PRELIMINARY PROGRAM



OTA 35TH ANNUAL MEETING

COLORADO CONVENTION CENTER ■ DENVER, COLORADO

THURSDAY - SATURDAY, SEPTEMBER 25 - 28, 2019

Celebrating 35 Years

Program Committee

Michael J. Gardner, MD Program Chair Stephen A. Kottmeier, MD Program Co-Chair Andrew M. Choo, MD Brett D. Crist, MD Gregory J. Della Rocca, MD, PhD, FACS David J. Hak, MD Gilbert R. Ortega, MD David W. Sanders, MD

Housing NOW OPEN



CME credits will be awarded for your participation at each activity except the Resident Course.

Gerard P. Slobogean, MD



35TH ANNUAL MEETING

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

TARGET AUDIENCE

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

MEETING HIGHLIGHTS

- 26 Breakout sessions including a variety of topics such as pelvic fractures, compartment syndrome, periprosthetic fractures, surgeon well-being, firearm trauma, dealing with bone loss, open fractures, and many others.
- 78 high quality paper presentations, including session of Highlight Papers reflecting practice-changing research and 160 posters.
- 4 main symposia focusing on fracture infections, pelvic ring injuries, limb salvage vs. amputation, and evidencebased fracture treatment.
- Industry Symposia showcasing products, demonstrating techniques and/or presenting research offered at three convenient times.



LEARNING OBJECTIVES

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

- Discuss and highlight recently presented prospective clinical trials in orthopaedic trauma
- ✓ Summarize evidence-based recommendations for the treatment of common fractures
- ✓ Knowledge transfer to initiate practice change to include treatment strategies based on evidence-based medicine
- ✓ Identify consensus opinions on many current issues and controversies regarding the treatment of infected fractures.

BORDER LECTURER

Milton L. Routt, MD
Professor, Orthopedic Surgery
McGovern Medical School,
University of Texas Health
Science Center, Houston, TX





PRESIDENT'S MESSAGE

David C. Teague, MD
OTA President

ON DEMAND				
GOLD REGISTRATION				
(Annual Meeting Registration	an			
Annual Meeting On Demand)				

Early Bird	02
Registration	And the
Until Septem	ber 10

initiaan meeting en bemana,		
	n/Before 1/10/19	After 9/10/19
OTA Member	\$ 550	\$ 650
Non-member	\$ 1100	\$ 1200
Non-member Medical Resident, Fellow, Student	\$ 750	\$ 850
Non-member Health Care Personnel	\$ 750	\$ 850
Additional Charge for USB	\$ 45	\$ 45

ANNUAL MEETING (ONLY)

REGISTRATION	Before 10/19	•	After 10/19
OTA Member (Incl. Guest Nation Attendees)	\$ 250	\$	350
Non-member (Incl. MD, DO, MBBS, etc.)	\$ 800	\$	900
Non-member Medical Resident, Fellow, Student	\$ 450	\$	550
Non-member Health Care Personnel (incl. NP, PA, AH, PhD, etc.)	\$ 450	\$	550

SEPTEMBER 25 - 28, 2019 ■ DENVER, COLORADO

2018 RESEARCH & EDUCATION DONORS

The Orthopaedic Trauma Association (OTA) gratefully acknowledges the 2018 Research and Education Donors.

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

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Celebrating 35 Years

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VENUE

The Orthopaedic Trauma Association's 35th Annual Meeting, all pre-meeting courses and the Resident Comprehensive Fracture Course will be held at the Colorado Convention Center in Denver, Colorado. Visit OTA.org to register and make hotel reservations.

Early Bird Registration: Register by September 10th to save \$100 on the Annual Meeting and each Pre-Meeting Registration.

Hotel block closes September 1st.

SEPTEMBER 25 - 28, 2019 ■ DENVER, COLORADO

WELCOME

Dear Colleagues,

On behalf of the OTA Program Committee and President David Teague, MD, I am pleased to invite you to the 35th Annual Meeting of the Orthopaedic Trauma Association (OTA) to be held in Denver, Colorado from September 25th to 28th, 2019. In the months Michael J. Gardner, MD leading up to the meeting, our Committee reviewed almost 1200 scientific abstracts and over 74 Breakout Symposia proposals. This has culminated in a program that includes the latest cutting-edge, high quality research and state-of-the-art treatment techniques and approaches for musculoskeletal injuries.



Annual Meeting Program Chair

The paper presentations will kick-off with a "Program Highlights" session, which will feature ten original research presentations that are of significant interest, of the highest quality, and have the potential to change practice. In addition to these ten studies, there will be an additional 68 paper presentations during the main session. Concurrent with these presentations, there will be 26 breakout sessions each with a specific focus, depending on your interest. During all this, there will be 160 posters in the Exhibitors Hall to peruse.

Four main symposia will be the focus of this year's meeting: what's new in fracture-related infections; multidisciplinary approach to the hemodynamically unstable pelvic fracture patient; recent dogma-changing evidence in orthopaedic trauma; and modern considerations in limb salvage vs. amputation. Additionally, the OTA is proud to welcome Argentina as the 2019 Guest Nation, and this IOTA member's representatives will give a special presentation on Friday afternoon.

A new addition to the program will feature a Past Presidents Debate on Friday afternoon, which will be both educational and entertaining, with more at stake than the typical debate!

Finally, we encourage all to arrive early to the Annual Meeting and take full advantage of one or more of the pre-meeting courses:

- Basic Science Focus Forum chaired by Edward J. Harvey, MD
- Orthopaedic Trauma Boot Camp chaired by Robert P. Dunbar, MD and Frank A. Liporace, MD
- PA/NP Course chaired by Daniel Segina, MD, Jennifer E. Hagen, MD, MS, Dennis C. Gregory, PA-C and Ryan M. Wilson, MPAS
- International Trauma Care Forum chaired by Peter V. Giannoudis, MD
- E/M and Surgical Coding Course chaired by Paul T. Appleton, MD
- Young Practitioners Forum led by Lisa K. Cannada and Jodi A. Siegel, MD
- The Residents Comprehensive Fracture Course chaired by Michael P. Leslie, DO and Seth R. Yarboro, MD, will run concurrent to the Annual Meeting, Wednesday through Friday.
- NEW! Inaugural OTA Pelvis and Acetabulum Course chaired by Michael Archdeacon, MD
- NEW! Soft Tissue Coverage Skills Course chaired by Joseph Hsu, MD

The common feature of each program event is the commitment to providing the highest quality, most interesting and clinically relevant material related to musculoskeletal trauma by world-class faculty and experts. We truly believe that anyone involved in the field will benefit from the 2019 OTA Annual Meeting. We look forward to seeing you in Denver!

Sincerely, Michael J. Gardner, MD

SEPTEMBER 25 - 28, 2019 ■ DENVER, COLORADO

PRELIMINARY PROGRAM

Thursday, 9.26.19

Stephen A. Kottmeier, MD

3:20 PM-Thursday, September 26, 2019 4:45 PM

1:00 PM-**WELCOME** (Four Seasons) 1:20 PM AND DONOR AWARDS

David C. Teague, MD – President

Michael J. Gardner, MD – Program Chair

PAPER 62 3:20 PM

Hip Fracture Evaluation with Alternatives of Total Hip Arthroplasty versus Hemi-

1:20 PM-SYMPOSIUM I (Four Seasons) What's New in Fracture Related 2:50 PM

Infections

Moderator: William Obremskey, MD Faculty: Stephen L. Kates, MD

> Kenneth A. Egol, MD Willem-Jan Metsemakers, MD

Learning Objectives

• Understand diagnosis of post op infections

Describe prevention of post op infections

Explain Treatment of post op infections

Description

Infection continues to be one of the most common complications after fracture fixation. A new definition of post op infection has been endorsed by the OTA and several groups have provided guidance on perioperative infection prevention and treatment of infections with antibiotics, soft tissue coverage, implant retention and bone defects. We will review new information and recent guidelines.

Presentations

What's New in Infection Prevention

William T. Obremskey, MD

What's New in Infection with Soft Tissue and Bone Defects

Stephen L. Kates, MD

What is New with Infection and Implant

Retention and Antibiotics

Kenneth A. Egol, MD

What's New in Definition, Implant **Development and Phage Therapy**

Willem-Jan Metsemakers, MD

2:50-3:20 PM Refreshment Break

3:31 PM PAPER 63

> Operative versus Non-operative Treatment of Acute Unstable Chest Wall Injuries - A Multi Centred Randomized Controlled Trial

Randomized Controlled Trial of X Patients

Niloofar Dehghan, FRCSC, MD, MSc; Aaron Nauth, MD; Emil H. Schemitsch, MD;

Milena Vicente RN; Richard Jenkinson MD;

Moderators: Michael J. Gardner, MD

Arthroplasty (X): A Multinational

Hans J. Kreder, MD;

HEALTH Investigators

PAPER SESSION I

Highlight Papers

Michael D. McKee, MD, FRCSC; Canadian Orthopaedic Trauma Society

(COTS); Unstable Chest Wall RCT Study

Investigators

3:37 PM PAPER 64

> **Autologous Iliac Bone Graft Versus** Biphasic Hydroxyapatite/Calcium Sulfate **Cement for Treatment of Bone Defects** in Tibial Plateau Fractures: A Multicenter, Prospective, Randomized Clinical Trial

Alex Hofmann, MD; Stanislav Gorbulev;

Paul Alfred Grützner;

Arndt Peter Schulz, MD, PhD;

Rupert Schupfner, OT; Michael Raschke, MD;

Martijn Van Griensven; Pol Maria Rommens, MD

3:43 PM Discussion

3:48 PM PAPER 65

Deltopectoral versus Deltoid Split

Approach for Proximal <u>HU</u>merus Fracture Fixation with Locking Plate: A Prospective

RAndomized Study (HURA Study) Dominique Rouleau, MD;

George Yves Laflamme, MD;

Frederic Balg, MD; Benoit Benoit, MD;

Michel Malo, MD; Francois Vezina, MD;

Stephane Leduc, MD

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Walter W. Virkus, MD; Anthony T. Sorkin, MD; Krista M. Brown, MS; Andrea Lynn Howe, BS; Joshua Rudnicki, BS; Blessing Enobun; Na-

than N. O'Hara; Jeff Gill, PhD;

Robert V. O'Toole, MD

PRELIMINARY PROGRAM

Thursday, 9.26.19

3:54 PM PAPER 66 Locked Plating versus Nailing for Proximal Tibia Fractures: A Multicenter RCT Paul Tornetta III, MD; Kenneth A. Egol MD; Clifford B. Jones, MD, FACS; Robert F. Ostrum, MD; Catherine A. Humphrey, MD; Robert Paul Dunbar, MD; William M. Ricci, MD; Laura Phieffer, MD; David C. Teague MD; Henry Claude Sagi, MD; Andrew N. Pollak, MD; Andrew H. Schmidt, MD; Stephen A. Sems, MD; Hans-Christoph Pape, MD; Saam Morshed, MD; Edward Perez, MD	Locked Plating versus Nailing for Proximal Tibia Fractures: A Multicenter RCT Paul Tornetta III, MD; Kenneth A. Egol MD; Clifford B. Jones, MD, FACS; Robert F. Ostrum, MD; Catherine A. Humphrey, MD; Robert Paul Dunbar, MD; William M. Ricci, MD; Laura Phieffer, MD; David C. Teague MD; Henry Claude Sagi, MD; Andrew N. Pollak, MD;	4:28 PM	PAPER 70 Does Negative Pressure Wound Therapy Reduce the Odds of Infection and Lower Health Related Quality of Life in Open Fracture Patients? Yousif Atwan, MD; Emil H. Schemitsch, MD; Sheila Sprague, PhD; Sofia Bzovsky; Kyle James Jeray, MD; Brad Petrisor, MD; Mohit Bhandari, MD, FRCSC, PhD; FLOW Investigators	
	4:34 PM	PAPER 71 Impact of Fascia Iliaca Block on Pain Outcomes and Opioid Consumption for Hip Fracture Patients – A Prospective,		
4:00 PM 4:05 PM	Discussion PAPER 67 Early Motion and Directed Exercise (EMADE) versus Usual-care, Post Ankle Fracture		Randomized Study Spencer Schulte, MD; Mai P. Nguyen, MD; Michael Reich, MD; Adam Adler, MD; Richard Van Tienderen, DO; Isaac Fernandez, MD	
Fixation: A Pragmatic Randomis Controlled Trial Paul A. Matthews, MA, MSc; Jessica Nightingale, BS; Tim Cou	Fixation: A Pragmatic Randomised	4:40 PM	Discussion	
		4:45 PM– 5:15 PM	PRESIDENT'S MESSAGE David C. Teague, MD	
4:11 PM	PAPER 68	5:15 PM– 6:15 PM	Business Meeting (Members Only)	
	Intravenous Ibuprofen Reduces Opioid Consumption in Acute Pain Management for Orthopaedic Trauma Patients Russell Weisz MD; Alexander Fokin MD, PhD; Amy Flynt PhD; Ines Macias-Perez PhD; Leo Pavliv RPH; Maggie Crawford; Ivan Puente	5:15 PM– 6:15 PM	HAPPY HOUR – EXHIBITOR RECEPTION (Mile High)	
		6:20 PM– 8:20 PM	WELCOME RECEPTION ELLIE CAULKINS OPERA HOUSE Join your colleagues for cocktails and hors	
4:17 PM	PAPER 69 A Prospective Clinical Trial Comparing Operative Versus Nonoperative Fixation of Minimally Displaced Lateral Compression Pelvic Fractures Gerard Slobogean, MD; Greg E. Gaski, MD; Jason Warren Nascone, MD; Marcus F. Sciadini, MD; Roman Natoli, MD; Theodore Thomas Manson, MD; Christopher T. LeBrun, MD; Todd Owen McKinley, MD;		d'oeuvres at the Ellie Caulkins Opera House.	

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4:23 PM Discussion

SEPTEMBER 25 - 28, 2019 ■ DENVER, COLORADO

PRELIMINARY **PROGRAM**

Friday, 9.27.19

Friday, September 27, 2019

6:30 AM-7:30 AM

CONCURRENT BREAKOUT SESSIONS Managing Complex Humeral Fractures: From Proximal to Distal (103/105)

Moderator: Andrew Choo, MD Faculty: Timothy S. Achor, MD Eben A. Carroll, MD Michael J. Gardner, MD

Learning Objectives

- Present unique and difficult fracture patterns and problems seen by the orthopaedic traumatologist.
- Discuss treatment options and algorithms for these difficult fractures.
- Identify challenges posed by poor bone stock, bone loss, infections, nonunions, and periprosthetic fractures.

Description

This course will present case-based discussions on the management of difficult problems in humeral fractures. Proximal, diaphysial, and distal humerus fractures will be examined with special attention to unique fracture problems including fracture-dislocations, ballistic injuries, segmental fractures, osteoporotic fractures, periprosthetic fractures, bone loss, and nonunions/malunions.

Current Strategies and Techniques for Operative Fixation of Complex Ankle Fractures and Fractures of the Tibial **Plafond** (201/203)

Moderator: Frank Liporace, MD Faculty: Richard Yoon, MD Mark Gage, MD Marcus Sciadini, MD Michael Maceroli, MD

Learning Objectives

- Getting the diagnosis right --- don't miss a higher level injury, not every ankle fracture is a bi- or trimalleolar ankle fracture!
- Deciding, how and when, to use approaches (anterior/posterior) and current update on the latest fixation strategies (i.e. minifragment, intramedullary nails for fibula/tibia).
- Salvage (fusions, frames, amputations) --when to say enough is enough!

Description

The goal of this breakout session is to provide operative management strategies to avoid complications and achieve desired outcomes. Presentations will be case-based and include everything from the simple to complex fractures. Strategies will focus on the latest decision-making and fixation options to maximize outcomes. Planning and fixation execution - this casebased breakout will provide the necessary education in this important trauma topic

Challenging Issues in Bicondylar Tibia **Plateau Fractures** (205/207)

Moderator: William T. Obremskey, MD Faculty: Clay A. Spitler, MD Matthew L. Graves, MD Chad Matthew Corrigan, MD

Learning Objectives

essential to OTA attendees.

- Understand techniques and philosophy to avoid complications
- Review techniques for reducing difficult medial and laterally based fractures
- Know associated injuries and understand indications for locking fixation

Description

Medially and laterally based fractures as well as techniques for reduction and support of these fractures will be reviewed. We will review current philosophy and techniques to minimize complications

The Soft Tissue Envelope: No Chance for Returns

(605/607)

Moderator: Lisa Cannada, MD Faculty: Michael T. Archdeacon, MD Kenneth A. Egol, MD James R. Ficke, MD

Learning Objectives

- Discuss advantages and indications for rotation flaps
- List at least 3 tips for management of difficult soft tissue wounds
- Describe advances made with soft tissue management strategies

Description

There may be significant morbidities regarding the initial management of the soft tissue envelope. This symposium will address management strategies for significant soft tissue injury.

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PRELIMINARY PROGRAM

Friday, 9.27.19

6:30 AM-7:30 AM

CONCURRENT BREAKOUTS (CONT'D)

Pelvic and Acetabulum

Fractures (Four Seasons)

Moderator: Paul Tornetta III, MD
Faculty: Henry Claude Sagi, MD
Cory Alan Collinge, MD
Hassan Riaz Mir, MD
Michael S. Kain, MD
Stephen A. Kottmeier, MD

Learning Objectives

- To understand indications for surgery of pelvic and acetabular fractures
- To be exposed to multiple fixation and reduction tactics
- To understand the controversies in the management of pelvic and acetabular fractures

Description

This is a case based review of controversial and complex pelvic and acetabulum fractures. It will focus on the indications for surgery as well as intra-operative reduction and fixation tactics.

Description

The mortality rate of a pelvic ring injuries presenting with hemodynamic instability is upwards of 30%. Timely and appropriate multi-disciplinary management by the trauma surgeon, orthopedic surgeon, and interventional radiologist can prevent death by exsanguination

Presentations

Acute Pelvis Stabilization
David Hak, MD

Pelvic Angiography and Embolization Sam McMurry, MD

Aortic Balloon Occlusion (REBOA) and Pelvic Packing: Indications, How It's Done, Complications, and How to Initiate in your Hospital

Ernest Moore, MD

Definitive Management and Outcomes
Joshua Parry, MD

9:00 AM-9:30 AM Breakfast/Break

7:30 AM-9:00 AM

SYMPOSIUM II (Four Seasons)

A Multidisciplinary Approach to Hemodynamically Unstable Pelvis Ring Injuries

Moderator: Cyril Mauffrey, MD
Faculty: David Hak, MD
Sam McMurry, MD
Ernest Moore, MD
Joshua Parry, MD

Learning Objectives

- How to acutely manage the hemodynamically unstable pelvis ring injury
- How to identify patients who would benefit from emergent external fixation, aortic ballon occlusion, preperitoneal pelvic packing, and angiographic embolization
- How to identify and treat subsequent complications of acute management of hemodynamically unstable pelvis ring injuries



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9:30 AM- 11:10 AM 9:30 AM	PAPER SESSION II Tibia and Knee/Tibial Plateau Moderators: Stephen A. Kottmeier, MD J. Tracy Watson, MD PAPER 72 Management of Traumatic Bone Defects	9:53 AM	PAPER 75 Evaluating the Efficacy of Topical Vancomycin Powder in the Treatment of Open Lower-Extremity Fractures Justin Vaida, MD; Daniel A. Bravin, MD; Michelle Bramer, MD
	in Tibial Plateau Fractures with Antibiotic- Impregnated Biodegradable Calcium Sulfate Beads: A Prospective Clinical Trial Ross K. Leighton, MD; Michael Edgar Forsythe, MD; George Yves Laflamme, MD; Andrew Furey, MD; Prism Schneider, MD, PhD, FRCSC	9:59 AM	PAPER 76 Does Topical Vancomycin Powder Use in Fracture Surgery Change Bacteriology and Antibiotic Susceptibilities? An Analysis of the VANCO Trial Robert V. O'Toole, MD; Manjari Joshi; Anthony R. Carlini, MS; Joshua Layne Gary, MD;
9:36 AM	PAPER 73 Bicondylar Plateau Fractures: What Predicts Infection Paul Tornetta III, MD; Nathan P. Olszewski, MD; Givenchy W. Manzano, MD; Eleanor Wilson; Joshua Namm, MD; Anna Noel Miller, MD; Daniela Barreto Rocha, MD; Daniel Scott Horwitz, MD; Amanda Pawlak, MD; Stephen Kottmeier, MD; Joshua Shapiro, MD;		William T. Obremskey, MD, MPH; Clinton Kenneth Murray, MD; Greg E. Gaski, MD; J. Spence Reid, MD; Yasmin Degani, MPH; Tara J. Taylor, MPH; Susan Catherine Jane Collins, MSc; Yanjie Huang; Daniel Oscar Scharfstein; Renan C. Castillo MD; METRC Vanco Investigators
Stephen Kottmeier, MD; Joshua Shapiro, MD; Lincoln Praston, MD; Brian Mullis, MD; Konstantin Gruenwald, BA; Andres F. Rodriguez-Buitrago, MD; Joshua Layne Gary, MD; Adam Joseph Miller, MD; Laura Phieffer, MD; Elizabeth Sheridan, MPH; Katherine Li, MD; Madhav A. Karunakar, MD; Darin M. Friess, MD; David Jenkins, BA; Ross K. Leighton, MD;	10:05 AM	PAPER 77 Infection Rates in Open Tibia Fractures with the Use of Intraoperative Topical Vancomycin/Tobramycin Powder Mark Alan Prevost, MD; William Cutchen; Patrick Graham Young, BS; Patrick Stahel Barousse, MD; Jeffrey Brewer, MD	
	Juan Sebastian Vargas-Hernandez, MD; Brandon J. Yuan, MD; Benjamin Ollivere, FRCS (Ortho), MD, MBBS, MA; Yulanda Myint, FRCS (Ortho), MSc; Patrik Suwak, DO; Sagar Amit Shah, MD; Donald Paul Willier, BS; Andrew J. Marcantonio, DO	10:11 AM 10:16 AM	Discussion
			PAPER 78 Improved Healing of Severe Open Long Bone Fractures Treated with Antibiotic -Formulated Bone Graft During the First Surgical Intervention Post-Injury
9:42 AM	PAPER 74 Better Fracture Reduction in Patients		Doron Norman, MD; Moshe Salai, MD; Noam Emanuel, PhD
Undergoing Early Definitive Fixation for Tibial Plateau Fractures with Acute Compartment Syndrome Ilexa Rae Flagstad, BS; Tony Pedri, MD; Sarah Catherine Peck, BS; Jerald Westberg, BA; Harsh Rajesh Parikh; Andrew H. Schmidt, MD; Brian Cunningham, MD	10:22 AM	PAPER 79 Post-Operative Cortical Continuity as a Predictor for Nonunion in Open Tibia Fractures Amy Ford, MD; Madeline Lyons, MD; Elizabeth Harkin, MD; Hobie D. Summers, MD; Garin Hecht, MD; William Dean Lack, MD; Joseph Royman Cohen, MD.	

Discussion

9:48 AM

Joseph Bowman Cohen, MD

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Friday, 9.27.19

10:28 AM PAPER 80

The Influence of Sagittal Proximal Tibial Anatomy in Tibial Intramedullary Nailing David Cinats, MD; Trevor Stone, MD;

Darius Viskontas, MD

10:34 AM Discussion

10:39 AM PAPER 81

Evaluation of the Orthopaedic Trauma Association Open Fracture Classification (OTA-OFC) as a Predictive Tool in Open

Tibial Shaft Fractures

Matthew Robert Garner, MD; Stephen James Warner, MD, PhD; Jacob Anthony Heiner, BS; Yesul Tina Kim, BS; Julie Agel, ATC

10:45 AM PAPER 82

Orthoplastic Reconstruction of Grade IIIB Open Tibial Fractures Using Devitalized Cortical Segments: The Bristol Experience 2014-2018

Khalid Al-Hourani, MD; Michael Thomas Stoddart, MBBS; Umraz Khan; Andrew Riddick, MBBS, FRCS (Ortho);

Michael Kelly, MBBS, MD, FRCS (Ortho)

10:51 AM PAPER 83

Perfusion Pressure Lacks Diagnostic Specificity for the Diagnosis of Acute Compartment Syndrome

Andrew H. Schmidt, MD; Junrui Di; Vadim Zipunnikov; Katherine Frey, MPH, PhD, RN; Daniel Oscar Scharfstein; Robert V. O'Toole, MD; Michael J. Bosse, MD; William T. Obremskey, MD, MPH; Daniel J. Stinner, MD; COL (ret) Roman A. Hayda, MD; Madhav A. Karunakar, MD; David J. Hak, MD; Eben A. Carroll, MD; Susan Catherine Jane Collins, MSc; Ellen MacKenzie, PhD 10:57 AM PAPER 84

Posterolateral Plating Is a Safe Alternative for the Treatment of Distal Tibia Fractures Michael Schloss, BA; Zachary Hannan, BS; Jared Atchison, BS; Syed Muhammad Raza Zaidi, BA; Alexandra Bryn Mulliken; Nathan N. O'Hara; Jason Warren Nascone, MD;

Robert V. O'Toole, MD; Theodore Thomas Manson, MD

11:03 AM Discussion



10:00 AM-11:00 AM CONCURRENT BREAKOUT SESSIONS
Maximizing Outcomes in Tibial Pilon
Fractures (103/105)

Moderator: Clay A. Spitler, MD
Faculty: Matthew L. Graves, MD
Brett D. Crist, MD
J. Tracy Watson, MD

Learning Objectives

- Understand fracture patterns and reduction techniques in order to maximize visualization and construct stability
- Understand soft tissue injuries including open fractures and fracture blisters and identify techniques to avoid complications
- Review pertinent approaches and understand how the sequence of approach and reduction can affect the final outcome

Description

Complex tibial pilon fractures are among the most challenging fractures treated by orthopaedic surgeons. Bony and soft tissue injury patterns will be reviewed with emphasis on open fracture management, reduction/fixation sequence selection, and salvage options for the severe open fracture. We will review current literature and techniques to maximize outcomes while avoiding complications.

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Friday, 9.27.19

10:00 AM-11:00 AM

CONCURRENT BREAKOUTS (CONT'D) **Compartment Syndrome:**

The Issues and Solutions You Need to **Know About in 2019!** (201/203)

Moderator: Emil H. Schemitsch, MD Faculty: David Sanders, MD Michael J. Gardner, MD Michael T. Archdeacon, MD William T. Obremskey, MD Abdel-Rahman Lawendy, MD Michael D. McKee, MD

Learning Objectives

- To achieve consensus around standard definitions of compartment syndrome.
- To achieve consensus regarding best evidence for management of compartment syndrome
- To improve understanding of new technologies for diagnosis, treatment and prevention of compartment syndrome.

Description

A primary goal of the symposium will be to achieve consensus opinions on many current issues and controversies regarding the treatment of this problem.

From Sling to Reverse: All Things Proximal Humerus --- When, How and **Gettina it Riaht** (205/207)

Moderator: Richard S. Yoon, MD Faculty: Gregory J. Della Rocca, MD Joshua Langford, MD Mark Gage, MD

Learning Objectives

- Provide the latest literature on work-up, indications and those who do best WITHOUT surgery (but also preparing yourself for operative success)
- Offering a systemic method to approaching both humeral nailing and plating, and achieving efficient success in both
- When and how --- the reverse total shoulder, something even a traumatologist can do!

Description

Goal of this breakout session is to offer a comprehensive, case-based (literature supported) update on treatment. Topics will review non-operative management/data along with reviewing tips, tricks and strategies in both nailing, plating and arthroplasty for the proximal humerus.

Long Bone Nonunion Treatments: A Case-based Discussion (605/607)

Moderator: Stephen James Warner, MD Faculty: Timothy S. Achor, MD Mark A. Lee, MD Mark R. Brinker, MD

Learning Objectives

- To learn reliable algorithms for effective clinical management of patients with diaphyseal nonunions, including medical management, preoperative evaluation, and surgical decision-making
- To learn appropriate operative techniques for treatment of long bone nonunions, including dynamization, exchange nailing, augmentative plating, cell-based therapy, and external fixation
- To learn evolving treatment options for more complex diaphyseal nonunion scenarios, including the presence of infection and segmental bone loss

Description

Through case-based, interactive discussions with leaders in the field of nonunion treatment, attendees will be engaged in learning how to treat patients with long bone nonunions. The cases presented will highlight surgical decision-making, operative techniques, and specific problem scenarios such as infections and bone loss. Each faculty member will bring significant experiences and unique perspectives within the field of nonunion treatment to provide comprehensive discussions on the topic.

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PRELIMINARY **PROGRAM**

Friday, 9.27.19

11:10 AM-11:40 AM

GUEST NATION PRESENTATION

2019 Guest Nation - Argentina

Jorge D. Barla, MD Fernando M. Bidolegui, MD

Cesar Pesciallo, MD

It is a great honor to welcome the members

of the Argentina Trauma Society.

The Guest Nation program was initiated in 2011 in recognition of the importance and benefits of sharing

knowledge and experience with international colleagues.

1:16 PM

Evaluation of Efficacy of Three-Dimensional

11:40 AM-12:10 PM

JOHN BORDER LECTURE

'What Matters' Milton L. Routt, MD

Professor, Orthopedic Surgery McGovern Medical School, University of Texas Health

Science Center, Houston, TX

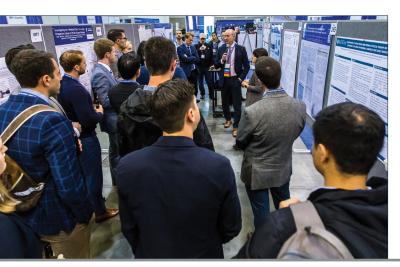
12:10 PM-1:10 PM

Lunch

12:25 PM-1:05 PM

Lunch Poster & Video Tours

Upper Extremity – Andrew Choo, MD General Interest – Conor P. Kleweno, MD



1:10 PM-PAPER SESSION III

Pelvis and Acetabulum and Polytrauma

Moderator: David J. Hak, MD

PAPER 85 1:10 PM

2:36 PM

Simultaneous Fracture Fixation and Total Hip Arthroplasty for Osteoporotic

Acetabular Fractures in the Elderly

Daud Chou, FRCS (Ortho); Ross Coomber, FRCS (Ortho); Thomas Baigent, MBChB; Joseph Martin Queally, MD;

Peter Hull, FRCS (Ortho), MBCHB;

Andrew Douglas Carrothers, FRCS (Ortho), MD;

Ronan O'Leary, MD

PAPER 86

Printing Patient-Specific Plates in Treating Acetabular Fractures Involving Disruption

of the Quadrilateral Plate

Shicai Fan, MD; Canbin Wang; Yuhui Chen;

Han Liu

1:22 PM PAPER 87

Retrograde Trans-pubic Screw

Osteosynthesis - Retrospective Analysis

of 158 Fractures

Daniel Wagner, MD; Marcus Erich Graafen; Alex Hofmann, MD; Pol Maria Rommens, MD

1:28 PM Discussion

1:33 PM PAPER 88

> **Outcomes of Single-Stage Versus 2-Stage** Bilateral Intramedullary Nail Fixation in Patients With Bilateral Femur Fractures

Ilexa Rae Flagstad, BS;

Lauren MacCormick Tatman, MD;

Melissa White, BA; Austin Heare, MD; Harsh Rajesh Parikh; Jerald Westberg, BA; Tegan Schmidt, BA, BS; Natasha Simske, BS;

Alexander Siy, BS; Reuben C. Lufrano, MD;

Andres F. Rodriguez-Buitrago, MD;

Joseph T. Labrum IV, MD; Nichole Shaw, MD; Jason Nadeau, MS; Erik A. Lund, MD;

Patrick Taylor Davis, BS; Daniel Connelly, BS; Jared Atchison, BS; Cyril Mauffrey, MD, MRCS;

David J. Hak, MD; Jesse Hahn, MD;

Paul S. Whiting, MD;

Hassan Riaz Mir, MD, MBA, FACS;

Andrew H. Schmidt, MD; Emily Wagstrom, MD;

William T. Obremskey, MD, MPH;

Robert V. O'Toole, MD; Heather A. Vallier, MD;

Brian Cunningham, MD

SEPTEMBER 25 - 28, 2019 ■ DENVER, COLORADO

PRELIMINARY **PROGRAM**

Friday, 9.27.19



1:39 PM PAPER 89

> Factors Influencing Management of Bilateral Femur Fractures: A Multicenter Retrospective Cohort of Early vs Delayed **Definitive Fixation**

Ilexa Rae Flagstad, BS;

Lauren MacCormick, MD; Melissa White, BA; Austin Heare, MD; Harsh Rajesh Parikh; Jerald Westberg, BA; Tegan Schmidt, BA, BS; Natasha Simske, BS; Alexander Siy, BS; Reuben C. Lufrano, MD; Nichole Shaw, MD; Jason Nadeau, MS; Patrick Taylor Davis, BS; Daniel Connelly, BS; Jared Atchison, BS; Andres F. Rodriguez-Buitrago, MD; Joseph T. Labrum, IV MD; Erik A. Lund, MD; Cyril Mauffrey, MD, MRCS; David J. Hak, MD; Paul S. Whiting, MD; Hassan Riaz Mir, MD, MBA, FACS; Andrew H. Schmidt, MD; Emily Wagstrom, MD; William T. Obremskey MD, MPH; Robert V. O'Toole, MD; Heather A. Vallier, MD; Brian Cunningham, MD

PAPER 90 1:45 PM

> An Analysis of Bilateral Femoral Shaft Fracture Outcomes Using a Retrospective Cohort from the NTDB

Christopher Thomas Cosgrove, MD; Philip R. Wolinsky, MD; Marschall B. Berkes, MD; Christopher McAndrew, MD; Anna Noel Miller, MD

Discussion 1:51 PM

1:56 PM PAPER 91

> Does Intramedullary Nail Fixation of the Tibia Pose the Same Risk of Pulmonary Complications as It Does in the Femur? A Propensity Score-Weighted Analysis of 1541 Fractures

Benjamin Matthew Wheatley, MD; Max Coale, BA; Nathan N. O'Hara; Robert V. O'Toole, MD

2:02 PM PAPER 92

> The Effect of Time to Irrigation on the Rate of Reoperation in Open-Fractures: A Propensity Score-based Analysis of the Fluid Lavage of Open Wounds (FLOW) Study

Herman Johal, MD; Daniel Axelrod, MD; Sheila Sprague, PhD; Brad Petrisor, MD; Sofia Bzovsky;

Mohit Bhandari, MD, FRCSC, PhD

2:08 PM PAPER 93

> **Predicting Mortality After Trauma Using Electronic Medical Record Data:** A Retrospective Analysis at a Level-I Trauma Center

Ryan W. Fairchild, MD; Hayden N. Box, MD; John David Watkins, MS; Arun Nethi; Dustin B. Rinehart, MD; Michael Cripps, MD; Manjula Julka, MBA, MD;

Adam Jennings Starr, MD

2:14 PM Discussion

2:19 PM PAPER 94

> **Posterior Sternoclavicular Dislocation:** Do We Need "Cardiothoracic Backup"?

Insights from a National Sample

Dana Angell Leonard, BA; Nicole Alexandria Segovia, BS;

Japsimran Kaur, BS; Julius A. Bishop, MD;

John Vorhies, MD

2:25 PM PAPER 95

> The Rate of Mediastinal and Vascular Injury Following Acute Posterior Sternoclavicular **Dislocation: A Multicenter Study**

Matthew Newland Fournier, MD; Mark R. Sinclair, MD; Evan Zheng, BA; David Andrew Spiegel, MD;

Anna Johnson, MD; Apurva Shah, MD, MBA; Anthony Ian Riccio, MD; Marilyn Elliott;

Donald S. Bae, MD; Jeffrey R. Sawyer, MD

2:31 PM Discussion

SEPTEMBER 25 - 28, 2019 ■ DENVER, COLORADO

PRELIMINARY PROGRAM

Friday, 9.27.19

1:30 PM-2:30 PM **CONCURRENT BREAKOUT SESSIONS**

The Femur Nonunion: Tips and Techniques on Successful Union from

Proximal to Distal (103/105)

Moderator: Harmeeth Singh Uppal, MD Faculty: David Barei, MD

Frank A. Liporace, MD John Alan Scolaro, MD

Learning Objectives

- The registrant will learn appropriate surgical planning, tips, strategies and techniques for successful salvage of complex proximal femur nonunions.
- The registrant will learn tips for successful management of complex femur nonunions including when to use plate and/or nailing techniques.
- The registrant will learn tips and various surgical strategies for successful management of distal femur nonunions.

Description

This symposium will highlight cases that specifically focus on how to successfully manage femur nounions, from the proximal to distal end. Focus will be on preoperative planning and learning proven techniques to get these difficult fractures to unite.

Controversies in Foot Fractures – The Great Debates (201/203)

Moderator: Benjamin Ollivere
Faculty: Paul Tornetta III, MD
Richard E. Buckley, MD
Roy W. Sanders, MD
Joshua Langford, MD
Heather A. Vallier, MD

Learning Objectives

- Management strategies for complex foot fractures
- Understand different approaches to calcaneal fractures and the current controversies.
- Understand how to optimise outcomes in complex midfoot and forefoot fractures.

Description

Issues addressed include a debate on how, when and if to fix calcaneal fractures. Surgical timing and controversies in the talus, tips and tricks for fixation of the forefoot and how to decide when to fuse the lisfranc joint.

Addressing the Challenges of Practice: Creating Efficiency Despite Overwhelm (205/207)

Moderator: **Jeffrey Mark Smith, MD**Faculty: **Thomas Christopher Fishler, MD**

Michael Brodkin, PA-C
Bruce Ziran MD, FACS
Steven J. Morgan, MD
Timothy James Bray, MD
Peter L. Althausen, MD
Todd Allen Swenning, MD
Ryan Edward Will, MD
Katy Yegorova, BA
Daniel John Coll, PA-C

Learning Objectives

- Identify strategies that address the EMR and practice overwhelm that many of us are experiencing.
- Learn practical tips for using scribes, advanced practice providers and more to create efficiencies in practice.
- Apply coaching and mentoring principles in colleague and patient interactions that produce improved patient outcomes and provider experience.

Description

No matter how well each of us is adjusting to healthcare changes, it has key ingredients that drive burnout. What can surgeons do to address the overwhelm? How do we keep it simple? Practical tips will include: what and how to delegate; what and how to outsource; and what and how to just make progress ourselves in decreasing the overwhelm and increasing our career satisfaction. This session will address the in's and out's of managing the EMR, using scribes, incorporating Advanced Practice Providers. We've been there, we've done it - don't reinvent the wheel... or repeat our mistakes! Our format will address education from the podium and faculty mentors at each table with participants. Our format will emphasize learning and performance improvement of the surgeon's existing skills and the surgeon's power to make incremental changes to their practice.

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PRELIMINARY PROGRAM

Friday, 9.27.19

1:30 PM- 2:30 PM	•	3:18 PM	PAPER 98 OTA Humanitarian Scholar SIGN Intramedullary Nailing Improves Early Postoperative Quality of Life and Function as Compared to Skeletal Traction for Management of Femoral Shaft Fractures in Malawi Linda Chokotho; Hao-Hua Wu, MD; Syed H. Ali; Patrick Albright, BS, MS; David Shearer MD; Brian Lau, MD
	 Perioperative evaluation and management of obese orthopaedic trauma patients 	3:24 PM	Discussion
	 that are unique. Tips and trick for positioning obese patients and wound management in orthopaedic trauma. Tips and tricks for intraoperative management of obese trauma patients including surgical exposure and reduction techniques, and fixation adjuncts to improve the likelihood of success. Description Obese trauma patients create significant 	3:29 PM	PAPER 99 Improving the Diagnosis of Ipsilateral Femoral Neck and Shaft Fractures: A New Imaging Protocol Nathan Brian Rogers, MD; Braden Edward Hartline, MD; Manickam Kumaravel, MD, FRCS; Timothy S. Achor, MD; Joshua Layne Gary, MD; Andrew Moon Choo, MD; Milton L. Routt, MD; John Wesley Munz, MD; Stephen James Warner, MD, PhD
2:36 PM	management issues. Participants will gain specific perioperative, and intraoperative knowledge to increase the likelihood of success in this challenging patient population. Case discussion will be included. Break	3:35 PM	PAPER 100 The Effect of Intramedullary Nail Entry Point on Postoperative Femoral Shaft Fracture Alignment Michael Wesley Honeycutt, MD; Kyle Cox, MD; William Tanner Cox, BS; Gregg Delgado, DO; Jeffrey Brewer, MD
3:06 PM-	PAPER SESSION IV	3:41 PM	PAPER 101
4:15 PM 3:06 PM	Hip/Femur Moderator: Brett D. Crist, MD PAPER 96 Cerclage Wire Adjunct in Traumatic Femoral Fracture: A Comparison of Union, Complication and Reoperation Lance Glen Jacobson, MD; Kathy J. Flint;	3.411W	Radiostereometric Analysis of Inducible Micromotion After Locked Lateral Plating of Distal Femur Fractures Vincent Galea, BA; Mina A. Botros, BS; Michael McTague, MPH; Michael John Weaver, MD; Mark S. Vrahas, MD; Henrik Malchau, MD; Charles R. Bragdon PhD; Marilyn Heng, FRCSC, MD
	Ryan Beeker; Shreya Sanjay Veera, BS;	3:47 PM	Discussion
	Michael K. Savaglio, MS; Timothy G. Weber, MD	3:52 PM	PAPER 102
3:12 PM	PAPER 97 Subtrochanteric Fractures: Does Open Reduction Increase the Risk of Infection and Fracture Healing Complications? Michalis Panteli, MD; James Vun;		Optimal Configuration of Internal Fixation Implants During Operative Management of Hip Fractures Michael Blankstein, MD, FRCSC; Patrick Christopher Schottel, MD; Sheila Sprague, PhD; Sofia Bzovsky;

Ippokrates Pountos, MD;

Robert Michael West, MSc;

Peter Giannoudis, BS, FACS, FRCS, MBBS, MD

Sheila Sprague, PhD; Sofia Bzovsky;

Mohit Bhandari, MD, FRCSC, PhD;

Emil H. Schemitsch, MD; FAITH Investigators

Marc F. Swiontkowski, MD;

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PRELIMINARY PROGRAM

Friday-Saturday, 9.27-28.19



PAPER 103

3:58 PM

XX: A Pilot Feasibility, 2x2 Factorial Randomized Control Trial Comparing the Sliding Hip Screw versus Cancellous Screws AND Vitamin D3 versus Placebo for the Treatment of Young Femoral Neck Fractures

FAITH-2 Trial Investigators

4:04 PM PAPER 104

Intramedullary versus Extra Medullary Fixation for Basicervical Femoral Fractures: Which is Better?

Wu Chean Lee, MBCHB; Ping Yen Yeo; Ernest Kwek, MBBS, FRCS (Ortho)

4:15 PM Discussion

4:15 PM- **DEBATES**

5:15 PM

Join past presidents of the OTA for two debates. The audience will vote live on who won each debate and the loser of the debate will donate \$500 to the OTA Research and Education Fund.

1st Debate

ORIF Calcaneus – Extensile Approach – Roy W. Sanders, MD ORIF Calcaneus – Sinus Tarsi – Paul Tornetta III. MD

2nd Debate

Critical Bone Defect Management: Masquelet – William M. Ricci, MD Critical Bone Defect Management: Bone Transport – J. Tracy Watson, MD

5:20 PM6:05 PM
Suds N'Science Poster & Video Tours
International – Peter Giannoudis, MD
Foot and Ankle – Paul Tornetta III, MD

Saturday, September 28, 2019

6:30 AM-7:30 AM CONCURRENT BREAKOUT SESSIONS
Challenges in Non-union Treatment A Case-Based Symposium (103/105)

Moderator: Paul S. Whiting, MD
Faculty: J. Spence Reid, MD
Gerald J. Lang, MD
David Goodspeed, MD

Learning Objectives

- Understand the biological and mechanical principles of fracture healing.
- Develop a systematic approach to non-union workup and pre-operative planning
- Understand treatment principles and techniques for non-unions

Description

After a brief review of bone-healing and non-union workup/pre-op planning, faculty will use a case-based approach to illustrate principles and techniques of non-union treatment. Interactive dialogue with participants during the case presentations will be emphasized.

The Traumatized Midfoot: Tips and Techniques for Successful Reconstruction (201/203)

Moderator: Harmeeth Singh Uppal, MD
Faculty: John Wesley Munz, MD
Stephen K. Benirschke, MD
Gregory J. Della Rocca, MD

Learning Objectives

- The registrant will learn surgical strategies and tips for successful midfoot reconstruction. Additional coverage will be on advantages/disadvantages of ORIF vs primary fusion.
- The registrant will learn successful surgical strategies and techniques for fixation of navicular and cuboid fractures often found in association with high energy foot trauma.
- The registrant will learn how to successfully plan and learn strategies to salvage failed fixation and manage post-traumatic complications.

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PRELIMINARY **PROGRAM**

Saturday, 9.28.19

6:30 AM-7:30 AM

CONCURRENT BREAKOUTS (CONT'D) The Traumatized Midfoot (cont'd) Description

This symposium will detail successful strategies for fixation of high energy complex midfoot injuries including associated navicular and cuboid fractures. Through case based discussion, the registrant will further their knowledge on preoperative planning and learning proven tips and techniques for successful reconstruction. Attention will be given for management and salvage of failed fixation and other postoperative complications.

Plateaus and Pilons: The Posterior Perspective (ver. 2) (205/207)

Moderator: Stephen A. Kottmeier, MD Faculty: Paul Tornetta III, MD J. Tracy Watson, MD Clifford B. Jones, MD

Learning Objectives

- Familiarize registrants with contemporary surgical exposure strategies and regional anatomy of the posterior plateau and pilon as well as access attributes and liabilities
- Acquaint registrants with evolving and contemporary fracture classification schemes of the pilon and plateau and discuss the impact of axial assessment with regard to approach selection and operative fixation
- Discuss combined anterior and posterior strategies towards successful pilon and plateau fixation; "staged" and simultaneous

Description

Managing complex articular fractures of the proximal distal tibia can be complicated by soft tissue exposure and implant inadequacies. Properly indicated and executed posterior access and fixation strategies may serve to resolve these concerns. Seven years ago at the OTA annual meeting (2011- Minneapolis) the same four faculty described these evolving trends. Since that time several of these tactics have been further clinically validated (1,2) and others challenged (3,4). This symposium will emphasize contemporary indications and limitations of these still evolving techniques. 1-Row ER, Komatsu DE, Watson JT, Jones C, Kottmeier S. Staged Prone/Supine Fixation of High-Energy Multicolumnar Tibial

Plateau Fractures: A Multicenter Analysis. J Orthop Trauma. 2018 Apr;32(4):e117-e122. 2-Kottmeier SA, Watson JT, Row E, Jones CB. Staged Fixation of Tibial Plateau Fractures: Strategies for the Posterior Approach. J Knee Surg. 2016 Jan;29(1):2-11. 3-Chan DS, Balthrop PM, White B, Glassman D, Sanders RW. Does a Staged Posterior Approach Have a Negative Effect on OTA 43C Fracture Outcomes? J Orthop Trauma. 2017 Feb;31(2):90-94. 4-Pierrie SN, Harmer LS, Karunakar MA, Angerame MR, Andrews EB, Sample KM, Hsu JR. Limited Added Value of the Posterolateral Approach. J Knee Surg. 2016 Jan; 29(1):21-7.

Firearm Trauma:

A Necessary Discussion

(605/607)

Moderator: Todd Allen Swenning, MD Faculty: James R. Ficke, MD Alan L. Jones, MD

Bruce Ziran, MD William T. Obremskey, MD Ann Marie Warren, PhD

Learning Objectives

- Participants will gain understanding of the demographics of firearm violence, ballistics, and management of low and high velocity injuries.
- Participants will gain understandings of constitutional, federal, and state laws that influence the issues, including second amendment issues and the Dickey amendment.
- Participants will gain understanding of trauma center preparedness as it pertains to mass casualty/active shooter scenarios and the psychological and emotional ramifications of those involved from shooter to victim to health care provider.

Description

This 90 minute symposium will attempt to provide the attendee with insight into the clinical, societal and psychological aspects of firearm injuries from a neutral, provider centric perspective. Promoting awareness of the scope of the problem, while fostering purposeful, civil discussion is critical to curbing this epidemic. We will examine how this problem is being managed in the US and abroad, both successfully and non.

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PRELIMINARY PROGRAM

Saturday, 9.28.19

6:30 AM-7:30 AM **CONCURRENT BREAKOUTS (CONT'D)**

Controversies in Treatment of

Pelvic Ring Injuries (Four Seasons)

Moderator: Geoffrey Marecek, MD Faculty: John Alan Scolaro, MD Milton L. Routt, MD Joshua Layne Gary, MD Hassan Riaz Mir, MD

Learning Objectives

- Determine how and when should an examination under anesthesia be performed
- Identify optimal fixation strategies for the anterior and posterior pelvic ring
- Understand when fixation of the anterior or posterior ring alone may be sufficient, or when combined fixation is necessary.

Description

This breakout will be a case-based discussion highlighting controversies in the treatment of pelvic ring injuries.

7:30 AM-9:00 AM SYMPOSIUM III (Four Seasons)

Considerations for Limb Salvage v Amputation Following Severe Leg and Foot Trauma

Moderator: Michael Bosse, MD
Faculty: Clifford B. Jones, MD
Joseph R. Hsu, MD
Benjamin Kyle Potter, MD
Saam Morshed, MD

Learning Objectives

- To understand the on-going controversies related to the salvage or amputation of the severely injured leg or foot by focusing on the "feasibility v advisability" and "could we, should we" conundrum specific to each patient.
- To understand the absolute and relative indications for early amputation and the related EBM that can be used to educate the patient in a shared-decision making treatment selection approach and system coaching strategies to better inform the patient related to treatment outcomes.
- To understand existing and emerging strategies to maximize the outcome of the patient related to their selected treatment

to include the use of dynamic orthotics for the salvage patient and return to function therapy programs.

Description

The symposium will focus on current advances and strategies used in the selection of treatment for the patient with a severely injured leg or foot, emphasizing patient, injury and outcome expectations that drive the decision. It will focus on the development of a shared-decision making approach to each individual patient. The symposium will conclude with case presentations and panel debate over appropriate treatment.

Presentations

Limb Salavage v Amputation Following Severe Leg and Foot Trauma Michael Bosse, MD

Early Amputation -Absolute and Relative Indications Clifford B. Jones, MD

Optimizing Outcomes for the Limb Salvage Patient Joseph R. Hsu, MD

Shared Decision Making - Providing Current Data and Patient Education Related to Treatment Selection Benjamin Kyle Potter, MD

Current EBM Related to Amputation or Reconstruction Outcomes
Saam Morshed, MD

9:00 AM-9:30 AM Breakfast/Break

9:30 AM- PAPER SESSION V 10:32 AM General Interest

Moderator: Andrew M. Choo, MD

9:30 AM

PAPER 105

The Efficacy of Antibiotic Strategies Employed at the Time of Definitive Wound Closure/Coverage for Severe Lower

Extremity Injuries

Clinton Kenneth Murray, MD; Heather C. Yun, MD; Manjari Joshi;

Anthony R. Carlini, MS; Renan C. Castillo, MD;

Michael J. Bosse, MD;

METRC Bioburden Investigators

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PRELIMINARY **PROGRAM**

Saturday, 9.28.19



PAPER 106 9:36 AM

> Single Dose IV Antibiotic for Low Energy **Extremity Gunshot Wounds: A Prospective Quality Improvement Care Pathway**

Jonathan Carr Savakus, BS;

Mai P. Nguyen, MD; Natasha Simske, BS; Joseph F. Golob, MD; Amy Ann McDonald; John J. Como MD, MPH;

Heather A. Vallier, MD

PAPER 107 9:42 AM

> Readmissions are Not What They Seem: Incidence and Classification of 30-Day Readmissions Following Orthopedic Trauma Surgery

Erin Arlene Kelly, MD; Leah Gonzalez, BS; Lorraine Hutzler, MHA; Sanjit R. Konda, MD; Philipp Leucht, MD; Kenneth A. Egol, MD

PAPER 108 9:48 AM

> Do Patient Reported Outcomes Improve Following Elective Implant Removal? Laurence Kempton MD; Walter W. Virkus, MD; Krista M. Brown, MS; Todd O. McKinley, MD;

Greg E. Gaski, MD

9:54 AM Discussion

PAPER 109 10:01 AM

> An Analysis of Medicare Reimbursement Rates in Orthopaedic Trauma: 2000-2018

Jack Haglin, BS; Ariana Lott, MD;

David Neil Kugelman, MD;

Sanjit R. Konda, MD; Kenneth A. Egol, MD

10:07 AM **PAPER 110**

> Utilization of Multimodal, Narcotic Free, Pain Control Regimen Is Adequate for Patients with Femur and Tibial Shaft

Fractures

Kyle Jay Klahs, DO; Isaac Fernandez, MD; Michael Reich, MD; Mai P. Nguyen, MD

10:13 AM **PAPER 111**

> **Enhancing Trauma Patient Experience** Through Education and Engagement: Development of a Mobile Application

Benjamin Randolph Childs, BS;

Anna Marie Swetz: Brendan Andres. BA:

Mary Alice Breslin, BA; Sarah Hendrickson, MEd; Timothy A. Moore, MD; Vanessa P. Ho, MD, MPH; Heather A. Vallier, MD

10:19 AM **PAPER 112**

Can We Believe the Positive Results of

Paul Tornetta III, MD; Justin J. Koh, MD;

Jean Kang, MD

10:25 AM Discussion

9:30 AM-10:30 AM **CONCURRENT BREAKOUT SESSIONS** Management of Critical Bone Defects

(103/105)

Moderator: Geoffrey Marecek, MD Faculty: Milton Little, MD Stephen Kottmeier, MD Mitchell Bernstein, MD

Jaimo Ahn, MD

Learning Objectives

- Identify options for bone graft harvest.
- Describe pros and cons of various reconstructive techniques for large bone defects.
- Appreciate techniques to optimize results in the treatment of bone defects.

Description

Reconstruction after trauma or infection often requires managing critical-sized bone defects. Various techniques are available to the treating surgeon including bone grafting, the induced membrane technique, bone transport and free vascularized bone transfer. We will address strategies to optimize success with these techniques.

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PRELIMINARY PROGRAM

Saturday, 9.28.19

9:30 AM-10:30 AM **CONCURRENT BREAKOUTS (CONT'D)**

From Fixation to Revision in
Periprosthetic and Interprosthetic
Hip & Knee Fractures: When, How
and Getting it Right (201/203)

Moderator: Frank Liporace, MD
Faculty: Richard Yoon, MD
George Haidukewych, MD

Derek Donegan, MD Michael Maceroli, MD

Learning Objectives

- Take away strategies for identifying stable versus loose implants in the periprosthetic (PPFx) THA/TKA Fracture setting. Additionally --- what do I do with an interprosthetic fracture?
- Fixation strategies, tips and tricks and avoiding pitfalls for PPFx about the acetabulum, proximal and distal femur.
- When and how --- revision strategies for a loose cup, loose femoral stem/component with and without good bone stock.

Description

This breakout session will offer a case-based, interactive strategy and update on the fixation and revision of periprosthetic THA/ TKA fractures. Also, treatment of interprosthetic fractures will also be highlighted for participants.

The Treatment of Peri-prosthetic Fractures in 2019: Can We Reach a Consensus? (205/207)

Moderator: Emil Schemitsch, MD
Faculty: Aaron Nauth, MD
Adam Sassoon, MD
Andrew Schmidt, MD
Michael McKee, MD
Nirmal Tejwani, MD

Learning Objectives

- How to accurately classify peri-prosthetic fractures of the femur about a total hip arthroplasty (THA) using the Vancouver system, and the common pitfalls of classification.
- When and how to use allograft struts to augment peri-prosthetic fracture fixation.
- The advantages and disadvantages of locked plating versus intramedullary nailing for peri-prosthetic fractures about a total knee arthroplasty (TKA).

Description

A primary goal of the symposium will be to achieve consensus opinions on many current issues and controversies regarding the treatment of peri-prosthetic fractures.

Snakes in the Grass: Common Occupational Hazards

(605/607)

Moderator: Lisa Cannada, MD
Faculty: Hassan Mir, MD
Jeffrey Smith, MD
Eric Meinberg, MD

Learning Objectives

- Identify the importance of overall health and wellness on your practice.
- List signs of burnout and strategies to prevent.
- The audience will learn of the dangers of radiation exposure and discuss educational opportunities on this topic.

Description

This symposium will discuss occupational hazards in the workplace and strategies for improving the work environment. This can contribute to career satisfaction and longevity.

10:32 AM- PAPER SESSION VI

11:41 AM Geriatric

Moderators: Gerard P. Slobogean, MD

Ida Leah Gitajn, MD

10:32 AM PAPER 113

A Multi Center Randomized Trial Evaluating Liposomal Bupivacaine for Decrease of

Narcotic Use in Hip Fractures Paul Edward Matuszewski, MD; Arun Aneja, MD; Amna Diwan, MD;

Mark T. Kraus, MD;

Eric Scott Moghadamian, MD;

Judith Siegel, MD; Raymond D. Wright, MD;

Eric F. Swart, MD

10:38 AM PAPER 114

Pre-operative Nerve Blocks for Hip Fracture Patients: A Pilot Randomized Trial

Matthew Ramesh Menon, MD; Lauren Alison Beaupre, PhD;

Khalid Al-Maazmi, MD; Ban Tsui, MD

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Saturday, 9.28.19

10:44 AM **PAPER 115**

> Intravenous Iron May Improve Outcomes in Elderly Patients with Operative Hip

Fractures

Jamie Engel, MD; Joseph N. Gabra, PhD; Patrick Kane, MD; William Jason Kurtz, MD

10:50 AM Discussion

10:55 AM **PAPER 116**

> Pull the Foley: Improved Quality for **Geriatric Trauma Patients Without**

Indwelling Catheters Sanjit R. Konda, MD;

Joseph Robert Johnson, BS; Erin Arlene Kelly, BA, MS; Kenneth A. Egol, MD

11:01 AM **PAPER 117**

> Should Urinary Catheter be Retained Preoperatively in Osteosynthesis of Pertrochanteric Fractures? A Prospective

Randomized Clinical Trial Direk Tantigate, MD:

Thippatai Chaichompoo, MD; Yuwarat Monteerarat, MD;

Theerawoot Tharmviboonsri, MD;

Kongkhet Riansuwan, MD

11:07 AM **PAPER 118**

Thrombelastography Identifies

Hypercoagulability in Hip Fracture Patients

Despite Thromboprophylaxis Daniel You, MD; Robert Korley, MD;

Richard E. Buckley, MD; Paul James Duffy, MD;

Ryan Martin, MD; Tanja Harrison, MPH;

Andrea Soo; Prism Schneider, MD, PhD, FRCSC

11:13 AM Discussion

11:18 AM **PAPER 119**

> Can We Predict Failure of Percutaneous Fixation of Femoral Neck Fractures?

Christina Kane, MD; Jacob Jo, BA;

Judith Siegel, MD;

Paul Edward Matuszewski, MD;

Eric F. Swart, MD

11:24 AM **PAPER 120**

> Should All Garden I and II Femoral Neck Fractures in the Elderly Be Fixed? Effect of Posterior Tilt on Rates of Subsequent

Arthroplasty

Kanu M. Okike, MD; Ugo Udogwu, BA; Marckenley Isaac; Sheila Sprague, PhD;

Marc F. Swiontkowski, MD;

Mohit Bhandari, MD, FRCSC, PhD; Gerard Slobogean, MD, MPH, FRCSC;

FAITH Investigators

11:30 AM **PAPER 121**

> Early Weight Bearing after Distal Femur Fractures in the Elderly: A Prospective,

Cohort Pilot Study

Lisa K. Cannada, MD;

Jennifer L. Bruggers, MD; Kyle J. Jeray, MD;

Robert D. Zura, MD;

Stephanie Lewis Tanner, MS; Sarah Dawson, BSN, RN; Heidi Israel, PhD, RN

11:36 AM Discussion

11:41 AM-Lunch

12:41 PM

11:55 AM-

Lunch Poster & Video Tours

12:35 PM Hip/Femur - Julius A. Bishop, MD

Knee/Tibia – Stephen A. Kottmeier, MD



SEPTEMBER 25 - 28, 2019 ■ DENVER, COLORADO

PRELIMINARY PROGRAM

Saturday, 9.28.19

12:41 PM-2:11 PM **SYMPOSIUM IV**

Traditional Thinking Challenged: Is the Evidence from Recent Fracture Trials Strong Enough to Change Practice?

Moderator: Emil H. Schemitsch, MD
Faculty: Michael D. McKee, MD
Gerard P. Slobogean, MD
David W. Sanders, MD
Michael J. Gardner, MD
J. Tracy Watson, MD
Edward J. Harvey, MD

Learning Objectives

- To understand shifting views regarding treatment of common fractures
- To evaluate the recent evidence that has challenged traditional thinking and led to controversy regarding management of some common fractures.
- To achieve consensus regarding best evidence for surgical management of common fractures in light of recent clinical trials.

Description

A primary goal of the symposium will be to evaluate the evidence and achieve consensus opinions on many current issues and controversies regarding fracture management.

Presentations

Should Surgery for Proximal Humerus Fractures Really be Avoided? Emil H. Schemitsch, MD

Are we Fixing the Right Number of Clavicle Fractures?

Michael D. McKee, MD

Should Antibiotic Powder Be Used in All, None or Just Some Open Fractures? Gerard P. Slobogean, MD

Is It Really Safe to Treat Pilon Fractures Early?

David W. Sanders, MD

Is There Really No Advantage to VACS in Open Fracture Management?

Michael J. Gardner, MD

Are any Local Adjuncts Used to Stimulate Fracture Repair Ready for Prime Time?

J. Tracy Watson, MD

Why Does Practice not Always Follow the Evidence?

Edward J. Harvey, MD



2:11 PM- PAPER SESSION VII
3:20 PM Foot and Ankle

Moderator: Greg J. Della Rocca, MD, PhD

2:11 PM PAPER 122

Tightrope versus Screw Fixation of the Tibio-Fibular Syndesmosis: A Long-Term CT Evaluation of Maintenance of Reduction

Prism Schneider, MD, PhD;

Jacalyn Thoren, MD; Duncan Cushnie, MD; Christopher Del Balso, FRCSC, MBBS; Tanja Harrison, MPH; Christina Tieszer;

David Sanders, MD

2:17 PM PAPER 123

Better Outcome for Suture Button Compared to Single Syndesmotic Screw for Syndesmosis Injury: 5-Year Results of a Randomized Controlled Trial

Benedikte W. Raeder, MD; Wender Figved, MD, PhD; Jan Erik Madsen, MD, PhD;

Frede Frihagen, MD; Silje Berild Jacobsen, MD;

Mette Renate Andersen, MD

2:23 PM PAPER 124

Immediate Improvement in Physical Function after Symptomatic Syndesmotic

Screw Removal

Jessica M. Kohring, MD;

Catherine A. Humphrey, MD; Kyle T. Judd, MD; Gillian Soles, MD; John T. Gorczyca, MD;

John P. Ketz, MD

2:29 PM Discussion

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2:34 PM **PAPER 125**

> **Tourniquet Use During Ankle Fracture Fixation Does Not Affect Rates of Wound Healing and Infectious Complications**

Trenton William Rivera, BA;

Alex Benedick, MD; Heather A. Vallier, MD

2:40 PM **PAPER 126**

> Closed Reduction Percutaneous Fixation versus Open Reduction Internal Fixation of **Intra-articular Calcaneal Fractures** Nicholas Bolz, MD; Aws Hammad, MD;

Robert E. Meehan, MD

2:46 PM **PAPER 127**

> The Impact of Skin Suture Pattern on **Incision Perfusion Using Intraoperative** Laser Angiography: A Randomized-Clinical Trial of Ankle Fracture Patients

Peter Shorten, MD; Robert David Nesbit;

Craig Scott Bartlett, MD;

Patrick Christopher Schottel, MD

2:52 PM Discussion

PAPER 128 2:57 PM

> What Is Too Swollen? Correlation of Soft-Tissue Swelling and Timing to **Surgery With Acute Wound Complications** for Operatively Treated Lower-Extremity Fractures

Matthew D. Riedel, MD; Amber Parker, BSN; Jorge Briceno, MD; Steven Staffa; Christopher Miller, MD; Jim Wu, MD; David Żurakowski, PhD; John Y. Kwon, MD

3:03 PM **PAPFR 129**

> Mid Term 5-Year Follow Up of a Novel Algorithm for Non-Operative Weber B **Ankle Fractures**

Edward Rooney, MD; Fred Finney, MD; Paul Talusan, MD; James R. Holmes, MD;

David Matthew Walton, MD

PAPER 130 3:09 PM

> Is Routine Radiography in the Follow-up of Trauma Patients with Ankle Fractures (Cost) Effective?

Pieter Van Gerven, MD; Pieta Krijnen, PhD; W.P. Zuidema, MD; Mostafa El Moumni;

Sidney Rubinstein, PhD; Maurits Van Tulder, PhD;

Inger Schipper, FACS, MD, PhD; M. Frank Termaat, MD, PhD

3:15 PM Discussion

2:15 PM-3:15 PM

CONCURRENT BREAKOUTS Lower Extremity Osteotomies-**Learning How to Make Them Work**

(103/105)

Moderator: Brett D. Crist, MD Faculty: Mark A. Lee, MD Mitchell Bernstein, MD James P. Stannard, MD

Learning Objectives

- Recognize how to evaluate lower extremity deformity.
- Utilize lower extremity osteotomy techniques based on anatomical location, and deformity type.
- Identify how to avoid complications associated with osteotomies.

Description

Participants will learn how to evaluate lower extremity deformities, and learn multiple techniques for femoral and tibial osteotomies--periarticular and diaphyseal, and how to avoid complications. Some of the techniques to be discussed include clam shell, mathematically directed, rotational, and frame-assisted.

Peri-Operative Medical Disasters: How to Manage Common Clinical Scenerios (201/203)

Moderator: Kyle T. Judd, MD Faculty: Gillian Soles, MD John T. Gorczyca, MD Daniel Ari Mendelson, MD Catherine A. Humphrey, MD Michael C. Willey, MD

Learning Objectives

- Develop appropriate evaluation and management strategies for efficient management of the anti-coagulated patient.
- Gain understanding of how preoperative/ intraoperative VTE, myocardial infarction and common substances affect operative risk and timing.

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2:15 PM-3:15 PM

CONCURRENT BREAKOUTS (CONT'D)

• Gain ability to better recognize common post operative medical complications, understand initial evaluation and management and coordinate appropriate definitive care.

Description

Case based discussion focusing on evaluation and management of common peri-operative medical scenarios.

Techniques for Management of **Challenging Distal Femur Fractures**

(205/207)

Moderator: John A. Scolaro, MD Faculty: Cory Alan Collinge, MD Michael J Gardner, MD Hobie D. Summers, MD

Learning Objectives

- Develop a strategy to manage bone loss in the distal femur.
- Evaluate the role for retrograde nail fixation of distal femur fractures.
- Assess the need for dual plate and plate-nail techniques in fixation of the distal femur.

Description

Distal femur fractures with complex or short articular segments, bone loss and/or poor bone quality are challenging injuries to treat. Learn the advantages and disadvantages of contemporary techniques implemented to address these injuries.

Fragility Fractures and Bone Health: **Current State of the Art** (605/607)

Moderator: Clifford B. Jones, MD Faculty: Kyle James Jeray, MD Joseph M. Lane, MD

Learning Objectives

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

Description

Fragility fractures have become nearly epidemic in the United States among older adults with over 2 million fractures each year - more than heart attacks, strokes, and breast cancer combined. Orthopedic surgeons are in a unique position to advantage of the 'teachable moment' of a fragility fracture and take the extra steps to help patients prevent future fractures. This mini-symposium will expose attendees to methods for managing fragility fractures, and will review successful strategies for establishing and running their own secondary fracture prevention program.

3:20 PM-**PAPER SESSION VIII** 4:29 PM **Upper Extremity** Michael J. Gardner, MD Moderator:

3:20 PM **PAPER 131**

> **Two-Year Functional Outcomes After Adolescent Clavicle Trauma:** A Multicenter Comparison of Operative versus Non-operative Treatment

Benton E. Heyworth MD; Elizabeth Savika Liotta, MBBS; Brittany Dragonetti, BA; David Neil Williams, PhD; Andrew Tennant Pennock, MD; G. Ying Li, MD; Henry Bone Ellis, MD;

Jeffrey J. Nepple, MD; Samuel Clifton Willimon, MD; David D. Spence, MD;

Nirav Kiritkumar Pandya, MD; Mininder S. Kocher, MD, MPH;

Eric William Edmonds, MD;

Philip L. Wilson, MD; Michael T. Busch, MD; Coleen S. Sabatini, MD, MPH;

Donald S. Bae, MD

3:26 PM **PAPER 132**

> General Health Outcomes Following Distal Clavicle Fractures: Results From a Previous **Randomized Controlled Trial**

Christine Schemitsch, BS;

Michael D. McKee, MD, FRCSC; Niloofar Dehghan, FRCSC, MD;

Emil H. Schemitsch, MD; Aaron Nauth, MD;

Milena Vicente, RN;

Jeremy Hall, MD, FRCS (ORTHO); Canadian Orthopaedic Trauma Society (COTS)

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3:32 PM	PAPER 133 Predictors of Patient-reported Function Following Operative and Non-operative Treatment of Acute Distal Clavicle Fractures Lauren Nowak, MSc; Michael D. McKee MD, FRCSC; Aaron Nauth, MD; Jeremy Hall, MD, FRCS (ORTHO); Emil H. Schemitsch, MD	4:06 PM	PAPER 137 Is There a Correlation Between Functional Results and Radiographic Findings in Patients with Distal Radius Fractures AO Type A3 Treated with a Volar Locking Plate or a External Fixator? Trine Ludvigsen, MD; Kjell Matre, MD; Yngvar Krukhaug, MD; Rakel Sif Gudmundsdottir, MD; Nils Vetti; Per Martin Kristoffersen; Monika Toppe; Eva Dybvik, MSc, PhD; Jonas Fevang, MD
3:38 PM	Discussion		,,,,,
3:43 PM	PAPER 134 Predicting Humeral Shaft Fracture Nonunion: The Radiographic Union Score for HUmeral fractures (RUSHU) William M. Oliver, MBBS; Thomas J. Smith, BS; Jamie A. Nicholson, MBCHB, MRCSED; Samuel G. Molyneux, FRCS (Ortho), MSc; Timothy O. White, MD, FRCS; Nicholas D. Clement, PhD; Andrew David Duckworth, FRCS, MBCHB, MSc, PhD	4:12 PM	PAPER 138 Scaphoid Waist Internal Fixation for Fractures Trial (SWIFFT): A Randomised Controlled Trial, Economic Evaluation and Nested Qualitative Study of Cast Immobilization versus Surgical Fixation for the Treatment of Adult Patients with a Bi-cortical Fracture of the Scaphoid Waist Matthew L. Costa, FRCS; Joe Dias, MD; Stephen Brealey, PhD; Caroline Fairhurst; Sebastian Hinde; Liz Cook, MSc; Amar Rangan, FRCS Tim Chesser, FRCS – presenting abstract only.
3:49 PM	PAPER 135		Tim Chessel, TRCS – presenting abstract only.
	Radial Head Replacement for Acute Fractures: A Study of Long-Term Outcomes Thomas Carter, MBChB; Caroline D. Cristofaro, BS; Neil Ranjan Wickramasinghe, MBBS; Margaret M. McQueen, MD; Timothy O. White, MD, FRCS; Andrew David Duckworth, FRCS, MBCHB, MSc, PhD	4:18 PM	PAPER 139 Immediate Weight Bearing of Plated Both - Bone Forearm Fractures in the Poly-Trauma Patient is Safe Lucas Scott Marchand, MD; Steven Andrew Horton, MD; Alexandra Bryn Mulliken; Ritu Goel; L. Nicole Krum, DPT; George Ochenjele, MD; Nathan N. O'Hara;
3:55 PM	PAPER 136		Robert V. O'Toole, MD; W. Andrew Eglseder, MD;
	Simple Decompression versus Anterior Transposition of the Ulnar Nerve: 2 Year		Raymond A. Pensy, MD
	Follow-Up of a Randomized Trial Emil H. Schemitsch, MD;	4:24 PM	Discussion
	Gurrattan Chandhoke; Christine Schemitsch; Niloofar Dehghan, FRCSC, MD, MSc; Milena Vicente, RN; Aaron Nauth, MD; Jeremy Hall, MD, FRCS (ORTHO), MEd; Michael D. McKee MD, FRCSC; Canadian Orthopaedic Trauma Society (COTS)	4:30 PM	ADJOURN
4:01 PM	Discussion		

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GENERAL INFORMATION

ACCREDITATION and CME CREDIT

The Orthopaedic Trauma Association (OTA) is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians. OTA designates this live activity for a maximum of **21** *AMA PRA Category 1 Credit(s)*TM. Physicians should claim only the credits commensurate with the extent of their participation in the activity.

OTA CME MISSION STATEMENT

The mission of the Orthopaedic Trauma Association 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. We will plan, manage and evaluate evidence-based educational activities that enhance participant competence, performance and patient outcomes employing needs assessment data and identified professional education gaps. CME activities will consist of carefully planned programs based on adult learning principles, including live CME activities and enduring materials. It is expected that participants in these CME activities integrate what they learn into their practice to improve their competence and performance in areas of patient care, patient safety and professional practice.

DISCLAIMER

The material presented at the 35th 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.

OTA disclaims any and all liability for injury or other damages resulting to any individual attending this event 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.

OTA MANDATORY DISCLOSURE POLICY

Philosophy

In order to promote transparency and confidence in the educational programs and in the decisions of the Orthopaedic Trauma Association (hereinafter referred to as "OTA"), the OTA Board of Directors has adopted this mandatory disclosure policy.

The actions and expressions of OTA Members and Others providing education of the highest quality or in shaping OTA policy must be as free of outside influence as possible, and any relevant potentially conflicting interests or commercial relationships must be disclosed. Because the OTA depends upon voluntary service by

Members to conduct its educational programs and achieve its organizational goals, this disclosure policy has been designed to be realistic and workable.

The OTA does not view the existence of these interests or relationships as necessarily implying bias or decreasing the value of your participation in the OTA.

FDA STATEMENT

Some drugs or medical devices demonstrated at this activity may not have been cleared by the FDA or have been cleared by the FDA for specific purposes only. The FDA has stated that it is the responsibility of the physician to determine the FDA clearance status of each drug or medical device he or she wishes to use in clinical practice.

Academy policy provides that "off label" uses of a drug or medical device may be described in the Academy's CME activities so long as the "off label" use of the drug or medical device is also specifically disclosed (i.e., it must be disclosed that the FDA has not cleared the drug or device for the described purpose). Any drug or medical device is being used "off label" if the described use is not set forth on the product's approval label.



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 musculo-skeletal 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 worldwide 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.

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SPECIAL **EVENTS**

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Special Events sponsored by **SurgeonMasters**

YOGA

Wednesday 5:30-6:30 PM and Friday 5:30-6:30 PM (Room 102)

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

MEDITATION

Daily Meditation: Wednesday - Saturday 6 AM-4 PM (Room 102) A room will be made available daily for meditation or mindfulness.

Guided Meditation: Wednesday - Friday 7-7:30 AM (Room 102)

Mindfulness and meditation are an alternate state of mind to the typical stressed, restless, confused and distracted mind. The practice is also a form of mind training that provides a healthier alternative to our human tendency to daydream and ruminate about negative events, past failures and future worries. It is associated with better executive functioning, increased focus and attention, decreased emotional interference with cognitive and physical tasks, and improved behavior regulation. Our session is intended to mix some education and practice. Beginners are encouraged to attend. Join your fellow surgeons and GUESTS to explore a few helpful strategies to practice and learn about mindfulness and meditation that can be utilized inside or outside of our surgical practices.

INDUSTRY SESSIONS

Wedneday, September 25 6:30 PM-8:00 PM

Thursday, September 26 11:15 AM-12:45 PM

Friday, September 27 6:30 PM-8:00 PM

Please visit the OTA website at ota.org for a complete listing of Industry Sessions.

TAI CHI

Saturday 6:30-7:30 AM (Room 102)

Research shows that exercise and the practice of some form of mindfulness is a helpful approach to reducing stress and burnout. Tai Chi, a martial art for self defense, can also benefit mood, balance, flexibility! Join your fellow surgeons looking to recharge for a more positive learning experience at the annual meeting. GUESTS are welcome. Instruction for 50-60 minutes provided for the span of beginner to advanced levels. Participants should bring a bottle of water and a towel.

BICYCLING (TOUR DE BONE)

Thursday 7-10 AM

Multiple studies show the benefits of aerobic exercise and learning capacity and memory. What better way to start off your OTA educational meeting! Join your fellow surgeons and GUESTS to explore these benefits. After registration, you will be contacted by SurgeonMasters with details on bike rental, fees and the organized ride. Questions? Email SurgeonMasters: paul@surgeonmasters.com

EXHIBIT HALL HOURS

Thursday, September 26 2:30 PM-5:00 PM 5:15 PM-6:15 PM - Exhibitors' Reception

Friday, September 27 9:00 AM-5:00 PM

Saturday, September 28 9:00 AM-1:45 PM



