



INTERNATIONAL TRAUMA CARE FORUM

Wednesday-Thursday
September 30 – October 1, 2020

Program Committee

Theodore Miclau III, MD *Co-Chair*
Hans-Christoph Pape, MD, FACS *Co-Chair*
Zsolt J. Balogh, MD, PhD
Victor de Ridder, MD, PhD, MBA
Anjan R. Shah, MD
Paul S. Whiting, MD
Robert D. Zura, MD

11.25 AMA PRA
Category I Credits™

Music City Center
Nashville, Tennessee

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Details & Registration:
ota.org

2020 OTA
ANNUAL MEETING

September 30 –
October 3, 2020





PROGRAM COMMITTEE



Theodore Miclau III, MD *Co-Chair*
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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, which include 2020 Guest Nation, Colombia and International Orthopaedic Trauma Association symposia.

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.

SYMPOSIA

- International Orthopaedic Trauma Association (IOTA):
Open Fracture Management Controversies
- *Combined Session with Basic Science:*
Polytrauma: Update on Basic Science and Clinical Evidence
- Topical Symposia: Upper Extremity, Pelvis/Acetabulum, Geriatrics, and Lower Extremity

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.

Wednesday, September 30
11:35 am -12:30 pm

INTERNATIONAL INDUSTRY LUNCH SESSION

Early Bird
Registration
Until August 31.



	OTA Member On/Before 8/31/20	OTA Member After 8/31/20	Non-Member On/Before 8/31/20	Non-Member After 8/31/20
Course Fee:	\$150	\$200	\$200	\$250

LEARNING OBJECTIVES

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

- ✓ Assess current techniques of the management of patients with pelvic instability.
- ✓ Discuss the latest treatments for fracture management in geriatric patients.
- ✓ Understand the treatment options, planning, and outcomes of patients with distal tibia fractures.
- ✓ Outline all the latest upper and lower extremity fracture fixation techniques.
- ✓ Review the latest recommendations for the treatment of patients following multiple injuries.

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WEDNESDAY, September 30, 2020

7:30 AM - **INTRODUCTION** (Room 207CD)
7:35 AM *Hans-Christoph Pape, MD*

7:35 AM - **SYMPOSIUM I**
8:15 AM **Humerus Fractures: Selecting Fixation for a Successful Outcome**

Moderators: *Hans-Christoph Pape, MD*
Michael D. McKee, MD

7:35 AM **Overview**
Michael D. McKee, MD

7:38 AM **Nonoperative Management: Indications**
Lars Mueller, MD

7:48 AM **ORIF: Indications and Techniques**
Stefaan J. Nijs, MD

7:58 AM **Reconstruction of Humeral Nonunions**
Peter Cole, MD

8:08 AM Discussion

8:15 AM - **PAPER SESSION I**
9:03 AM **Upper Extremity**
Moderators: *Hans-Christoph Pape, MD*
Michael D. McKee, MD

8:15 AM-8:21 AM **PAPER 30**
 **Hemiarthroplasty versus Nonoperative Treatment of Comminuted Proximal Humeral Fractures: Results of the ProCon Multicenter Randomized Clinical Trial**
Dennis Den Hartog; Niels Schep; Kiran Mahabier; Aron Jasper Marius De Zwart, BS; Stefaan J.B. Nijs; Michael Verhofstad MD, PhD; Esther MM Van Lieshout, PhD; Procon Investigators


8:21 AM-8:27 AM **PAPER 31**
Comparative Analysis of Locking Plate Osteosynthesis Versus Coracoclavicular Stabilization Using a Suture Button Device for Neer Type IIB Lateral Clavicle Fractures
Chul-Hyun Cho MD, PhD; Beom-Soo Kim, MD; Du Han Kim, PhD; Chung-Shin Bek, MD

8:27 AM-8:33 AM **PAPER 32**
Predictors of Humeral Diaphyseal Nonunion: NSAIDs, BMI, and Nonoperative Management Are Associated With an Increased Risk of Nonunion
William M. Oliver, MBBS, MRCSED; Henry Searle; Zhan Herr Ng; Samuel Molyneux, FRCS (Ortho), MSc; Timothy O. White MD, FRCS; Nicholas D. Clement, MRCS Ed; Andrew David Duckworth, FRCS, MBChB, MSc, PhD

8:33 AM Discussion

8:39 AM-8:45 AM **PAPER 33**
Combined Surgical Approach of Anterior and Posterior for Ulnar Coronoid Fracture of O'Driscoll Type 3B
Heng Lisong, MD



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WEDNESDAY, continued

8:45 AM- 8:51 AM **PAPER 34**
Machine Learning to Estimate the Probability for Fracture of the Distal Radius in Patients Presenting to the Emergency Department with Sustained Wrist Trauma
D.W.G. Langerhuizen, BS;
Laurent Alexander Marijn Hendrickx;
Gino M. Kerkhoffs, MD, PhD;
Ruurd Jaarsma, FRACS, MD, PhD;
Job N. Doornberg, MS;
Marjolein Mulders;
J.C. Goslings, MD, PhD; Niels Schep

8:51 AM- 8:57 AM **PAPER 35**
Do 3D Printed Hand Held Models Improve Surgeon Reliability for Recognition of Intra-Articular Distal Radius Fracture Characteristics?
D.W.G. Langerhuizen, BS;
Stein Jasper Janssen, MD;
Gino M. Kerkhoffs, MD, PhD;
Ruurd Jaarsma, FRACS, MD, PhD;
Job N. Doornberg MS

8:57 AM Discussion

9:03 AM - 9:17 AM **SPECIAL INTEREST LECTURE**
General Aspects of a Geriatric Fracture Care - Do We Have Evidence Based Results ?
Carlos M. Olarte, MD

9:17 AM Morning Break

9:32 AM - 10:12 AM **SYMPOSIUM II**
Pelvic Ring Injuries: Recent Advances in Diagnosis and Treatment
Moderators: *Paul S. Whiting, MD*
H. Claude Sagi, MD

9:32 AM **Overview**
H. Claude Sagi, MD

9:35 AM **High-Energy Injuries: Stopping the Bleeding**
Zsolt J. Balogh, MD, PhD

9:45 AM **Which Ring Injuries are Unstable?**
Kees Jan 'KJ' Ponsen, MD

9:55 AM **Unstable Injuries: Selecting the Right Approach and Fixation**
Milton L. Routt, MD

10:05 AM Discussion

10:12 AM - 11:16 AM **PAPER SESSION II**
Pelvis and Acetabulum
Moderators: *Paul S. Whiting, MD*
H Claude Sagi, MD

10:12 AM- 10:18 AM **PAPER 36**
 **The Safety and Effectiveness of Robot-Assisted Percutaneous Screw Fixation in Treatment of Unstable Pelvic Fractures**
Pengfei Wang, MD;
Utku Kandemir, MD; Bin-Fei Zhang;
Yan Zhuang; Kun Zhang, MD;
Yuxuan Cong; Ping-Cheng Liu, MD

10:18 AM- 10:24 AM **PAPER 37**
SI-Screws as a Damage Control Option in High-Energy Pelvic Trauma – An Option in Hemodynamically Unstable Patients?
Simon Tiziani; *Adrian Knoepfe;*
Hans-Christoph Pape, MD;
Valentin Neuhaus, MD

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WEDNESDAY, continued

- 10:24 AM- **PAPER 38**
10:30 AM **High-Energy Blunt Pelvic Ring Injuries and Intra-pelvic Arterial Lesions**
Anna-Eliane Abboud;
Sana Boudabbous;
Elisabeth Anderегgen;
Axel Gamulin, MD
- 10:30 AM- **PAPER 39**
10:36 AM **Dynamic Testing for Occult Pelvic Ring Instability Lacks Standardization and Reproducibility**
Adam K. Lee, MD; *Douglass Tucker, BS;*
Geoffrey Marecek, MD;
Cory Alan Collinge, MD
- 10:36 AM Discussion
- 10:44 AM- **PAPER 40**
10:50 AM **Does the Implant Failure of Symphysis Plating After Symphysis Ruptures Lead to a Worse Outcome?—A Long Term Follow-Up**
Philipp Pieroh, MD; *Eva Knorr, MD;*
Georg Osterhoff, MD;
Ulrich J.A. Spiegel, MD; *Andreas Hinz;*
Johannes Fakler, MD;
Andreas Höch, MD
- 10:50 AM- **PAPER 41**
10:56 AM **Combined Pelvic Ring and Acetabular Fractures: Treatment, Complications and Outcomes**
Will Robert Kitchen, BA;
Rachael Clegg, MBCHB;
Hussein Taki, MBCHB, MRCS;
Elizabeth Shirland, RN;
Jaikirty Rawal, FRCS (Ortho), MA, MBBS;
Peter Hull, FRCS (Ortho), MBCHB;
Andrew Douglas Carrothers, FRCS (Ortho), MD;
Daud Chou, FRCS (Ortho), MBBS, MSc

- 10:56 AM- **PAPER 42**
11:02 AM **The Indications for Acute Total Hip Arthroplasty in Elderly Patients with Acetabular Fracture: A Systematic Review and Meta-Analysis of Current Situation**
Bin-Fei Zhang; *Pengfei Wang, MD;*
Yan Zhuang

11:02 AM- **HUMANITARIAN SCHOLAR**

- 11:08 AM **Ethiopia**
PAPER 43
Patient-Reported Outcome Measures of Surgically Treated Acetabular Fractures Without C-Arm in Ethiopia
Samuel Hailu, MD;
Amanuel Leulseged Wolde, MD;
Shikuria Lemma Nida;
Samuel Tesfaye Shiferaw, MD;
Jonathan Yates, MBCHB, MRCS

- 11:08 AM Discussion

- 11:16 AM - **KEY NOTE LECTURE**
11:30 AM **Surgical Approaches in Tibial Plateau Fractures**
Rodrigo Pesantez, MD

- 11:30 AM **Proceed to Room 106 ABC**

- 11:35 AM- **JOINT INDUSTRY LUNCH**
12:30 PM

**ZIMMER BIOMET****Solutions for the Treatment of Humeral Fractures**Speaker (tentative): **TBD**

Box Lunch Provided by OTA

- 12:30 PM **Return to Room 207CD**

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WEDNESDAY, continued

12:35 PM - SYMPOSIUM III

1:15 PM **Tibial Nailing: Pushing the Limit**

Moderators: *Zsolt J. Balogh, MD, PhD*
Phil Wolinsky, MD

12:35 PM **Overview**
Phil Wolinsky, MD

12:38 PM **Proximal Fractures: Challenges, Tricks and Outcomes**
Christian Krettek, MD, FRACS

12:48 PM **Midshaft Segmental Fractures: Benefits and Limits**
Sean E. Nork, MD

12:58 PM **Distal Fractures: Is Nailing Superior?**
Guy Putzeys, MD

1:08 PM Discussion

1:15 PM - PAPER SESSION III

2:03 PM **Lower Extremity**


Moderators: *Zsolt J. Balogh, MD, PhD*
Phil Wolinsky, MD

1:15 PM- PAPER 44

1:21 PM  **Rehabilitation Strategy After Nonsurgical Treatment of Achilles Tendon Rupture: UKSTAR, a Multicenter Randomized Controlled Trial and Economic Evaluation**
Matthew L. Costa, FRCS;
Juul Achten, PhD, MSc;
Ioana Marian, MSc;
Benjamin Ollivere, MD, FRCS (Ortho), MA, MBBS;
Susan Dutton, MSc;
Mandy Maredza, PhD;
Stavros Petrou;
Rebecca Kearney, PhD

1:21 PM-
1:27 PM

PAPER 45

 **Improved Reduction and Alignment of Distal Third Tibial Fractures with Suprapatellar Intramedullary Nailing**
Matthew Hague, MBCHB;
Dominic Xavier Texeira;
Thomas Richard Edward Anderson, MBBS;
Michael Williamson, MD;
Alex Trompeter

1:27 PM-
1:33 PM

PAPER 46

Minimally Invasive Surgical (MIS) Operative Outcomes Compared with Nonoperative Treatment of Displaced Intra-Articular Calcaneal Fractures (DIACF): Early Results
Imogen Chappelow, MBCHB;
Theodore Howard, MBBS;
Ines Lore Hildegard Reichert, FRCS (Ortho), MD, PhD;
Raju Ahluwalia, FRCS (Ortho)

1:33 PM Discussion

1:39 PM-
1:45 PM

PAPER 47

Treatment Patterns for the Management of Open Tibial Shaft Fractures in Latin America
Patrick Albright, BS, MS;
Madeline Mackechnie, MSc;
Heather Roberts, MD;
David Shearer, MD, FAAOS;
Luis Padilla, MD;
Julio Segovia, MD;
Jose Eduardo Quintero, MD;
Rafael Eduardo Amadei, MD;
Fernando B. Reis, FACS;
Saam Morshed, MD;
Theodore Miclau, MD

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WEDNESDAY, continued

- 1:45 PM- **PAPER 48**
 1:51 PM **Two-stage Orthoplastic Debridement of Type IIIB Open Tibial Shaft Fractures is Protective of Acute Compartment Syndrome**
Khalid Al-Hourani, MD;
Michael Thomas Stoddart, MBBS;
Umraz Khan;
Michael Kelly, MBBS, MD, FRCS (Ortho)
- 1:51 PM- **HUMANITARIAN SCHOLAR**
 1:57 PM **Pakistan**
PAPER 49
Outcomes of Early Intramedullary Nailing in Open Tibia Fractures In Low And Middle Income Countries
Faseeh Shahab, MD; Shahab Ud Din;
Lewis G. Zirkle, MD
- 1:57 PM Discussion

- 2:03 PM - **SYMPOSIUM IV**
 2:45 PM **Pilon Fractures – Consensus and Controversy**
 Moderators: *Theodore Miclau III, MD*
Rodrigo Pesantez, MD
- 2:03 PM **Overview**
Theodore Miclau III, MD
- 2:06 PM **Surgical Approaches in Pilon Fractures**
Rodrigo F. Pesantez, MD
- 2:14 PM **Preventing Complications: Pre- and Post-op Strategies**
S. Kottmeier
- 2:22 PM **ORIF vs. Fusion: What are the Indications?**
Kodi E. Kojima, MD
- 2:30 PM **Complex Open Pilon Fractures: Limb Salvage vs. Amputation**
Carlos M. Olarte, MD
- 2:38 PM Discussion

- 2:45 PM - **PAPER SESSION IV**
 3:27 PM **General Interest**
 Moderators: *Theodore Miclau III, MD*
Florian T. Gebhard, MD, PhD
- 2:45 PM- **PAPER 50**
 2:51 PM **Very Distal Femoral Periprosthetic Fractures: Replacement Versus Fixation, a Systematic Review**
Luc Rubinger, MD;
Hassaan Abdel Khalik, BS;
Aaron M. Gazendam, MD;
Jesse Isaac Wolfstadt, MD;
Amir Khoshbin, MD;
Daniel Tushinski, BA, FRCSC, MD;
Herman Johal, MD



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WEDNESDAY, continued

2:51 PM-
2:57 PM **PAPER 51**
 **Implementation of a Mobile App for Trauma Education: Results from a Multicenter Study**
Benjamin Randolph Childs, BS;
Brendan Andres, BA; Mary Alice Breslin, BA;
Mai P. Nguyen, MD; Natasha Simske, BS;
Paul S. Whiting, MD;
Aswinkumar Vasireddy, MBBS;
Heather A. Vallier, MD

2:57 PM Discussion


3:03 PM-
3:09 PM **PAPER 52**
Female Gender and Consultant Care are Predictive of Not Receiving Protocolled Post-Op Assessment in Orthopaedic Trauma: Case Study of 249 Patients Undergoing Intramedullary Nailing for Tibial Shaft Fractures
Laurent Alexander Marijn Hendrickx;
James Virgin, MD; Job N. Doornberg, MS;
Gino M. Kerkhoffs, MD, PhD;
Ruurd Jaarsma, FRACS, MD, PhD

3:09 PM- 3:15 PM **HUMANITARIAN SCHOLAR**

Kenya
PAPER 53
 **Can a Standardized “Squat-and-Smile” Assessment Avoid X-ray Check and Increase Follow-up Rate of Trauma Patients in Hardship Areas?**
Daniele Sciuto

3:15 PM-
3:21 PM **PAPER 54**
Adolescent Clavicle Fractures: Epidemiology and Risk of Re-intervention following Non-Operative Management
Jamie A. Nicholson, MBCHB, MRCSED;
Nathan Ng, MBCHB; Pengchi Chen;
Liam Yapp MBCHB, MRCSED;
Mark Gaston, MB, ChB;
Christopher M. Robinson, MD

3:21 PM Discussion

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3:27 PM Proceed to Room 106 ABC

3:40 PM -
4:45 PM **JOINT SESSION V**
Polytrauma: Update on Basic Science and Clinical Evidence

Moderators: **Aaron Nauth, MD**
Hans-Christoph Pape, MD

3:40 PM **Polytrauma: What is True and What is New?**
Hans-Christoph Pape, MD

3:50 PM **The Significance of Inflammation in Polytraumatized Patients**
Todd McKinley, MD

4:00 PM **Early Neutrophil Changes in Polytrauma Patients and its Prognostic Relevance**
Luke PH Leenen, MD, PhD, FACS

4:10 PM **Management of Major Fractures in Polytrauma, What Does the Clinical Literature Tell Us?**
Frank Hildebrand, MD

4:20 PM **Putting it all Together, When You Should Intervene Based on What We Know Now!**
Heather Vallier, MD

4:30 PM Discussion

4:45 PM Adjourn for the Day

4:50 PM-
6:00 PM **INTERNATIONAL RECEPTION**
(Davison BR Foyer)
With special thanks and support from

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INTERNATIONAL TRAUMA CARE FORUM

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THURSDAY, October 1, 2020

7:30 AM - **INTRODUCTION** (Room 207CD)
 7:35 AM Theodore Miclau III, MD

7:35 AM - **SYMPOSIUM VI**
 8:18 AM **Hip Fracture Management: Optimizing Outcomes**
 Moderators: Victor de Ridder, MD, PhD
 Stephen L. Kates, MD

7:35 AM **Overview**
 Stephen L. Kates, MD


7:38 AM **Developing an Orthogeriatric Program: Key Steps**
 Martin J. Heetveld, MD, PhD

7:48 AM **Multicenter Studies: Is There Enough Evidence to Change Practice?**
 Marc Swiontkowski, MD

7:58 AM **Hip Fracture Augmentation: Techniques and Outcomes**
 Carlos M. Olarte, MD

8:08 AM Discussion

8:18 AM - **PAPER SESSION VI**
 9:14 AM **Geriatric**
 Moderators: Victor de Ridder, MD, PhD
 Stephen L. Kates, MD

8:18 PM- **PAPER 55**
 8:24 AM  **Screw-Calcar Related Tip-Apex Distance Is the Most Reliable Indicator for Compression Hip Screw Failure**
Chinyelu Menakaya, MB, BS, MRCS RCSEng; Liza Osagie Clouard, MBBS, MD; Turab Arshad Syed, MBBS

8:24 AM- **PAPER 56**
 8:30 AM **Orthogeriatric Trauma Units Improve Patient Outcomes in Geriatric Hip Fracture Patients**

Henk Jan Schuijt, MD, MSc;
 Jip Kusen, BS; Jan Jonas Van Hernen, MD;
 Olivia Geraghty, ACNP-BC, ATC, BA, BOC, BOCO, BOCB, BS,
 B; Diederik Pieter Johan Smeeing;
 Detlef Van Der Velde, MD, PhD

8:30 AM- **PAPER 57**
 8:36 AM **Orthogeriatric Co-Management for Hip Fractures. Can Small Changes Make a Big Difference?**


Maic Werner, MS; Olaf Krause, MD;
 Christian Macke, MD;
 Lambert Herold, MD;
 Christian Krettek, MD;
 Emmanouil Liodakis, MD

8:36 AM Discussion

8:46 AM- **PAPER 58**
 8:52 AM **The Impact of Nail Canal Ratio on Postoperative Early Excessive Neck Shortening After Intramedullary Nailing of Trochanteric Fracture: A Retrospective Cohort Study**
Takahiro Inui, MD;

Yoshinobu Watanabe, MD;
 Yoshiaki Kurata, MD; Kentaro Matsui, MD;
 Keisuke Ishii, MD; Takashi Suzuki, MD;
 Taketo Kurozumi, MD, PhD;
 Hirotaka Kawano, MD, PhD

8:52 AM- **PAPER 59**
 8:58 AM **Relationship Between Clinical Results and Reduction in Femoral Trochanteric Fractures Treated with Proximal Femoral Nail Antirotation (PFNA)-II**
Etsuo Shoda, MD; Shimpei Kitada;
 Takahiro Niikura MD, PhD;
 Keisuke Oe, MD, PhD;
 Atsushi Sakurai, MD; Takeharu Sasaki, MD

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THURSDAY, continued

- 8:58 AM- 9:04 AM **PAPER 60**
Factors Associated with Mortality Following Surgical Management of Hip Fractures
Sofia Bzovsky, MSc;
Emil H. Schemitsch, MD;
Marc F. Swiontkowski, MD;
Diane Heels-Ansdell, MSc;
Frede Frihagen, MD;
Mohit Bhandari, MD, FRCSC, PhD;
Sheila Sprague, PhD;
FAITH Investigators;
HEALTH Investigators
- 9:04 AM Discussion
- 9:14 AM Morning Break



- 9:34 AM - 10:54 AM **IOTA SYMPOSIUM VII**
 INTERNATIONAL ORTHOPAEDIC TRAUMA ASSOCIATION
IOTA - Open Fractures: Current Treatment Perspectives
Moderators: *Theodore Miclau III, MD*
Yun Tian, MD
Sushrut Babhulkar, MD
- 9:34 AM **Overview**
Theodore Miclau III, MD
- 9:39 AM **Antibiotic Administration: Type, Timing, and Route**
Hiroaki Minehara, MD
- 9:50 AM **Surgical Timing: Which Fractures, What Time?**
Rafael Amadei, MD
- 10:01 AM **Critical Sized Bone Defects: Current Evidence**
Achille Contini, MD
- 10:12 AM **Wound Coverage: Vacs to Flaps – When and How**
Michael Kelly, MD
- 10:23 AM **Open Fractures: What are the Top Research Questions?**
Emil Schemitsch, MD
- 10:34 AM Discussion
All Faculty
- 10:54 AM **Adjourn to Industry Symposia**

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 11.25 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.