2009 OTA ANNUAL MEETING
THURSDAY, OCTOBER 8, 2009

6:30 am  Registration
          (Douglas Pavilion Foyer)

1:00 pm  WELCOME
          (Elizabeth Ballroom A-E, Level II)
          David C. Templeman, MD – President
          William M. Ricci, MD – Program Chair
          James A. Goulet, MD – Program Co-Chair
          CDR Michael T. Mazurek, MD – Local Host
          Jeffrey M. Smith, MD – Local Host

1:10 pm –  RESEARCH AWARD PRESENTATIONS
1:20 pm  Joseph Borrelli, Jr., MD,
          OTA Research Committee Chair

1:20 – 2:35 pm  SYMPOSIUM I:
                ASSESSMENT OF FRACTURE HEALING
(Notes p. 127)  Moderator:  Emil H. Schemitsch, MD
                (Elizabeth Ballroom A-E, Level II)
                Faculty:  Mohit Bhandari, MD
                           Michael D. McKee, MD
                           Theodore Miclau, III, MD
                           Marc F. Swiontkowski, MD
                           Paul Tornetta, III, MD

1:20 pm  Fracture Healing Defined:  Is There a Consensus?
          Theodore Miclau, III, MD

1:30 pm  Measurement Error:  Who Should Measure Healing in Clinical Research?
          Paul Tornetta, III, MD

1:40 pm  Which Radiographic Measure Should We Use?  Feasibility and Relevance
          Michael D. McKee, MD

1:50 pm  What Outcomes Should We Measure?  Beyond the X-Ray
          Marc F. Swiontkowski, MD

2:00 pm  Clinical Trials in Fracture Healing:  Is the Evidence Good Enough?
          Mohit Bhandari, MD

2:10 pm  Discussion

Key:  ∆ = presentation was funded by an OTA administered grant
      Names in bold = Presenter

See pages 67 - 90 for financial disclosure information.
SESSION I

PEDIATRICS and INJURY PREVENTION

2:35 pm - 3:43 pm  
Moderators - Andrew H. Schmidt, MD & Steven L. Frick, MD

2:35 pm  
Lydia A. White, MD; Charles T. Mehlman, DO, MPH; Alvin H. Crawford, MD;  
1University of Cincinnati, Cincinnati, Ohio, USA;  
2Cincinnati Children’s Hospital, Cincinnati, Ohio, USA

2:41 pm  
Elastic Stable Intramedullary Nailing in Pediatric Forearm Fractures: An Analysis of 162 Cases  
Christian Schinkel, MD; Marcel Dudda, MD; Gert Muhr, MD; Hamid Joneidi-Jafari, MD; Tobias Fehmer, MD; Alexandros P. Anstasiadis, MD; University Hospital Bergmannsheil, Ruhr University Bochum, Bochum, Germany

2:47 pm  
Discussion

2:52 pm  
On-Call Coverage for Pediatric Orthopaedic Emergencies: Description of an Effective Call System to Optimize Pediatric Patient Care  
Christopher Bray, MD; Brian Scannell, MD; Michael J. Bosse, MD; Steven Frick, MD; Virginia Casey, MD; D. Christian Clark, MD; J. Michael Wattenbarger, MD;  
1Department of Orthopaedic Surgery, Carolinas Medical Center, Charlotte, North Carolina, USA;  
2OrthoCarolina, Charlotte, North Carolina, USA

2:58 pm  
Dispelling the Myth: Emergency Fracture Care, Who’s Doing What?  
Kenneth J. Koval, MD; Jeffrey O. Anglen, MD; James Weinstein, DO, MS; J. Lawrence Marsh, MD; John J. Harrast, MS;  
1Dartmouth Hitchcock Medical Center, Lebanon, New Hampshire, USA;  
2Indiana University, Indianapolis, Indiana, USA;  
3University of Iowa, Iowa City, Iowa, USA;  
4Web Data Solutions, Hinsdale, Illinois, USA

3:04 pm  
Discussion

• The FDA has not cleared this drug and/or medical device for the use described in this presentation (i.e., the drug or medical device is being discussed for an “off label” use). For full information refer to page 478.
Comparing Acute Narcotic Requirements of Pediatric Patients with Isolated Femur Fractures: Skeletal vs. Skin Traction
Cameron J. Vanlaningham, MD; Thomas M. Schaller, MD; Christopher Wise, MD
1Michigan State University/Kalamazoo Center for Medical Studies, Kalamazoo, Michigan, USA; 2Orthopaedic Trauma Surgery, HealthCare Midwest, Kalamazoo, Michigan, USA; 3Orthopaedic Trauma Surgery, DFP Orthopedics, Independence, Missouri, USA

Prescription Narcotic Use before and after Orthopedic Trauma Surgery and the Effect of Perioperative Counseling
Joel Holman, MD; Thomas F. Higgins, MD; Daniel S. Horwitz, MD; University of Utah, Department of Orthopedics, Salt Lake City, Utah, USA

Outcomes in Pregnant Trauma Patients with Orthopaedic Injuries
Lisa K. Cannada, MD; Ping Pan, BS; Brian M. Casey, MD; Donald D. McIntire, PhD; Shahid Shafi, MD, MPH; Kenneth J. Leveno, MD
1Department of Orthopaedic Surgery, St. Louis University Hospital, Saint Louis, Missouri, USA; 2University of Texas Southwestern Medical School, Dallas, Texas, USA; 3Department of Obstetrics and Gynecology & Trauma Surgery, University of Texas Southwestern Medical Center, Dallas, Texas, USA

Childbirth after Pelvic Fractures: Debunking the Myths
Lisa K. Cannada, MD; Sara Strebe, MD; Heather A. Vallier, MD; Beth Ann Cureton, BS; Jennifer Barr, MD; Zhen Qin, MS; George V. Russell, Jr., MD; Carol E. Copeland, MD
1St. Louis University Medical Center, Saint Louis, Missouri, USA; 2University of Texas-Southwestern, Dallas, Texas, USA; 3Metrohealth Medical Center, Cleveland, Ohio, USA; 4University of Mississippi, Jackson, Mississippi, USA; 5Sinai Hospital, Baltimore, Maryland, USA

Discussion
SESSION II  
PELVIS and ACETABULUM

4:10 pm  
Nonoperative Immediate Weightbearing of Minimally Displaced Lateral Compression Sacral Fractures Does Not Result in Displacement  
Gillian Sembler, MD; John Lien, MD; Paul Tornetta, III, MD;  
Boston University Medical Center, Boston, Massachusetts, USA  
Paper #33

4:16 pm  
Predicting Future Displacement of Non-Operatively Managed Sacral Fractures: Can It Be Done?  
Brandon Bruce, MD1; Mark Reilly, MD2; Steven Sims, MD3;  
1Carolinas Medical Center, Charlotte, North Carolina, USA;  
2New Jersey Medical School, Newark, New Jersey, USA  
Paper #34

4:22 pm  
Discussion

4:27 pm  
Minimally Invasive Treatment of Unstable Pelvic Ring Injuries with an Internal Anterior Fixator (INFIX) and Posterior Iliosacral Screws  
Rahul Vaidya, MD; Frederick Tonnos, DO; Robert Colen, DO; Anil Sethi, MD;  
Detroit Medical Center Detroit Receiving Hospital, Detroit, Michigan, USA  
Paper #35

4:33 pm  
A Clinical Comparison between Anterior Pelvic External Fixation and Subcutaneous Locked Pelvic Spanning Internal Fixation for Pelvic Ring Injuries  
Archie A. Heddings, MD1; Jack Anavian, MD2; Thuan V. Ly, MD2;  
Robert A. Morgan, MD2; Peter A. Cole, MD2;  
1Department of Orthopaedic Surgery, University of Kansas Medical Center, Kansas City, Kansas, USA;  
2Department of Orthopaedic Surgery, University of Minnesota-Regions Hospital, Saint Paul, Minnesota, USA  
Paper #36

4:39 pm  
Discussion

4:44 pm  
Value of Three-Dimensional Computed Tomography in Classifying Acetabular Fractures during Orthopaedic Residency Training  
Jeffrey P. Garrett, MD; Lawrence X. Webb, MD; Joseph A. Veneziano, MD;  
Eben A. Carroll, MD;  
Wake Forest University Health Sciences, Winston-Salem, North Carolina, USA  
Paper #37

4:50 pm  
Impact of a 3-Dimensional “Hands-On” Anatomical Teaching Module on Acetabular Fracture Pattern Recognition by Orthopaedic Residents: A Pilot Study  
Erik Hansen, MD; Meir Marmor, MD; Amir Matityahu, MD;  
University of California San Francisco, San Francisco, California, USA  
Paper #38

4:56 pm  
Discussion

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THURSDAY, OCTOBER 8, 2009

5:00 – 6:00 pm  Business Meeting for OTA Members Only

5:30 – 7:30 pm  Welcome Reception

Join the OTA for entertainment, cocktails and a generous assortment of hors d’oeuvres while taking in the magnificent views of downtown, San Diego Bay and the Pacific Ocean from the pool deck of the Manchester Grand Hyatt.

Dinner on your own.

See pages 67 - 90 for financial disclosure information.
6:30 am

Attendee Registration
(Douglas Pavilion Foyer)

Scientific Posters
(Elizabeth Ballroom Foyer)

Speaker Ready Room
(Elizabeth Foyer)

6:45 - 7:45 am

Case Presentations—Tickets Required

Continental Breakfast (6:15—Available at Case Discussion Rooms)

6:45 – 7:45 am

CASE PRESENTATIONS

Problems Solved in Proximal Humerus Fractures (#F-1) (America’s Cup A/B, Level 4)
Moderators: John T. Gorczyca, MD and Utku Kandemir, MD
Faculty: Milan K. Sen, MD and Donald A. Wiss, MD

Pelvis and Acetabulum (#F-2) (Elizabeth F, Level 2)
Moderator: Paul Tornetta, III, MD
Faculty: Kyle F. Dickson, MD; Alan L. Jones, MD; Mark A. Lee, MD and David C. Templeman, MD

Common Pediatric Fractures (#F-3) (Molly A/B, Level 2)
Moderator: Stephen L. Frick, MD
Faculty: Susan Scherl, MD and Kelly L. VanderHave, MD

Clinical Research Seminar: Randomized Controlled Trials (#F-4) (America’s Cup C/D, Level 4)
Moderators: Mohit Bhandari, MD and Theodore Miclau, III, MD
Faculty: Michael J. Bosse, MD; Saam Morshed, MD; Emil H. Schemitsch, MD and Andrew H. Schmidt, MD

Ankle Fractures (#F-5) (Mohsen A/B, Level 3)
Moderator: Michael J. Gardner, MD
Faculty: David P. Barei, MD and J. Tracy Watson, MD

8:00 am

1985 2009

OTA Celebrating 25 Years of Education

25th Anniversary Lecture (Elizabeth Ballroom A-E, Level II)

The Growth of the OTA as a Subspecialty Society
Richard F. Kyle, MD,
Past President AAOS,
Past President OTA

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FRIDAY, OCTOBER 9, 2009

SYMPOSIUM II:
SURGICAL TIMING:
WHAT’S EMERGENT AND WHAT’S NOT
(Notes p. 150) Moderator: Mark A. Lee, MD
Faculty: Brett D. Crist, MD
       Tania A. Ferguson, MD
       Yvonne M. Murtha, MD
       Philip R. Wolinsky, MD

8:15 am Introduction / Goals and Objectives
        Mark A. Lee, MD
8:20 am True Emergencies
        Mark A. Lee, MD
8:30 am Urgent or Emergent?
        Tania A. Ferguson, MD
8:40 am Damage Control Orthopaedics
        Yvonne M. Murtha, MD
8:50 am Staged Management of Periarticular Injuries
        Brett D. Crist, MD
9:05 am The Influence of the Orthopaedic "Trauma" Room
        Philip R. Wolinsky, MD
9:20 am Case Examples
        Faculty
9:35 am Question/Answer Session
        Faculty

9:45 am Break
Visit Scientific Posters (Elizabeth Ballroom Foyer)
& Technical Exhibits (Douglas Pavilion Level I)

See pages 67 - 90 for financial disclosure information.
SESSION III  
HIP and GERIATRIC

10:25 am  
Low-Energy Femoral Diaphyseal Fractures and long-term Bisphosphonate Use  
Brett A. Lenart, MD; Andrew S. Neviaser, MD; Stephen Lyman, PhD; Charles C. Chang, MD, DDS; Folorunsho Edobor-Osula, MD, MPH; Barbara Steele, MD; Marjolein C.H. van der Meulen, PhD; Dean G. Lorich, MD; Joseph M. Lane, MD;  
1Rush University Medical Center, Chicago, Illinois;  
2Hospital for Special Surgery, New York, New York, USA;  
3Long Island Jewish Medical Center, New Hyde Park, New York, USA;  
4New York Medical College at Westchester Medical Center, Valhalla, New York, USA;  
5Cornell University, Ithaca, New York, USA;  
6Hospital for Special Surgery, New York-Presbyterian Hospital-Weill Cornell Medical Center, Weill Medical College of Cornell University, New York, New York, USA

10:31 am  
Complications Associated with Pharmacologic Reversal of Warfarin-Associated Coagulopathy in Patients with Hip Fractures  
Mark A. Vitale, MD, MPH; Corrine Vanbeek, MD; Jeffrey A. Geller, MD; Columbia University Medical Center, Department of Orthopaedic Surgery, Hip Fracture Service, New York, New York, USA

10:37 am  
Depth of Sedation and Postoperative Delirium during Spinal Anesthesia for Hip Fracture Repair in Elderly Patients: A Randomized Controlled Study  
Frederick Sieber, MD; Khwaja Zakriya, MD; Hochang Lee, MD; Paul Rosenberg, MD; Simon C. Mears, MD; Johns Hopkins Bayview Medical Center, Baltimore, Maryland, USA

10:43 am  
Discussion

10:48 am  
Does ORIF of Geriatric Acetabular Fractures Lead to Hip Arthroplasty and Poor Midterm Outcomes?  
Robert V. O’Toole, MD; Emily Hui, MPH; Amit Chandra, BA; RA Cowley Shock Trauma Center, Dept. of Ortho, University of Maryland School of Medicine, Baltimore, Maryland, USA

10:54 am  
Protrusio Fractures of the Acetabulum in Patients 70 Years and Older  
Michael T. Archdeacon, MD, MSE; University of Cincinnati Academic Health Center, Cincinnati, Ohio, USA

11:00 am  
Discussion

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FRIDAY, OCTOBER 9, 2009

11:05 am A Randomized Clinical Trial Comparing Minimally Invasive Surgery to Conventional Approach for Endoprosthesis in Elderly Patients with Hip Fractures
(p. 156)
Paper #44
G. Yves Laflamme, MD; Louis Roy, MD; Mathieu Carrier, MD; Paul R. Kim, MD; Stephane Leduc, MD;
1Université de Montréal, Division Chirurgie Orthopédique, Hôpital du Sacré-Cœur, Montréal, Québec, Canada;
2Department of Surgery, University of Ottawa, Ottawa Hospital–General Campus, Ottawa, Ontario, Canada

11:11 am A Randomized, Prospective Comparison of the DHS and DHHS Implants for the Treatment of Pertrochanteric Hip Fractures Performed in the Community Setting
(p. 157)
Paper #45
Daniel C. Fitzpatrick, MS, MD; Daniel V. Sheerin, MD; Thomas K. Wuest, MD;
Slocum Center for Orthopedics, Eugene, Oregon, USA

11:17 am Outcomes of Length Stable Fixation of Femoral Neck Fractures
(p. 159)
Paper #46
Sreevathsa Boraiah, MD; Omesh Paul, MD; Michael J. Gardner, MD;
Joseph U. Barker, MD; Robert J. Parker, BS; David Helfet, MD;
Dean Lorich, MD;
1Westchester Medical Center, Valhalla, New York, USA;
2Hospital for Special Surgery, New York, New York, USA;
3Washington University School of Medicine, Saint Louis, Missouri, USA

11:23 am Discussion

SESSION IV
UPPER EXTREMITY

11:28 am – 12:31 pm Moderators - Michael D. McKee, MD & Laura J. Prokuski, MD

11:28 am Outcomes of Conservatively Treated Displaced Scapular Body Fractures
(p. 160)
Paper #47
Apostolos Dimitroulias, MD; Kenneth G. Molinero, DO; Daniel E. Krenk, DO; Matthew T. Muffly, MS; Daniel T. Altman, MD; Gregory T. Altman, MD;
Allegheny General Hospital, Pittsburgh, Pennsylvania, USA

11:34 am Surgical and Functional Outcomes after Operative Management of Displaced Intra-articular Glenoid Fractures
(p. 161)
Paper #48
Jack Anavian, MD; Coen A. Wijdicks, MSc; Lisa K. Schroder, BS, MBA; Peter A. Cole, MD;
University of Minnesota, Regions Hospital, Saint Paul, Minnesota, USA

11:40 am Discussion

11:45 am Operative versus Nonoperative Treatment of Humeral Shaft Fractures: A Retrospective Review of 213 Patients from Two Level I Trauma Centers
(p. 163)
Paper #49
Southeastern Fracture Consortium; Michael C. Tucker, MD; William T. Obrenskay, MD; Mark Floyd, BS; Anthony Denard, BS;
1Palmetto Health Richland/USC, Columbia, South Carolina, USA;
2Vanderbilt University, Nashville, Tennessee, USA;
3Medical College of Georgia, Augusta, Georgia, USA

See pages 67 - 90 for financial disclosure information.
FRIDAY, OCTOBER 9, 2009

11:51 am
Anterior Sub-Muscular Plating of the Humerus
**Bruce R. Ziran, MD**; Wade R. Smith, MD; Gabrielle Peacher, BS
1Atlanta Medical Center, Decatur, Georgia, USA
2Denver Health Medical Center, Denver, Colorado, USA

11:57 am
A Comparison of Open versus Percutaneous Plating of Proximal Humerus Fractures
**Jeffrey S. Staron, MD**; B. Matthew Hicks, MD
1Fort Wayne Medical Education Program
2Fort Wayne Orthopaedics, Fort Wayne, Indiana, USA

12:03 pm
Discussion

12:08 pm
Prospective Randomised Treatment of Distal Radius Fractures in the Elderly: Are Fixed Angle Implants Superior to K-Wire Osteosynthesis?
**Christian Probst, MD**; Rebekka Schmidt, MD; Katja Briese, MD; Ralph Gaulke, MD; Christian Krettek, MD; Reinhard Meier, MD
1Hannover Medical School, Department of Trauma, Hannover, Germany
2Würzburg University Hospital, Department of Trauma, Würzburg, Germany

12:14 pm
Effects of Brachioradialis Lengthening and Pronator Quadratus Repair on Outcomes following Volar Plating of Distal Radius Fractures
**Stuart Hershman, MD**; Igor Immerman, MD; Christopher Bechtel, BS; Michael Walsh, PhD; Nader Paksima, DO; Kenneth A. Egol, MD; NYU Hospital for Joint Diseases, New York, New York, USA

12:20 pm
Do Antioxidants Modulate the Outcome of Fractures? A Prospective Randomized Controlled Trial
**Ingri Ekrol, MD**; Charles Court-Brown, MD; Stuart Ralston, MD; Margaret McQueen, MD
1Orthopaedic Trauma Unit, Royal Infirmary of Edinburgh
2University of Edinburgh, Edinburgh, United Kingdom

12:26 pm
Discussion

12:31 –
Lunch

1:31 pm
Visit Scientific Posters (Elizabeth Ballroom Foyer) & Technical Exhibits (Douglas Pavilion Level I)

12:31 – 1:31 pm
**Kathy Cramer, MD Memorial Women in Orthopaedic Trauma Luncheon/Meeting**
(America’s Cup, Level 4)

Co-Chairs: Jacqueline J. Krumrey, MD
Laura S. Phieffer, MD

Pre-Registration is required.

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FRIDAY, OCTOBER 9, 2009

1:31 – 3:01 pm

**Concurrent Sessions**

*(Skills Labs and Mini Symposia run concurrently.)*

**Tickets Required**

(Notes pgs. 171 - 172)

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**1:31 – 3:01 pm**

**SKILLS LABS**

**Clavicle / Proximal Humerus (#F-6)** *(Elizabeth H, Level 2)*

*Moderator:* Lawrence X. Webb, MD  
*Faculty:* Eben A. Carrol, MD; Barnaby T. Dedmond, MD; Kyle J. Jeray, MD; Clifford B. Jones, MD; Michael D. McKee, MD; Joseph Veneziano, Jr., MD

**IM Nail Proximal Femur (#F-7)** *(Madeleine ABC, Level 3)*

*Moderator:* Kyle F. Dickson, MD  
*Faculty:* Christopher T. Born, MD; Stuart M. Gold, MD; David W. Lowenberg, MD; Nirmal C. Tejwani, MD; Walter W. Virkus, MD

**ORIF Proximal Tibia (#F-8)** *(Douglas D, Ground Level)*

*Moderator:* Cory A. Collinge, MD  
*Faculty:* Brett D. Crist, MD; Michael J. Gardner, MD; Bradley R. Merk, MD and Franklin D. Shuler, MD

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**1:31 – 3:01 pm**

**MINI SYMPOSIA**

**Soft Tissue Coverage for the Non-Microsurgeon (#F-9)** *(Elizabeth F, Level 2)*

*Moderator:* Gregory L. DeSilva, MD  
*Faculty:* Michael T. Archdeacon, MD and Stephen P. DeSilva, MD

**OTA/OR Amputation: Indications, Techniques, Outcomes and Rehabilitation (#F-10)** *(Molly A/B, Level 2)*

*Moderator:* William J. Ertl, MD  
*Faculty:* Michael J. Bosse, MD and Paul J. Dougherty, MD

**Considerations and Techniques in the Management of Peri-prosthetic Fractures (#F-11)** *(OTA General Session, Room Level 2)*

*Moderator:* Samir Mehta, MD  
*Faculty:* David P. Barei, MD; James A. Goulet, MD; Thomas J. Ellis, MD; John L. Esterhai, Jr., MD; George J. Haidukewych, MD and Andrew H. Schmidt, MD

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3:01 – Break

3:35 pm  
Visit Scientific Posters *(Elizabeth Ballroom Foyer)*  
& Technical Exhibits *(Douglas Pavilion Level I)*

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FRIDAY, OCTOBER 9, 2009

4:46 pm  Clinical Results of the Anatomic Compression Arthrodesis Technique with Anterior Plate Augmentation for Ankle Arthrodesis
Paper #60

4:52 pm  Discussion

4:57 pm  Treatment of Displaced Intra-Articular Calcaneal Fractures with Closed Reduction and Percutaneous Screw Fixation
Paper #61

5:03 pm  Efficiency of Low-Intensity Pulsed Ultrasound on Distraction Osteogenesis after Trauma: A Prospective, Randomized Study
Paper #62

5:09 pm  The Preoperative Diagnosis of Infection in Nonunions
Paper #63

5:15 pm  Discussion

5:20 pm  Adjourn

5:45 – 6:45 pm  MILITARY RECEPTION –
Seaport Tower Lounge (32nd Floor)
(All Active Duty Military & DVSP Attendees are Welcome)

Hosted by: OTA Board of Directors,
Military Committee - COL (ret) Roman A. Hayda, MD, Chair;
LTC Romney C. Andersen, MD; CDR Michael T. Mazurek, MD;
COL Mark W. Richardson, MD; LTC Greg Osgood, MD

See pages 67 - 90 for financial disclosure information.
2009 OTA ANNUAL MEETING  
SATURDAY, OCTOBER 10, 2009

6:30 am  
**Attendee Registration**  
*(Douglas Pavilion Foyer)*

**Scientific Posters**  
*(Elizabeth Ballroom Foyer)*

**Speaker Ready Room**  
*(Elizabeth Foyer)*

6:45 - 7:45 am  
**Case Presentations**—**Tickets Required**  
(Notes p. 185)

**Continental Breakfast** *(6:15 — Available at Case Discussion Rooms)*

<table>
<thead>
<tr>
<th>6:45 — 7:45 am</th>
<th><strong>CASE PRESENTATIONS</strong></th>
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<tbody>
<tr>
<td><strong>Elbow Trauma (#S-1)</strong></td>
<td><em>(Elizabeth H, Level 2)</em></td>
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<tr>
<td><strong>Moderator:</strong> Jesse B. Jupiter, MD</td>
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<tr>
<td><strong>Faculty:</strong> Michael D. McKee, MD; Sean E. Nork, MD; Emil H. Schemitsch, MD and Thomas F. Varecka, MD</td>
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<tr>
<td><strong>Nonunions and Malunions (#S-2)</strong></td>
<td><em>(Elizabeth F, Level 2)</em></td>
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<td><strong>Moderator:</strong> Stuart M. Gold, MD</td>
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<tr>
<td><strong>Faculty:</strong> William M. Ricci, MD; Walter W. Virkus, MD and J. Tracy Watson, MD</td>
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<tr>
<td><strong>Mid-Forefoot (#S-3)</strong></td>
<td><em>(Mohsen A/B, Level 3)</em></td>
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<td><strong>Moderators:</strong> Peter A. Cole, MD and Dolfi Herscovici, Jr., DO</td>
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<tr>
<td><strong>Faculty:</strong> Clifford B. Jones, MD and Robert A. Probe, MD</td>
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<tr>
<td><strong>Failures and Potential Salvage in Lower Extremity Trauma (#S-4)</strong></td>
<td><em>(America’s Cup A/B, Level 4)</em></td>
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<td><strong>Moderator:</strong> Daniel S. Horwitz, MD</td>
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<tr>
<td><strong>Faculty:</strong> Wade R. Smith, MD and Bruce H. Ziran, MD</td>
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<tr>
<td><strong>Evaluation, Resuscitation and Operative Management of Patients with Pelvic Fractures and Hemorrhagic Shock (#S-5)</strong></td>
<td><em>(Molly A/B, Level 2)</em></td>
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<td><strong>Moderator:</strong> David J. Hak, MD</td>
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<tr>
<td><strong>Faculty:</strong> Milton L. “Chip” Routt, MD; Andrew N. Pollak, MD and Adam J. Starr, MD</td>
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</tbody>
</table>

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SATURDAY, OCTOBER 10, 2009

SYMPOSIUM III: GRAFT OPTIONS FOR BONE DEFECTS

(Notes p. 186) Moderator: Paul Tornetta, III, MD (Elizabeth Ballroom A-E, Level II)
Faculty: Michael J. Bosse, MD
Clifford B. Jones, MD
H. Claude Sagi, MD
J. Tracy Watson, MD

8:00 am Introduction
Paul Tornetta, III, MD

8:05 am Autogenous Bone: The Gold Standard
Michael J. Bosse, MD

8:20 am RIA and Other Autogenous Augmentation
H. Claude Sagi, MD

8:35 am The BMP’s: What’s the Evidence?
Clifford B. Jones, MD

8:50 am Bone Transport
J. Tracy Watson, MD

9:05 am Discussion

9:30 – 10:05 am Break

10:05 am Visit Scientific Posters (Elizabeth Ballroom Foyer) & Technical Exhibits (Douglas Pavilion Level I)

SESSION VI
BASIC SCIENCE / INJURY PREVENTION / SPINE

10:10 am – 12:15 pm Moderators - Theodore Miclau, III, MD & William T. Obremskey, MD

10:10 am The Use of Endothelial Progenitor Cells to Promote Bone Healing: A Defect Model in the Rat Femur
(p. 187) Paper #64
Kivanc Atesok, MD; Ru Li, PhD; Emil H. Schemitsch MD, FRCS(C); Musculoskeletal Research Lab, Division of Orthopaedics, Department of Surgery, St. Michael’s Hospital, University of Toronto, Toronto, Ontario, Canada

10:16 am Expression of Bone Morphogenetic Protein Antagonists during Fracture Healing
(p. 188) Paper #65
D. Brian Dean, MD; J. Tracy Watson, MD; Wu Jin, BS; Charles Peters, BS; Tyler Enders, BS; Berton R. Moed, MD; Zijun Zhang, PhD
Department of Orthopaedic Surgery,
Anatomical Science Program, Saint Louis University, Saint Louis, Missouri, USA

See pages 67 – 90 for financial disclosure information.
10:22 am Discussion

10:27 am △ Power Doppler Ultrasound Allows for Real Time Blood Flow Analysis of Tibial Fracture Callus in Patients
(p. 190)
Paper #66
Adam F. Rana, MD; Alda Cossi, MD; June F. Cheng, MD; Elizabeth Krall Kaye, PhD; Paul Tornetta, III, MD; Boston University Medical Center, Boston, Massachusetts, USA

10:33 am Environmental Oxygen Levels Affect Angiogenesis during Fracture Healing
(p. 192)
Paper #67
Chuanyong Lu, MD; Zhiqing Xing, MD; Diane Hu, MD; Theodore Miclau, III, MD; Ralph Marcucio, PhD; Department of Orthopaedic Surgery, University of California at San Francisco, San Francisco, California, USA

10:39 am Minimally Invasive Plate Osteosynthesis: Advanced Early Fracture Healing in a Sheep Trauma Model
(p. 194)
Paper #68
Martin E. Wullschleger, MD; Roland Steck, PhD; John Webster; Kathleen Wilson; Keita Ito, PhD; Michael A. Schuetz, PhD;
1Queensland University of Technology, Institute of Health and Biomedical Innovation, Brisbane, Queensland, Australia;
2The Prince Charles Hospital, Biological Research Facility, Brisbane, Queensland, Australia;
3Eindhoven University of Technology, Orthopaedic Biomechanics Section, Eindhoven, The Netherlands

10:45 am Discussion

10:50 am A Biomechanical Testing Model That Matches Clinical Failure Modes of Locked Plate Constructs
(p. 195)
Paper #69
William M. Ricci, MD; Jacob Carnter BA; Yanming Zheng, PhD; Bob Jones, BA; Zane Hartsell; Paul Tornetta, III, MD;
1Washington University School of Medicine, Saint Louis, Missouri, USA;
2Boston University School of Medicine, Boston, Massachusetts, USA;
3Smith & Nephew, Inc., Memphis, Tennessee, USA

10:56 am Does Bone Mineral Density Influence the Strength of Locked and Unlocked Plates?
(p. 197)
Paper #70
Paul Tornetta III, MD1 William M. Ricci, MD2; Jacob Carnter, BA3; Yanming Zheng, PhD3;
1Boston University Medical Center, Boston, Massachusetts, USA;
2Washington University Orthopaedic Trauma, Saint Louis, Missouri, USA;
3Smith & Nephew, Inc., Memphis, Tennessee, USA

11:02 am Discussion

△ OTA Grant
• The FDA has not cleared this drug and/or medical device for the use described in this presentation (i.e., the drug or medical device is being discussed for an “off label” use). For full information refer to page 478.
SATURDAY, OCTOBER 10, 2009

11:07 am  △ Negative Pressure Dressings on Primarily Closed Wounds
(p. 199)
Paper #71
△ Improve Wound Healing Parameters at Three Days in a Porcine Model
James E. Meeker, MD; Laurence Dahners, MD;
Department of Orthopaedic Surgery, University of North Carolina at Chapel Hill,
Chapel Hill, North Carolina, USA

11:13 am  Incisional Negative Pressure Wound Therapy as a Treatment for
(p. 200)
Draining Hematomas: A Prospective Randomized Study
James P. Stannard, MD; David A. Volgas, MD; Rena L. Stewart, MD;
Jorge E. Alonso, MD;^1
The University of Alabama at Birmingham, Birmingham, Alabama, USA;
The University of South Alabama, Mobile, Alabama, USA

11:19 am  Discussion

11:24 am  Does Stress Induced Hyperglycemia Increase the Risk of Perioperative
(p. 201)
Infectious Complications in Nondiabetic Orthopaedic Trauma Patients?
Madhav A. Karunakar, MD; Kurtis S. Staples, MD;
Carolinas Medical Center, Charlotte, North Carolina, USA;
The CORE Institute, Phoenix, Arizona, USA

11:30 am  A Prospective Study of Cognitive Deficits, Depression and
(p. 202)
Posttraumatic Stress Disorder (PTSD) in Trauma Patients
without Intracranial Injury
William T. Obremskey, MD, MPH; Rebecca Bauer, MD, MPH;
Christine Abraham; Venice Anderson, MA; Yanna Song, MA;
Kristin Archer, PhD, DPT; Oscar Guillamondegui, MD;
James C. Jackson, PsyD; E. Wesley Ely, MD, MPH;
Vanderbilt University Medical Center, Nashville, Tennessee, USA

11:36 am  Discussion

11:41 am  Financial Implications of Non-Operative Fracture Care at an
(p. 203)
Academic Trauma Center
Paul Appleton, MD; Edward Rodriguez MD;
Beth Israel Deaconess Medical Center, Boston, Massachusetts, USA

11:47 am  Financial Impact of a Dedicated Orthopaedic Traumatologist on a
(p. 204)
Private Group Practice
Peter L. Althausen, MD, MBA; Lisa Davis, MBA; Eric Boyden, MD;
Timothy J. Omara, MD; Timothy J. Bray, MD;
Reno Orthopaedic Clinic, Reno, Nevada, USA

11:53 am  Discussion

△ OTA Grant
See pages 67 - 90 for financial disclosure information.
The Value of Adding MRI to CT Protocols for Cervical Spine Clearance in Blunt Trauma: A Meta-Analysis

Andrew Schoenfeld, MD\(^1\); Natalie Warholic, MA\(^2\); Christopher M. Bono, MD\(^3\); Kevin J. McGuire, MD\(^4\); Mitchell B. Harris, MD\(^5\);
\(^1\)Harvard Combined Orthopaedic Program, Boston, Massachusetts, USA;
\(^2\)Brigham and Women’s Hospital, Boston, Massachusetts, USA;
\(^3\)Beth Israel Deaconess Medical Center, Boston, Massachusetts, USA

Posterior C2 Instrumentation in the Management of Trauma: Accuracy and Risks Associated with Four Techniques

Richard J. Bransford, MD\(^6\); Anthony J. Russo, MD\(^7\); Mark Freeborn, MD\(^1\); Quynh Nguyen, PA-C\(^8\); Michael J. Lee, MD\(^9\); Jens R. Chapman, MD\(^10\); Carlo Bellabarba, MD\(^11\);
\(^6\)Harborview Medical Center / University of Washington, Seattle, Washington, USA;
\(^7\)Montana Orthopaedics, Butte, Montana, USA

Concurrent Sessions

Skills Labs and Mini Symposia run concurrently. Tickets Required

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<tr>
<th>1:15 – 2:45 pm</th>
<th>SKILLS LABS</th>
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<tr>
<td>Distal Radius (#S-6)</td>
<td>(Ford ABC, Level 3)</td>
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<tr>
<td>Moderator: Jesse B. Jupiter, MD</td>
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<td>Faculty: John T. Capo, MD; Charles M. Court-Brown, MD; Mark D. Perry, MD; Margaret M. McQueen, MD</td>
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<tr>
<td>ORIF Distal Femur (#S-7)</td>
<td>(Annie AB, Maggie, Level 3)</td>
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<td>Moderator: Michael S. Sirkin, MD</td>
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<td>Faculty: Cory A. Collinge, MD; Bharat M. Desai, MD; Robert F. Ostrum, MD; Atilla Poka, MD</td>
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<td>ORIF Distal Tibia (#S-8)</td>
<td>(Edward ABC, Level 2)</td>
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<td>Moderator: Frank A. Liporace, MD</td>
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<td>Faculty: Daniel S. Horowitz, MD; Erik Kubiak, MD; Ullises P. Militano, MD; Brian H. Mullis, MD; Mark C. Reilly, MD; Anthony S. Rhorer, MD</td>
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SATURDAY, OCTOBER 10, 2009

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<tr>
<td>1:15 – 2:45 pm</td>
<td>MINI SYMPOSIA</td>
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<td><strong>Treatment of Orthopaedic Infections (#S-9)</strong></td>
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<td>Moderator: William T. Obremskey, MD</td>
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<td>Faculty: Jeffrey O. Anglen, MD and Andrew H. Schmidt, MD</td>
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<td><strong>Fragility Fractures and Bone Health: Beyond ORIF (#S-10)</strong></td>
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<td>Moderator: Douglas R. Dirschl, MD</td>
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<td>Faculty: Clifford B. Jones, MD; Joseph M. Lane, MD and Priscilla Majewski</td>
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<td><strong>Orthopaedic Traumatologist as Educator (#S-11)</strong></td>
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<td>Moderator: J. Tracy Watson, MD</td>
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<td>Faculty: Piet de Boer, FRCS; Richard E. Buckley, MD; Robert D. Fox, Ed.D; Susan Scherl, MD and Paul Tornetta, III, MD</td>
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<td><strong>OTA / ORA: Heterotopic Ossification: Highlights &amp; Considerations (#S-12)</strong></td>
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<td>Moderator: Samir Mehta, MD</td>
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<td>Faculty: Michael J. Gardner, MD; Nader M. Hebela, MD; Major Joseph R. Hsu, MD and Mary Ann E. Keenan, MD</td>
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<td>2:45 pm</td>
<td>Break</td>
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<td>Visit Scientific Posters</td>
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<td>3:10 – 3:40 pm</td>
<td>JOHN BORDER MEMORIAL LECTURE</td>
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<td>(Elizabeth Ballroom A-E, Level II)</td>
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<td>Introduction: David C. Templeman, MD</td>
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<td>Lecture Co-sponsored by AO North America</td>
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<td>“Trauma Surgery Is Not Supposed To Be Easy”</td>
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<td>Lawrence B. Bone, MD</td>
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<td></td>
<td>Past President of OTA, Professor and Chairman, Department of Orthopaedic Surgery, State University of New York at Buffalo</td>
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