately reduce their tax liability, and to cultivate an environment wherein they can thrive financially.

**CME credits are not available.
Absolutely no recording (audio or video) or photography is permitted.**

REGISTRATION and ADDITIONAL INFORMATION

Registration Information – Register Early!

- ◆ Register online at www.ota.org with OTA's new, simplified registration process.
- ◆ FAX completed form directly to: 847.430.5140
- ◆ Check made payable to OTA and drawn from a US bank in US dollars.
Mail form and check by September 15 to:
OTA
9400 W. Higgins Rd, Suite 305,
Rosemont, IL 60018, USA
- ◆ Registrations faxed or postmarked after September 15 will not be processed; on-site registrations will require an additional \$100 USD late fee for all pre-meeting events and Annual Meeting.
- ◆ All pre-registrations will receive confirmation by E-mail. Badges will be picked up on-site. Attendees will be able to pre-register online until September 30, 2016.

Cancellations and Refunds

- ◆ Submit cancellation in writing to OTA office via fax: 847.430.5140 or email: OTA@ota.org
- ◆ Refunds less a \$100 USD processing fee per registration will be made in a timely basis by OTA after the close of the OTA Annual Meeting, if cancelled prior to October 5th.
- ◆ No refunds after October 5, 2016.

On-site Registration

- ◆ Registrations received after September 30 will be accepted on-site plus an additional \$100 USD late fee.
- ◆ On-site Registration available:
Tuesday, October 4
4:00 pm - 6:00 pm
Wednesday - Saturday, October 5 – 8
6:15 am - 5:00 pm

2016 Annual Meeting App

Watch your email for release of the 2016 Annual Meeting App!



Skills Labs

No pre-registration and no tickets!

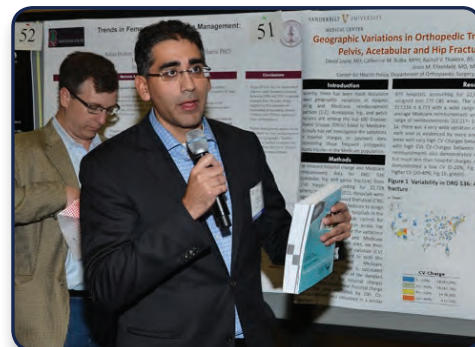
All attendees will have an equal opportunity at attending the skills labs.

- ◆ Skills Labs FILL QUICKLY, arrive early.

Annual Meeting Posters

Annual Meeting Scientific Posters will be available for viewing during exhibit hall hours beginning at 2:30 pm on Thursday through 1:30 pm on Saturday in the exhibit hall.

- ◆ Visit www.ota.org for a complete listing of posters.
- ◆ ePosters will be available on the OTA website, as well as the Annual Meeting App.



Guided Poster Tours

Friday Lunch (12:30 pm - 1:15 pm):

- (PT1) **Hip/Femur** Guide: *Thomas F. Higgins, MD*
- (PT2) **International** Guide: *Peter V. Giannoudis, MD*

Friday Evening Suds n' Science (5:40 pm - 6:15 pm):

- (PT3) **Foot/Ankle** Guide: *Paul Tornetta III, MD*
- (PT4) **General Interest** Guide: *Michael J. Gardner, MD*

Saturday Lunch (12:30 pm - 1:15 pm):

- (PT5) **Knee/Tibia** Guide: *J. Tracy Watson, MD*
- (PT6) **Upper Extremity** Guide: *Michael D. McKee, MD*

- ◆ Ensure your space in Guided Poster Tours - Register early.
- ◆ Poster Tours FILL QUICKLY and may not be available to on-site registrants.
- ◆ Indicate your order of your preference on the registration form.

NPI # _____
 AAOS # _____
 (REQUIRED FOR CME CREDIT)

FIRST NAME _____ FAMILY (LAST) NAME _____ DEGREE _____

ADDRESS Home Office Address _____

CITY _____ STATE/PROVINCE _____ POSTAL CODE _____ COUNTRY _____

() ()

TELEPHONE Home Office Cell _____ FAX _____ E-MAIL Office Personal _____

ON DEMAND BUNDLED PACKAGE FEES

(U.S. Funds)

(Annual Meeting Registration and Annual Meeting On Demand)

(Additional information on page 50.)



By 9/30/16*	After 9/30/16	By 9/30/16*	After 9/30/16
OTA Member		Non-Member	

OTA Member	<input type="checkbox"/> \$550 / \$650		
Non-member		<input type="checkbox"/> \$1050 / \$1150	
Non-member Medical Resident, Fellow**		<input type="checkbox"/> \$750 / \$850	
Non-member Health Care Personnel**		<input type="checkbox"/> \$750 / \$850	

ANNUAL MEETING ONLY REGISTRATION FEES

(U.S. Funds)

By 9/30/16*	After 9/30/16	By 9/30/16*	After 9/30/16
OTA Member		Non-Member	

OTA Member	<input type="checkbox"/> \$250 / \$350		
Non-member		<input type="checkbox"/> \$750 / \$850	
Non-member Medical Resident, Fellow**		<input type="checkbox"/> \$450 / \$550	
Non-member Health Care Personnel**		<input type="checkbox"/> \$450 / \$550	

**Chief or Residency/Fellowship Program Director Name (required): _____

WEDNESDAY, OCTOBER 5

By 9/30/16*	After 9/30/16	By 9/30/16*	After 9/30/16
OTA Member		Non-Member	

Basic Science Focus Forum	<input type="checkbox"/> \$250 / \$350	<input type="checkbox"/> \$350 / \$450
Grant Writing Workshop	<input type="checkbox"/> \$150 / \$200	<input type="checkbox"/> \$200 / \$250
ICD-10 Coding for Trauma Surgeons	<input type="checkbox"/> \$200 / \$300	<input type="checkbox"/> \$300 / \$400
International Orthopaedic Trauma Care Forum	<input type="checkbox"/> \$150 / \$200	<input type="checkbox"/> \$200 / \$250
International Reception (All International Participants Welcome)	<input type="checkbox"/> FREE	<input type="checkbox"/> FREE
Orthopaedic Trauma Boot Camp	<input type="checkbox"/> \$275 / \$375	<input type="checkbox"/> \$400 / \$500
Orthopaedic Trauma for PAs and NPs	<input type="checkbox"/> \$250 / \$350	<input type="checkbox"/> \$400 / \$500
Residents Comprehensive Fracture Course	<input type="checkbox"/> \$725 / \$725	<input type="checkbox"/> \$725 / \$725

PGY1 ___ PGY2 ___ PGY3 ___ PGY4 ___ PGY5 ___ Fellow ___

Residency Program Director _____

Residency Program Director Email _____

THURSDAY, OCTOBER 6

Young Practitioners Forum	<input type="checkbox"/> \$75 / \$100	<input type="checkbox"/> \$75 / \$100
Welcome Reception	<input type="checkbox"/> FREE	<input type="checkbox"/> FREE
Guest Reception Ticket(s)		
# of persons attending ___ X \$65.00 USD	\$ _____	\$ _____

FRIDAY, OCTOBER 7

Military Reception	<input type="checkbox"/> FREE	<input type="checkbox"/> FREE
New Member Luncheon	<input type="checkbox"/> FREE	<input type="checkbox"/> FREE
Women in Orthopaedic Trauma Luncheon	<input type="checkbox"/> FREE	<input type="checkbox"/> FREE

TOTAL \$ _____ \$ _____

RESERVED SESSIONS (Indicate your choices)

No additional charge - Tickets Required

INDUSTRY SYMPOSIA

	1st Choice # (List ONLY one/day)	2nd Choice # (List ONLY one/day)
Wednesday Evening (6:30 pm – 8:00 pm)	_____	_____
Thursday Lunch (11:15 am – 12:45 pm)	_____	_____
Friday Evening (6:30 pm – 8:00 pm)	_____	_____

POSTER TOURS

Friday Lunch (12:30 pm – 1:15 pm)	<input type="checkbox"/> PT1	<input type="checkbox"/> PT2	<input type="checkbox"/> PT1	<input type="checkbox"/> PT2
Friday Evening (5:40 pm – 6:15 pm)	<input type="checkbox"/> PT3	<input type="checkbox"/> PT4	<input type="checkbox"/> PT3	<input type="checkbox"/> PT4
Saturday Lunch (12:30 pm – 1:15 pm)	<input type="checkbox"/> PT5	<input type="checkbox"/> PT6	<input type="checkbox"/> PT5	<input type="checkbox"/> PT6

SKILLS LABS

Friday Morning (8:00 am – 9:00 am)	
Friday Afternoon (1:15 pm – 2:15 pm)	
Saturday Morning (9:00 am – 10:00 am)	

No pre-registration and no tickets!
No more waiting lists. Skills Labs will FILL QUICKLY! Arrive EARLY. Door monitors will close lab door when room reaches maximum.



SPECIAL EVENTS

Yoga Wednesday (7:00 pm – 8:00 pm)	<input type="checkbox"/> \$20	Friday (6:00 am – 7:00 am)	<input type="checkbox"/> \$20
Tai Chi Saturday (6:00 am – 7:00 am)	<input type="checkbox"/> \$20		
2nd Annual Tour de Bone Bike Event	Thursday Morning (7:00 am – 10:00 am)	<input type="checkbox"/> \$25	

THREE WAYS TO REGISTER!

ONLINE at www.ota.org

FAX 847.430.5140

BY MAIL (*Mailed registrations must be postmarked on or prior to September 15, 2016.)

Make checks payable to: **Orthopaedic Trauma Association**
 9400 W. Higgins Rd, Suite 305
 Rosemont, IL 60018, USA

REGISTER ON-SITE AFTER SEPTEMBER 30, 2016.

REFUNDS: OTA office must receive written notice of cancellation for a refund less a \$100.00 USD processing fee. NO refunds after October 5, 2016.

QUESTIONS: Contact OTA at 847.698.1631 or email ota@ota.org.

METHOD OF PAYMENT

Check Enclosed VISA MasterCard American Express

CARD NUMBER _____ EXP. DATE _____ CVV # _____

NAME (AS IT APPEARS ON CARD) _____

SIGNATURE (I AGREE TO PAY ACCORDING TO THE CREDIT CARD ISSUER AGREEMENT) _____

ANNUAL MEETING WELCOME RECEPTION

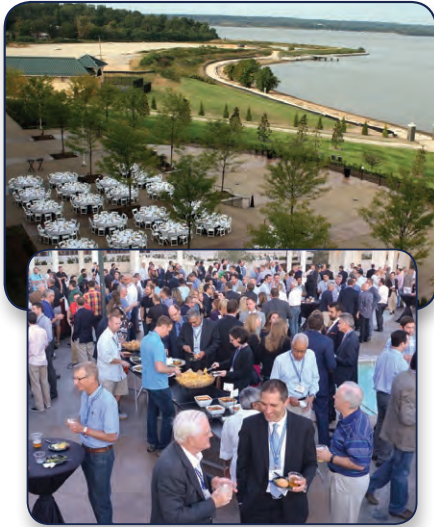
Thursday, October 6, 2016

6:00 pm - 8:00 pm

Gaylord National Harbor Orchard Terrace

Join your colleagues for cocktails and hors d'oeuvres on the Orchard Terrace of the Gaylord National Harbor, just outside the exhibit hall.

Annual Meeting attendees will once again enjoy wonderful offerings at the live auction during the Welcome Reception.



OTA Does It Again at the 2016 Annual Meeting!

The OTA Auction is Back by Popular Demand in support of OTA Research & Education.



Take a peek at some of the items up for bid - **Got a need for speed?** Nascar Driver for a Day is the package for you. **Love Sailing?** Bid on America's Cup Yacht Sailing experience package. How about

an exclusive **Sonoma Valley Private Winery Tours Package** or a **case of favorite bottles of wine from the OTA Board, Past Presidents and Leadership** to add to your collection. Like to ski? Get ready to bid on a Ski vacation package on **Peak 8 of Breckenridge Ski Resort?** For your Baseball collection, a **Joe Mauer signed Twins Baseball Jersey**. You'll be proud to own this **US Military Flag** flown by a Para-rescue group running missions into Syria and Iraq for personnel recovery. Don't overlook the **OTA 2017 Annual Meeting Vancouver Auction Package**... More items to come!

You can bid on some items online at <http://ota.org/education/2016-ota-annual-meeting/auction/silent-auction/>

VIDEO COPY OF THE 2016 OTA ANNUAL MEETING



On Demand
Opportunity

Can't Attend
Every Session?

Order OTA Annual Meeting **On Demand** and save hundreds of dollars!

With many sessions occurring simultaneously, your **On Demand** program gives you the opportunity to participate in all key presentations, helping you maximize the investment you've made in attending the live meeting.

OTA Annual Meeting **On Demand** features online access to over 60 hours of break-outs, pre-meeting events and podium presentations from any computer or mobile device.

Attendee **On Demand** Price (with Annual Meeting registration): \$300

Priced hundreds of dollars higher if purchased following the Annual Meeting!

Order today when registering
for the Annual Meeting
online at www.ota.org or with the
meeting registration form on page 49!

Special offer ends October 8, 2016.



OTA VIDEO THEATER



Visit the OTA Video Theater and learn new or evolving techniques! View and evaluate selected peer reviewed videos from your colleagues. The Theater will be in the exhibit hall during exhibit hours, beginning on Thursday afternoon.



UPCOMING EVENTS

Membership Application Deadline (Apply Online)
November 1, 2016

Resident Grant Deadline (Apply Online)
December 2016

Full Grant Pre-proposal Deadline (Apply Online)
February 2017

2017 OTA Events

January 20 - 21, 2017
Residents Advanced Trauma
Techniques Course
Dallas, Texas

March 18, 2017
OTA Specialty Day
San Diego, California

April 5 - 8, 2017
OTA Spring Residents
Comprehensive Fracture Course
Chicagoland, Illinois

April 6 - 9, 2017
OTA Fellows Course
Boston, Massachusetts

October 11 - 13, 2017
OTA Residents Comprehensive
Fracture Course
Vancouver, Canada

October 11 - 14, 2017
OTA Annual Meeting
Vancouver, Canada

Annual Meeting Abstract Deadline: February 1, 2017

Check www.ota.org for details

Future Events

JOIN OTA

Member Services

Take advantage of the many OTA member services...

- JOT Subscription
- Meeting Discounts
- Fellowship Match
- Career Resources
- Coding and Practice Management Resources (Academic and Community)



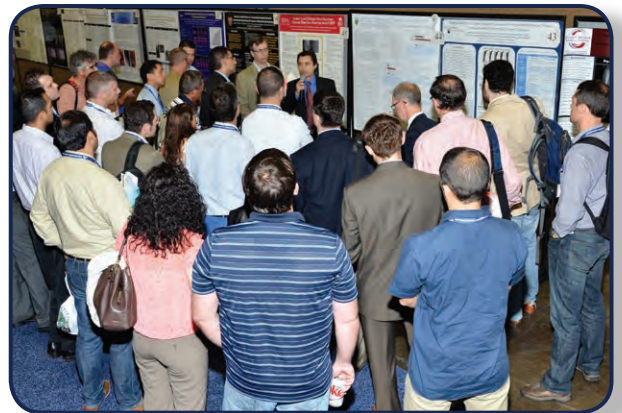
Education

Learn the latest techniques for the management of complex orthopaedic trauma patients from leading orthopaedic trauma educators.

The OTA offers educational opportunities for:

- Residents
- Young Practitioners
- Mid - Senior Level Orthopaedic Surgeons
- Fellows

Scholarships offered for most resident programs.



Research

- Research Grants
- Trauma Registry
- Mult-Center Studies
- Conduct and Access OTA Member Surveys

Professional Development and Leadership Opportunities

- 25+ Committees and Project Teams
- Resident and Fellow Education and Research Grants



Health Policy and Practice Management

- Shape Health Policy
- Evaluate Current Practice Management Issues
- Develop Position Statements and Incorporate Thoughtful Solutions



Membership

32nd Annual Meeting Check List

- Completed the Meeting Registration Form?
- Indicated your preferences for Industry Lunch Symposia and Guided Poster Tours (page 49)?
- Included your Payment with the Registration Form?
- Made your hotel reservation with The Gaylord National Harbor online at www.ota.org?

Secure on-line registration at www.ota.org or Fax Registration Forms with Credit Card payment to 847.430.5140

Mail Registration with USD Check Payment to the OTA staff office:

Orthopaedic Trauma Association

9400 W. Higgins Road, Suite 305, Rosemont, IL 60018 USA

Registration faxed or post-marked by September 15, 2016.

Register on-line by September 30, 2016.

- ◆ All Badges will be picked up at the Registration Desk in National Harbor - none will be mailed.
- ◆ Pre-registrations will receive confirmation via E-mail.
- ◆ Badges will be printed and picked up in the Express Registration line in National Harbor.
- ◆ Please REMEMBER to bring your meeting registration confirmation.

Attendance at an OTA educational event authorizes the OTA to capture your image or likeness in photographic, digital video, or other electronic format, and authorizes the OTA to use said image or likeness in marketing materials to promote OTA, including print, electronic and on the internet. OTA warrants that its use of the image or likeness will not be in a negative manner. OTA has no control over the use of the image or likeness by third parties and therefore makes no express or implied warranties on any use by third parties.



ORTHOPAEDIC
— TRAUMA —
ASSOCIATION

9400 W. Higgins Rd, Suite 305
Rosemont, IL 60018 USA



Gaylord
★ NATIONAL HARBOR ★
Maryland

2016 ANNUAL MEETING

CME Credits

20 AMA PRA Category 1 Credits™

for attending the Annual Meeting.
Additional credits are also available
if you attend premeeting events:

Basic Science Focus Forum (11 AMA PRA Category 1 Credits™)

CPT & ICD-10 Coding Conundrums (6 AMA PRA Category 1 Credits™)

Grant Writing Workshop (5 AMA PRA Category 1 Credits™)

International Orthopaedic Trauma Care Forum (8.5 AMA PRA Category 1 Credits™)

Orthopaedic Trauma Boot Camp (12.75 AMA PRA Category 1 Credits™)

Orthopaedic Trauma for PAs & NPs (13.75 AAPA Category 1 CME Credits™)

Young Practitioners Forum (4 AMA PRA Category 1 Credits™)

Pre-registration Deadlines:

Registration faxed or post-marked
by September 15, 2016.

Register on-line by September 30, 2016

Hotel Deadlines: September 30, 2016

Register Today at www.ota.org