AO Trauma NA Blended Course - Basic Principles of Fracture Management

August 27, 2026 - August 29, 2026
Houston, Texas, 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 - **July 13 - August 7, 2026**
(must be completed in its entirety to advance to the In-Person Small Group Discussions and Practical Lab)

****All Self Study Material Must Be Completed by August 7, 2026 @ 8AM ET****

In-Person Small Group Discussions and Practical Lab (3-days) - **Houston, Texas August 27-29, 2026**

Event Summary

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

Course Prerequisite(s):
No Prerequisites

Venue:
Marriot Marquis Houston
1777 Walker Street
Houston, Texas, USA
Phone Number: 1-713-654-1777

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

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

Boulton, Christina - Chairperson
MD
Department of Orthopaedic Surgery
University of Arizona
Banner University Medical Center
Tucson, Arizona

Dr. Boulton is an orthopaedic trauma surgeon and associate residency program director at University of Arizona / Banner University Medical Center in Tucson, AZ. She completed Medical School and Orthopaedic Residency training at Harvard Medical School and Orthopaedic Trauma Fellowship at R Adams Cowley Shock Trauma Center in Baltimore. Her clinical interests include complex fracture management, nonunion and deformity correction.

Agenda

Day 1

Thursday, August 27, 2026 - 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, August 28, 2026 - 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, August 29, 2026 - 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.

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