

### AO Trauma NA Fireside: Working Through Fracture Problems Together



April 5, 2022 - June 7, 2022 Online, N/A, USA

Designed to serve the needs of surgeons 2-10 years in practice, the AO Trauma NA Fireside series provides a pragmatic review of current best practices, effective surgical approaches, and tips and tricks to address the challenges of region-specific problem fractures and maximize patient outcomes.

Each of the eight ninety-minute sessions was created in collaboration with a group of practicing surgeons across North America. Topics covered include femur fractures, atypical ankle injuries, and fracture-related infections.

The Fireside series emphasizes and encourages interaction with experts in the field. Participants can submit cases and/or share their perspectives on diagnosis, treatment, and management of fractures, and in turn receive input and feedback from AO NA faculty.

Session 1- April 5, 2022: Atypical Ankle Injuries

Session 2- April 12, 2022: Fracture-related Infections

Session 3- April 26, 2022: Proximal Tibial Fracture Management Avoiding Malreduction

Session 4- May 3, 2022:Bone Defect Management - Basics to Avoid Complications

Session 5- May 10, 2022: Proximal Humerus Fractures: ORIF vs Replacement...and Are We Giving Enough Love for the Arthroplasty Option?

Session 6- May 24, 2022: Humeral Shaft Fractures: MIPO plating, IMN, ORIF

Session 7- May 31, 2022: Proximal Femur Fracture Revisions: Intertrochanteric, Subtrochanteric and Bisphosphonate Nonunions

Session 8- June 7, 2022: Geriatric Distal Femur Fractures

### **Event Summary**

Tuition:

Level Name: Participant - Orthopaedic

Pricing Tier: Attending

Tuition: \$0.00

Course Prerequisite(s):

No Prerequisites

Venue: Language(s): No Venue English

> Directly Provided by: (No Sponsoring Organizations)

Professional Level Prerequisite(s):

No Prerequisites

#### **CME**

#### **Continuing Education Credit: 1.50**

The Continuing Medical Education (CME) mission of AO North America (AONA®) is to provide comprehensive multidisciplinary needs based education to surgeons, fellows, and residents in the specialties of orthopedic, hand, craniomaxillofacial, spine, neurosurgery, and veterinary surgery in the areas of trauma (i.e.), operative reduction and fixation), degenerative disorders, deformities, tumors, and reconstruction.

Expected results of AONA's CME activities for surgeons, fellows, and residents are to:

- Increase their knowledge base and surgical skill level
- Improve competence by applying advances of knowledge in patient care in the areas of trauma, degenerative disorders, deformities, tumors, and reconstructive surgical techniques
- Address practice performance gaps by improving management of aspects of traumatic injuries and musculoskeletal disorders (i.e., preoperative planning to post-operative care)

### **Learning Objectives**

#### Upon completion, participants should be able to:

- Identify key aspects of fractures that need to be done correctly to have a good patient outcome
- Describe current best-practices in critical steps of fractures
- Develop evidence-based medicine strategies for fracture care

### **Faculty**



Hubbard, David - Education Advisor MD Professor Medical Director Perioperative Services WVUH Department of Orthopaedic Surgery West Virginia University Morgantown, West Virginia

Dr David Hubbard hails from Morgantown, West Virginia. He is Professor in the Department of Orthopaedic Surgery at West Virginia University Hospital and Chief of the Orthopaedic Trauma Service. He is board-certified and fellowship trained orthopedic trauma surgeon. He completed his orthopedic residency at West Virginia University Hospital in 1994. He then completed his orthopedic trauma fellowship at the prestigious University of Washington at Harbourview Medical Center in Seattle, Washington. Dr Hubbard has been involved with AO his entire career serving as faculty member, chairman of multiple courses in North America and Europe and on multiple committees. He also served as a Trustee for the AO Foundation. Dr Hubbard is currently a busy orthopedic trauma surgeon and educator at West Virginia University Hospital.



Bernstein, Mitchell - Lecturer MD, FRCSC, FAAOS Associate Professor Orthopedic Trauma & Limb Deformity McGill University Health Center Montreal, Quebec



Bishop, Julius - Lecturer MD Associate Professor Associate Residency Director Department of Orthopaedic Surgery Stanford University Medical Center Palo Alto, California



Camuso, Matthew - Lecturer MD Orthopaedic Trauma Surgery Maine Medical Center Portland, Maine



Cohen, Joseph - Lecturer MD Assistant Professor of Orthopedic Surgery Division of Trauma Department of Orthopedics Loyola University Medical Center Chicago, Illinois



Coles, Chad - Lecturer MD, FRCSC Professor Dalhousie University QE II Health Sciences Centre Halifax, Nova Scotia



Printed on: April 15, 2022

Crist, Brett - Lecturer
MD
Professor
Vice Chairman of Business Development
Director Orthopaedic Trauma Service
Director Orthopaedic Trauma Fellowship
Director of Limb Preservation and Optimization Center
Department of Orthopaedic Surgery

Columbia, Missouri

After obtaining a bachelor's degree from Tabor College in Hillsboro, Kansas, Dr. Crist earned his medical degree from the University of Kansas School of Medicine. He completed his residency at the University of Kansas School of Medicine, Wichita, and a fellowship in orthopaedic trauma at the University of California-Davis. Dr. Crist is the Director of the Orthopaedic Trauma Service, Director of the Orthopaedic Trauma Fellowship, and the Vice Chairman for Business Development. He specializes in orthopaedic trauma/fracture care, hip and pelvis reconstruction including total hip arthroplasty, and young adult hip disorders/hip preservation. Dr. Crist is a Tenured Professor of Orthopaedic Surgery at the University of Missouri School of Medicine. He has research interests in fracture care, nonunions, deformity, infections, anterior total hip arthroplasty, patient-centered outcomes and hip preservation procedures. From the beginning of his career, he's been involved with AO and continues to enjoy teaching at AO events, participating in committee and leadership roles, and being a part of the AO Family.



Davies, Jonah - Lecturer MD, FRCS(C) Assistant Professor Department of Orthopaedics Harborview Medical Center Seattle, Washington



Eastman, Jonathan - Lecturer
MD
Associate Professor
Department of Orthopaedic Surgery
University of Texas, Health Sciences Center at Houston
McGovern Medical School, Memorial Hermann Medical Center
Houston, Texas



Gardner, Michael - Lecturer MD Professor Department of Orthopaedic Surgery Stanford University School of Medicine Palo Alto, California



Gary, Joshua - Lecturer MD Chief of Orthopaedic Trauma Service Associate Professor Keck Medicine of USC Los Angeles, California



Hagen, Jennifer - Lecturer MD Associate Professor Orthopedics Chief, Trauma Fellowship Director University of Florida Gainesville, Florida



Higgins, Thomas - Lecturer MD Professor Chief of Orthopaedic Trauma University of Utah Health Sciences Center Salt Lake City, Utah

Dr. Thomas Higgins holds the Richard L. Stimson Presidential Endowed Chair in Orthopaedic Surgery and is a Professor and the Chief of Orthopaedic Trauma Surgery at the University of Utah. His medical degree was completed at Brown University School of Medicine. His orthopaedic training was at Yale University, with post-graduate fellowship in orthopaedic trauma at the R. Adams Cowley Shock Trauma Center in Baltimore. He has been on the faculty at University of Utah since 2000. Dr. Higgins clinical expertise is in the treatment of complex intra-articular injuries, pelvic and acetabular trauma, and musculoskeletal care in the setting of polytrauma. His elective practice focuses on the deformity correction, malunions, and nonunions. The author of over fifty peer-reviewed publications and multiple book chapters, Dr. Higgins main area of research interest clinically has been on plateau fractures. He has been primary investigator or co-investigator on four OTA grants, two AO grants, and an OREF grant. His most recent research has focused on the genetics of trauma and the use of opiate analgesics in the trauma setting, and the roles of inflammatory mediators in the formation of post-traumatic osteoarthritis. In the educational sphere, Dr. Higgins is recognized nationally for his research and presentations of tibial plateau fractures. He has been active with orthopaedic education with AO North America, chairing three courses, and teaching at over thirty. Previously a member of the OTA Education Committee, he has also chaired multiple resident courses for the OTA. He has received the annual teaching award twice at the University of Utah. He has previously served on the Orthopaedic Trauma Association Board of Directors, and was the Program Chair for the OTA Annual Meeting in 2013 and 2014. In 2009, Dr. Higgins served as the OTA/AAOS Landstuhl Visiting Scholar, and has been visiting professor at multiple universities. In 2015 he and his family spent four months serving at Kijabe Hospital in Kenya, and he maintains an interest in continuing to serve in global medicine. When he is not working, he enjoys skiing, biking, and travelling with his wife and kids.



Large, Thomas - Lecturer MD Assistant Professor Emory University Department of Orthopaedic Surgery Grady Memorial Hospital Atlanta, Georgia

Originally from South Bend, IN, I graduated Summa Cum Laude from Duke University and Alpha Omega Alpha from Indiana University School of Medicine before completing my internship and orthopaedic surgery residency at Carolinas Medical Center in Charlotte, NC in 2006. I was then on active duty with the US Air Force including two tours at Bagram Airbase, Afghanistan, the largest and busiest trauma center in Operation Enduring Freedom. My military service culminated as Chief of Orthopaedic Surgery at Travis AFB, CA. After five months of volunteer work at Bedford Orthopaedic Hospital, Nelson Mandela University, Mthatha, S. Africa, I worked as a visiting surgeon with Professor Schildhauer in Bochum, Germany and then completed an AO fellowship with Professor Gebhard in Ulm, Germany. My trauma training concluded with fellowship at Harborview Medical Center in Seattle, WA. I am a practicing orthopaedic trauma surgeon previously at Mission Hospital in Asheville, NC from 2012-2021 and now at Grady Memorial Hospital, Emory University, in Atlanta, GA. I am committed to improving trauma care and education in the developing world and have done additional volunteer work in Ghana and Uganda. I enjoy hiking and other adventures with my family, travel, golf, photography, and old cars.



Learned, James - Lecturer MD Assistant Clinical Professor Department of Orthopaedic Surgery UCI Health Orange, California

Dr. Learned treats acute fractures and chronic deformities, infections and nonunions. He enjoys complex fracture reconstruction, including pelvic and acetabular fractures. In his spare time, he enjoys spending time with his family and dogs, live music and outdoor activities.



Levack, Ashley - Lecturer MD, MAS Assistant Professor of Orthopaedic Surgery Loyola University Chicago Stritch School of Medicine Loyola University Medical Center Maywood, Illinois



Little, Milton - Lecturer MD Orthopaedic Trauma Fellowship Director Assistant Professor Cedars-Sinai Medical Center Los Angeles, California

Milton Little, MD is the Cedars Sinai Orthopaedic Trauma Fellowship director and a member of the Orthopaedic Trauma Service at Cedars Sinai Medical Center specializing in pelvis, acetabulum, peri-articular fractures in addition to non-union fracture fixation. He has published extensively in peer-reviewed journals including Journal of Orthopaedic Trauma, Journal of Bone and Joint Surgery and the Bone and Joint Journal (formerly JBJS Br) to name a few. He has published on numerous topics including ankle fractures, proximal humerus fractures, tibial plateau fractures and pelvic-acetabular fractures. Dr. Little has completed his undergraduate degree at Stanford University. He graduated with honors from the University of Michigan Medical School in Ann Arbor, Michigan. After completing an Orthopaedic Residency at the Hospital for Special Surgery in New York City, he finalized his training with an Orthopaedic Trauma Fellowship at Harborview Medical Center-University of Washington. Specialty: Orthopaedics Subspecialty: Trauma Arthroplasty Reconstruction Education: Undergraduate: Stanford University, 2003 Medical School: University of Michigan Medical School, 2008 Residency: Hospital for Special Surgery, 2013 Fellowship: Harborview Medical Center, 2014



Miller, Anna - Lecturer
MD, FACS
Vice Chair and Chief, Orthopaedic Trauma Service
Washington University School of Medicine
St. Louis, Missouri

Anna N. Miller, MD, FACS, is Vice Chair and Chief of the Division of Orthopaedic Trauma at Washington University in St. Louis and Barnes-Jewish Hospital. Dr. Miller has particular interests in the improvement of orthopaedic trauma care on a national level and is the Chair of the Orthopaedic Subgroup for the American College of Surgeons' Committee on Trauma. She is also interested in the management and outcomes of elderly patients with fragility fractures and is involved with AOA and AAOS regarding fragility fractures, as well as being on the National Quality Forum Trauma Outcomes Steering Committee. Dr. Miller is also involved in numerous multicenter national studies. She is a co-investigator on several federally funded grants, particularly focusing on traumatic injury and how it relates to the treatment of United States soldiers in combat situations as well as automotive crash injury investigation with the National Highway Traffic Safety Administration.



Nam, Diane - Lecturer MSc, MD, FRCSC Associate Professor, Orthopaedic Surgery Sunnybrook Health Sciences Centre University of Toronto Toronto, Ontario

Diane Nam, MSc MD FRCSC, is an Associate Professor at the University of Toronto. She is an orthopaedic trauma surgeon at Sunnybrook Health Sciences Center with subspecialty expertise in polytraumatic conditions of the upper limb. She is the Upper Extremity Trauma Fellowship Director and a clinician scientist at the Sunnybrook Research Institute investigating the molecular and cellular mechanisms in bone regeneration focusing on translational research with novel treatments to improve fracture healing.



Nork, Sean - Lecturer MD Professor Department of Orthopaedics Harborview Medical Center University of Washington Seattle, Washington

Dr. Sean Nork is a Professor of Orthopaedics and Sports Medicine with the University of Washington specializing in orthopaedic surgery for trauma patients. Dr. Nork's clinical interests include orthopaedic traumatology, non-union fractures, periarticular fractures and pilon fractures. Dr. Nork earned a bachelor's degree in bioengineering from the University of California, Berkeley, and his Medical Degree from the University of California, San Diego. His internship and residency were done at the University of California, San Francisco. He came to the University of Washington as a fellow in the prestigious orthopaedic traumatology program at Harborview Medical Center. He is board certified in orthopaedic surgery.



Quinnan, Stephen - Lecturer
MD
Professor of Surgery Florida Atlantic University
Chief of Orthopaedic Trauma
St. Mary's Medical Center/Paley Orthopedic & Spine Institute
West Palm Beach, Florida



Rothberg, David - Lecturer MD Associate Professor University of Utah Department of Orthopaedics Salt Lake City, Utah



Schenker, Mara - Lecturer MD, FACS Chief of Orthopaedics, Grady Memorial Hospital Associate Professor, Emory University Atlanta, Georgia



Scolaro, John - Lecturer MD, MA Chief, Orthopaedic Trauma Residency Program Director Department of Orthopaedic Surgery University of California, Irvine Orange, California



Soles, Gillian - Lecturer MD Associate Professor Department of Orthopaedic Surgery University of California Davis Medical Center Sacramento, California



Summers, Hobie - Lecturer MD Professor Chief of Orthopaedic Trauma Loyola University Medical Center Chicago, Illinois



Westrick, Edward - Lecturer MD Co-Director, Orthopaedic Trauma Allegheny General Hospital Allegheny Health Network Pittsburgh, Pennsylvania

Dr. Edward Westrick is the Co-Director of Orthopaedic Trauma and Assistant Trauma Fellowship Director at Allegheny General Hospital of the Allegheny Health Network in Pittsburgh, PA. He is also Assistant Professor of Orthopedic Surgery at Drexel University College of Medicine. He obtained his medical degree and orthopedic residency at the University of Pittsburgh School of Medicine in Pittsburgh, PA. He completed his trauma fellowship at the University of Washington – Harborview Medical Center in Seattle, WA. His clinical practice includes traumatic upper and lower extremity fractures, pelvis and acetabular fractures, complex repair involving non-unions and malunions, and advanced limb salvage techniques including custom 3D printed implants. Additionally, he has a strong interest periprosthetic fractures and revision arthroplasty for fractures and failed arthroplasty indications.

## Agenda

## Day 1

Tuesday, April 05, 2022 - 20:00 - 21:30

Schedule	Title	Moderator	Faculty	Room
20:00 - 20:05	Welcome		Bernstein, M	
20:05 - 20:35	Case 1		Westrick, E	
20:35 - 21:05	Case 2		Scolaro, J	
21:05 - 21:25	Journal/ Discussion		Bernstein, M Scolaro, J Westrick, E	
21:25 - 21:30	Wrap Up/Adjournment		Bernstein, M	

## Day 2

Tuesday, April 12, 2022 - 20:00 - 21:30

Schedule	Title	Moderator	Faculty	Room
20:00 - 20:05	Welcome		Large, T	
20:05 - 20:35	Case 1		Levack, A	
20:35 - 21:05	Case 2		Learned, J	
21:05 - 21:25	Journal/ Discussion		Large, T Learned, J Levack, A	
21:25 - 21:30	Wrap Up/Adjournment		Large, T	

## Day 3

Tuesday, April 26, 2022 - 20:00 - 21:30

Schedule	Title	Moderator	Faculty	Room
20:00 - 20:05	Welcome		Miller, A	
20:05 - 20:35	Case 1		Soles, G	
20:35 - 21:05	Case 2		Schenker, M	
21:05 - 21:25	Journal/ Discussion		Miller, A Schenker, M Soles, G	
21:25 - 21:30	Wrap Up/Adjournment		Miller, A	

### Day 4

Tuesday, May 03, 2022 - 20:00 - 21:30

Schedule	Title	Moderator	Faculty	Room
20:00 - 20:05	Welcome		Bernstein, M	
20:05 - 20:35	Case 1		Quinnan, S	
20:35 - 21:05	Case 2		Little, M	
21:05 - 21:25	Journal/ Discussion		Bernstein, M Little, M Quinnan, S	
21:25 - 21:30	Wrap Up/Adjournment		Bernstein, M	

# Day 5

## Tuesday, May 10, 2022 - 20:00 - 21:30

Schedule	Title	Moderator	Faculty	Room
20:00 - 20:05	Welcome		Nam, D	
20:05 - 20:35	Case 1		Summers, H	
20:35 - 21:05	Case 2		Davies, J	
21:05 - 21:25	Journal/ Discussion		Davies, J Nam, D Summers, H	
21:25 - 21:30	Wrap Up/Adjournment		Nam, D	

## Day 6

## Tuesday, May 24, 2022 - 20:00 - 21:30

Schedule	Title	Moderator	Faculty	Room
20:00 - 20:05	Welcome		Gardner, M	
20:05 - 20:35	Case 1		Bishop, J	
20:35 - 21:05	Case 2		Cohen, J	
21:05 - 21:25	Journal/ Discussion		Bishop, J Cohen, J Gardner, M	
21:25 - 21:30	Wrap Up/Adjournment		Gardner, M	

# Day 7

## Tuesday, May 31, 2022 - 20:00 - 21:30

Schedule	Title	Moderator	Faculty	Room
20:00 - 20:05	Welcome		Coles, C	
20:05 - 20:35	Case 1		Gary, J	
20:35 - 21:05	Case 2		Hagen, J	
21:05 - 21:25	Journal/ Discussion		Coles, C Gary, J Hagen, J	
21:25 - 21:30	Wrap Up/Adjournment		Coles, C	

## Day 8

## Tuesday, June 07, 2022 - 20:00 - 21:30

Schedule	Title	Moderator	Faculty	Room
20:00 - 20:05	Welcome		Higgins, T	
20:05 - 20:35	Case 1		Crist, B	
20:35 - 21:05	Case 2		Rothberg, D	
21:05 - 21:25	Journal/ Discussion		Crist, B Higgins, T Rothberg, D	
21:25 - 21:30	Wrap Up/Adjournment		Higgins, T	

#### AO NA Disclaimer Information

#### **Faculty Disclosure:**

It is the policy of AO North America to abide by the Accreditation Council for Continuing Medical Education Standards for Commercial Support. Standard 2: "Disclosures Relevant to Potential Commercial Bias and Relevant Financial Relationships of Those with Control over CME Content," requires all planners, including course directors, chairs, and faculty, involved in the development of CME content to disclose their relevant financial relationships prior to participating in the activity. Relevant financial relationships will be disclosed to the activity audience. The intent of the disclosure is not to prevent a faculty with a relevant financial or other relationship from teaching, but to provide participants with information that might be of importance to their evaluation of content. All potential conflicts of interest have been resolved prior to the commencement of this activity.

#### Off-Label / Experimental Discussions:

Some medical devices used for teaching purposes and/or discussed in AO North America's educational activities may have been cleared by the FDA for specific uses only or may not yet be approved for any purpose. Faculty may discuss off-label, investigational, or experimental uses of products/devices in CME certified educational activities. Faculty have been advised that all recommendations involving clinical medicine in this CME activity are based on evidence that is accepted within the profession of medicine as adequate justification for their indications and contraindications in the care of patients.

All scientific research referred to, reported or used in this CME activity in support or justification of a patient care recommendation conforms to the generally accepted standards of experimental design, data collection and analysis.

#### Disclaimer:

AONA does not endorse nor promote the use of any product/device of commercial entities. Equipment used or discussed in this educational activity is for teaching purposes only with the intent to enhance the learning experience.

The opinions or views expressed in this live continuing medical education activity are those of the faculty and do not necessarily reflect the opinions or recommendations of AO North America or any commercial supporter. The certificate provided pertains only to the participants' completion of the educational activity.

#### **Conflict of Interest Resolution Statement:**

When individuals in a position to control or influence the development of the content have reported financial relationships with one or more commercial interests, AO North America utilizes a process to identify and resolve potential conflicts to ensure that the content presented is free of commercial bias.

#### Liability Statement:

AO North America faculty and staff assume no personal liability for the techniques/ approaches discussed or demonstrated which are for teaching and educational purposes only. The certificate provided pertains only to the participants' completion of the course and does not, in any way, attest to the proficiency of the participants' clinical experience.

#### **Animal Anatomic Specimens:**

This course will involve exposure to and contact with animal anatomic specimens. These specimens are being utilized for purposes of teaching and learning and are to be treated with the utmost respect. Participants should be familiar with and understand the potential risks involved and will be required to observe all customary safety procedures.

### Acknowledgment

#### **Educational Grant**

AO North America gratefully acknowledges funding for its education activities from the AO Foundation. The AO Foundation receives funding for education from Synthes GmbH.