Preliminary Program

2013 OTA ANNUAL MEETING OCT. 9-12

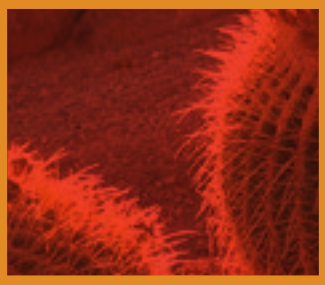
JW Marriott Desert Ridge | PHOENIX, AZ

PRE-MEETING COURSES:

- Basic Science Focus Forum
- Grant Writing Workshop
- International Orthopaedic Trauma Care Forum
- Masters Level Trauma Coding Course
- Orthopaedic Trauma Boot Camp
- Orthopaedic Trauma for NP's & PA's
- Young Practitioners Forum

19+ CME

OTA ORTHOPAEDIC TRAUMA ASSOCIATION



www.ota.org

ORTHOPAEDIC TRAUMA ASSOCIATION

The OTA gratefully acknowledges 2012 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 gratefully acknowledges OTA contributors for their support.

Foundation Award

SILVER AWARD
$50,000–$74,999

FOT

DIAMOND AWARD
$150,000 and above

smith&nephew

stryker®

GOLD AWARD
$100,000–$124,999

BIOMET® TRAUMA

Medtronic

DePuy Synthes TRAUMA

zimmer

COPPER AWARD
$25,000–$49,999

Dear Colleagues:

On behalf of the OTA Program Committee, I am please to invite you to the 29th Annual Meeting of the Orthopaedic Trauma Association (OTA) to be held in Phoenix from October 9–12, 2013. The committee has put a tremendous effort into planning a meeting which will provide the most comprehensive and up-to-date program related to treatment of musculoskeletal injury available anywhere. A diverse spectrum of topics and the opportunity to attend a wide range of sessions including scientific presentations of original research, didactic lectures, small group discussions, and hands-on labs provide learning opportunities that meet the needs of all musculoskeletal health care professionals. Additional pre-meeting events are specifically designed for orthopaedic physician assistants and nurse practitioners and for non-fellowship trained orthopaedic surgeons.

This year's meeting will highlight main symposia on topics with broad appeal including the latest evidence-based information upper extremity injury, the scientific data assessing bone healing, and the evolution and future direction of functional outcome assessment. Continued this year, attendees will have choices throughout the meeting to attend podium presentations or concurrent mini-symposia covering a wide range of topics. Break-out sessions in the form of mini-symposia, case presentations, and skills labs that include other general interest as well as more focused topics will allow attendees to really customize their meeting experience to their particular areas of interest.

The Scientific Program will include the most relevant and scientifically sound research. More than 70 podium presentations and 120 posters were selected by the Program Committee from a record 751 abstract submissions. A session jointly sponsored by the American Orthopaedic Association's (AOA) "Own the Bone" initiative and the OTA will be embedded within the program to provide a step-by-step workshop for practices and research associates seeking to set up a sustainable center for treatment of fragility fractures.

Five meetings precede the traditional Annual Meeting, beginning with the Basic Science Focus Forum (BSFF), chaired by Ted Miclau, MD and Ed Harvey, MD. The BSFF is a one and one-half day event beginning Wednesday October 9th that will provide an additional in-depth program designed to augment and expand upon the basic science presented and discussed at the main meeting.

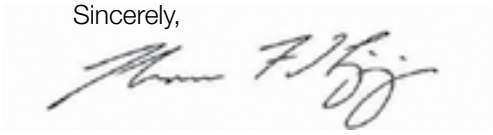
Bob Ostrum, MD and Dan Horwitz, MD will chair a one and one-half day Orthopaedic Trauma Boot Camp, beginning Wednesday October 9, designed for practicing orthopaedic surgeons with busy practices outside of trauma who are called upon to solve difficult fracture problems in their communities. Dr. Ostrum will be assisted by a select team of experienced OTA surgeon educators to help increase your knowledge and enhance your competency.

Three additional, single day pre-meeting events will take place on Wednesday, October 9. The perennially popular Masters Level Coding Course will be organized by Scott Broderick, MD and KarenZupko & Associates, Inc. The highly successful International Forum, started three years ago, will continue under the direction of Bill De Long, MD. A Grant Writing Workshop will be offered, chaired by Todd McKinley, MD and Brett Crist, MD. In addition, the half-day Young Practitioners Forum led by Lisa Cannada MD on Thursday morning rounds out the pre-meeting events. We encourage all to arrive early to the Annual Meeting and take full advantage of these OTA offerings.

A two and one-half day course specifically designed for Physician Assistants, chaired by Mike Archdeacon, MD, Cliff Jones, MD, Dan Coll, PA-C, and Keith Zurmehly, PA-C, will run concurrent with the Annual Meeting from Thursday, October 10 to Saturday, October 12.

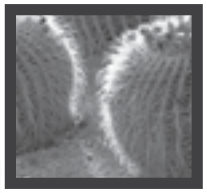
The common feature of each program event is the commitment to providing the highest quality, most interesting and clinically relevant material related to musculoskeletal trauma by world-class faculty and experts. We truly believe that anyone involved in the field will benefit from this year's OTA Annual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

Sincerely,



Thomas F Higgins, MD
Annual Meeting Program Chair

2013 OTA ANNUAL MEETING



Dear Colleagues:

I am pleased to welcome you to Phoenix, Arizona, for the 29th Annual Meeting of the Orthopedic Trauma Association!

The meeting will be held at the picturesque JW Marriott Desert Ridge in north Phoenix/Scottsdale. This family friendly property has amenities all can enjoy. Nearby Desert Ridge Marketplace offers a variety of shopping, dining, and entertainment opportunities.

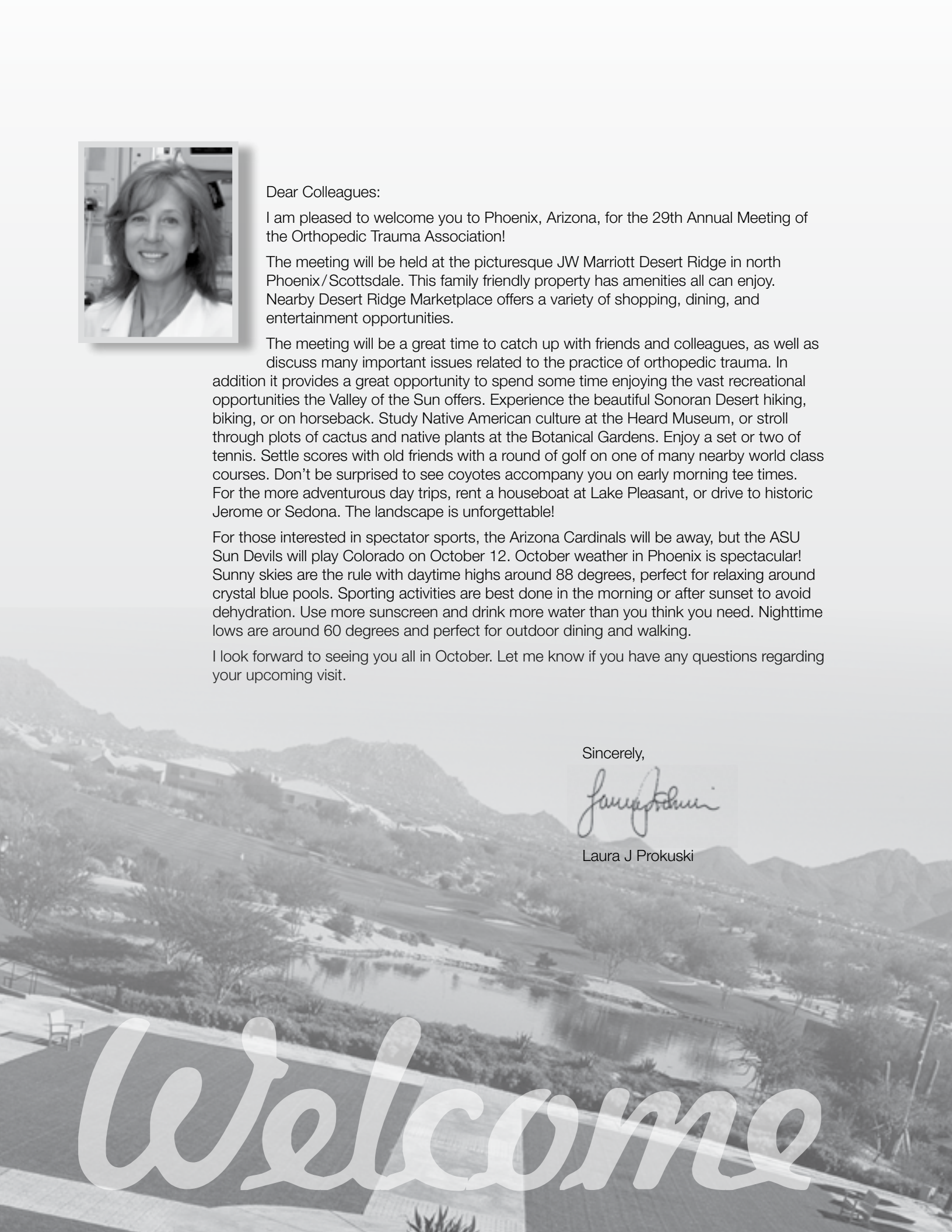
The meeting will be a great time to catch up with friends and colleagues, as well as discuss many important issues related to the practice of orthopedic trauma. In addition it provides a great opportunity to spend some time enjoying the vast recreational opportunities the Valley of the Sun offers. Experience the beautiful Sonoran Desert hiking, biking, or on horseback. Study Native American culture at the Heard Museum, or stroll through plots of cactus and native plants at the Botanical Gardens. Enjoy a set or two of tennis. Settle scores with old friends with a round of golf on one of many nearby world class courses. Don't be surprised to see coyotes accompany you on early morning tee times. For the more adventurous day trips, rent a houseboat at Lake Pleasant, or drive to historic Jerome or Sedona. The landscape is unforgettable!

For those interested in spectator sports, the Arizona Cardinals will be away, but the ASU Sun Devils will play Colorado on October 12. October weather in Phoenix is spectacular! Sunny skies are the rule with daytime highs around 88 degrees, perfect for relaxing around crystal blue pools. Sporting activities are best done in the morning or after sunset to avoid dehydration. Use more sunscreen and drink more water than you think you need. Nighttime lows are around 60 degrees and perfect for outdoor dining and walking.

I look forward to seeing you all in October. Let me know if you have any questions regarding your upcoming visit.

Sincerely,

Laura J Prokuski



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 health care 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

19+ AMA PRA Category 1 Credits™ for attending the Annual Meeting. Additional credits if you attend premeeting events:

Basic Science Focus Forum (10.25 CME)
Masters Level Trauma Coding (6 CME)
International Trauma Care Forum (8.5CME)
Orthopaedic Trauma Boot Camp (12 CME)
Young Practitioners Forum (4 CME)
Grant Writing Workshop (8.5 CME)
NP/PA Course (20.25 AAPA Category 1 CME Credits)

Table of Contents

Pre-Meeting Courses / Events

Basic Science Focus Forum 5
Orthopaedic Trauma Boot Camp 9
Grant Writing Workshop 10
International Trauma Care Forum 11
Masters Level Trauma Coding Course 14
Young Practitioners Forum 15

Annual Meeting and Events

Program (Thursday) 16
Program (Friday) 17
Skills Labs (Friday morning) 17
Skills Labs (Friday afternoon) 19
Schedule At-A-Glance 26
Program (Saturday) 21
Skills Lab (Saturday morning) 21

Concurrent Courses

Orthopaedic Trauma for NP's and PA's 28

Information and Registration

Annual Meeting Special Offerings 25
Industry Lunch Symposia 30
Case Presentations 31
Mini-Symposia 32
Skills Labs 34
Poster Tours 35
Information 36
Hotel Information 36
Transportation Information 37
Registration Information 37
Registration Form 39

2013 OTA ANNUAL MEETING

Meeting and Pre-Meeting Courses

The OTA is an organization dedicated to the discovery and dissemination of knowledge and information regarding the prevention, diagnosis, and treatment of musculoskeletal injuries. The 29th OTA Annual Meeting will provide all registrants the opportunity to witness presentations of peer-reviewed original basic science and clinical research papers, posters and symposia that present current concepts for topics of general interest. A multitude of mini-symposia, bio-skills labs, informal case presentations, and technical exhibits, each with specific focus, will enable a customized educational experience. Ample opportunity will be available for expression of common concerns, sharing of relevant experiences and discussion of alternative treatment approaches.

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 the most up-to-date clinical and basic science advancements related to orthopaedic trauma
- Understand current problems, options, and role for functional outcomes in the assessment of fracture care
- Recognize the differences in operative and non-operative treatment of common upper extremity injuries
- Become familiar with the changing landscape of outcomes measures and how this may impact orthopaedic trauma in the future

2013 Program Committee

Thomas F Higgins, MD, Program Chair
Robert V O'Toole, MD, Program Co-Chair
Michael J Gardner, MD
Pierre Guy, MD, MBA
Stephen A Kottmeier, MD
Michael D McKee, MD
Gilbert R Ortega, MD
John T Ruth, MD
David W Sanders, MD

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.

Basic Science Focus Forum

Theodore Miclau, III, MD Program Chair

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.

Attendees of this activity can earn up to ***10.25 AMA PRA Category 1 Credits™***

Objectives

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

- Review clinical relevance for hot topics in biomechanically directed fixation
- Understand etiology of and therapy for venous thromboembolism in trauma patients
- Review the epidemiology and treatment of atypical femur fractures
- Know about state-of-the-art technologies and practices in intraoperative imaging
- Recognize the cycle of innovation and its importance to clinical research

Wednesday, October 9, 2013

6:30 am **Registration & Breakfast**

7:25 am **Introduction:**
Theodore Miclau, III, MD
Program Chair

7:30 am – 8:40 am Symposium 1

Hot Topics in Biomechanics:
Hip Fracture Fixation
Moderators: Steven A Olson, MD;
Loren L Latta, PhD

7:30 am **Fixation Recommendations in 2013: Intramedullary Nailing**
Emil H Schemitsch, MD

7:40 am **Fixation Recommendations in 2013: Plating**
Steven A Olson, MD

7:50 am **Considerations in New Devices Development: Ease of Use to FDA Concerns**
Joseph Ferrante, PhD

8:00 am **Selecting the Best Model: Comparing Existing Devices to New Constructs**
Loren L Latta, PE, PhD

8:10 am **Translating Biomechanical Findings into Clinical Practice**
Thomas A Russell, MD

8:20 am Discussion

8:40 am – 9:38 am Paper Session 1

Biomechanically-Directed Fixation: Hot Topics
Moderators: Steven A Olson, MD;
Loren L Latta, MD

8:40 am **Overview:** *Steven A Olson, MD*

8:50 am Paper 1
Lunotriquetral Ligament Injuries Associated With Distal Radius Fractures: The Effect Of Wrist Position And Forearm Rotation During A Fall Onto An Outstretched Hand
Check C Kam; Prasad Sawardeker, MD; Raz Nicolescu; David Kaimrajh, MS; Jordan Fennema, MD; Paul Diaz-Granados, MD; Edward Milne; Loren L Latta, MD, PhD; Elizabeth Anne Ouellette, MD, MBA

8:56 am Paper 2
Biomechanical Analysis Of Far Proximal Radial Shaft Fracture Fixation
Gregory Gaski; Stephen M Quinnan, MD; David Kaimrajh, MS; Edward Milne; Loren L Latta, MD, PhD

9:02 am Paper 3
No Difference In Fatigue Failure Between Non-Locked And Locked Interlocking Screws Of Intramedullary Nails In Proximal Tibia Fractures
Utku Kandemir, MD; Safa Herfat; Murat Pekmezci, MD

9:08 am Discussion

9:14 am Paper 4
Is Overdrilling Of Cortical Screws An Appropriate Surrogate For Osteoporosis In Biomechanical Testing?
Jacob Cartner, BS; Megan Fessenden; Tim Petteys; Paul Tornetta, III, MD

9:20 am Paper 5
Finite Element Analysis Of The Distal Femur: Fracture Motion Predicts Clinical Callus
William Lack; Jacob Elkins, MS; Trevor Lujan, PhD; Richard Peindl, PhD; James Kellam, MD; Donald D Anderson, BS, MS, PhD; Thomas D Brown, PhD; J Lawrence Marsh, MD

9:26 am Paper 6
The Minimal Screw Length For Tricortical Syndesmosis Fixation In Ankle Fracture: A Cadaveric Study
Derrick O Cote, MD; Alexander Chong; Bradley Dart; Nils Hakansson; Michael Ward; Pie Pichetsurnthorn; Paul Wooley

9:32 am Discussion

9:38 am Break

Basic Science Focus Forum (cont.)

10:00 am – 11:10 am Symposium 2

Inflammation
Moderators: Peter V Giannoudis, MD; Chelsea Bahney, PhD

10:00 am **Inflammation and Healing: When is Too Much a Bad Thing?**
Chelsea Bahney, PhD

10:10 am **Inflammatory-Related Cytokines: What Role Do They Have in Healing?**
David J Hak, MD, MBA

10:20 am **Can PRPs Modulate the Inflammatory Response During Healing?**
Peter V Giannoudis, MD

10:30 am **Anti-Inflammatories: How and When Can They be Useful in Orthopaedic Trauma?**
David W Sanders, MD

10:40 am **Systemic Trauma: Evidence-Based Recommendations for Timing of Fixation in 2013**
Hans-Christopher Pape, MD

10:50 am Discussion

11:10 am – 11:44 am Paper Session 2

Inflammation and Bone Healing
Moderators: Peter V Giannoudis, MD; Chelsea Bahney, PhD

11:10 am **Overview: Peter V Giannoudis, MD**

11:20am Paper 7
Age-Related Changes In Macrophage Polarization Affects Osteogenesis
Fei Gao, MD, PhD; Jesse Shantz; Yan Yiu Yu, PhD; Ralph S Marcucio, MD; Theodore Miclau, III, MD

11:26 am Paper 8
T-Lymphocyte Immune Modulation In Fracture Repair: The Role Of Il-17F In A Novel GSK3/Beta-Catenin Independent Pathway
Elaine Mau, MD, MSc; Yufa Wang; Heather Whetstone; Diane Nam, MSc, MD, FRCSC

11:32 am Paper 9
Lipopolysaccharide-Induced Systemic Inflammation Affects Bone Healing In A Murine Tibia Fracture Model
Jesse A Shantz, MD, MBA; Gao Fei, MD; Yan Yiu Yu, PhD; Theodore Miclau, III, MD; Ralph S Marcucio, PhD

11:38 am Discussion

11:44 am Lunch

12:45 pm – 1:55 pm Symposium 3

Bone Grafting
Moderators: Joseph Borrelli, Jr, MD; Kenneth A Egol, MD

12:45 pm **Efficacy of Autografts: Do Harvest Sites Matter?**
Aaron Nauth, MD

12:55 pm **Grafting in the Setting of Infection: Strategies**
Hans-Christoph Pape, MD

1:05 pm **Bone Graft Extenders: Which Ones Work?**
J Tracy Watson, MD

1:15 pm **Bone Graft Timing: What is Most Optimal?**
Mark A Lee, MD

1:25 pm **Bone Graft Substitutes: Is Anything as Effective as Autograft?**
Kenneth A Egol, MD

1:35 pm Discussion

1:55 pm – 3:24 pm Paper Session 3

Bone Regeneration and Repair
Moderators: Joseph Borrelli, Jr, MD Kenneth A Egol, MD

1:55 pm **Overview: Joseph Borrelli, Jr, MD**

2:05 pm Paper 10
The Influence Of Construct Stiffness On Bone Regeneration In A Rodent Defect Model
Joel C Williams, MD; Matthew A Anderson, BS; Blaine A Christiansen, PhD; A Hari Reddi, PhD; Mark A Lee, MD

2:11 pm Paper 11
A Novel Rodent Critical Sized Defect Model And BMP-7 Dose Response Study
Joel C Williams, MD; Sukanta Maitra; Matthew J Anderson, BS; Blaine A Christiansen, PhD; A Hari Reddi, PhD; Mark A Lee, MD

2:17 pm Paper 12
Spacer Composition Influences Properties Of The Masquelet Membrane In Animals And Observed Gene Expression Patterns Of Inducible Membranes In Humans
Monique Bethel, MD; Susan M McDowell, MD; Brahmananda R Chitteti, PhD; Tien-Min Gabriel Chu, DDS, PhD; Janos P Ertl, MD; Brian H Mullis, MD; Melissa A Kacena, PhD; Jeffrey O Anglen, MD

2:23 pm Paper 13
The Masquelet Technique Induces The Formation Of A Mesenchymal Stem Cell Rich Periosteum Like Membrane
Peter V Giannoudis, MD; Richard Cuthbert; Sarah Churchman; Tan Boon; Dennis McGonagle

2:29 pm Discussion

2:37 pm Paper 14
Opiates Impair Healing In Rat Femur Fracture Model
Jesse Chrastil, MD; Thomas F Higgins, MD; Christopher Sampson; Kevin Jones

2:43 pm Paper 15
Systemic Inhibition Of Notch Signaling Alters Multiple Phases Of Fracture Healing
Michael Dishowitz, PhD; Luke Lopas; Joel Takacs; Julie Engiles; Jaimo Ahn, MD, PhD; Kurt D Hankenson, DVM

2:49 pm Paper 16
Unexpected Dispensable Role Of MMP9 In A Stabilized Femur Fracture Model
Cesar S Molina, MD; Masato Yuasa, MD; Johnathan G Schoencker, MD, PhD

2:55 pm Discussion

3:01 pm Paper 17
The Non-Essential And Potentially Pathogenic Role Of A Fibrin Clot In Fracture Healing
Masato Yuasa, MD; Nicholas Mignemi; Heather Cole; Lynda O'Rear; Jesse Bible, MD; William T Obremskey, MD, MPH; Jeffry Nyman; Justin Cates; Herbert Schwartz; Jonathan Gregory Schoenecker

3:07 pm Paper 18
Single Nucleotide Polymorphisms In Osteogenic Genes In Atrophic Delayed Fracture Healing – A Preliminary Investigation
Vikram Sathyendra, MD; Henry J Donahue, PhD; Kent E Vrana, PhD; Arthur Berg, PhD; David Fryzel, BS; Jonathan Gandhi, BS; J Spence Reid, MD

3:13 pm Paper 19
Systemic Proteomic Profiles Associated With Healing And Nonunion Of Mid-Shaft Femur Fractures
Andrew Ringnes, MD; Melissa Nicole Zimel, MD; Denise Koueiter, MS; Tristan Maerz; Timothy Geddes; Kevin Grant, MD; Kevin Baker

3:19 pm Discussion

3:25 pm Break

3:45 pm – 4:50 pm Symposium 4

Building Networks: The Basics
Moderators: Saam Morshed, MD, PhD; Paul Volberding, MD

3:45 pm **Global Clinical Research: Why Do We Need It?**
Paul Volberding, MD

4:00 pm **What Kind of Evidence is Needed to Change Practice or Policy?**
David Shearer, MD, MPH

4:10 pm **Conducting International Clinical Research: What Resources are Necessary?**
Emil H Schemitsch, MD

4:20 pm **Selecting the Right Study Design: Balancing Science and Resources**
Saam Morshed, MD, PhD

4:30 pm **International Research Studies: How to Partner?**
Gerard P Slobogean, MD, MPH

4:40 pm Discussion

4:50 pm – 5:30 pm Paper Session 4

International Research Studies
Moderators: Saam Morshed, MD, PhD; Paul Volberding, MD

4:50 pm **International Registries: INORMUS**
Clary K Foote, MD

4:56 pm Paper 20
Management Of Closed Femur Fractures With The SIGN Intramedullary Nail In Two Developing African Countries (Multicenter Observational Study)
Kyle R Stephens, DO; Daniel Galat, MD; Duane Anderson, MD; Kiprono G Koech, MD; Paul Whiting, MD; Michael Mwachiro, MD; Douglas W Lundy, MD

5:02 pm Paper 21
The Design Of A Prospective Observational Study To Evaluate The Outcomes Of Operatively Treated Femoral Shaft Fractures In Sub-Saharan Africa (Single-Center Observational Study)
David Shearer, MD; MPH, Edmund Eliezer, MD; Billy Haonga, MD; Saam Morshed, MD, PhD

5:08 pm **International Randomized Control Trial: FLOW**
Kyle J Jeray, MD

5:14 pm Discussion

5:30 pm **Adjourn to International Poster Reception**

2013 OTA ANNUAL MEETING

Thursday, October 10, 2013

7:25 am Introduction
Theodore Miclau, III, MD, Program Chair

7:30 am – 8:40 am Symposium 5
Infection
Moderators: Emil H Schemitsch, MD; Joseph C Wenke, PhD

7:30 am **Diagnosis of Infection in Orthopaedic Trauma Patients: New Technologies**
Joseph C Wenke, PhD

7:40 am **Preventing Orthopaedic Infections**
David Markel, MD, MPH

7:50 am **Implant-Related Infections: Bugs and Biofilms**
Lawrence X Webb, MD

8:00 am **Managing Hardware-Related Infections: Evidence Based Strategies**
Mike D McKee, MD

8:10 am **Treatment of Post-Traumatic Osteomyelitis: The Next Generation!**
Todd O McKinley, MD

8:20 am Discussion

8:40 am – 9:13 am Paper Session 5
Musculoskeletal Infection
Moderators: Emil H Schemitsch, MD; Joseph C Wenke, PhD

8:40 am **Overview: Emil H Schemitsch, MD**

8:50 am Paper 22
Development And Evaluation Of A Biofilm Dispersing Scaffold
Chad A Krueger, MD; Carlos J Sanchez, PhD; Edna Margarita-Prieto, PhD; Katarzyna J Zienkiewicz, PhD; Desiree R Romano, BA; Kevin S Akers, MD; Scott A Guelcher; Joseph C Wenke, PhD

8:56 am Paper 23
Intraoperative Dip-Coating Inhibit Biofilms And Support Bone Healing During Infection
Thomas Schaer, DO; Suzannne Stewart, DVM

9:02 am Paper 24
Evaluation Of An Absorbable Gentamicin Eluting Plate Sleeve In An Ovine Fracture Healing Model
Joanne Haughan, DVM; Carl A Depaula, PhD; David Armbruster, BS; Thomas Schaer, DO

9:08 am Discussion

9:13 am Break

9:30 am – 10:40 am Symposium 6
Stem Cell Therapies
Moderators: Theodore Miclau, III, MD; Ralph S Marcucio, PhD

9:30 am **Stem Cell Populations: Which Ones are Most Useful?**
Aaron Nauth, MD

9:40 am **Stem Cells: How Do They Influence Healing?**
Peter V Giannoudis, MD

9:50 am **Progenitor Cells: What are The Sources?**
Ralph S Marcucio, MD

10:00 am **Stem Cell Therapies: What Still Needs to be Overcome?**
Chelsea Bahney, PhD

10:10 am **Developing Stem Cell Approaches to Bone Defect**
George Muschler, MD

10:20 am Discussion

10:40 am – 11:14 am Paper Session 6
Stem Cells
Moderators: Theodore Miclau, III, MD Ralph S Marcucio, PhD

10:40 am **Overview: Ralph S Marcucio, PhD**

10:50 am Paper 25
Effects Of Endothelial Progenitor Cell Therapy On Diabetic Rat Fracture Healing
Clifford Lin, MD; Aaron Nauth, MD; Emil H Schemitsch, MD

10:56 am Paper 26
The Effects Of Aminobisphosphonate In Vitro And In Vivo Treatment On The Osteogenic Capacity Of Bone Marrow Stromal Cells From Senile Osteoporotic Hip Fracture Patients
Richard Andreas Lindtner, MD; André N Tiaden, PhD; Konstantin Genelin, MD; Hannes L Ebner, PhD; Ingrid Sitte, MD; Marina Klawitter; Brigitte von Rechenberg, Professor; Peter J Richards, PhD

11:02 am Paper 27
Healing Segmental Bone Defects With Endothelial Progenitor Cell Subtypes
Erica Giles, BS; Michael Glick, BSc; Tony Lin, BSc; Wendy Chi; Aaron Nauth, MD; Emil H Schemitsch, MD

11:08 am Discussion

11:14 am **Adjourn to Industry Lunch Symposia**

Basic Science

Orthopaedic Trauma Boot Camp

Robert F Ostrum, MD; Daniel S Horwitz, MD

Attendees of this activity can earn up to 12 *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 operative 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.

Objectives

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

- Understand current indications for operative and non-operative treatment of fractures and dislocations
- Comprehend appropriate surgical techniques, approaches, and implant selections for fracture care
- Recognize the importance of careful soft tissue techniques
- Analyze critically ill traumatized patients and practice appropriate temporary stabilization procedures and establish protocols for transfer

Wednesday, October 9, 2013

6:15 am **Registration and Continental Breakfast**

7:00 am **Welcome and Announcements**
Robert F Ostrum, MD

Moderator: Daniel S Horwitz, MD

7:05 am Clavicle Fractures
Robert A Probe, MD

7:25 am Proximal Humerus Fractures
John T Capo, MD

7:45 am Distal Humerus Fractures
David C Teague, MD

8:05 am Distal Radius Fractures
Thomas F Varecka, MD

8:25 am Questions / Discussion

8:40 am **Case Presentations**
Daniel S Horwitz, MD

Moderator: Steven J Morgan, MD

8:55 am Open Fractures
Robert F Ostrum, MD

9:15 am Orthobiologics
J Tracy Watson, MD

9:35 am Initial Management of the Polytrauma Patient
Dolfi Herscovici, Jr, DO

9:55 am Questions / Discussion

10:10 am **Case Presentations**
Steven J Morgan, MD

10:25 am Break

10:45 am **Lab 1 – Proximal Humerus Locking Plate**
Lab Leader: John T Capo, MD
Lab 2 – Distal Radius Plating – Locked Volar, Focal Dorsal
Lab Leader Thomas F Varecka, MD

11:35 am Femoral Neck Fractures in Younger Patients
J Tracy Watson, MD

11:55 am Femoral Neck Fractures in Elderly: ORIF, Monopolar, or THR
Kenneth A Egol, MD

12:15 pm Intertrochanteric Fractures: IMHS Versus DHS
Jeffrey O Anglen, MD

12:35 pm Questions / Discussion

12:50 pm **Lunch with Case Presentations**
Robert F Ostrum, MD

Moderator: Frank A Liporace, MD

1:30 pm Posterior Wall Acetabulum Fractures
Andrew H Schmidt, MD

1:50 pm Femoral Nailing: Antegrade Versus Retrograde
Daniel S Horwitz, MD

2:10 pm Supracondylar Femur Fractures
Paul Tornetta III, MD

2:30 pm Periprosthetic Fractures
Daniel S Horwitz, MD

2:50 pm Break

3:10 pm Role and Technique for Spanning External Fixator
Jeffrey O Anglen, MD

3:30 pm Patella Fractures
Joshua Langford, MD

3:50 pm Questions / Discussion

4:05 pm Case Presentations
Frank A Liporace, MD

4:30 pm **Adjourn**

Thursday, October 10, 2013

Moderator: Erik Kubiak, MD

7:00 am Tibial Plateau Fractures
Steven J Morgan, MD

7:20 am Tibial Shaft Fractures
Philip R Wolinsky, MD

7:40 am Tibial Nonunions
Gerald J Lang, MD

8:00 am Pilon Fractures
Steven J Morgan, MD

8:20 am Questions / Discussion

8:35 am Case Presentations
Erik Kubiak, MD

8:50 am Break

9:00 am **Lab 1 – Distal Femoral Plating**
Lab Leader: Erik Kubiak, MD
Lab 2 – Proximal Tibia Plating
Lab Leader: Philip R Wolinsky, MD

9:50 am Talus Fractures
Dolfi Herscovici, Jr, MD

10:10 am Calcaneus Fractures
Erik Kubiak, MD

10:30 am Questions / Discussion

10:45 am Case Presentations
J Tracy Watson, MD

11:00 am **Adjourn**
Robert F Ostrum, MD

11:00 am – 12:45 pm **Industry Lunch Symposia**
(Box lunch available)

OTA / ORS *Grant Writing Workshop*

Wednesday, October 9, 2013

Todd O McKinley, MD, Chair; Brett D Crist, MD, Co-Chair

Attendees of this activity can earn up to 7 *AMA PRA Category 1 Credits*™

Target Audience

This workshop is designed for any surgeon 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 cover principles that apply to both entry level grants (i.e. OTA-sponsored grants) and secondary higher-order funding such as NIH or DOD level grants.

Objectives

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

- Identify the mechanics of writing a successful research grant
- Understand the grant review process

Program

6:30 am **Registration and Continental Breakfast**

7:25 am **Introduction**
Todd O McKinley, MD, Chair,
OTA / ORS Grant Writing Workshop

7:30 am – 9:30 am DIDACTICS: MECHANICS OF A GRANT
Moderator: Marc F Swiontkowski, MD

7:30 am **Introduction and Specific Aims**
TBD

7:50 am Background and Significance
Stephen L Kates, MD (OTA)

8:10 am Discussion

8:30 am Previous Work / Experimental Design and Methods
Aaron Stoker, PhD (ORS)

8:55 am Finishing the Grant: Alternative Strategies / Limitations, Budget, Bio-Sketches, Human Subjects and Vertebrate Animals
Donald D Anderson, PhD (OTA, ORS)

9:15 am Alternative Funding Sources: How to Successfully Interact with Industry
James P Stannard, MD (OTA)

9:30 am Discussion

9:45 am Break

10:00 am – 12:00 pm OPTIMIZING YOUR CHANCES OF SUCCESS
Moderator: TBD

10:00 am Establish Rapport with Reviewers
Theodore Miclau, III, MD (OTA, ORS)

10:30 am Collaborations
Marc F Swiontkowski, MD (OTA, ORS)

10:50 am The OTA Grant Review Process and How to Succeed
Todd O McKinley, MD (OTA, ORS)

11:10 am KEYNOTE SPEAKER
Translational Research: Starting from the Ground Up
James L Cook, DVM, PhD (ORS)

11:35 am Discussion

12:00 pm Lunch

SMALL GROUP ACTIVITIES:
(Groups of 3 to 4 attendees per faculty in small group discussions)

1:00 pm – 2:30 pm All Faculty
Attendees and faculty will be required to read a library of grants prior to the workshop for these discussions.

- Successful Grant Review and Discussion
- Marginal Grant Review and Discussion
- Rejected Grant Review and Discussion

2:30 pm Break

3:00 pm – 4:00 pm All Faculty
Mock Grant Review

4:00 pm – 4:30 pm All Faculty
Discussion of Mock Grant Review, Small Group Activities and Closing Remarks
Brett D Crist, MD (OTA)

ORTHOPAEDIC TRAUMA ASSOCIATION

ORS Orthopaedic Research Society

Wednesday, October 9, 2013

William G De Long, Jr, MD; Saqib Rehman, MD; Douglas W Lundy, MD, Chairmen

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

Target Audience

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.

Objectives

Attendees of the International Orthopaedic Trauma Care Forum will:

- Learn about the varied methods of treating fracture and trauma complications from around the world
- Become familiar with unique approaches to lower extremity injuries treated in areas of the world with limited resources
- Increase understanding and knowledge of orthopaedic resident training internationally
- Learn about state of the art methods to manage open fractures
- Understand the differences of Orthopaedic Post-Graduate Training in Asia, Germany and South America

Program

7:00 am **Registration and Continental Breakfast**

7:30 am **Introduction – William G De Long, Jr, MD**

7:35 am – 8:05 am Symposium 1

International Comparison of Orthopaedic Post-Graduate Training
China: Prof. Wang Manyi, MD
Germany: Hans-Christoph Pape
Brazil: Ney Amaral, MD

8:05 am – 10:37 am Paper Session 1

Fractures of the Lower Extremity

Moderators: Saqib Rehman, MD
David C Templeman, MD

8:05 am Paper 1
The Retrograde Tibial Nail – A New Implant Concept for Distal Tibia Fractures
Sebastian Kuhn, MD; Philipp Appelmann, MD; Phillip Pairon, MD; Dorothea Mehler, MD; Pol M Rommens
University Medical Center of the Johannes Gutenberg University Mainz, Germany

8:13 am Paper 2
Infection Rates Following Intramedullary Nailing of Open Tibial Shaft Fractures in Low- And Middle-Income Countries
Paul Whiting, MD; Daniel Galat, MD; Lewis G Zirkle, Jr., MD;
Tufts Medical Center, Boston, MA

8:21 am Paper 3
Outcome of Reamed Intramedullary Interlocking Nail in Open Fracture Shaft Tibia
Pankaj Kumar, MD
Sant Ishar Singh Hospital Pehowa, Kurukshetra Haryana, India

8:29 am Discussion

8:44 am Paper 4
Surgical Treatment of Lateral Tibial Plateau Fractures with Porous Titanium Granules or With Bone Graft – Preliminary Results From an Ongoing Randomized Study
Brynjolfur Y Jonsson, MD
Kopavogur, Iceland

8:52 am Paper 5
Masquelet Technique for the Treatment of Open Tibial Fractures with Bone Defects
Martin M Mangupli, MD
Cordoba, Argentina

9:00 am Paper 6
Avoiding Rotational Mismatch of Locking Distal Tibia Plates Depends on Proper Plate Position
Kyu-Hyun Yang, MD
Yongdong Severance Hospital, Seoul, Korea

9:08 am **Closed Tibia Interlocking Nails without Image Intensifier**
*Innocent Chiedu Ikem, MD**
Obafemi Awolowo University, Osun State, Nigeria

9:16 am Discussion

9:31 am Break

9:51 am Paper 7
Coronal Mismatch of Femoral Locking Plates on Asian Femur: Probably an Insidious Trap Leading Valgus Malunion or Nonunion In Mid-Distal Femoral Fractures
Jian Lin, MD; Qiu-gen Wang, MD; Jian-hua Huang, MD; Jian-dong Wang, MD; Xiao-feng Wu, MD; Jie Tao, MD; Wei Gao, MD; Hao-qing Li, MD
Shanghai First People's Hospital, Shanghai Jiaotong University Shanghai, China

9:58 am Paper 8
Comparison of Anterior Position of Distal Femoral Nail End in Randomised Treatment of Trochanteric Fractures
Nicholas Boyd Jorgensen, MBBS; Cameron Cooke, MBBS, FRACS
Princess Alexandra Hospital, Brisbane, Austrailia

10:06 am Paper 9

Total Hip Arthroplasty for Failed Proximal Femoral Fracture Fixations *Gunasekaran Kumar, MD; Viju Peter, MD; Colin Dunlop, MD*
Prenton, United Kingdom

** 2013 OTA Sign Scholar Recipient*

10:14 am Paper 10
Cementless Total Hip Replacement for Displaced Subcapital Femoral Fractures
Diana Kennedy, MBBS; Cameron Cooke, MD; Lloyd (Doug) King, FRCS(Ortho); Mark Dekkers, FRCS(Ortho)
Brisbane, Australia

10:22 am Discussion

10:37 am – 10:57 am Symposium 2
Training Abroad for Orthopaedic Residents
Moderator: R Richard Coughlin, MD
University of California San Francisco

10:57 am – 12:16 pm Paper Session 2
General Management of Musculoskeletal Injury
Moderators: Massimo M Morandi, MD; Patrick Yoon, MD

10:57 am Paper 11
Osseointegration as a Viable Treatment Option for Rehabilitation of Amputees
Munjed Al Muderis, MBBS, FRACS, FRCS (ORTHO)
Advanced Orthopaedics, Sydney, Australia

11:05 am Paper 12
Blast Mediated Traumatic Amputation: Evidence Suggesting a New Injury Mechanism
James Singleton, MBBS; Neil M Walker, MBBS, MRCS; Iain E Gibb, MBBS, FRCS(Ed), FRCR; Anthony M Bull, PhD, DIC, BEng, CEng; Jon C Clasper, MBA, DPhil, DM, FRCSEd(Orth)
Ministry of Defence, Kingston Upon Thames, United Kingdom

11:13 am Paper 13
Secondary Intramedullary Nailing Following External Fixation: A Novel Surgical Approach to "Nail" The Regenerated Bone for Reconstruction of Complex Fractures and Segmental Bone Defects in Severe Limb Trauma
Gerald E Wozasek, MD; Markus Hofbauer, MD
Clinic for Trauma Surgery, University of Vienna Medical School, Vienna, Austria

11:21 am Discussion

11:29 am Paper 14
Ultrasonographic Monitoring of Fracture Healing: Is This the End of Radiography in Fracture Follow-Ups?
Sourabh Chachan
Barsha Tudu, MBBS, MS;
Biswajit Sahu, MBBS, MS, M Ch
Sambalpur, Odisha, India

11:37 am Paper 15
Effect of Chronic Heavy Smoking on Ankle Fracture Healing
Waseem Jerjes, MD, PhD;
Hiang Boon Tan, MB, CHB; Peter V Giannoudis, MD;
Leeds General Infirmary, London, United Kingdom

11:45 am Paper 16
Impact of Intraoperative 3D-Fluoroscopy on Functional Outcomes and Health-Related Quality in Open Reduction and Internal Fixation of Displaced, Intra-Articular Calcaneal Fractures
Dirk Stengel, MD; Nicolai Spranger, MD; Axel Ekkernkamp, MD; Kai Bauwens, MD; Michael Wich, MD
Unfallkrankenhaus Berlin Klinic F. Unfallchirurgie, Berlin, Germany

11:53 am Paper 17
Results and Functional Outcome of Traumatic Secondary Arthrosis of The Ankle Joint Treated by Internal Arthrodesis
Marlon O Coulibaly, MD; Thomas A Schildhauer, MD; Dominik Seybold, MD; Sven Jung, MD; Jan Gessmann, MD
University Hospital Bergmannsheil GMBH, Department of Traumatology, Ruhr-Univers, Bochum, Germany

12:01 pm Discussion

12:16 pm Lunch

1:00 pm – 2:19 pm Paper Session 3
Fractures of the Upper Extremity and Hip
Moderators: Steven J Morgan, MD
Jeffrey O Anglen, MD

1:00 pm Paper 18
Implantation of Carbon-Fibers-Peek Intramedullary Humeral Nail for Trauma and Pathological Fracture Fixation – A Multicenter, International Retrospective Accumulated Experience
Christoph Rangger, MD
Krankenhaus Nordwest, Frankfurt, Germany

1:08 pm Paper 19
A Clinical Comparison of Parallel Versus Orthogonal Anatomical Precontoured Plating for Intrercondylar Humerus Fractures
Ting Li, MD; Xieyuan Jiang, MD; Prof. Wang Manyi, MD
Beijing Jishuitan Hospital China

1:16 pm Discussion

1:24 pm Paper 20
A Simple Way to Improve Hospital Medical Care for Hip Fracture Patients: Testing Protein Levels
Yael Sagy, MD; Ahuva Weiss-Meilik, MD; Shani Gershtein, MD; Moshe Salai, MD; Ely Liviu Steinberg, MD
Rihon-Lezion, Israel

1:32 pm Paper 21
An Investigation of 5563 Patients Aged Over 50 With Hip Fractures from Level 1 Trauma Center
Yeming Wang, MD; Wanfu Wei, MD
Tianjin Hospital, Tianjin, China

1:40 pm Paper 22
Treatment of Pertrochanteric Fractures (AO / OTA 31-A1, A2 And A3): Without C-Arm Using Sign Hip
Professor Shahab-Uddin, FCPS; Faseeh Shahab, MBBS; Lewis G Zirkle, Jr, MD; Peshawar, Pakistan

1:48 pm Paper 23
Achieving Hip fracture Fixation Without Using Image Intensifier
Billy Thomson Haonga, MD Muhimbili Orthopaedic Institute, Muhimbili Complex, Dar -se salaam, Tanzania*

1:56 pm Paper 24
Pelvic Hemorrhage at CT After Blunt High-Energy Pelvic Trauma: Extent and Significance
Anna Totterman, MD; Narin Tiftikci, MD; Mats Beckman, MD; Anders Sundin, MD, Professor Karolinska University Hospital, Stockholm, Sweden

2:04 Discussion

2:19 pm – 3:25 pm Symposium 3 Guest Nation

Moderator: William G De Long, Jr, MD

Prof. Wang Manyi, MD
Chinese Orthopaedic Association
Assessment of BMD of the Femor Head with QCT?

Prof.Jiang Baoguo, MD
Coping with Escalating Volumes of Road Crashes in a Maturing Industrial Environment in China

Prof. Wei Jie, MD

3:25 pm Break

3:45 pm – 4:50 pm Symposium 4
Combined Session with Basic Science Focus Forum

Building Networks: The Basics
Moderators: Saam Morshed, MD, PhD; Paul Volberding, MD

3:45 pm **Global Clinical Research: Why Do We Need It?**
Paul Volberding, MD

4:00 pm **What Kind of Evidence is Needed to Change Practice or Policy?**
David Shearer, MD, MPH

4:10 pm **Conducting International Clinical Research: What Resources are Necessary?**
Emil H Schemitsch, MD

4:20 pm **Selecting the Right Study Design: Balancing Science and Resources**
Saam Morshed, MD, PhD

4:30 pm **International Research Studies: How to Partner?**
Gerard P Slobogean, MD, MPH

4:40 pm Discussion

4:50 pm – 5:30 pm Paper Session 4

International Research Studies
Moderators: Saam Morshed, MD, PhD; Paul Volberding, MD

4:50 pm **International Registries: INORMUS (Invited Paper)**
Research Fellow, McMaster

4:56 pm – 5:02 pm Paper 20
Management Of Closed Femur Fractures With The SIGN Intramedullary Nail In Two Developing African Countries (Multicenter Observational Study)
Kyle R Stephens, DO; Daniel Galat, MD; Duane Anderson, MD; Kiprono G Koech, MD; Paul Whiting, MD; Michael Mwachiro, MD; Douglas W Lundy, MD

5:02 pm – 5:08 pm Paper 21
The Design Of A Prospective Observational Study To Evaluate The Outcomes Of Operatively Treated Femoral Shaft Fractures In Sub-Saharan Africa (Single-Center Observational Study)
David Shearer, MD; MPH, Edmund Eliezer, MD; Billy Thomson Haonga, MD; Saam Morshed, MD, PhD

5:08 pm – 5:14 pm **International Randomized Control Trial: FLOW**
Kyle J Jeray, MD

5:14 pm – 5:30pm Discussion

5:30 pm **Adjourn**

5:30 pm – 630 pm **International Poster Reception**
ALL International attendees are invited.
Refreshments will be served.

** 2013 OTA Sign Scholar Recipient*

International Orthopaedic Trauma Care

** 2013 OTA Sign Scholar Recipient*

Masters Level Trauma Coding Course

Wednesday, October 9, 2013

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

J. Scott Broderick, MD, Course Chair

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

Course Description

Margaret Maley from KarenZupko & Associates, Inc. is back with a course you can't afford to miss! Take this opportunity to attend a coding and reimbursement course designed specifically for orthopaedic trauma surgeons and their staff. The increased focus on documentation audits and looming implementation of ICD-10 makes this a course you must attend.

Do you or your staff question:

- How the documentation of a level 3 new patient visit or outpatient consultation is different from a level 4?
- Could our group pass an audit of E&M services?
- What is medical necessity and how do I communicate it to the payer?
- What do I report if the resident sees the patient in the ER and I see him in the hospital the following day before surgery?
- How do I report debridements of an open fracture done on different days?
- What will I need to change in my description of fractures for ICD-10 implementation?
- Should we use a modifier 59 on this case?

Learning Objectives

Upon successful completion of the Evaluation and Management (E&M) Section, participants will be able to:

- Confidently report services in the ER that result in a hospital admission
- Know what modifier is required if you see a patient in the ER and take them urgently to the operating room
- Describe and document open fractures using the Gustilo Classification for ICD-10 diagnosis reporting
- Accurately document the level of service for your typical patient in the emergency room or office

Upon successful completion of the orthopaedic trauma procedural coding section, participants will be able to:

- Discuss what is included in global fracture care
- Describe how using a specific modifier can impact reimbursement
- Accurately report the application of external fixation, fracture debridement versus wound debridement, and the care of multiple fractures in the same session
- Correctly document and report subsequent procedures done during the "global period"
- Identify the difference between returning a patient to the operating room to treat a complication versus returning for an anticipated surgical procedure
- Report the services of surgical assistants and PA's.

About the Speaker

Margaret Maley brings 30 years of orthopaedic experience to her clients working with KarenZupko & Associates as a consultant and speaker for 17 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 medicine. "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, administrators and staff.

Margaret has extensive experience working with private practices and academic orthopaedic departments, state orthopaedic societies, and as a featured speaker for national organizations like the American Academy of Orthopaedic Surgeons, the Musculoskeletal Tumor Society, the American Association of Hip and Knee Surgeons, the Western Orthopaedic Association, the Gait and Clinical Movement Analysis Society, and the Pediatric Orthopaedic Society of North America.

Course Agenda

8:00 am **Registration**

9:00 am – 12:00 pm **Evaluation and Management**

- Level of Service documentation
  - History, Exam, Medical Decision Making
  - Can time be used to report a level of service?
- Category of service
- What is the Global Surgical Package and the Global Period
- Procedures done with E&M services (such as injections or cast applications)
- Unrelated E&M services in the Global Period
- ICD-10 coding and documentation for fractures

12:00 pm – 1:00 pm Lunch

1:00 pm – 4:00 pm **Fracture Care Surgical Coding**

- Unrelated Procedures (modifier 79)
- Staged Procedures (modifier 58)
  - Complicated Fractures
  - Debridements
- Treatment of Complications (modifier 78)
  - When is it a complication and how is it reported?
- Using modifier 51 versus modifier 59
- Unusual service (modifier 22)
- Reporting unlisted procedures

Young Practitioners Forum Preparing for a Successful Career

Thursday, October 10, 2013

Lisa K Cannada, MD, Chair

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.

Forum Objectives

- Increase knowledge and understanding of the fellowship, job interviewing and negotiating processes
- Learn important tips for young practitioners in different practice settings
- Identify successful strategies for financial management
- Develop skills for a successful practice as a surgeon and teacher

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

Program

6:15 am **Registration**
Continental Breakfast
Ballroom Foyer Level 1

6:30 am Introduction: Trauma Profile for Young Practitioners
Lisa K Cannada, MD, Chair

6:36 am Tips for Approaching the Fellowship Match
Bryan W Ming, MD

6:42 am Getting the Most out of Your Fellowship
Milton L "Chip" Routt, Jr, MD

6:51 am What I need to Start My Job: A Wish List? Academic; Non Academic
Raymond D Wright, Jr, MD; Cory A Collinge, MD

7:05 am Tips for Improving Your Business IQ
Timothy J Bray, MD

7:16 am The View from the Other Side of the Desk: What an Employer Looks for in an Interview
Douglas W Lundy, MD

7:27 am Panel Discussion: Getting What You Need from a Hospital
Clifford B Jones, MD; Aaron G Osborne, DO; Peter Althausen, MD

7:53 am Reflections: The Dark Side of Being an Employed Physician
Jake Heiney, MD

7:59 am Negotiating
M Bradford Henley, MD

8:20 am Questions

8:28 am Break

8:41 am The Value of Preoperative Planning
Matt L Graves, MD

8:52 am Becoming the "Captain of the Ship" in the OR
Timothy S Achor, MD

9:00 am Tips for Being an Effective Teacher
Jaimo Ahn, MD

9:11 am Getting Organized in Your Job
Jodi Siegel, MD

9:22 am Things You Never Thought of that Make a Difference
J Tracy Watson, MD

9:35 am Look Before You Jump
Troy H Caron, DO

9:40 am Questions

9:47 am Preparing for Medical Testimony for Your Patient
Gerald J Lang, MD

9:58 am Tips for Personal Finance Success
Roy Sanders, MD

10:16 am Keynote Address:
Reflections on the Past and Preparing for the Future
Andrew R Burgess, MD

10:41 am Wrap up and Questions

11:00 am Industry Lunch Symposia

Thursday, October 10, 2013

1:00 pm **Welcome and Donor Awards**

1:20 pm – 2:50 pm Symposium 1

Evaluating Outcomes In the 21st Century
Mark S Vrahas, MD; Richard C Gerson, PhD; Thomas F Higgins, MD; Nan Rothrock, PhD
In 2004 the NIH funded PROMIS (Patient Reported Outcomes Measurement System) with the goal of creating a system of highly reliable, precise measures of patient–reported health status. Key components of this effort were to use Item Response Theory and Computer Adaptive Testing to increase measure accuracy while decreasing patient burden. This effort has been highly successful and measures created by PROMIS are likely to become standard across all fields of medicine. This symposium will explain the PROMIS initiative, the science behind the new measures, and how these measures may affect our speciality

2:50 pm – 3:20 pm Break

3:20 pm – 4:46 pm Paper Session 1: Polytrauma / Pelvis / Post-Traumatic Reconstruction

Moderators: Pierre Guy, MD, MBA; H Claude Sagi, MD

3:20 pm Paper 28
Time To Definitive Operative Treatment Following Open Fracture Does Not Impact Development Of Deep Infection: A Prospective Cohort Of 736 Patients
Donald Weber, MD; Sukhdeep K Dulai, MD, MSc, FRCS (C); Joseph Bergman, MD; Richard E Buckley, MD; Lauren A Beaupre

3:26 pm Paper 29
Pain And PTSD Following Major Extremity Trauma: Results From The Metals Study
Renan Castillo, MS; Anthony Carlini; Ellen J MacKenzie, PhD

3:32 pm Paper 30
The Effectiveness Of Osseo-Integrated Prosthesis Compared With Socket Prosthesis After Transfemoral Amputation
Jan Paul M Frolke, MD, PhD; Henk Meent, MD, PhD; Maria TE Hopman, PhD

3:38 pm Discussion

3:43 pm Paper 31
Multiple Orthopaedic Procedures In The Initial Surgical Setting: When Do The Benefits Outweigh The Risks In Patients With Multiple System Trauma?
Heather A Vallier, MD; Benjamin R Childs; Nickolas Nahm; Timothy A Moore, MD

3:49 pm Paper 32
Early Appropriate Care: A Protocol To Standardize Resuscitation Assessment And To Expedite Fracture Care Reduces Hospital Stay And Enhances Revenue
Heather A Vallier, MD; Andrea Dolenc, BS; Timothy A Moore, MD

3:55 pm Discussion

4:00 pm Paper 33
The Effect Of Surgical Treatment On Mortality After Acetabular Fracture In The Elderly: A Multicenter Study Of 451 Patients
Joshua L Gary, MD; Ebrahim Paryavi, MD; Steven D Gibbons, MD; Scott P Ryan, MD; Jordan Houston Morgan, BS; Michael J Weaver, MD; Adam J Starr, MD; Robert V O'Toole, MD

4:06 pm Paper 34
Acute Total Hip Arthroplasty Versus Open Reduction Internal Fixation For Acetabular Fractures Involving The Posterior Wall In Patients < 65 Years Old: A Matched Cohort Analysis
Carol Alice Lin, MA, MD; Jerald Westberg, BA; Andrew H Schmidt, MD

4:12 pm Paper 35
Patient-Reported Health After Operatively Treated Displaced Sacral Fractures: A 10-Year Follow-up
Aron Adelved, MD; Anna Tötterman, MD, PhD; Thomas Glott, MD; Helene L Søberg, PT, PhD; Jan Erik Madsen, MD, PhD; Olav Roise, MD

4:18 pm Discussion

4:23 pm Paper 36
Recombinant Human Morphogenetic Protein-2 (rhBMP-2) Versus Iliac Crest Autograft To Treat Tibia Nonunion: A Retrospective Multicenter Study
William T Obremskey, MD, MPH Southeast Fracture Consortium

4:29 pm Paper 37
The Reamer Irrigator Aspirator (RIA) As A Device For Harvesting Bone Graft Compared With Iliac Crest Bone Graft (ICBG) Union Rates And Complications
John Dawson, MD; Peter Nowotarski; Dirk W Kiner, MD; Warren E Gardner, MD; Rachel Swafford

4:35 pm Paper 38
Dynamizations And Exchange Nailing: Success Rates And Indications
Jody Litrenta, MD; Paul Tornetta, III, MD; Cory A Collinge, MD; Heather A Vallier, MD; Clifford B Jones, MD, FACS; Christiane Gertrud Kruppa; Reza Firoozabidi, MD; Kenneth A Egol, MD; Ross K Leighton, MD; Mohit Bhandari, MD, PhD, FRCSC; Emil H Schemitsch, MD; David W Sanders, MD

4:41 pm Discussion

4:46 pm – 5:16 pm **President's Message: Standardization and Systems: Steps We Must Take (Together)**
Andrew H Schmidt, MD

President's Message
Andrew H Schmidt, MD

5:16 pm – 6:16 pm **OTA Business Meeting**

6:30 pm – 8:30 pm **Welcome Reception**

Friday, October 11, 2013

6:30 am – 7:45 am Break-outs

6:30 am Case Presentation
Orthopaedic Trauma Coding
Moderator: J Scott Broderick, MD
William R Creevy, MD

6:30 am Case Presentation
The Challenging Hip Fracture: Pearls and Pitfalls
Moderator: Amer J Mirza, MD
Darin Freiss, MD; Erik Kubiak, MD; Edward A Perez, MD

6:30 am Case Presentation
Proximal Humerus ORIF – Advances in Fixation and Augmentation
Moderator: Clifford B Jones, MD
Michael J Gardner, MD; Samir Mehta, MD

6:30 am Case Presentation
2 Minutes / 2 Slides: Ankle Injuries Technical Tips and Tricks
Moderator: Pierre Guy, MD, MBA
Kenneth A Egol, MD; Timothy O White, MD; David W Sanders, MD; Paul Tornetta, III, MD

6:30 am Case Presentation
Distal Humerus Fractures: Tips and Tricks
Moderator: Utku Kandemir, MD
Michael D McKee, MD; Milan K Sen, MD; John T Gorczyca, MD

6:30 am Skills Lab
(SL1) Fixation of Clavicle Fractures
Lab Leader: Gregory M Osgood, MD
Daren P Forward, MD; Julie Keller, MD; CDR Joseph E Strauss, DO; Erik Hasenboehler, MD; David B Weiss, MD; Emil H Schemitsch, MD

6:30 am Skills Lab
(SL2) ORIF Distal Tibia and Fibula Fractures
Lab Leader: Matt L Graves, MD
TBD

7:00 am Poster Tour **P1: Foot / Ankle / Pilon**
Clifford B Jones, MD

8:00 am – 8:55 am Paper Session 2: Geriatric

Moderators: Kyle J Jeray, MD; Michael D McKee, MD

8:00 am Paper 39
Association Between Type Of Surgery And Perioperative Acute Myocardial Infarction In Elderly Hip Fracture Patients
Nathalie Helen Urrunaga, MD, MS; Amelia C Watkins, MD; Robert Sterling, MD; Mary L Forte, PhD

8:06 am Paper 40
Effect Of Vitamin K On Surgical Timing After Hip Fracture In Patients On Warfarin
Jacob Lantry, MD; John T Gorczyca, MD

8:12 am Paper 41
Healing Time And Complications In Operatively Treated Atypical Femur Fractures Associated With Bisphosphonate Use: A Multicenter Series
Yelena Bogdan, MD; Paul Tornetta, III, MD; Thomas A Einhorn, MD; Pierre Guy, MD, MBA; Lise Leveille, MD; Juan De Dios Robinson, BA, MBBS, MSc, FRC; Nikkole M Haines, MD, BS; Daniel S Horwitz, MD; Emil H Schemitsch, MD; H Claude Sagi, MD; Daniel Stahl, MD; Megan Brady, MD; David W Sanders, MD; Thomas F Higgins, MD; Michael S Kain, MD; Cory A Collinge, MD; Stephen A Kottmeier, MD; Darin M Friess, MD

8:18 am Discussion

8:23 am Paper 42
Rehospitalization After Operatively Treated Hip Fractures: Targets For Intervention
Christopher M McAndrew, MD; Michael J Gardner, MD; Ellen F Binder; William M Ricci, MD; Eric J Lenze

8:29 am Paper 43
Can An Evidence-Based Treatment Algorithm For Intertrochanteric Hip Fractures Maintain Quality At A Reduced Cost?
Kenneth A Egol, MD; Alejandro Marcano, MD; Lambert Lewis, BA; Nirmal C Tejwani, MD, FRCS; Toni M McLaurin, MD; Roy Davidovitch, MD

8:35 am Paper 44
Intramedullary Versus Extramedullary Fixation Of Unstable Intertrochanteric Hip Fractures: A Prospective Randomized Control Study
Rudolph Reindl, MD; Edward J Harvey, MD; Gregory K Berry, MD; Canadian Orthopaedic Trauma Society

8:41 am Paper 45
Is Immediate Weight Bearing Safe For Periprosthetic Distal Femur Fractures Treated With Locked Plating?
Wade R Smith, MD; Jason Stoneback, MD

8:47 am Discussion

8:55 am **Guest Nation Intro**
Andrew H Schmidt, MD

8:59 am **Best International Forum Paper: TBD**

9:07 am **Guest Nation Presentation**
Prof. Wang Manyi, MD
Chinese Orthopaedic Association
"Chinese Trauma Education"

9:15 am **Border Lecture**
Skeletal Trauma: Global Conundrum
Bruce D Browner, MD

Border Lecture
Bruce D Browner, MD
Skeletal Trauma: Global Conundrum

9:45 am – 10:15 am Break

Friday, October 11, 2013 (cont.)

10:15 am – 11:45 am Break-outs

10:15 am Mini-Symposium
How to Use the OTA Case Database at Your Institution
Moderator: Julie Agel, ATC

10:15 am Mini-Symposium
Femoral Neck Fractures in Young Adults: Why are We Not "Fixing" These Better?
Moderator: Cory A Collinge, MD
Michael T Archdeacon, MD; Bradley R Merk, MD; Frank Liporace, MD

10:15 am Mini-Symposium
Traumatic Limb Injuries Requiring Amputation: A Multidisciplinary Approach Using The Osteomyoplastic (Ertl) Technique
Moderator: William J Ertl, MD
Jonathan D Day, CPO; Carol P Dionne, PT, DPT, PhD, OCS; Jan Ertl, MD; James R Ficke, MD

10:15 am – 11:24 am Paper Session 3: Hip / Femur

Moderators: John T Ruth, MD
Thomas A DeCoster, MD

10:15 am Paper 46
A Prospective Randomized Trial Investigating The Effect Of The Reamer Irrigator-Aspirator (RIA) On The Volume Of Embolic Load And Respiratory Functions During Intramedullary Nailing Of Femoral Shaft Fractures
Milena (Lynn) Vicente, RN; Emil H Schemitsch, MD; Jeremy A Hall, FRCSC; Michael D McKee, MD; Zachary A Morison; Niloofar Dehghan; Hans J Kreder, MD

10:21 am Paper 47
Morbid Obesity Increases The Risk Of Systemic Complications In Patients With Femoral Shaft Fractures
Stuart Deaderick, BS; Robert Francis Murphy, MD; John C Weinlein, MD

10:27 am Paper 48
Operative Versus Non-Operative Treatment Of Femoral Fractures In Spinal Cord Injury Patients
Julius A Bishop, MD; Paola Suarez, MPH; Lisa DiPonio, MD PhD; Doug Ota, MD, PhD; Catherine Curtin, MD

10:33 am Discussion

10:38 am Paper 49
Locked Plating Versus Retrograde Nailing For Distal Femur Fractures: A Multicenter Randomized Trial
Paul Tornetta, III, MD; Kenneth A Egol, MD; Clifford B Jones, MD, FACS; Janos P Ertl, MD; Brian H Mullis, MD; Ed Perez, MD; Cory A Collinge, MD; Robert Ostrum, MD; Catherine A Humphrey, MD; Sean Nork, MD; Michael J Gardner, MD; William M Ricci, MD; Laura S Phieffer, MD; David C Teague, MD; William J Ertl, MD; Christopher T Born, MD; Alan Zonno, MD; Judith A Siegel, MD; H Claude Sagi, MD; Andrew N Pollak, MD; Andrew H Schmidt, MD; David C Templeman, MD; Stephen A Sems, MD; Darin M Friess, MD; Hans-Christoph Pape

10:44 am Paper 50
Distal Locking In Femural And Tibial Nailing Of 228 Patients Without X-Ray Guidance: A Multicenter Study
Ramon B Gustilo, MD; Arturo C Canete, MD; Godofredo V Dungca, MD; Regidor B De Leon, MD; Daniel V Dungca, MD; Jerome B Atupan, MD; Joaquin C Pandanan, MD; Wilfredo B Pacheco, MD; Abigail T Jao, BS, MEM-BME

10:50 am Paper 51
A Prospective Randomized Control Trial Of Fixation Of Intertrochanteric Fractures: Compression Hip Screw Versus Third Generation Long Cephalomedullary Nail
Diana Kennedy, MBBS; Cameron Cooke, MD; Lloyd (Doug) King, FRACS (ortho); Mark Dekkers, FRACS (ortho)

10:56 am Discussion

11:01 am Paper 52
Femoral Neck Shortening Impairs Gait Pattern And Muscle Strength After Internal Fixation Of A Femoral Neck Fracture
Stephanie Zielinski, MD; Noël LW Keijsers; Stephan FE Praet; Martin J Heetveld; Mohit Bhandari, MD, PhD, FRCSC; Jean Pierre Wilssens; Peter Patka; Esther MM Van Lieshout

11:07 am Paper 53
Implication Of Subgrouping In Valgus Femoral Neck Fractures: Comparison Of 31-B1.1 With 31-B1.2 Fracture In OTA Classification
Kyu-Hyun Yang, MD; Hyoung-Kyeun Song; Hyun-Cheol Oh; Yougun Won

11:13 am Paper 54
Fixation Of Displaced Femoral Neck Fractures In Young Adults: Fixed Angle Devices Or Pauwel Screws
C Max Hoshino, MD; Matthew Christian; Robert V O'Toole, MD; Theodore T Manson, MD

11:19 am – 11:24 am Discussion

11:24 am – 12:30 pm Lunch

Meeting Agenda

11:35 am – 12:20 pm Poster Tour

11:35 am – 12:20 pm Poster Tour
(P2) Upper Extremity / Wrist / Hand
Michael D McKee, MD

11:35 am – 12:20 pm Poster Tour
(P3) Pelvis and Acetabulum
Paul Tornetta, III, MD

12:30 pm – 2:00 pm Break-outs

12:30 pm Skills Lab
(SL3) SIGN
Lab Leader: Lewis G Zirkle, Jr, MD
Innocent Chiedu Ikem (Inno Ikem), MD
Billy Thomson Hoanga, MD; Robert S Schultz, MD;
Paul Whiting, MD; Kyle R Stephens, DO;
Frederic B Wilson, Jr, MD; John W Staeheli, MD;
Prof. Shabab-uddin, MD; Faseeh Shahab, MD

12:30 pm Skills Lab
(SL4) IM Fixation of Proximal Tibial Fractures
Lab Leader: Roy Sanders, MD
Anthony S Rhorer, MD; Paul Tornetta, III, MD:
Joshua Langford, MD; William M Ricci, MD

12:30 pm Skills Lab
(SL5) Knee or Ankle Spanning Ex-Fix
Lab Leader: Edward A Perez, MD
Matthew I Rudloff, MD; Robert D Zura, MD;
Amer J Mirza, MD; Hassan R Mir, MD

12:30 pm Mini-Symposium
Contemporary Debates in Orthopaedic Trauma
Moderator: Michael Suk, MD, JD
Samuel G Agnew, MD; Bruce D Browner, MD
Lisa K Cannada, MD; Clifford B Jones, MD;
A Alex Jahangir, MD; Douglas W Lundy, MD:
Theodore Toan Le, MD; Samir Mehta, MD;
Manish K Sethi, MD; Philip R Wolinsky, MD

12:30 pm Mini-Symposium
Financial Implications of Increasing ACS Trauma Level: Where does Orthopaedic Trauma Surgeon Fit into the Equation?
Moderator: Timothy J Bray, MD
Peter Althausen, MD; Austin Hill, MD, MPH;
Roy Sanders, MD; Mike Williams, MBA

12:30 pm Mini-Symposium
Introduction to ICD-10 for Orthopaedic Traumatologists
Moderator: M Bradford Henley, MD
William R Creevy, MD; J Scott Broderick, MD

12:30 pm – 1:40 pm Symposium 2

Assessment of Fracture Repair
Moderators: Emil H Schemitsch, MD;
Theodore Miclau, III, MD

12:30 pm **What is the Problem and is there a Consensus?**
Michael D McKee, MD

12:40 pm **Current Options for Determining Union**
Saam Morshed, MD, PhD

12:50 pm **What is the Role for Functional Outcomes?**
Robert V O'Toole, MD

1:00 pm **Are Fracture Healing Trials a Thing of Past: The Challenge of FDA**
Paul Tornetta, III, MD

1:10 pm **Focusing Our Efforts: Challenging Healing Problems, but What Will the Answers Be?**
Michael J Bosse, MD

1:20 pm Discussion

1:40 pm – 2:04 pm Paper Session 4: Basic Science

Moderators: Theodore Miclau, III, MD;
Emil H Schemitsch, MD

1:40 pm Paper 55
Is There An International Consensus How To Assess Fracture Healing Based On Clinical And Radiological Findings?
Wojciech Michal Glinkowski, MD, PhD;
Jakub Janowicz, MD

1:46 pm Paper 56
Any Cortical Bridging Predicts Healing Of Tibial Shaft Fractures
William Lack; James Starman, MD;
Rachel Seymour, PhD; Michael Bosse, MD;
Madhav Karunakar, MD; Stephen Sims, MD;
James Kellam, MD

1:52 pm Paper 57
Ultrasonographic Monitoring Of Fracture Healing: Is This The End Of Radiography In Fracture Follow-ups?
Sourabh Chachan;
Barsha Tudu, MBBS, MS;
Biswajit Sahu, MBBS, MS, M Ch

1:58 pm Discussion

2:04 pm – 2:30 pm Break

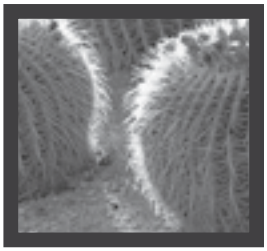
2:30 pm – 4:00 pm Break-outs

2:30 pm Mini-Symposium
Technical Tips in 3 and 4-Part Proximal Humerus ORIF
Moderator: Utku Kandemir, MD
John T Gorczyca, MD; Milan K Sen, MD;
Michael J Gardner, MD; Michael D McKee, MD

2:30 pm Mini-Symposium
How to Establish and Run a Fragility Fracture Program
Moderator: James A Goulet, MD
Clifford B Jones, MD; Kyle J Jeray, MD;
Joseph M Lane, MD; Marc F Swiontkowski, MD

2:30 pm Mini-Symposium
Healthcare Systems and Trauma: A 360 Degree World View for the Orthopaedic Trauma Surgeon
Moderator: Manish K Sethi, MD
James R Ficke, MD; A Alex Jahangir, MD;
Samir Mehta, MD

2013 OTA ANNUAL MEETING



Friday, October 11, 2013 (cont.)

2:30 pm–4:07 pm Paper Session 5: Knee/Tibia

Moderators: David W Sanders, MD
David P Barei, MD

2:30 pm Paper 58
Are Locked Plates Needed For Split Depression Tibial Plateau Fractures (OTA Type 41B)?
Michelle Abghari, BS; Alejandro Marcano, MD; Roy Davidovitch, MD; Sanjit Reddy Konda, MD; Kenneth A Egol, MD

2:36 pm Paper 59
Inflammatory Cytokine Response Following Tibial Plateau Fracture Does Not Correlate With Fracture Grading Of "Low Versus High Energy"
Justin Haller, MD; Thomas F Higgins, MD; Erik Kubiak, MD

2:42 pm Discussion

2:47 pm Paper 60
Fix It Or Discard It? A Retrospective Review Of Functional Outcomes After Surgically Treated Patella Fractures Comparing ORIF With Partial Patellectomy
Nicholas Bonnaig, MD; Chris Casstevens, MD; Michael T Archdeacon, MD

2:53 pm Paper 61
No Difference In Infection, Compartment Syndrome, Or Secondary Procedures In Early Versus Delayed Spanning External Fixation For High-Energy Tibial Plateau And Plafond Fractures
Justin Haller, MD; David Holt; Erik Kubiak, MD; Thomas F Higgins, MD

2:59 pm Discussion

3:04 pm Paper 62
Intramedullary Nailing With An Internal Compression Device For Transverse Tibial Shaft Fractures Decreases Time To Union When Compared To Traditional "Backslapping" And Dynamic Locking
Michael J Beltran, MD; Christopher James; H Claude Sagi, MD

3:10 pm Paper 63
The Effect Of Postoperative Weight-Bearing On Tibia Fractures Treated With Intramedullary Nailing: A Prospective Randomized Trial
Steven C Gross, MD; David Taormina; Kenneth A Egol, MD; Nirmal C Tejwani, MD, FRCS

3:16 pm Paper 64
Does A 6-Month Wait Before Reoperation Improve Tibial Nonunion Rates?: A Comparative Examination Of Patients Not Enrolled In SPRINT
Carol Alice Lin, MA, MD; SPRINT Investigators

3:22 pm Discussion

3:27 pm Paper 65
Defining The Lower Limit Of A "Critical Bone Defect" In Open Diaphyseal Tibia Fractures
Nikkole M Haines, MD, BS; William Lack; Rachel Seymour, PhD; Michael J Bosse, MD

3:33 pm Paper 66
Alignment After Intramedullary Nailing Of Distal Tibia Fractures Without Fibula Fixation
Anthony De Giacomo, MD; William R Creevy, MD; Paul Tornetta, III, MD

3:39 pm Paper 67
Outcomes Of The Patients With Cultured Pathogens At The Time Of Nonunion Surgery
David P Taormina, MS; James H Lee, BE; Alejandro I Marcano, MD; Raj Karia; Kenneth A Egol, MD

3:45 pm Discussion

3:50 pm Paper 68
Acute Compartment Syndrome: Where Pressure Fails Ph Succeeds
Kirsten Elliott, FRCS (ortho), MD; Alan Johnstone, FRCS

3:56 pm Paper 69
Interobserver Reliability In The Measurement Of Lower Leg Compartment Pressures.
Thomas M Large, MD; Julie Agel, ATC; Daniel J Holtzman, MD; Stephen K Benirschke, MD; James C Krieg, MD

4:02 pm Discussion

2013 OTA ANNUAL MEETING

4:07 pm – 4:53 pm Paper Session 6: Pediatrics and Spine

Moderators: Gilbert R Ortega, MD
Samir Mehta, MD

4:07 pm Paper 70
Displaced Medial Epicondyle Fractures In Children: Comparative Effectiveness Of Modern Surgical Treatment Versus Non-Operative Treatment
Emily Mayer, BS; Charles T Mehlman, DO, MPH

4:13 pm Paper 71
A Prospective Cohort Study Of The Adoption Of Titanium Elastic Intramedullary Nails For The Treatment Of Femur Fractures In Kumasi, Ghana
Tai Holland, BS; Scott Patrick Kaiser, BS, MD; Paa Kwesi Baidoo, MD; Kate Liddle; Richard Coughlin, MD; Dominic Awariyah; Peter Konadu, MD; Raphael Kumah, MD

4:19 pm Paper 72
Refracture Rates Following Clavicle Shaft Fractures In Children: Angulation Only Fractures Versus Completely Displaced Fractures
Michelle Masnovi, BS, MS; Charles T Mehlman, DO, MPH

4:25 pm Discussion

4:30 pm Paper 73
Predicting Redisplacements Of Diaphyseal Forearm Fractures: How About The Three-Point Index?
Kadir Bahadir Alemdaroglu, MD; Serkan Iltar; Ferhat Say; Nevres H Aydogan

4:36 pm Paper 74
Factors Associated With Nonunion In 97 Consecutive Type-2 And Type-3 Odontoid Fractures In Elderly Patients
Clifford B Jones, MD, FACS; Michael Merrick; Debra Sietsema, PhD, RN; Casey Smith, MD; Tan Chen, BS; Scott S Russo, MD; James R Stubbart, MD

4:42 pm Paper 75
Operative Versus Nonoperative Treatment Of Thoracolumbar Burst Fractures Without Neurological Deficit: Fifteen To Twenty-Year Follow-up
Kirkham B Wood; Mitchel B Harris, MD; Christopher M Bono, MD; Amir Mehbod; Glenn Butterman

4:48 pm Discussion

4:53 pm **Adjourn**

5:30pm – 6:30pm **Military Reception**

Saturday, October 12, 2013

6:30 am – 7:45 am Break-outs

6:30 am Case Presentation
Surgical Treatment of Pediatric Femur Fractures, Current Concepts
Moderator: Enes Kanlic, MD, PhD;
Amr A Abdelgawad, MD; J Eric Gordon, MD; Marc F Swiontkowski, MD

6:30 am Case Presentation
Mangaement of Pelvic and Acetabulum Fractures
Moderator: Paul Tornetta, III, MD;
Thomas F Higgins, MD; Robert V O'Toole, MD; Philip R Wolinsky, MD

6:30 am Case Presentation
The Isolated Humerus: Not All Belong in the Sarmiento
Moderator: Lisa K Cannada, MD;
William T Obremskey, MD; Clifford B Jones, MD

6:30 am Skills Lab
(SL6) ORIF Distal Radius Fractures
Lab Leader: Melvin P Rosenwasser, MD
Michael D McKee, MD; Jesse B Jupiter, MD; Thomas F Varecka, MD; R Kumar Kadiyala, MD

7:00 am Poster Tour
(P4) Hip and Femur
J Tracy Watson, MD

8:00 am – 9:30 am Symposium 3

The Operative versus Non-Operative Treatment Of Common Upper Extremity Injuries: What Does Evidence-Based Medicine Tell Us?
Michael D McKee, MD; Peter A Cole, MD; Clifford B Jones, MD; Stephane Pelet, MD, PhD; David C Ring, MD, PhD; Melvin P Rosenwasser, MD; Emil H Schemitsch, MD
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 the operative versus non-operative treatment of common upper extremity injuries.

9:30 am – 10:00 am Break

Saturday, October 12, 2013 (cont.)

10:00 am – 11:30 am Break-outs

10:00 am Mini-Symposium
What Could Go Wrong Did: Getting Out of Trouble
Moderator: Lisa K Cannada, MD
Frank A Liporace, MD; Brian H Mullis, MD; David C Templeman, MD

10:00 am Mini-Symposium
Geriatric Pelvis and Acetabular Fractures: We Should Treat Them Like Hip Fractures
Moderator: Brett D Crist, MD
Michael T Archdeacon, MD; Steven A Olson, MD; Stephen A Sems, MD; Cory A Collinge, MD

10:00 am Mini-Symposium
Malunion / Nonunion Management: What I Wish Someone Had Told Me Before I Started Doing These Cases
Moderator: Samir Mehta, MD
David P Barei, MD; Gregory J Della Rocca, MD, PhD; J Spence Reid, MD

10:00 am – 11:26 am Paper Session 7: Foot and Ankle

Moderators: Robert V O'Toole, MD; Christopher M Doro, MD

10:00 am Paper 76
Open Reduction And Internal Fixation Compared With Primary Subtalar Fusion For Treatment Of Sanders Type IV Calcaneal Fractures: A Randomized Multicentre Clinical Trial
Richard E Buckley, MD; Jeffrey Poon, MBBS; Karel Fasbender; Rogier Steins; Khitish Mohanty; Elizabeth Oddone Paolucci, PhD

10:06 am Paper 77
Combined Approaches Increases Nonunion In Tibial Pilon Fractures
Paul M Balthrop, MD; Daniel S Chan; David Glassman; Brian White

10:12 am Paper 78
Long-term Follow-up Of High-Energy Pilon Fractures: A Prospective Comparison Of Locked Plates Versus Non-Locked Plates
Theodore Toan Le, MD; Albert D'Heurle, MD; Namdar Kazemi, MD; Michael T Archdeacon, MD; John D Wyrick, MD

10:18 am Discussion

10:23 am Paper 79
Early Weight-Bearing And Mobilization Versus Non-Weight-Bearing And Immobilization After Open Reduction And Internal Fixation Of Unstable Ankle Fractures: A Randomized Controlled Trial
Niloofar Dehghan; Richard J Jenkinson, MD; Michael D McKee, MD; Emil H Schemitsch, MD; Aaron Nauth, MD; Jeremy A Hall, FRCSC; David J Stephen, MD; Hans J Kreder, MD

10:29 am Paper 80
Does The Muller AO Classification System For Ankle Fractures Correlate More Closely To The Mechanism Of Injury Than The Lauge-Hansen System?
Edward K Rodriguez, MD, PhD; John Y Kwon, MD; Lindsay Herder, BA; Paul T Appleton, MD

10:35 am Paper 81
The Quality And Utility Of Routine Immediate Postoperative Radiographs Following Ankle Fracture Surgery
Elizabeth Martin, MD; Sara Lyn Miniaci-Coxhead, MD; Joshua G Hunter, MD; John T Gorczyca, MD; Jonathan M Gross, MD; Catherine A Humphrey, MD; John P Ketz, MD

10:41 am Discussion

10:46 am Paper 82
A Prospective Randomized Multicentric Trial Comparing A Static Implant To A Dynamic Implant In The Surgical Treatment Of Acute Ankle Syndesmosis Rupture
Stéphane Pelet, MD, PhD, FRCSC; Mélissa Laflamme; Mark Glazebrook; Michel Van Bekerom; Etienne Belzile; Luc Bédard

10:52 am Paper 83
The Fate Of The Fixed Syndesmosis Over Time
Scott Koenig; Elisabeth Gennis, MD; Deirdre Rodericks, BS; Peter Otlans; Paul Tornetta, III, MD

10:58 am Paper 84
Does Syndesmotic Injury Have A Negative Effect On Functional Outcomes? A Multicenter Prospective Evaluation
Jody Litrenta, MD; Paul Tornetta, III, MD; Laura S Phieffer, MD; Clifford B Jones, MD, FACS; Janos P Ertl, MD; Brian H Mullis, MD; Kenneth A Egol, MD; Michael J Gardner, MD; William M Ricci, MD; David C Teague, MD; William J Ertl, MD; Cory A Collinge, MD; Ross K Leighton, MD

11:04 am Discussion

11:09 am Paper 85
Stress Ankle Radiographs And Predictability Of Deltoid Ligament Injury In A Supination-External Rotation Cohort
Patrick Schottel, MD; Marschall B Berkes, MD; Milton TM Little, MD; Matthew Garner; Jacqueline Birnbaum; David L Helfet, MD; Dean G Lorich, MD

11:15 am Paper 86
Anatomical Strategy For Fixation Of Supination External Rotation Type IV Equivalent (SER IV E) Ankle Fractures
Milton TM Little, MD; Marschall B Berkes, MD; Patrick Schottel, MD; Matthew Robert Garner, MD; Lionel Enrique Lazaro; Jacqueline F Birnbaum, BA; David L Helfet, MD; Dean G Lorich, MD

11:21 am Discussion

11:26 am – 12:30 pm Lunch

11:40 am – 12:25 pm Poster Tour
(P5) Geriatric
William T Obremskey, MD

11:40 am – 12:25 pm Poster Tour
(P6) General Interest
Lisa K Cannada, MD

12:30 pm – 2:00 pm Break-outs

12:30 pm Mini-Symposium
Management of Pediatric Trauma Urgencies / Emergencies
Moderator: David A Podeszwa, MD;
Christine A Ho, MD; Anthony I Riccio, MD; Lane Wimberly, MD

12:30 pm Mini-Symposium
Rib Fracture Fixation in 2013: Lunatic Fringe or State of the Art?
Moderator: Michael D McKee, *MD;*
Peter Althausen MD; Noloofar Dehghan, MD; Aaron Nauth, MD; Morad Hameed, MD; Emil H Schemitsch, MD; Gerard P Slobogean, MD

12:30 pm Orthopaedic Surgeons Taking Ownership of Extremity Trauma: Soft Tissue Coverage
Moderator: Christopher M McAndrew, MD;
Daniel A Osei, MD; Martin I Boyer, MD; Duretti Fufa, MD; David A Volgas, MD

12:30 pm – 1:56 pm Paper Session 8: Topics of General Interest
Moderators: Thomas F Higgins, MD; Matt L Graves, MD

12:30 pm Paper 87
Utilizing The ASA Score As A Predictor Of 90-Day Perioperative Readmission In Patients With Isolated Orthopaedic Trauma Injuries
Vasanth Sathiyakumar, BA; Aaron Yengo-Kahn, BS; Harrison F Kay, BS; R Adams Cowley; Young M Lee; Jesse M Ehrenfeld, MD, MPH; William T Obremskey, MD, MPH; Manish K Sethi, MD

12:36 pm Paper 88
Do Surgeons Know The Cost Of Orthopaedic Trauma Implants? A Multicenter Study Of 216 Surgeons
Kanu Okike, MD; Robert V O'Toole, MD; Andrew N Pollak, MD; Julius A Bishop, MD; Christopher M McAndrew, MD; Samir Mehta, MD; William Wood Cross, MD; Grant Garrigues, MD; Mitchel B Harris, MD; Christopher T LeBrun, MD

12:42 pm Paper 89
Does Fracture Care Make Money For The Hospital? An Analysis Of Hospital Revenue And Cost For Treatment Of Common Fractures
Conor Kleweno, MD; Robert V O'Toole, MD; Jeromie Ballreich, MHS; Andrew N Pollak, MD

12:48 pm Discussion

12:53 pm Paper 90
Sleep Disturbance Following Fracture Is Related To Emotional Well Being Rather Than Functional Result
Brandon S Shulman, BA; Frank Liporace; Roy Davidovitch, MD; Raj Karia; Kenneth A Egol, MD

12:59 pm Paper 91
Anxiety And Depression In The Etiology Of Chronic Pain: Results From A Two-Year Cohort Study Of Trauma Patients
Renan Castillo, MS; Stephen Wegener, PhD; Sara Elizabeth Heins, BA; Jennifer Haythornthwaite; Ellen J MacKenzie, PhD; Michael J Bosse, MD

1:05 pm Paper 92
Impact Of Early Postoperative Pain On Outcomes 1-Year Following Traumatic Orthopaedic Injury
Kristin Archer, PhD, DPT; Sara Elizabeth Heins, BA; Christine Abraham; William T Obremskey, MD, MPH; Stephen Wegener, PhD; Renan Castillo, MS

1:11 pm Discussion

1:16 pm Paper 93
Nature's Wrath – The Effect Of Daily Weather Patterns On Postoperative Pain Following Orthopaedic Trauma
Brandon S Shulman, BA; Alejandro I Marcano, MD; Roy Davidovitch, MD; Raj Karia; Kenneth A Egol, MD

1:22 pm Paper 94
Impact Of Patient Comprehension On Postoperative Complications In An Orthopaedic Trauma Population
Hassan R Mir, MD; Rishin J Kadakia, BSc; James M Tsahakis, BA; Neil M Issar, BSc; Harrison F Kay, BSc; Kristin Archer, PhD, DPT

1:28 pm Paper 95
Stress-Hyperglycemia Is Associated With Surgical Site Infection: A Prospective Observational Study Of Non-Diabetic, Non-Critically Ill Orthopaedic Trauma Patients
Justin E Richards; Julie Hutchison, ACNP; Kaushik Mukherjee, MD, MSCI; A Alex Jahangir, MD; Hassan R Mir, MD; Jason M Evans, MD; Aaron M Perdue, MD; William T Obremskey, MD, MPH; Manish K Sethi, MD; Addison K May, MD

1:34 pm Discussion

1:39 pm Paper 96
Effectiveness Of Vitamin D Therapy In Orthopaedic Trauma Patients
Brett D Crist, MD, FACS; Daniel S Robertson, MD; Tyler Jenkins; Yvonne M Murtha, MD; Gregory J Della Rocca, MD, PhD, FACS; David A Volgas, MD; James P Stannard, MD

1:45 pm Paper 97
Are Routine Two Week Postoperative Radiographs Useful?
Brian Mosier; Gregory T Altman, MD; Lisa A Taitsman, MD

1:51 pm Discussion

1:56 pm – 2:26 pm Break

Saturday, October 12, 2013 (cont.)

2:26 pm – 3:55 pm Paper Session 9: Upper Extremity

Moderators: Stephen A Kottmeier, MD; Clifford B Jones, MD

2:26 pm Paper 98
Non-Operative Treatment Of Closed Extra-Articular Distal-Third Diaphyseal Fractures Of The Humerus: A Comparison Of Functional Bracing And Long Arm Casting
David Saper, MD; Chris Swellengrebel; Andrew Jawa; David Ring; Ryan Shin; Paul Yi

2:32 pm Paper 99
Functional Outcome Scores Of Humeral Shaft Fractures In Patients Treated Non-Operatively Compared To Those Treated Surgically
Edward Shields, MD; Michael Maceroli, MD; Leigh Sundem; Sean Childs; Adrian Hadiano; Catherine A Humphrey, MD; Jonathan M Gross, MD; John P Ketz, MD; John T Gorczyca, MD

2:38 pm Paper 100
A Prospective Randomized Study Of Operative Treatment For Non-Comminuted, Humeral Shaft Fractures- Open Plating Versus Minimal Invasive Plate Osteosynthesis (MIPO)
Jung Jae Kim, MD; Young-Soo Byun; Chang-Wug Oh, MD; Kichul Park, PhD; Ji Wan Kim

2:44 pm Discussion

2:49 pm Paper 101
Upright Compared To Supine Radiographs Of Clavicle Fractures: Does Patient Positioning Affect Displacement?
Jonathon David Backus; David J Merriman, MD; Christopher M McAndrew, MD; Michael J Gardner, MD; William M Ricci, MD

2:55 pm Paper 102
Can Complications Of Locked Plating About The Proximal Humerus Fractures Be Minimized? The Effect Of The Learning Curve
Kenneth A Egol, MD; Brandon S Shulman, BA; Crispin C Ong; David P Taormina, MS; Raj Karia; Joseph D Zuckerman, MD

3:01 pm Paper 103
Minimally Displaced Radial Head / Neck Fractures (Mason Type-I, OTA Types 21A2.2 And 21B2.1): Are We "Over Treating" Our Patients?
Brandon S Shulman, BA; James H Lee, BE; Frank Liporace; Kenneth A Egol, MD

3:07 pm Discussion

3:12 pm Paper 104
PROMIS Physical Function Computer Adaptive Test Compared To Other Upper Extremity Outcome Measures In The Evaluation Of Patient Outcomes Following Proximal Humerus Fractures In Patients Over 60
Jordan Houston Morgan, BS; Kanu Okike, MD; Michael A Kallen, PhD, MPH; Mark S Vrahas, MD

3:18 pm Paper 105
Pain Exposure Physical Therapy Versus Conventional Therapy In Patients With Complex Regional Pain Syndrome Type 1: A Randomised Controlled Trial
Jan Paul M Frolke, MD, PhD; Karlijn J Barnhoorn, MD; Henk Van de Meent, MD, PhD; Robert TM Van Dongen, MD, PhD; Frank PAJ Klomp; Hans JMM Groenewoud, MSc; Ria MWG Nijhuis-vanderSanden, PhD

3:24 pm Paper 106
When Do Distal Radius Fractures Most Likely Displace And When Do They Stop Moving: Long-Term Follow-up Of Closed Reduction And Casting
Andy Jawa, MD; Joey Lamartina, MD; Paul Tornetta, III, MD

3:30 pm Discussion

3:35 pm **Closing Remarks**

3:40 pm **Adjourn**

2013 OTA ANNUAL MEETING

Special Offerings and Events

2013 Guest Nation: China

The OTA is honored to welcome China as the 2013 Guest Nation. We are pleased to have the opportunity for collaboration with our Chinese colleagues, and a chance to recognize their contributions and achievements.

Representatives from the Chinese Othopaedic Trauma Society will participate in a symposium at the International Orthopaedic Trauma Care Forum on Wednesday, October 9, and will also speak at the Annual Meeting about Chinese Trauma Education.

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

International Poster Reception

Wednesday October 9, 2013
5:30 pm – 6:30 pm
All International attendees are welcome to attend.

William DeLong, MD, International Committee Chair

Women in Orthopaedic Trauma Luncheon Kathy Cramer Memorial Luncheon

Friday October 11,
11:30 am – 12:30 pm
Leslie J Gullahorn, MD and
Laura S Phieffer, MD
(Registration / ticket required)

Kathy Cramer, MD

New Member Luncheon

Friday October 11, 2013
11:30 am – 12:30 pm
Guest Speakers:
Robert A Probe, MD
Robert A Winquist, MD (invited)
All new and prospective members invited.

Clifford B Jones, MD Membership Committee Chair

Exhibit Hours:

Thursday: 2:30 pm – 5:00 pm
Friday: 9:00 am – 5:00 pm
Saturday: 9:00 am – 1:30 pm

Poster Viewing Hours:

Thursday, October 10, 1:00 pm – Saturday, October 12, 1:30 pm
Don't miss the opportunity for a guided poster tour at this year's Annual Meeting. Registration required and space is limited. See page 35 for details.

E-Posters

Run out of time for the posters? No problem… visit the OTA website to view 2013 Annual Meeting E-Posters.

Please share the following excellent educational opportunity with your residents.

Comprehensive Fracture Course for Residents

October 9 – 11, 2013
Fairmont Scottsdale Princess
Chair: Michael T Archdeacon, MD
Co-Chair: Kyle J Jeray, MD
"It would be difficult to match the collective knowledge, experience, and commitment to teaching of this year's outstanding faculty!"
Visit www.ota.org for the preliminary program and registration.

Michael T Archdeacon, MD

Kyle J Jeray, MD

Industry Lunch Symposia

Thursday, October 10, 11:00 am

Arthrex · DePuy Synthes Trauma · Lilly · Orthofix Always Innovating · Pacira Pharmaceuticals, Inc. · Zimmer

Wednesday, October 9, 2013

Basic Science

7:30 am – 8:40 am	**Symposium 1:** Hot Topics in Biomechanics: Hip Fracture Fixation
8:40 am – 9:38 am	**Paper Session 1:** Biomechanically-Directed Fixation: Hot Topics
9:38 am – 10:00 am	Break
10:00 am – 11:10 am	**Symposium 2:** Inflammation
11:10 am – 11:44 am	**Paper Session 2:** Inflammation and Bone Healing
11:44 am – 12:45 pm	Lunch
12:45 pm – 1:55 pm	**Symposium 3:** Bone Grafting
1:55 pm – 3:24 pm	**Paper Session 3:** Bone Regeneration and Repair
3:25 pm – 3:45 pm	Break
3:45 pm – 4:50 pm	**Symposium 4:** Building Networks: The Basics
4:50 pm – 5:30 pm	**Paper Session 4:** International Research Studies

Grant Writing Workshop

7:30 am – 9: 45 am	**Didactics:** Mechanics of a Grant
9:45 am – 10:00 am	Break
10:00 am – 12:00 pm	**Optimizing Your Chances of Success**
12:00 pm – 1:00 pm	Lunch
1:00 pm – 2:30 pm	**Grants Library**
2:30 pm – 3:00 pm	Break
3:00 pm – 4:00 pm	**Mock Grant Review**
4:00 pm – 4:30 pm	**Mock Grant Review Discussion**

Orthopaedic Trauma Boot Camp

7:00 am – 10:25 am	**Orthopaedic Trauma Boot Camp Presentations**
10:25 am – 10:45 am	Break
10:45 am – 11:35 am	**Orthopaedic Trauma Boot Camp Labs**
11:35 am – 12:50 pm	**Orthopaedic Trauma Boot Camp Presentations**
12:50 pm – 1:30 pm	Lunch
1:30 pm – 2:50 pm	**Orthopaedic Trauma Boot Camp Presentations**
2:50 pm – 3:10 pm	Break
3:10 pm – 4:30 pm	**Orthopaedic Trauma Boot Camp Presentations**
4:30 pm	Adjourn

Coding Course

9:00 am – 12:00 pm	**Evaluation and Management**
12:00 pm – 1:00 pm	Lunch
1:00 pm – 4:00 pm	**Fracture Care Surgical Coding**

International Trauma Care Forum

7:30 am – 7:35 am	**Introduction**
7:35 am – 8:05 am	**Symposium 1:** International Comparison of Orthopaedic Post-Graduate Training
8:05 am – 10:37 am	**Paper Session 1:** Fractures of the Lower Extremity
9:16 am – 9:31 am	Break
10:37 am – 10:57 am	**Symposium 2:** Training Abroad for Orthopaedic Residents
10:57 am – 12:16 pm	**Paper Session 2:** General Management of Musculoskeletal Injury
12:16 pm – 1:00 pm	Lunch
1:00 pm – 2:19 pm	**Paper Session 3:** Fractures of the Upper Extremity and Hip
2:19 pm – 3:25 pm	**Symposium 3:** Guest Nation
3:25 pm – 3:45 pm	Break
3:45 pm – 4:50 pm	**Symposium 4:** Building Networks: The Basics
4:50 pm – 5:30 pm	**Paper Session 4:** International Research Studies
5:30 pm – 6:30 pm	International Poster Reception

Thursday, October 10, 2013

Basic Science

7:30 am – 8:40 am	**Symposium 5:** Infection
8:40 am – 9:13 am	**Paper Session 5:** Musculoskeletal Infection
9:13 am – 9:30 am	Break
9:30 am – 10:40 am	**Symposium 6:** Stem Cell Therapies
10:40 am – 11:14 am	**Paper Session 6:** Stem Cells
11:14 am	Adjourn

Young Practitioners Forum

6:30 am – 8:28 am	**Young Practitioners Forum Presentations**
8:28 am – 8:41 am	Break
8:41 am – 10:41 am	**Young Practitioners Forum Presentations**

Orthopaedic Trauma Boot Camp

7:00 am – 8:50 am	**Orthopaedic Trauma Boot Camp Presentations**
8:50 am – 9:00 am	Break
9:00 am – 9:50 am	**Orthopaedic Trauma Boot Camp Labs**
9:50 am – 11:00 am	**Orthopaedic Trauma Boot Camp Presentations**

Industry Lunch Symposia

11:00 am – 12:45 pm	**Arthrex; Orthofix; Zimmer Trauma; DePuy Synthes Trauma; Pacira Pharmaceuticals, Inc.** (Box lunch provided.)

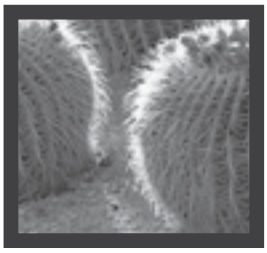
Annual Meeting

1:00 pm – 1:20 pm	**Welcome and Donor Awards**
1:20 pm – 2:50 pm	**Symposium 1:** Evaluating Outcomes in the 20th Century
2:50 pm – 3:20 pm	Break
3:20 pm – 4:46 pm	**Paper Session 1:** Polytrauma / Pelvis / Post-Traumatic Reconstruction
4:46 pm – 5:16 pm	**President's Message**
5:16 pm – 6:16 pm	**OTA Business Meeting**
6:30 pm – 8:30 pm	**OTA Welcome Reception**

Friday, October 11, 2013	
6:30 am – 7:45 am	**Case Presentations and Skills Labs**
7:00 am – 7:45 am	**Poster Tour**
8:00 am – 8:55 am	**Paper Session 2:** Geriatric
8:55 am – 9:15 am	**Guest Nation Talks**
9:15 am – 9:45 am	**Border Lecture:** Bruce D Browner
9:45 am – 10:15 am	Break
10:15 am – 11:45 am	**Mini-Symposia**
10:15 am – 11:24 am	**Paper Session 3:** Hip / Femur
11:24 am – 12:30 pm	Lunch (Women in Orthopaedic Trauma Luncheon and New Member Luncheon)
11:35 am – 12:20 pm	**Poster Tours**
12:30 pm – 2:00 pm	**Mini-Symposia and Skills Labs**
12:30 pm – 1:40 pm	**Symposium 2:** Assessment of Fracture Repair
1:40 pm – 2:04 pm	**Paper Session 4:** Basic Science
2:04 pm – 2:30 pm	Break
2:30 pm – 4:00 pm	**Mini-Symposia**
2:30 pm – 4:07 pm	**Paper Session 5:** Knee / Tibia
4:07 pm – 4:53 pm	**Paper Session 6:** Pediatrics and Spine
5:30 pm – 6:30 pm	**Military Reception**

Saturday, October 12, 2013	
6:30 am – 7:45 am	**Case Presentations and Skills Lab**
7:00 am – 7:45 am	**Poster Tour**
8:00 am – 9:30 am	**Symposium 3:** The Operative Versus Non-Operative Treatment of Common Upper Extremity Injuries: What does Evidence-Based Medicine Tell Us?
9:30 am – 10:00 am	Break
10:00 am – 11:30 am	**Mini-Symposia**
10:00 am – 11:26 am	**Paper Session 7:** Foot and Ankle
11:26 am – 12:30 pm	Lunch
11:40 am – 12:25 pm	**Poster Tours**
12:30 pm – 2:00 pm	**Mini-Symposia**
12:30 pm – 1:56 pm	**Paper Session 8:** Topics of General Interest
1:56 pm – 2:26 pm	Break
2:26 pm – 3:35 pm	**Paper Session 9:** Upper Extremity

2013 OTA ANNUAL MEETING



Orthopaedic Trauma for NPs and PAs

Michael T Archdeacon, MD;
Clifford B Jones, MD;
Daniel J Coll, MHS, PA-C;
Keith Zurmehly, PA-C, Program Chairs

Target Audience

This course is intended for PAs and NPs who are practicing in orthopaedics inpatient/outpatient or caring for orthopaedic injuries in ER/UC/General Trauma Services.

The Physician Assistant Review Panel is pleased to award a maximum of 20.25 hours of AAPA Category 1 CME Credit to the program entitled Orthopaedic Trauma for NP's and PA's provided by the Orthopaedic Trauma Association.

Forum Objectives

- Identify injury characteristics and integrate treatment strategies for multiple injury patients.
- Demonstrate and apply surgical skills for the application of external fixators for provisional stabilization.
- Compare and contrast fractures and treatment strategies for fractures about the knee.
- Employ and critique surgical skills involved in distal femoral and proximal tibia open reduction and internal fixation.
- Discuss the management algorithms and controversies encountered with the care of complex foot and ankle trauma.
- Recognize and review common complications encountered in the care of fractures and injuries.
- Examine and evaluate the operative treatment of upper extremity fractures.
- Apply and practice techniques for fixation of common upper extremity fractures.

Thursday, October 10, 2013

1:00 pm–2:30 pm **The Polytraumatized Patient**
Moderator: Raymond D Wright, Jr, MD

1:00 pm Assessing the Multiply Injured Patient - The Orthopaedic ABC's
1:15 pm Staged Treatment and Provisional Stabilization
1:30 pm Pelvic Ring Injuries - Evaluation, X-Ray Sheets and Binders
1:45 pm Compartment Syndrome - What To Do
2:00 pm Open Fractures - Classification, Debridement, Antibiotics and Treatment
2:15 pm Questions and Case Discussions
2:45 pm Break and Transition to Labs
3:00 pm Skills Lab
2 Labs with 45 minute rotating sessions
3:00 pm Spanning Knee Ex Fix
Theodore Toan Le, MD
Faculty, Lab Leader
3:00 pm Spanning Ankle Ex Fix
Anna N Miller, MD
Faculty, Lab Leader
4:30 pm–4:45 pm Break and Transition to President's Message

4:46 pm–5:16 pm

President's Message

Andrew H Schmidt, MD

President's Message:
Standardization and Systems: Steps We Must Take (Together)

Friday, October 11, 2013

6:30 am–7:45 am **Sessions**
PA/NP's welcome to attend

6:30 am Case Presentation
The Challenging Hip Fracture: Pearls and Pitfalls
Amer J Mirza, MD; Darin Freiss, MD; Erik Kubiak, MD; Edward A Perez, MD

6:30 am Case Presentation
Proximal Humerus ORIF – Advances in Fixation and Augmentation
Michael J Gardner, MD; Samir Mehta, MD; Clifford B Jones, MD

6:30 am Case Presentation
2 Minutes/2 Slides: Ankle Injuries Technical Tips and Tricks
Pierre Guy, MD, MBA; Kenneth A Egol, MD; Timothy O White, MD; David W Sanders, MD; Paul Tornetta, III, MD

6:30 am Case Presentation
Distal Humerus Fractures: Tips and Tricks
Utku Kandemir, MD; Michael D McKee, MD; Milan K Sen, MD; John T Gorczyca, MD

6:30 am Skills Lab
(SL1) Fixation of Clavicle Fractures
Lab Leader: Gregory M Osgood, MD
Daren P Forward, MD; Julie Keller, MD; CDR Joseph E Strauss, DO; Erik Hasenboehler, MD; David B Weiss, MD; Emil H Schemitsch, MD

6:30 am Skills Lab
(SL2) ORIF Distal Tibia and Fibula Fractures
Lab Leader: Matt L Graves, MD
Faculty TBD

8:00 am–9:00 am **Fractures About The Hip and Knee I**
Moderator: Christina L Boulton, MD
8:00 am Femoral Neck Fractures - Fix It Or Replace It
8:15 am Subtroch/Intertroch - Plates and ORIF
8:30 am Subtroch/Intertroch - IM Nails
8:45 am Femoral Shaft Fractures - Entry Portals
9:00 am Break and Transition to Border Lecture
9:15 am Border Lecture

Border Lecture
Bruce D Browner, MD
Skeletal Trauma: Global Conundrum

9:45 am Break and Transition to PA/NP Session

10:00 am–11:15 am **Fractures About The Hip and Knee II**
Moderator: Christina L Boulton, MD
10:00 am Supracondylar Femur - Tips and Tricks For Reduction and Fixation
10:15 am Tibial Plateau Fractures - One Incision Versus Two Incisions - When?
10:30 am Tibial Shaft Fractures - Transpatellar Or Suprapatellar Entry
10:45 am Questions and Case Discussions
11:15 am–12:30 pm Lunch Break

12:30 pm–2:00 pm **Skills Lab**
2 Labs with 45 minute rotating sessions
Distal Femoral Locked Plating
Christopher M McAndrew, MD
Faculty, Lab Leader
Proximal Tibia Plating
TBD

2:00 pm–2:15 pm Break and Transition to PA/NP Session

2:15 pm–3:45 pm **Expert Panel and Case Discussions - Foot and Ankle**
Moderator: Ryan P Finnan, MD
Ankle, Pilon, Calcaneus, Talus, Lisfranc, Crush Foot, Etc.

3:45 pm–4:00 pm Break

4:00 pm–5:30 pm **Expert Panel and Case Discussions - Fracture Complications**
Moderator: Hassan R Mir, MD
Wound Infection, Osteomyelitis, Malunion, Nonunion, Etc.

Saturday, October 12, 2013

6:30 am–7:45 am **Sessions**
6:30 am Case Presentation
Surgical Treatment of Pediatric Femur Fractures, Current Concepts
Enes Kanlic, MD, PhD; Amr A Abdelgawad, MD; J Eric Gordon, MD; Marc F Swiontkowski, MD
6:30 am Case Presentation
Mangaement of Pelvic and Acetabulum Fractures
Paul Tornetta, III, MD; Thomas F Higgins, MD; Robert V O'Toole, MD; Philip R Wolinsky, MD
6:30 am Case Presentation
The Isolated Humerus: Not All Belong in the Sarmiento
Lisa K Cannada, MD; William T Obremskey, MD; Clifford B Jones, MD
6:30 am Skills Lab
(SL6) ORIF Distal Radius Fractures
Lab Leader: Melvin P Rosenwasser, MD
Michael D McKee, MD; Jesse B Jupiter, MD; Thomas F Varecka, MD; R Kumar Kadiyala, MD

8:00 am–10:30 am **Upper Extremity Fractures**
Moderator: John D Wyrick, MD
8:00 am Clavicle Fractures - When To Fix Them
8:15 am Proximal Humerus Fractures - ORIF Or IM Nail - Which Is Better
8:30 am Humeral Shaft Fractures - Approaches and Techniques
8:45 am Supracondylar Humerus Fractures - Reduction and Fixation Options
9:00 am–9:15 am Break
9:15 am Elbow Dislocations - What Are The Issues
9:30 am Olecranon Fractures - Plates, Tension Bands Or IM Nails?
9:45 am Distal Radius Fractures - Volar Or Dorsal?
10:00 am–10:30 am Questions and Case Discussions
10:30 am–10:45 am Transition to Labs

10:45 am–12:15 pm **Skills Lab**
2 Labs with 45 minute rotating sessions
Clavicle ORIF
Jaimo Ahn, MD, PhD;
Faculty, Lab Leader
Distal Radius Volar Plating
Gregory L DeSilva, MD
Faculty, Lab Leader

12:15 pm–12:45 pm Lunch Break
12:30 pm–2:00 pm **Sessions**
PA/NP's welcome to attend
12:30 pm–2:00 pm Mini-Symposium
Management of Pediatric Trauma Urgencies/Emergencies
David A Podeszwa, MD; Christine A Ho, MD; Anthony I Riccio, MD; Lane Wimberly, MD
12:30 pm–2:00 pm Mini-Symposium
Rib Fracture Fixation in 2013: Lunatic Fringe or State of the Art?
Michael D McKee, MD; Timothy J Bray, MD; Noloofar Dehghan, MD; Aaron Nauth, MD; Morad Hameed, MD; Emil H Schemitsch, MD; Gerard P Slobogean, MD

Industry Lunch Symposia

Thursday, October 10, 2013

11:00 am–12:45 pm **IS1: Arthrex**

Reduced and Unbreakable: Achieving the best with the Arthrex TightRope®

Surgical solutions for fractures and soft tissue injuries of the ankle and clavicle including: the Knotless Ankle TightRope, Ankle Fracture Management System, Clavicle Fracture Management System, and the AC TightRope.

11:00 am–12:45 pm **IS2: OrthoFix**

The Management of Traumatic Bone Defects

The management of bone defects caused by trauma and nonunion continues to represent a substantial clinical challenge in the management of orthopaedic trauma patients. A variety of treatment options will be discussed during this industry session sponsored by Orthofix Orthopedics. Please join us for a global perspective on the complex management of traumatic bone defects including the Masquelet technique, the use of monolateral and circular fixation, as well as, the use of biologics.

11:00 am–12:45 pm **IS3: Zimmer**

Fragility Fractures of the Proximal Femur

11:00 am–12:45 pm **IS4: Depuy Synthes Trauma**

Peri-Prosthetic Fracture Treatment

11:00 am–12:45 pm **IS6: Pacira Pharmaceuticals, Inc.**

Peri-Operative Pain Management in the Orthopaedic Trauma Patient

Dr. Neil MacIntyre is a fellowship-trained orthopedic trauma surgeon at OrthoWilmington in Wilmington, North Carolina. Dr. MacIntyre specializes in the treatment of complex musculoskeletal injuries. He also specializes in the care of non-unions, mal-unions and complex fracture conditions. Dr. MacIntyre completed fellowship training in orthopedic trauma surgery at Hospital for Special Surgery in New York with Dr. David Helfet. He has completed advanced coursework in Upper Extremity Management, the evaluation, preservation and replacement of Young Adult Hip Disease, Pelvic and Acetabular Fracture conditions as well as Advanced Trauma studies.

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

2013 OTA ANNUAL MEETING

Case Presentations

Friday, October 11, 2013

6:30 am–7:45 am **Orthopaedic Trauma Coding**
Moderator: J Scott Broderick, MD
William R Creevy, MD
Updates in ICD-9 and CPT codes will be discussed. Case-based examples will be presented for both common and complex fracture cases. Participants are encourage to bring case examples for discussion.

6:30 am–7:45 am **The Challenging Hip Fracture: Pearls and Pitfalls**
Moderator: Amer J Mirza, MD
Darin Freiss, MD; Erik Kubiak, MD; Edward A Perez, MD
This case presentation session is focused on delving deeper into the challenges that hip fractures can present. Specifically our session will highlight some problem patterns, and then present strategies to avoid trouble. This session is geared towards a broad audience, with topics relevant to both a community/generalist practice and a busy academic traumatology practice, at both an attending and resident/fellow level.

6:30 am–7:45 am **Proximal Humerus ORIF - Advances in Fixation and Augmentation**
Moderator: Clifford B Jones, MD;
Michael J Gardner, MD; Samir Mehta, MD
Proximal humeral fractures can be difficult to reduce, and to obtain and maintain stable fixation to achieve a good functional outcome. This session will highlight newer surgical approaches, reduction techniques, and implant and augmentation applications to minimize complications.

6:30 am–7:45 am **2 Minutes/2 Slides: Ankle Injuries Technical Tips and Tricks**
Moderator: Pierre Guy, MD, MBA
Kenneth A Egol, MD; Timothy O White, MD; David W Sanders, MD; Paul Tornetta, III, MD
A series of brief presentations consisting of two slides over two minutes where experts will highlight diagnostic pearls and/or surgical tricks for the care of patients with ankle injuries (fractures, ligamentous injuries). Each presentation will be followed by a short discussion.

6:30 am–7:45 am **Distal Humerus Fractures: Tips and Tricks**
Moderator: Utku Kandemir, MD
Michael D McKee, MD; Milan K Sen, MD; John T Gorczyca, 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.

Saturday, October 12, 2013

6:30 am–7:45 am **Surgical Treatment of Pediatric Femur Fractures, Current Concepts**
Moderator: Enes Kanlic, MD, PhD
Amr A Abdelgawad, MD; J Eric Gordon, MD; Marc F Swiontkowski, MD
Pediatric femur fractures (proximal, shaft and distal) are common injuries often requiring urgent attention by orthopaedic surgeon on call. Current concepts of tactics and techniques in surgical treatment of growing skeleton will be discussed. Special focus is on intracapsular hip fractures, submuscular bridge plating (videos), intramedullary lateral entry rigid and elastic nailing.

6:30 am–7:45 am **Mangaement of Pelvic and Acetabulum Fractures**
Moderator: Paul Tornetta, III, MD
Thomas F Higgins, MD; Robert V O'Toole, MD; Philip R Wolinsky, MD
Cases will be presented that highlight the initial management, operative treatment options, and expected outcomes of pelvic and acetabulum fractures. An expert panel will provide varying opinions on the management of these complex injuries.

6:30 am–7:45 am **The Isolated Humerus: Not All Belong in the Sarmiento**
Moderator: Lisa K Cannada, MD
William T Obremskey, MD; Clifford B Jones, MD
Isolated humeral shaft fractures are controversial. The standard treatment used to be non operative. This has been shown to have increased rates of malunion and nonunion. Through case presentations with strong consideration of patient variables, treatment strategies for the isolated humeral shaft will be discussed.

Friday, October 11, 2013

10:15 am–11:45 am **How to Use the OTA Case Database at Your Institution**
Moderator: Julie Agel, ATC
This symposium will review the OTA sponsored orthopedic trauma registry. It will review how to access the database, how to enter data, how to run reports and options for multicenter study data sharing.

10:15 am–11:45 am **Femoral Neck Fractures in Young Adults: Why are We Not "Fixing" These Better?**
Moderator: Cory A Collinge, MD
Michael T Archdeacon, MD; Bradley R Merk, MD; Frank Liporace, MD
The purpose of this symposium is to review the treatment of femoral neck fractures in young adults (<50) with an emphasis on fixation and failed treatment. Pathogenesis of nonunion, malunion, and fixation failure will be discussed in the context of reduction and implant selection. Basic principles of fracture treatment will be reviewed and whether these apply to these fractures or not.

10:15 am–11:45 am **Traumatic Limb Injuries Requiring Amputation: A Multidisciplinary Approach Using The Osteomyoplastic (Ertl) Technique**
Moderator: William J Ertl, MD
Jonathan D Day, CPO;
Carol P Dionne, PT, DPT, PhD, OCS;
Jan Ertl, MD James R Ficke, MD
Osteomyoplastic amputation, commonly known as the "Ertl approach", is an innovative surgical approach which, when combined with comprehensive and interdisciplinary rehabilitation, aggressively addresses the complex issues which surround comprehensive care of those with amputation. The purpose of this course is to inform and update participants on the interdisciplinary management of osteomyoplastic amputation. The following topics will be addressed: selected surgical approaches of primary amputation and revision; comprehensive and individualized rehabilitation for optimal functional restoration; prosthetic management specific to this approach, the amputee perspective; research update. This is a pertinent and important emerging practice for all practitioners.

12:30 pm–2:00 pm **Contemporary Debates in Orthopaedic Trauma**
Moderator: Michael Suk, MD, JD
Samuel G Agnew, MD; Clifford B Jones, MD;
A Alex Jahangir, MD; Theodore Toan Le, MD;
Samir Mehta, MD; Manish K Sethi, MD;
Philip R Wolinsky, MD; Bruce D Browner, MD;
Lisa K Cannada, MD; Douglas W Lundy, MD
This symposium will cover the topics of Certification of Trauma Centers and Fellowship Training as a Marker of Quality in "Lincoln-Douglas" style debate format. Come hear the OTA Health Policy Committee members debate these important topics, and be prepared to share your opinions during allotted time for open mic.

12:30 pm–2:00 pm **Financial Implications of Increasing ACS Trauma Level: Where does Orthopaedic Trauma Surgeon Fit into the Equation?**
Moderator: Timothy J Bray, MD;
Peter Althausen, MD; Austin Hill, MD, MPH;
Roy Sanders, MD; Mike Williams, MBA
Nationally there has been an increase in the number of trauma centers since 2005. Trauma surgeons are typically excluded from the decision-making process and are therefore less aware of the financial costs and benefits to establishing a trauma center or increasing ACS trauma level status. The purpose of this symposium is to discuss how profitability, market share, halo effect, the affordable care act, and a rapidly increasing number of trauma trained orthopaedic surgeons contribute to the increase in trauma centers and the decentralization of trauma care. Finally, there will be a discussion in ways for the surgeon to improve quality care in a fiscally sustainable manner within trauma centers and the financial impact of the Affordable Care Act on trauma care.

12:30 pm–2:00 pm **Introduction to ICD-10 for Orthopaedic Traumatologists**
Moderator: M Bradford Henley, MD
William R Creevy, MD; J Scott Broderick, MD;
Attendees will learn about the enhanced requirements of ICD-10-CM for physician documentation of musculoskeletal trauma diagnoses. Insight into the specific requirements to substantiate medical necessity and obtain reimbursement for orthopaedic operative procedures, inpatient and outpatient services will be provided. Further, participants will understand the benefits, rationale and requirements for conversion to ICD-10-CM and ICD-10-PCS.

2:30 pm–4:00 pm **Technical Tips in 3 and 4-Part Proximal Humerus ORIF**
Moderator: Utku Kandemir, MD
John T Gorczyca, MD; Milan K Sen, MD;
Michael J Gardner, MD; Michael D McKee, MD
While open reduction and internal fixation is one of the most common type of treatment when surgery is indicated in proximal humerus fractures, it is technically challenging and prone to complications associated with the surgical technique.

2:30 pm–4:00 pm **How to Establish and Run a Fragility Fracture Program**
Moderator: James A Goulet, MD
Clifford B Jones, MD; Kyle J Jeray, MD;
Joseph M Lane, MD; Marc F Swiontkowski, MD
Until recently, most orthopaedic surgeons have not had the inclination or the means to adequately address the metabolic bone needs of fracture patients with poor bone quality at high risk for recurrent fragility fractures. Recently, however, highly cost effective programs have been developed that greatly diminish the risk of fracture recurrence. This mini-symposium will offer registrants a pathway to establishing and running a fragility fracture clinic as a practice adjunct, without sacrificing the quality or focus of their orthopaedic trauma practices.

2:30 pm – 4:00 pm **Healthcare Systems and Trauma: A 360 Degree World View for the Orthopaedic Trauma Surgeon**
Moderator: Manish K Sethi, MD
James R Ficke, MD; A Alex Jahangir, MD
Samir Mehta, MD
As the United States finds itself strapped with 16.4 trillion dollars of debt, no issue will be of more importance to the future generation of America's leaders than a sound understanding of healthcare. This symposium seeks to develop an understanding of the evolution of healthcare reform in America, from President Johnson's creation of Medicare in 1965 to the dramatic changes in healthcare enacted in 2010.The underlying premise of the symposium is that one must reflect upon the evolution of American healthcare in order to understand potential future directions of change.

Saturday, October 12, 2013

10:00 am – 11:30 am **What Could Go Wrong Did: Getting Out of Trouble**
Moderator: Lisa K Cannada, MD
Brian H Mullis, MD; Frank A Liporace, MD;
David C Templeman, MD
It's Friday afternoon (Fill in the blank: or 6 pm and you have a commitment or Sunday morning and you have somewhere). No sweat. The simple fracture is all that is between you and freedom. Then it falls apart. What to do to avoid failure in a "simple fracture case"

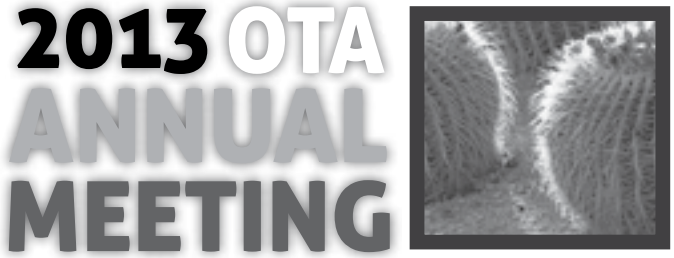
10:00 am – 11:30 am **Geriatric Pelvis and Acetabular Fractures: We Should Treat Them Like Hip Fractures**
Moderator: Brett D Crist, MD
Michael T Archdeacon, MD; Steven A Olson, MD;
Stephen A Sems, MD; Cory A Collinge, MD
Pelvic ring and acetabular fractures in the geriatric patient can affect function and morbidity as significantly as hip fractures and should be considered as important. This break-out session will demonstrate the impact these fractures have on geriatric patients and will review operative indications and techniques in a lecture, debate, and case-based format.

10:00 am – 11:30 am **Malunion / Nonunion Management: What I Wish Someone Had Told Me Before I Started Doing These Cases**
Moderator: Samir Mehta, MD
David P Barei, MD; Gregory J Della Rocca, MD, PhD;
J Spence Reid, MD
Malunion and nonunion management can be very challenging. Preoperative assessment and preoperative planning are critical aspects to a successful outcome. Understanding the limitations of surgery are also important when counseling patients.

12:30 pm – 2:00 pm **Management of Pediatric Trauma Urgencies / Emergencies**
Moderator: David A Podeszwa, MD
Christine A Ho, MD; Anthony I Riccio, MD;
Lane Wimberly, MD
A case-based and didactic review of pediatric trauma urgencies and emergencies. Interactive discussion will cover the evaluation and management of pediatric pulseless supracondylar humerus fractures, femoral neck fractures, and complex physeal fractures of the distal femur and proximal tibia. Potential complications and management strategies of the complications will also be reviewed.

12:30 pm – 2:00 pm **Rib Fracture Fixation in 2013: Lunatic Fringe or State of the Art?**
Moderator: Michael D McKee, MD
Peter Althausen, MD; Noloofar Dehghan, MD;
Aaron Nauth, MD; Morad Hameed, MD;
Emil H Schemitsch, MD; Gerard P Slobogean, MD
Rib fracture fixation in the setting of the flail or unstable chest wall in polytrauma patients is gaining in popularity. Although it is a non-traditional area of fixation, there is some preliminary information that stabilization of flail chest injuries may significantly decrease patient morbidity and is of interest to practicing orthopaedic surgeons. This symposium will examine the history, techniques, current status, and future of rib fracture fixation.

12:30 pm – 2:00 pm **Orthopaedic Surgeons Taking Ownership of Extremity Trauma: Soft Tissue Coverage**
Moderator: Christopher M McAndrew, MD;
Daniel A Osei, MD; Martin I Boyer, MD;
Duretti Fufa, MD; David A Volgas, MD
The evolution of surgical specialties has resulted in a select number of surgeons who develop an understanding of soft tissue trauma and extremity anatomy, who are also available to treat injuries in a timely manner. Orthopaedic surgeons are best positioned to develop the skill-sets to treat severe extremity trauma from debridement through stabilization AND soft-tissue coverage. Collaboration amongst orthopaedic surgeons who specialize in traumatology and micro-vascular surgery can greatly benefit the patient and the health care system. Discussion of the principles of soft tissue coverage and a model for developing a "single-specialty system" for lower extremity trauma will be presented.



Friday, October 11, 2013

6:30 am – 7:45 am **(SL1) Fixation of Clavicle Fractures**
Lab Leader: Gregory M Osgood, MD
Daren P Forward, MD; Julie Keller, MD; CDR Joseph E Strauss, DO; Erik Hasenboehler, MD; David B Weiss, MD; Emil H Schemitsch, MD
Clavicle Fixation: Who, Why, How? Over the last decade, evidence based medicine has supported a trend toward surgical fixation of displaced clavicle fractures in young, active individuals. Now, take the opportunity to share experiences and learn the pearls and pitfalls in clavicle fixation from the expert. Greg Osgood, MD, will review the indications and operative techniques for displaced fractures of the clavicle. You will also have the opportunity to have hands-on workshop training during the session to practice different plating techniques and discuss approaches to the clavicle. This session will increase your clinical knowledge and help you in your daily practice.

6:30 am – 7:45 am **(SL2) ORIF Distal Tibia and Fibula Fractures**
Lab Leader: Matt L Graves, MD
TBD
This lab will include hands-on instruction by our panel of experts on the open reduction and internal fixation of distal tibia and fibula fractures with plate and screws in a synthetic bone model. Topics including timing, approach, and post-op care will also be covered.

12:30 pm – 2:00 pm **(SL3) SIGN**
Lab Leader: Lewis G Zirkle, Jr, MD
Innocent Chiedu Ikem (Inno Ikem), MD
Billy Thomson Hoanga, MD; Robert S Schultz, MD; Paul Spencer Whiting, MD; Kyle R Stephens, DO; Frederic B Wilson, Jr, MD; John W Staeheli, MD; Prof. Shabab-uddin, MD; Faseeh Shahab, MD
The SIGN IM nail interlocking screw system is designed for use in developing countries and for surgeons everywhere who would like to avoid radiation from use of C-arm. The dital interlocking screws can be placed consistently and quickly using a mechanical technique which has been used in 112,000 fractures of long bones. The goal of SIGN nail sawbones skills lab is to discuss techniques for stabiliation of tibia, femur and humerus fractures. Table instructors will include surgeons who are OTA-SIGN Scholars.

12:30 pm – 2:00 pm **(SL4) IM Fixation of Proximal Tibial Fractures**
Lab Leader: Roy Sanders, MD
Anthony S Rhorer, MD; Paul Tornetta, III, MD; Joshua Langford, MD; William M Ricci, MD
This lab will cover options for intra-medullary fixation of proximal tibial metaphyseal fractures, including flexed and extended position, and supra-patellar nailing. Our panel of experts will review adjunctive techniques for obtaining reduction, including blocking screws, reduction plates, distractors and positioning.

12:30 pm – 2:00 pm **(SL5) Knee or Ankle Spanning Ex-Fix**
Lab Leader: Edward A Perez, MD
Matthew I Rudloff, MD; Robert D Zura, MD; Amer J Mirza, MD; Hassan R Mir, MD
This lab will demonstrate the principles for, and application of, temporizing spanning external fixation – damage control orthopedics. The practical exercise will demonstrate the proper technique and surgical pearls to utilize within the clinical setting.

Saturday, October 12, 2013

6:30 am – 7:45 am **(SL6) ORIF Distal Radius Fractures**
Lab Leader: Melvin P Rosenwasser, MD
Michael D McKee, MD; Thomas F Varecka, MD; R Kumar Kadiyala, MD
This lab will provide an opportunity to hone your volar plating techniques. Experienced and renowned surgeons will be there to share their expertise, tips and tricks.

Poster Tours

Friday, October 11, 2013

7:00 am–7:45 am (P1) Foot Ankle Pilon
Clifford B Jones, MD

11:35 am–12:20 pm (P2) Upper Extremity/Wrist/Hand
Michael D McKee, MD

11:35 am–12:20 pm (P3) Pelvis and Acetabulum
Paul Tornetta, III, MD

Saturday, October 12, 2013

7:00 am–7:45 am (P4) Hip and Femur
J Tracy Watson, MD

11:40 am–12:25 pm (P5) Geriatric
William T Obremskey, MD, MPH

11:40 am–12:25 pm (P6) General Interest
Lisa K Cannada, MD

Don't miss an opportunity for a guided poster tour. Registration is required and space is limited.

Poster Viewing Hours:

Thursday, 10/10, 1:00 pm–Saturday, 10/12, 1:30 pm

Registration and Additional Information

Disclaimer

The material presented at the 29th 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.

Course Location

Things are different in the desert. The sky is bigger. The stars are brighter. The sunsets stop you in your tracks.

It's a feeling that can't be conjured, landscaped or kindled with twinkling bulbs. John Ford knew that. So did Frank Lloyd Wright. Come to Greater Phoenix and you'll understand, too. America's sixth-largest city still has real cowboys and rugged mountains and the kind of cactus most people see only in cartoons. Phoenix is the gateway to the Grand Canyon, and its history is a testament to the spirit of puebloans, ranchers, miners and visionaries.

Projected against this rich backdrop is a panorama of urban sophistication: Resorts and spas that drop jaws and soothe souls. Stadiums and arenas worthy of the world's biggest sports spectacles. Restaurants with inspired cuisine and inspiring patio views. Golf courses that beckon players the year round. Shopping centers as stylish and eclectic as the fashions they house.

This is Greater Phoenix — Arizona's urban heart and America's sunniest metropolis.

Accommodations

JW Marriott Desert Ridge
Room Rates: $335 USD
Reservation Deadline: September 10

Fairmont Princess
Room Rate: $264 USD
Reservation Deadline: September 10

Please make hotel reservations online by visiting **www.ota.org**.

The JW Marriott is the headquarter hotel, where all Annual Meeting events will take place. The Residents Course will take place at the Fairmont, and overflow housing is available at the Fairmont.

Continuous looping shuttle service will be available between hotels.

Ground Transportation to JW Marriott

This hotel does not provide shuttle service.

From Phoenix Sky Harbor International Airport - PHX

Driving directions:

- Take 24th Street Exit from Phoenix Sky Harbor Int'l Airport and follow signs to 51 North
- Stay on 51 North until it ends at Loop 101
- Exit 101 East and stay in right lane to exit Tatum Blvd
- Turn left onto Tatum Blvd. You'll pass Desert Ridge Marketplace on right.
- Turn right at Deer Valley Road.
- Turn left at Marriott Drive.

Alternate transportation:

- SuperShuttle; fee: $23 USD (one way); reservation required
- Estimated taxi fare: $65 USD (one way)

From Scottsdale Municipal Airport - SCF

Visit SCF airport website

Hotel direction: 6 mile(s) NW

Alternate transportation:

- Super Shuttle; fee: $21 USD (one way) reservation required
- Estimated taxi fare: $20 USD (one way)

Ground Transportation to Fairmont Princess

From Phoenix Sky Harbor International Airport

Driving directions:

- Follow Sky Harbor Blvd. to 'East Cities/Exit 202'.
- Continue to Hwy 202. Take Hwy 202 East to Hwy 101 Loop North.
- Follow Hwy 101 North and exit on Scottsdale Road.
- Turn left (south) on Scottsdale Road and continue to Princess Drive.
- Turn left (east) on Princess Drive, follow signs to the Fairmont Scottsdale Princess. (Approx. .03 miles)
- Lobby entrance will be on your right.
- The hotel has three parking lots, one for each section of the hotel.
  Valet parking: From $25.00 USD for overnight, including in-and-out privileges
  Self parking: $10.00 USD per night
  Hybrid drivers enjoy complimentary overnight valet and self parking

Payment

- All meeting registrations must be accompanied by payment.
- Indicate payment ~ Visa, MasterCard or AMEX with cardholder name, number, expiration date and signature and FAX form directly to: (847) 823–0536
- Check made payable to OTA and drawn from a US bank in US dollars. Mail form and check to:
  OTA 6664 Eagle Way Chicago IL 60678-1066, USA
- Registrations sent via Courier must be sent to the OTA staff office: 6300 N. River Road, Suite 727, Rosemont, IL 60018.

Cancellations and Refunds

- Submit cancellation in writing to OTA office via fax: (847) 823–0536 or E-mail: OTA@aaos.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.
- No refunds after October 1, 2013.

Registration Information

- Register online at www.ota.org using your OTA username. E-mail ota@aaos.org for your OTA username.
- Postmarked registrations after September 3 will not be processed; on-site registrations will require an additional $100 USD late fee. On-line registrations prior to September 10 will not incur the $100 USD late fee.
- All pre-registrations will receive confirmation by E-mail. Badges will be mailed to all those in the US and Canada who register by September 10. International attendees need to pick up their badges on-site.
- The pre-registration form may be photocopied as needed.

On-site Registration

- Registrations postmarked after September 3 will be accepted on-site plus an additional $100 USD late fee.
- On-site Registration will be available as follows:
  Convention Center Foyer (All Pre-Meeting Events)
  Tuesday: 4:00 pm–6:00 pm
  Wednesday–Saturday: 6:15 am–5:00 pm
- Exhibitors must register through the OTA office.

Annual Meeting Posters

Annual Meeting Scientific Posters will be available for viewing at all times during the meeting beginning at 2:30 pm on Thursday through 1:30 pm on Saturday outside of the General Session room.

Skills Labs, Poster Tours and Industry Lunch Symposia

- Ensure your space in Skills Labs, Poster Tours and Industry Lunch Symposia - register early. Tickets are required.
- Sessions FILL QUICKLY and may not be available to on-site registrants.
- Choose the Sessions in order of your preference.

2013 OTA ANNUAL MEETING

Pre-registration deadlines:
September 3, 2013 (mail)
September 10, 2013 (online)

2013 OTA ANNUAL MEETING Checklist

- ☐ **Completed the Meeting Registration Form?**
- ☐ **Indicated your preferences for Industry Lunch Symposia, Skills Labs and Guided Poster Tours (page 39)**
- ☐ **Included your Payment with the Registration Form?**
- ☐ **Made your hotel reservation with the JW Marriott Desert Ridge or Fairmont Scottsdale online at www.ota.org or by calling 877–632–8165?**

Secure on-line registration at **www.ota.org**
or Fax Registration Forms with Credit Card payment to 847–823–0536

Mail Registration with USD Check Payment to:
Orthopaedic Trauma Association
6664 Eagle Way
Chicago, IL 60678-1066 USA

Please note that the above address can only be used when sending via First Class Postage. Courier or Federal Express deliveries must be sent to the OTA staff office:
6300 N. River Road, Suite 727, Rosemont, IL 60018.

OTA ORTHOPAEDIC TRAUMA ASSOCIATION

For More Information
Call 847–698–1631, E-mail ota@aaos.org or visit the OTA web site, www.ota.org.

Registration faxed or post-marked by September 3, 2013.
Register on-line by September 10, 2013.

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.

Registration Form

PLEASE PROVIDE ALL REQUESTED INFORMATION.
FORMS RECEIVED WITHOUT ALL INFORMATION WILL NOT BE PROCESSED.

PERSONAL INFORMATION (PLEASE PRINT CLEARLY)

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

ANNUAL MEETING REGISTRATION FEES U.S. FUNDS

Postmarked by: September 3, 2013. Fees increased $100 USD on site.

☐ OTA Member (includes Candidate Members in their Residency)	$250.00 USD
☐ OTA International or Candidate (Post-Fellowship) Member	$325.00 USD
☐ Non-member	$725.00 USD
☐ Medical Resident Non-member or Non-member Allied Health Please provide Residency Program Director: _____	$425.00 USD

	Non-member	OTA Member
WEDNESDAY, OCTOBER 9		
☐ Basic Science Focus Forum	$275.00 USD	$250.00 USD
☐ Orthopaedic Trauma Boot Camp	$275.00 USD	$250.00 USD
☐ Grant Writing Workshop	$250.00 USD	$225.00 USD
☐ International Trauma Care Forum	$50.00 USD	$50.00 USD
☐ International Reception	FREE	FREE
☐ Masters Level Trauma Coding Course	$225.00 USD	$200.00 USD
NEW! ☐ ALL-Inclusive Pre-Meeting Badge for OTA Members		$300.00 USD
THURSDAY, OCTOBER 10		
☐ Young Practitioners Forum	$50.00 USD	$50.00 USD
☐ Orthopaedic Trauma for NPs and PAs 10/10/13–10/12/13	$350.00 USD	$250.00 USD
☐ Welcome Reception	FREE	FREE
☐ Guest Reception Ticket(s) ☐ # of persons attending X $65.00 USD		
FRIDAY, OCTOBER 11		
☐ Women in Orthopaedic Trauma Luncheon	FREE	FREE
☐ New Member Luncheon	FREE	FREE
☐ Military Reception	FREE	FREE
TOTAL $		

RESERVED SESSIONS | TICKETS REQUIRED		**1st Choice #** *(Only check one)*	**2nd Choice #** *(Only check one)*
Industry Lunch Symposia			
Thursday Lunch	11:00 am–12:45 pm	☐ IS1 ☐ IS2 ☐ IS3 ☐ IS4 ☐ IS5 ☐ IS6	☐ IS1 ☐ IS2 ☐ IS3 ☐ IS4 ☐ IS6
Poster Tours			
Friday Morning	7:00 am–7:45 am	☐ #P1	
Friday Lunch	11:35 am–12:20 pm	☐ #P2 ☐ #P3	☐ #P2 ☐ #P3
Saturday Morning	7:00 am–7:45 am	☐ #P4	
Saturday Lunch	11:50 am–12:35 pm	☐ #P5 ☐ #P6	☐ #P5 ☐ #P6
Skills Labs			
Friday	6:30 am–7:45 am	☐ #S1 ☐ #S2	☐ #S1 ☐ #S2
Friday	12:30 pm–2:00 pm	☐ #S3 ☐ #S4 ☐ #S5	☐ #S3 ☐ #S4 ☐ #S5
Saturday	6:30 am–7:45 am	☐ #S6	

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)

REFUNDS: OTA office must receive written notice of cancellation for a refund less a $100.00 USD processing fee. NO refunds after October 1, 2013.
Make checks payable to: Orthopaedic Trauma Association, 6664 Eagle Way, Chicago, IL 60678-1066, USA

REGISTER ON-SITE AFTER SEPTEMBER 10, 2013 - AN ADDITIONAL $100 USD FEE WILL APPLY.
All company representatives must use Exhibitor Registration Form (available from OTA staff).

2013 OTA ANNUAL MEETING

Join OTA

Member Services

Take advantage of the many OTA member services….

- *JOT* Subscription
- Meeting Discounts
- Fellowship Match
- Discussion Forum and Listserv
- Mentor Programs
- 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 and fellows programs.

Research

- Research Grants
- Trauma Registry
- Mulit-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 & Practice Management

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

ORTHOPAEDIC TRAUMA ASSOCIATION

www.ota.org

2013–2014 OTA Events

Save the Date

WEBINAR: PERIPROSTHETIC FEMORAL SHAFT AND SUPRACONDYLAR FEMUR FRACTURES - GENERAL PRINCIPLES AND ROLE FOR LOCKED PLATES AND REVISION ARTHROPLASTY (REGISTER ONLINE)
September 24, 2013

MEMBERSHIP APPLICATION DEADLINE *(Apply Online)*
November 1, 2013

ACUTE CARE ORTHOPAEDIC TRAUMA COURSE
November 2, 2013
Atlanta, GA

WEBINAR: COMMON UPPER EXTREMITY FRACTURES: THE WHEN AND HOW OF SURGICAL MANAGEMENT *(Register Online)*
November 19, 2013

ADVANCED TRAUMA TECHNIQUES COURSE FOR RESIDENTS
January 10–11, 2014
Texas

OTA SPECIALTY DAY
Saturday, March 15, 2014
New Orleans, LA

OTA FELLOWS COURSE
April 3–6, 2014
Boston, Massachusetts

OTA SPRING RESIDENT'S COMPREHENSIVE FRACTURE COURSE 2.0
April 16–19, 2014
Lombard, Illinois

AAOS/OTA JOINT TRAUMA UPDATE COURSE
May 1–3, 2014
Orlando, Florida

30TH OTA ANNUAL MEETING
October 15–18, 2014
Tampa, Florida

2013 WEBINARS
Visit the OTA or AAOS website for details.

Join OTA

Application deadlines:
- **NOVEMBER 1, 2013**
- **MAY 1, 2014**

Apply online at **www.ota.org**.

ORTHOPAEDIC TRAUMA ASSOCIATION

Check **www.ota.org** for details.

* Educational Opportunities include *Category 1 CME™ credits*

ORTHOPAEDIC TRAUMA ASSOCIATION
6300 N. River Road, Suite 727
Rosemont, IL 60018-42c26 USA

2013 OTA ANNUAL MEETING OCT. 9-12

JW Marriott Desert Ridge | PHOENIX, AZ

Register Now

for the 2013 OTA Annual Meeting
at **www.ota.org**

Pre-registration Deadline:
Mail: September 3, 2013
Online: September 10, 2013

Hotel Deadline: September 16, 2013

19+ *AMA PRA Category 1 Credits™* for attending the Annual Meeting.

Additional credits if you attend premeeting events:
Basic Science Focus Forum (10.25 CME)
Masters Level Trauma Coding (6 CME)
International Trauma Care Forum (8.5CME)
Orthopaedic Trauma Boot Camp (12 CME)
Young Practitioners Forum (4 CME)
Grant Writing Workshop (8.5 CME)
NP/PA Course (20.25 AAPA Category 1 CME Credits)

Join OTA