2019 OTA ANNUAL MEETING
SEPTEMBER 25 - 28, 2019 • DENVER, COLORADO • #OTA2019

INTERNATIONAL TRAUMA CARE FORUM

COURSE AGENDA

Wednesday-Thursday,
September 25-26, 2019

Peter V. Giannoudis, MD, FACS, FRCS
International Committee Chair

11.5 AMA PRA Category 1 Credits™
OVERVIEW

The International Trauma Care Forum is focused on gathering trauma surgeons from across the globe together to exchange ideas and knowledge on the differences in treatment from a global perspective. This one and a half day session is comprised of 34 papers and 7 symposia, one of which features presenters from the OTA 2019 Guest Nation, Argentina.

Attendees of the International Trauma Care Forum will collaborate with the attendees of the Basic Science Focus Forum and exchange ideas during their joint session symposium. This combined session has proved to be a great way to come together to discuss ideas with basic science researchers.

TARGET AUDIENCE

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

LEARNING OBJECTIVES

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

- Revisit surgical techniques of pelvic and acetabulum reconstruction.
- Understand internal fixation principles to guide treatment for tibial plateau and fragility fractures.
- Comprehend the parameters affecting salvage versus amputation for severe lower limb injuries.
- Outline all the latest upper and lower extremity fracture fixation techniques.
- Explore all the latest advances in treating bone infections.

INTERNATIONAL COMMITTEE

Peter V. Giannoudis, MD, FACS, FRCS Chair
Ney Amaral, MD
Fernando de la Huerta, MD
Theodore Toan Le, MD
Hans-Christoph Pape, MD, FACS
Anjan R. Shah, MD
Robert D. Zura, MD

FEATURED SYMPOSIA

- Surgical Techniques: How I Do It?
  Pelvic Instability Revisited
- IOTA: Tibial Plateau Fractures:
  Global Perspectives on a Complex Problem
- Rotator Cuff Lesions
- Femoral Neck Non-Union
- Joint Session: Local Delivery of Antibiotics for Bone Infections: Current Insights
- IOTA Fragility Fracture Care:
  Advances in Management

INTERNATIONAL TRAUMA CARE FORUM

SEPTEMBER 25 - 26, 2019 • DENVER, COLORADO • #OTA2019

Early Bird Registration Until September 10.

<table>
<thead>
<tr>
<th></th>
<th>OTA Member On/Before 9/10/19</th>
<th>OTA Member After 9/10/19</th>
<th>Non-Member On/Before 9/10/19</th>
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<td>Course Fee</td>
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Register Today at ota.org
**WEDNESDAY, September 25, 2019**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>7:30</td>
<td>Introduction</td>
<td>Peter V. Giannoudis, MD, FACS, FRCS</td>
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<tr>
<td>7:35</td>
<td>SYMPOSIUM I</td>
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<tr>
<td>8:15</td>
<td>Surgical Techniques: How I Do It?</td>
<td>Ross K. Leighton, MD, Christian Allende, MD</td>
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<tr>
<td>7:35</td>
<td>Introduction</td>
<td>Ross K. Leighton, MD</td>
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<td>7:37</td>
<td>When I Do Pubis Symphysis and How?</td>
<td>Paul Tornetta III, MD</td>
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<tr>
<td>7:47</td>
<td>Sacroiliac Joint Open: My Preferred Method of Reconstruction</td>
<td>Peter V. Giannoudis, MD, FACS, FRCS</td>
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<tr>
<td>8:07</td>
<td>Discussion</td>
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<tr>
<td>8:15</td>
<td>PAPER SESSION I</td>
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<tr>
<td>8:15</td>
<td>Acetabulum - Femoral Head Injuries</td>
<td>Hans-Christoph Pape, MD, Erik Kubiak, MD</td>
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<td>8:15</td>
<td>PAPER 28</td>
<td>Morphometric Analysis and Safety of Percutaneous Fixation of Anterior Column of Acetabulum in an Indian Population: A Preliminary Report Vivek Trikha, MD</td>
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<td>8:21</td>
<td>PAPER 29</td>
<td>Safety of Surgical Hip Dislocation in Femoral Head Fracture-dislocation</td>
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<td>8:27</td>
<td>PAPER 30</td>
<td>Safety of Surgical Hip Dislocation in Femoral Head Fracture-dislocation</td>
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<td>8:33</td>
<td>PAPER 31</td>
<td>Clinical Results of Osteochondral Autograft from Ipsilateral Femoral Head for Femoral Head Defect after Posterior Hip Fracture Dislocation – Short Term Preliminary Study Yougun Won, MD; Gisoo Lee; Chan Kang, MD, PhD</td>
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This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME). The Orthopaedic Trauma Association is accredited by the ACCME to provide continuing medical education for physicians. The Orthopaedic Trauma Association designates this live activity for a maximum of 11.5 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.
## Wednesday, 9.25.19

### Symposium II

**Tibial Plateau Fractures: Global Perspectives on a Complex Problem**

**Moderators:**
- Peter V. Giannoudis, MD, FACS, FRCS
- Achille Contini, MD
- Rafeal Amadei, MD

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<tr>
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<tr>
<td>9:00 AM</td>
<td>Overview</td>
<td>Peter V. Giannoudis, MD, FACS, FRCS</td>
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<tr>
<td>9:02 AM</td>
<td>Complex Plateau Fractures: Initial Management and Timing of Definitive Treatment</td>
<td>Kees Jan Ponsen, MD, PhD</td>
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<tr>
<td>9:12 AM</td>
<td>Post-Fixation Stability: What is the Optimal Construct for Early Mobility</td>
<td>Kodi Kojima, MD</td>
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<td>9:22 AM</td>
<td>The Posteromedial Fragment: When and How to Fix</td>
<td>Sushrut Babhulkar, MD</td>
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<td>9:32 AM</td>
<td>Posterior Plateau Fractures: Approach and Fixation</td>
<td>Francisco Chana, MD</td>
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<td>9:42 AM</td>
<td>Compartment Syndrome and Plateau Fracture: Treatment Approach and Recommendations</td>
<td>Bertil Bouillon, MD</td>
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<td>9:52 AM</td>
<td>Discussion</td>
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### Symposium III

**Guest Nation Symposium**

**Moderators:**
- Heather Vallier, MD
- Bibiana Dello Russo, MD

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<tr>
<td>10:02 AM</td>
<td>Overview</td>
<td>Bibiana Dello Russo, MD</td>
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<td>10:04 AM</td>
<td>Haggled Extremity Scoring Systems: Still Valid?</td>
<td>Marcelo Rio, MD</td>
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<tr>
<td>10:14 AM</td>
<td>How Do I Proceed with Salvage?</td>
<td>Guido Carabelli, MD</td>
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<td>10:24 AM</td>
<td>What Do I Consider as the Gray Zone Making It Difficult to Decide</td>
<td>David Teague, MD</td>
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<td>10:34 AM</td>
<td>Discussion</td>
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### Symposium IV

**Rotator Cuff Lesions**

**Moderators:**
- Michael D. McKee, MD
- Koji Kojima, MD

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<tr>
<td>10:54 AM</td>
<td>Late Reconstruction: My Preferred Method - Outcomes</td>
<td>Chad Myeroff, MD</td>
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<tr>
<td>11:04 AM</td>
<td>Discussion</td>
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<tr>
<td>11:14 AM</td>
<td>Walk to Room 401-404</td>
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</table>
11:25 AM–12:25 PM  INDUSTRY LUNCH

12:25 PM  Return to Room 601/603

12:35 PM–1:09 PM  PAPER SESSION II

12:35 PM  PAPER 32  The Intra- and Interrater Reliability of the Fragility Fractures of the Pelvis Classification and Their Therapeutic Relevance: A Multicenter Assessment

Philipp Pieroh, MD; Andreas Höch; Florian Gras, MD; Sven Märdian; Alexander Pflug; Silvan Wittenberg; Christoph Ihle; Notker Blankenburg; Kevin Dallacker-Losensky, MD; Tanja Lieselotte Schröder; Steven C. Herath, MD; Daniel Wagner, MD; Hans-George Palm, MD, MBA; Christoph Josten Prof; Fabian Stuby, MD

12:41 PM  PAPER 33  Accuracy of Percutaneous Sacro-Iliac Screw Fixation for Pelvic Ring Injuries using Standardized Image Intensifier Protocol with Lateral Shots as the Corner Stone for Screw Placement: Prospective Cohort Study with Post-Op Computed Tomography as the Reference Standard

Job N. Doornberg, MS; Jan Erik Madsen, MD, PhD; Mark Rickman, MD

12:47 PM  PAPER 34  Use of Ultrasonography for Evaluation of Stability of Lateral Compression Type 1 (LC-1) Pelvic Fractures to Assist Determination of Treatment Strategy

Bin-Fei Zhang; Pengfei Wang, MD; Yan Zhuang

12:53 PM  PAPER 35  Quality of Life After Pelvic Ring Fractures: Long-Term Outcomes: A Multicentre Study

Erik Hermans MD; Lars Brouwers; Thijs Van Gent; Jan Biert; Mariska Adriana De Jongh, PhD; Koen Lansink, MD, PhD; Michael Edwards, MSc, PhD

1:09 PM–1:25 PM  SPECIAL INTEREST LECTURE

1:25 PM–2:13 PM  PAPER SESSION III

1:25 PM  PAPER 36  Comprehensive Evaluation and Treatment Strategy of Tibia Plateau Fracture with Knee Dislocation

Zhe Song; Yangjun Zhu, MD; Kun Zhang, MD

1:31 PM  PAPER 37  Poor Sporting Abilities After a Tibial Plateau Fracture Involving the Posterior Column - How Can We Do Better?

Liselore Quintens, MD; Juriaan Van Den Berg, MD; Maike Reul; Esther MM Van Lieshout, PhD; Siebe De Boer, MD; Michael Verhofstad; Harm Hoekstra

1:11 PM–1:25 PM  Box Lunch Provided by OTA (No CME credits offered)
1:37 PM  PAPER 38  
The Application of a New Type Ultradistal Locking Tools for Intramedullary Nailing in the Treatment of Tibial Fractures  
_Hongliang Liu; Cheng Ren_

1:43 PM  Discussion

1:49 PM  PAPER 39  
Secondary Intramedullary Nailing Following External Fixation for Tibial Shaft Fracture: What are the Factors that Affect Infection?  
_Joon-Woo Kim; Chang-Wug Oh, MD; Il Seo, MD; Kyeong Hyeon Park, MD; Jeong Heo_

1:55 PM  PAPER 40  
Periprosthetic Atypical Femoral Fractures Exist and are Associated with Duration of Bisphosphonate Therapy  
_Samuel Mackenzie; Richard Ng, MD; Gordon Thomas Snowden; Matilda Powell-Bowns; Andrew D. Duckworth, FRCS, MBCHB, MSc, PhD; Chloe Scott, FRCS_

2:01 PM  PAPER 41  
Functional Outcome of Open Distal Femoral Fractures Managed with Lateral Locking Plates  
_Raghav Arora, MBBS, MS; Deepak Jain; Harpal S. Selhi, MD; Rajnish Garg, MD, MBBS, MS_

2:07 PM  Discussion

2:13 PM–3:03 PM  SYMPOSIUM V  
Femoral Neck Non-Union  
_Moderators: Cyril Mauffrey, MD; Florian T. Gebhard, MD, PhD_

2:13 PM  Pre-operative Investigations: What I Need to Know?  
_Steven A. Olson, MD_

2:23 PM  Intertrochanteric Valgus Osteotomy: When and How?  
_William M. Ricci, MD_

2:33 PM  Subtrochanteric Valgus Osteotomy: Indications-My Preferred Method of Treatment?  
_Henry Broekhuysen, MD_

2:43 PM  Femoral Neck Non Union Associated with Femoral Head AVN  
_Peter Giannoudis, MD, FACS, FRCS_

2:53 PM  Discussion

2:55 PM  Walk to Room 401-404

3:03 PM  Break (Refreshments)  
(401-404)

3:15 PM–  JOINT SESSION VI: (401-404)  
4:20 PM  Local Delivery of Antibiotics for Bone Infections: Current Insights  
_Moderators: Peter V. Giannoudis, MD, FACS, FRCS; Edward J. Harvey, MD_

3:15 PM  Overview  
_Peter V. Giannoudis, MD, FACS, FRCS_

3:20 PM  Cement Bids and Cement Spacers: An Update  
_David J. Hak, MD_

3:30 PM  Matrices  
_Edward J. Harvey, MD_

3:40 PM  Bone Substitute Options and Effectiveness  
_Peter V. Giannoudis, MD, FACS, FRCS_

3:50 PM  Coated Nails  
_Brett D. Crist, MD_

4:00 PM  The Role of Bioglass  
_Nikolaos Kanakaris, MD, PhD_

4:10 PM  Discussion

4:20 PM–  KEY NOTE LECTURE  
4:35 PM  Non-Union Decision Making  
_Christian Allende, MD_
4:35 PM– 
5:17 PM 
**PAPER SESSION IV**

Best of the Best - Paper Session

*Michael D. McKee, MD*
*Thomas A. (Toney) Russell, MD*
*Cesar Pesciallo, MD*

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<tr>
<th>Time</th>
<th>Session Title</th>
<th>Presenter(s)</th>
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<tbody>
<tr>
<td>4:35 PM</td>
<td>Overview</td>
<td><em>Michael D. McKee, MD</em></td>
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<tr>
<td>4:37 PM</td>
<td>PAPER 42</td>
<td><em>Paa Kwesi Baidoo, MD</em>; <em>James Beguah Odei, PhD</em>; <em>Velarie Yaa Ankrah Ansu, MS</em>; <em>Michael Segbefia</em>; <em>Henry Holdbrook-Smith, MD</em></td>
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<td>4:43 PM</td>
<td>PAPER 43</td>
<td><em>Zhe Song</em></td>
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<td>4:49 PM</td>
<td>PAPER 44</td>
<td><em>Junzui Li, MD</em></td>
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<td>4:55 PM</td>
<td>PAPER 45</td>
<td><em>Kyeong Hyeon Park, MD</em>; <em>Chang-Wug Oh, MD</em>; <em>Ki Chul Park</em>; <em>Jeong Heo</em>; <em>Joon-Woo Kim, MD, PhD</em></td>
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<td>5:01 PM</td>
<td>PAPER 46</td>
<td><em>Vivek Trikha, MD</em>; <em>Anupam Gupta</em>; <em>Arulselvi Subramanian, MD</em></td>
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**4:37 PM** - Predictors of Hip Fracture Mortality in Ghana: A Single-Center Prospective Study

**4:43 PM** - Treatment for Coexisting Fractures of the Proximal Humerus and Humeral Shaft: ORIF or MIPPO?

**4:49 PM** - Excellent Outcome After Double Locked Plating in Su Type II or III Periprosthetic Distal Femoral Fractures

**4:55 PM** - Coned Hemipelvis and Total Hip Replacement in Osteoporotic Acetabular Fractures of the Elderly

**5:01 PM** - Prospective Evaluation of Functional Outcome Along with Histological Features of Induced Membrane in Patients with Infective Nonunion Managed with Masquelet Technique

**5:07 PM** - Discussion

**5:17 PM** - Adjourn for the Day

**5:25 PM– 6:25 PM** - INTERNATIONAL RECEPTION

Join your colleagues and view the international posters display.

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**THURSDAY, September 26, 2019**

**7:30 AM** - Introduction

*Peter V. Giannoudis, MD, FACS, FRCS* (601/603)

**7:32 AM– 8:20 AM** - **PAPER SESSION V**

**7:32 AM** - Pelvis and Hip Fractures

*Brent Norris, MD*
*Takashi Matsushita, MD, DMSc*

**7:32 AM** - Application of Measurement of Femoral Eccentricity on Orthopaedic-Position Radiographic Film of Hip Joint in Total Hip Arthroplasty

*Junzui Li, MD*
7:38 AM  PAPER 48
Arthroplasty Can Improve Long-Term Survival of Female Patients Sustained Femoral Neck Fracture Age Over Ninety: The Ten Years Results of Compare to Conservative Treatment
Liu Yang, DC

7:44 AM  PAPER 49
Hemiprothesis After Hip Fracture in Geriatric Patients with Dementia Increases Mortality and Lacks Functional Recovery
Konrad Schütze, MD;
Peter H. Richter, MD; Alexander Eickhoff;
Florian T. Gebhard, MD, PhD;
Christian Matthias Ehrnthaller

7:50 AM  Discussion

7:56 AM  PAPER 50
Venous Thromboembolism Following Delayed Surgery of a Hip Fracture
Ji Wan Kim; Eic Ju Lim; Ki Chul Park

8:02 AM  PAPER 51
Changes in Patellar Fracture Characteristics: A Multicenter Retrospective Analysis of 1596 Patellar Fracture Cases Between 2003 and 2017
Seong-Eun Byun, MD, PhD;
Jaeang Sim, MD; Yong Bum Joo;
Ji Wan Kim; Won Chul Choi, MD;
Young Gon Na, MD; Oog Jin Shon

8:08 AM  PAPER 52
Surgical Treatment with Locking Plate for Nonunion in Femur and Tibia
Tomoaki Fukui, MD;
Takahiro Niikura, MD, PhD;
Keisuke Oe, MD, PhD;
Ryosuke Kuroda, MD

8:14 AM  Discussion

8:20 AM–9:32 AM  IOTA SYMPOSIUM VII
IOTA Fragility Fracture Care: Advances in Management
Moderators: Theodore Miclau III, MD
Yoram Weil, MD
Jose Quintero, MD

8:20 AM  Overview
Peter V. Giannoudis, MD, FACS, FRCS

8:22 AM  Systems Approaches to Fragility Fracture Care: How Can They Help?
Timothy Chesser, MB, BS, FRCS

8:32 AM  Measuring Success: Outcomes Beyond Mortality?
Zsolt Balogh, MD

8:42 AM  Fragility Fractures in a Japanese Population: Does the Treatment Differ?
Takashi Miyamoto, MD

8:52 AM  Managing Bone Loss in Elderly Patients: What Are the Options?
Yun Tian, MD

9:02 AM  Surgical Management of Insufficiency Fractures: When and How?
Guy Putzeys, MD

9:12 AM  Complications Post Osteoporotic Fracture Fixation: Tips and Tricks
Fernando de le Huerta, MD

9:22 AM  Discussion

9:32 AM  Morning Break
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<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Authors</th>
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<tbody>
<tr>
<td>9:45 AM</td>
<td>PAPER SESSION VI</td>
<td>Upper Limb Injuries</td>
<td>Sushrut Babhulkar, MD, Jong-Keon Oh, MD</td>
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<tr>
<td>10:45 AM</td>
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<td>Paper 53: Clinical Application of ‘Expanded Paratricipital Approach’ for Fixation of Complex Articular Fractures in Distal Humerus: Revisited with Cadaveric Study and Case Series</td>
<td>Jae-Woo Cho; Do-Hyun Yeo, MD; Beom-Soo Kim, MD; Eic Ju Lim; Seungyeob Sakong; Dong-Wan Kang; Jinkak Kim, MD; Jong-Keon Oh, MD, PhD</td>
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<td>9:51 AM</td>
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<td>Paper 54: Optimal Plate Position in Minimally Invasive Plate Osteosynthesis for Mid-shaft Clavicle Fractures: Simulation Using 3D-Printed Models of Actual Clinical Cases</td>
<td>Ji Wan Kim; Ki Chul Park</td>
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<td>9:57 AM</td>
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<td>Paper 55: Olecranon Osteotomy Fixation Following Complex Distal Humerus ORIF: Plate or Tension Band?</td>
<td>Zhe Song; Yangjun Zhu, MD; Kun Zhang, MD</td>
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<td>10:03 AM</td>
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<td>Paper 56: The Clinical Benefit of Fibular Allograft Augmentation in Locked Plating of Proximal Humerus Fractures: A Retrospective Study</td>
<td>Yeming Wang, MD; Jianhua Yang; Junyang Liu; Xu Tian; Jingming Dong; Jie Sun, MD, MS</td>
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<td>10:09 AM</td>
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<td>Discussion</td>
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<td>10:19 AM</td>
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<td>PAPER SESSION VII</td>
<td>General Trauma</td>
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<td>11:00 AM</td>
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<td>Paper 57: Clinical Application of 3D Printing Technology in Orthopaedic Trauma Surgery</td>
<td>Rahat Jarayabhand, MD; Chittawee Jiamton, MD</td>
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<td>10:25 AM</td>
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<td>Paper 58: Empowering Pre-hospital Care Providers to Better Manage Open Fractures</td>
<td>Aswinkumar Vasireddy, MBBS; Kelly Jones; Erica F. Ley, MSc</td>
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<td>10:31 AM</td>
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<td>Paper 59: B-Ultrasound Surface Positioning Upper Arm Nerve Combined with MIOPP Technique for Upper Humeral Shaft Fracture</td>
<td>Wei Fan, PhD</td>
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<td>10:37 AM</td>
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<td>Paper 60: Syndesmotic Fixation in Unstable Ankle Fractures: Does Early Postoperative Weight Bearing Affect Radiographic Outcomes?</td>
<td>Khalid Al-Hourani, MD; Michael Thomas Stoddart, MBBS; Timothy Chesser, MB, BS, FRCS</td>
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<td>10:43 AM</td>
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<td>Paper 61: Whether Bisphosphonate Delays Bone Healing After Hip Fracture Fixation in Elderly Patients</td>
<td>Ong-Art Phruetthiphat, MD; Yanin Plumarom</td>
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<td>10:49 AM</td>
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<td>Discussion</td>
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<td>11:00 AM</td>
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<td>Adjourn to Industry Symposia</td>
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