AO Trauma NA Blended Course - Basic Principles of Fracture Management

October 30, 2025 - November 1, 2025
Chicago, Illinois, USA

This Blended *Basic Principles of Fracture Management* course is designed to provide the participant with a fundamental knowledge of the operative treatment of fractures according to the AO principles.

The four guiding AO principles of fracture fixation are:

1. Anatomic reduction of the fracture fragments, particularly in joint fractures.
2. Stable fixation to ensure proper healing of the fracture while allowing surrounding tissue to move and strengthen.
3. Atraumatic surgical techniques to preserve the blood supply to the bone fragments and soft tissue.
4. Early, pain-free mobilization returning the patient to function as quickly as possible.

This course will also cover the concepts of absolute and relative stability of soft tissue injury as applied, in context, for each limb segment's major fracture types.

This course is the foundation for the AO North America curriculum, which **teaches the surgeon how to manage trauma and trauma reconstruction**. The goal of this course is not to advocate the treatment of all fractures by surgical fixation, but rather, to help ensure that when surgery is carried out, that it is done properly based upon principles, appropriate preoperative planning, and decision making.

All AO North America resident courses are developed and consistent with the Accreditation Council for Graduate Medical Education (ACGME) competencies and specialty specific Milestones program.

Blended Course Timeline

Self-Study pre-recorded lectures and assessments - **September 22, 2025 - October 17, 2025** (must be completed in its entirety to advance to the In-Person Small Group Discussion and Practical Lab

****All Self Study Material Must Be Completed by Friday, October 17, 2025 @ 8AM ET****

In-Person Small Group Discussions and Practical Lab (3-days) - **Chicago, Illinois - October 30 - November 1, 2025**

Event Summary

Tuition:
Level Name: Participant - Orthopaedic
Pricing Tier: Resident
Tuition: $1,200.00

Course Prerequisite(s):
No Prerequisites

Venue:
Chicago Marriott O'Hare
8535 West Higgins Road
Chicago, IL, USA
Phone Number: 773-693-4444
www.marriott.com/hotels/travel/chiap-chicago-marriott-ohare

Language(s):
English

Directly Provided by:
AO North America

Professional Level Prerequisite(s):

- Residency Year 2
- Residency Year 3
- Residency Year 4
- Residency Year 5
- Residency Year 6
- Residency Year 7
- Residency Year 8
- Fellow

CME

Continuing Education Credit: 34.75

- AO North America is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

Designation Statement - AO North America designates this live educational activity for a maximum of 34.75 ***AMA PRA Category 1 Credits™***. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

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.

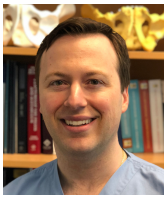
Expected results of AONA's CME activities for surgeons, fellows, and residents are to:
• Increase their knowledge base and surgical skill level
• Improve competence by applying advances of knowledge in patient care in the areas of trauma, degenerative disorders, deformities, tumors, and reconstructive surgical techniques
• Address practice performance gaps by improving management of aspects of traumatic injuries and musculoskeletal disorders (i.e., pre-operative planning to post-operative care)

Learning Objectives

Upon completion, participants should be able to:

- Discuss the concepts of stability, their influence on bone healing, and how to apply implants to achieve appropriate stability
- Plan a treatment based on assessment, imaging, classification, and decision making
- Apply reduction techniques in fracture management with attention to the importance of the soft-tissue
- Apply related psychomotor skills to the practical application of orthopedic implants to fractured bones
- Plan the initial treatment of the polytraumatized patient

Faculty



Adams, Mark - Co-Chairperson
MD
Associate Professor
Fellowship Program Director
Division of Orthopaedic Trauma
Rutgers New Jersey Medical School
Newark, New Jersey

Mark R. Adams, MD, is a board certified orthopaedic surgeon at Rutgers North Jersey Orthopaedic Institute (NJOI), and an associate professor in the Department of Orthopaedics at Rutgers New Jersey Medical School (NJMS). He is also an attending orthopaedic trauma surgeon for the Department of Orthopaedics in the Division of Trauma at University Hospital in Newark, the Level I Trauma Center for northern New Jersey. He specializes in complex fractures of the upper and lower extremities, complications and post-traumatic reconstruction, and serves as the program director for the Orthopaedic Trauma Fellowship at Rutgers New Jersey Medical School.

Jeffcoat, Devon - Co-Chairperson
MD
Clinical Professor
Department of Orthopaedic Surgery
UCLA Medical Center
Los Angeles, California

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

Dimitroulias, Apostolos - Lecturer
MD
Associate Professor, Albert Einstein College of Medicine
Attending Orthopedic Trauma, Jacobi Medical Center
Bronx, New York

Harris, Timothy - Coach
MD
Wake Orthopaedics
Raleigh, North Carolina

Huber, Florian - Lecturer
MD
Director of Orthopaedic Trauma
Tidal Health Peninsula Regional Medical Center
Peninsula Orthopaedic Associates, PA
Salisbury, Maryland

Large, Thomas - Lecturer

MD
Associate 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.

Lee, Christopher - Lecturer

MD
Assistant Professor
Department of Orthopaedics
UCLA
Los Angeles, California

Dr. Christopher Lee is an Assistant Professor of Orthopaedic Trauma at the David Geffen School of Medicine at UCLA. He graduated cum laude from the University of Notre Dame and received alpha omega alpha honors from the Keck School of Medicine at USC. He completed his orthopaedic surgery residency at UCLA, and an orthopaedic trauma fellowship at R Adams Cowley Shock Trauma Medical Center. His current clinical interests include pelvis and acetabular fractures, periarticular fractures, and nonunions/malunions.

Moloney, Gele - Lecturer

MD
Associate Professor of Orthopaedic Surgery
Chief of Orthopaedic Surgery, UPMC Mercy
University of Pittsburgh Medial Center
Pittsburgh, Pennsylvania

Nousiainen, Markku - Lecturer

MD, MS, MEd, FRCS(C)
Associate Professor
Division of Orthopaedic Surgery
University of Toronto
Sunnybrook Health Sciences Centre
Toronto, Ontario

Page, Brian - Lecturer

MD
Assistant Professor
Orthopaedic Traumatology
Limb Reconstruction
Hospital for Special Surgery
NewYork-Presbyterian Weill Cornell Medical Center
New York, New York

Radomski, Lenny - Lecturer

MD, BASc, MEd
Clinical Surgical Associate
Sunnybrook Hospital
University of Toronto
Toronto, Ontario

Schaffer, Nathaniel - Lecturer
MD, PhD
Western Washington Medical Group
Everett, Washington

Nathaniel Schaffer did his undergraduate studies in Mathematics and Chemistry at Washington University in St Louis before enrolling in the Medical Scientist Training Program at the University of Texas Southwestern Medical Center. There he developed an interest in providing medical care in lesser developed countries having spent a year working in hospitals abroad. He went to the University of Michigan for his orthopaedic surgery residency training, and while there he continued to participate in service trips abroad. He completed his trauma fellowship at Vanderbilt University Medical Center, and he currently practices orthopaedic trauma surgery at Providence Regional Medical Center in Everett, WA with the Western Washington Medical Group.

Smith, Jeffrey - Coach
MD, FACS, FAAOS
Orthopaedic Traumatologist
Orthopaedic Trauma & Fracture Specialists Medical Corp.
Surgeon Coach, SurgeonMasters LLC
Orthopaedic Trauma Medical Director, Scripps Memorial Hospital
Co-Director, San Diego Orthopaedic Trauma Fellowship
San Diego, California

Dr. Jeffrey M. Smith is a practicing Orthopaedic Traumatologist who blends his surgical skills with being a patient advocate and guide through the entire process. He is also the Co-Director of the San Diego Orthopaedic Trauma Fellowship. As an accomplished surgeon and Professional Certified Coach, he helps other Surgeons transform their habits inside and outside the operating room, navigate career milestones and challenges, and find their work-life rhythm with the goal of creating sustainable lifestyle-friendly surgical practices that positively impacts those around them. With over 20 years of experience within academic and private practice, he has learned to cope with the ups and downs of being a performance-driven surgeon and even experienced some episodes of burnout during his career. How can we all PRACTICE our Best?

Wellman, David - Lecturer
MD
Medical Director of Orthopaedic Trauma
Program Director, Orthopaedic Surgery
New York Medical College
Westchester Medical Center
Hawthorne, New York

Agenda

Day 1

Thursday, October 30, 2025 - 07:00 - 18:35 - (includes breaks, travel-time and meals)

Schedule	Title	Moderator	Faculty	Room
07:00 - 08:00	Registration and Breakfast			
08:00 - 08:15	Introduction and Welcome			
08:15 - 09:00	MODULE 1: Basic Principles - Bone Healing and Absolute Stability			
08:15 - 08:25	Bone Healing			
08:25 - 08:35	Screw Design and Function			
08:35 - 08:45	Introduction to Absolute Stability			
08:45 - 09:00	Module Summary | Q & A			
09:00 - 09:10	Travel to Lab			
09:10 - 10:40	PRACTICAL EXERCISE I: (Absolute Stability); A. Introduction to Implants; B. Lag Screw; C. Neutralization Plate; D. Buttress Plate			
10:40 - 10:55	Break			
10:55 - 12:25	PRACTICAL EXERCISE I: Absolute Stability (continued): E. Axial Compression with Plates; F. Oblique Fracture: Lag Through Plate; G. Olecranon Fixation			
12:25 - 13:15	Lunch			
13:15 - 14:15	AO SKILLS LAB: Part 1			
14:15 - 14:20	Travel to Lecture Hall			
14:20 - 14:45	Applications and Indications of Absolute Stability Quiz Bowl			
14:45 - 15:45	Fireside			
15:45 - 15:55	Travel to Skills Lab			
15:55 - 16:55	AO SKILLS LAB: Part 2			
16:55 - 17:05	Travel to Discussion Group			
17:05 - 18:35	Small Group Discussion 1: Soft Tissues and Initial Evaluation			

Day 2

Friday, October 31, 2025 - 07:00 - 17:50 - (includes breaks, travel-time and meals)

Schedule	Title	Moderator	Faculty	Room
07:00 - 07:45	Breakfast			
07:45 - 08:45	MODULE 2: Secondary Bone Healing - Relative Stability			
07:45 - 07:55	Day 1 Recap and Summary (Absolute Stability) Intro to Relative Stability			
07:55 - 08:05	Indirect Reduction Techniques (Compare and Contrast)			
08:05 - 08:15	External Fixation Principles			
08:15 - 08:25	Medullary Nail Principles			
08:25 - 08:35	Bridge Plating Principles			
08:35 - 08:45	Module Summary			
08:45 - 08:55	Travel to Lab			
08:55 - 10:25	PRACTICAL EXERCISE II: (Relative Stability); A. External Fixation (prefab); B. Comparison of Locked and Unlocked Screws in Osteoporotic Bone; C. Bridge Plating			
10:25 - 10:35	Travel to Discussion Group Rooms			

10:35 - 11:45	Nailing Flip Chart
11:45 - 12:30	Lunch
12:30 - 13:45	PRACTICAL EXERCISE III: Relative Stability: A. Spanning Ex-Fix; B. IM Nail Tibia
13:45 - 13:55	Travel to Discussion Group
13:55 - 15:25	Small Group Discussion 2: Diaphyseal
15:25 - 15:35	Travel to Lecture Hall
15:35 - 16:00	Relative Stability Quiz Bowl
16:00 - 17:50	PRACTICAL EXERCISE IV: Pre-op Planning - Forearm Model

Day 3

Saturday, November 01, 2025 - 07:15 - 15:00 - (includes breaks, travel-time and meals)

Schedule	Title	Moderator	Faculty	Room
07:15 - 07:45	Breakfast			
07:45 - 08:00	Violation of AO Principles: How Not to AO			
08:00 - 09:20	PRACTICAL EXERCISE V: Operate Your Plan Radius / Ulna			
09:20 - 09:35	Break and Travel to Lecture Hall			
09:35 - 10:20	MODULE 3: Hip and Ankle Fractures			
09:35 - 09:45	Intracapsular Hip Fractures			
09:45 - 09:55	Extracapsular Hip Fractures			
09:55 - 10:10	Ankle Fractures			
10:10 - 10:20	Module Summary			
10:20 - 10:25	Travel to Lab			
10:25 - 11:35	PRACTICAL EXERCISE VI: Ankle Fractures			
11:35 - 11:45	Travel to Discussion Group			
11:45 - 13:15	Small Group Discussion 3: Articular Fractures with Lunch			
13:15 - 13:25	Travel to Lab			
13:25 - 14:45	PRACTICAL EXERCISE VII: Intertrochanteric Hip Fractures			
14:45 - 15:00	Course Summary and Adjourn			

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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 in this course is for teaching purposes only with the intent to enhance the learning experience.

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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.