

2017 — Preliminary Program

Basic Principles of Fracture Management for Residents

**See Inside for Complete
List of Dates and Locations**



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AO North America
1700 Russell Road
Paoli, PA 19301

www.aona.org

A letter from the Chair of AOTrauma North America



As Chair of the AOTrauma North America Education Committee, it is my pleasure to introduce you to this unique and exciting organization and our mission. Since 1958, the AO has been the worldwide leader in musculoskeletal trauma education. AONA provides comprehensive multidisciplinary education to surgeons, fellows and residents in orthopedic, craniomaxillofacial, spine and veterinary surgery.

The AO ('Arbeitsgemeinschaft für Osteosynthesefragen') is a noncommercial entity dedicated to education, research and the advancement of surgical care. We are a fellowship of like-minded surgeons that span the globe. AONA was established as a regional entity of the AO Foundation in 1992 and continues the long tradition of teaching excellence. As an independent, surgeon-driven, nonprofit specialty society, AONA is dedicated to the advancement of patient care. Our mission is to improve the care of patients with musculoskeletal injuries in North America through education and research.

I invite you to participate in the many opportunities offered by AOTrauma North America. There is a wide spectrum of educational activities to meet the life-long learning needs of surgeons. Whether as a resident, fellow or attending surgeon, AOTNA offers modern teaching techniques and state-of-the-art courses that are tailored for today's learner. Our educational activities include annual courses, symposia, regional summits and workshops throughout the world. AO North America has developed a systematic approach to education and course offerings. Beginning at the basic principles level and continuing through to the complex care of a variety of musculoskeletal disorders we cover it all.

Specialty courses are intensive and focus on specific anatomical areas of the musculoskeletal system. Each educational offering has its own unique structure, at times employing didactic sessions, hands-on laboratory, cadaveric specimens, small group discussions, expert panels and live surgery.

AO North America is recognized globally for providing excellent surgical education. Participating in these activities will be extremely valuable to you as you strive to improve patient care throughout your career.

Sincerely,

A handwritten signature in dark ink, appearing to read 'R. Wilber', written in a cursive style.

Roger Wilber

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2017 AOTrauma North America Course Schedule

Basic and Advanced Courses

January 12 – 15, 2017

Basic Principles of Fracture Management
Charlotte, North Carolina

March 9 – 12, 2017

Basic Principles of Fracture Management
Dallas, Texas

April 20 – 23, 2017

Principles of Fracture Management Courses
Part 1: Basic Principles
Part 2: Advanced Principles
La Jolla, California

May 18 – 21, 2017

Basic Principles of Fracture Management
Chicago, Illinois

August 17 – 20, 2017

Basic Principles of Fracture Management
Bellevue, Washington

September 14 – 17, 2017

Principles of Fracture Management Courses
Part 1: Basic Principles
Part 2: Advanced Principles
Glendale (Phoenix), Arizona

October 26 – 29, 2017

Principles of Fracture Management
Part 1: Basic Principles
Part 2: Advanced Principles
Toronto, Ontario

November 30 – December 3, 2017

Basic Principles of Fracture Management
Baltimore, Maryland / St. Louis, Missouri

Additional Courses of Interest

January 13 – 16, 2017

New England Regional Fracture Summit
Stowe, Vermont

January 17 – 20, 2017

Surgical Preservation of the Hip
(Observation Bio Skills Lab using
Human Anatomical Specimens)
Marco Island, Florida

June 1 – 4, 2017

Pelvic and Acetabular Management
(with Human Anatomical Specimens)
Chicago, Illinois

September 14 – 17, 2017

Foot and Ankle (with Human
Anatomical Specimens)
Glendale (Phoenix), Arizona

November 9 – 12, 2017

Trauma Update: Tips and Tricks for
Orthopaedic Surgeons
Marco Island, Florida

All live educational activities will been approved for
AMA PRA Category 1 Credit™
All courses subject to modification.

Please visit our website: www.aona.org to
see all current course offerings.

CME Mission Statement

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 all aspects of musculoskeletal injuries and disorders (i.e., pre-operative planning to post-operative care)



Course Description



This course is part of an overall competency-based educational program that includes many other activities and resources for self-directed learning. The educational activities in each program are developed by an international taskforce of clinical experts and educators and made available to you through the Education section of www.aotrauma.org.

The Basic Principles of Fracture Management Course is designed to provide the participant with a fundamental knowledge of operative treatment of fractures according to the AO principles.

The four guiding AO principles of fracture fixation are:

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

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

BioSkills Laboratory

Application, patient selection and preoperative planning considerations will be presented. Participants will have the opportunity to carry out the techniques on artificial bones in a bioskills laboratory. Problems and complications, intraoperative difficulties and patient follow-up will be addressed. Concepts of polytrauma care associated with orthopedic surgery will be discussed.

Discussion Groups

Small groups will be formed to allow a unique opportunity for both the participant and Faculty to discuss preselected cases that will complement the AO principles presented in the lectures and labs.

Target Audience

This course is designed specifically for orthopedic fellows and residents. Practicing orthopedic surgeons interested in learning/reviewing the AO Principles also may attend.

Learner Objectives

At the end of this course, participants will 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





Accreditation



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

AONA has been resurveyed by the Accreditation Council for Continuing Medical Education (ACCME) and awarded **Accreditation with Commendation**.

Designation Statement

AO North America designates this live educational activity for a maximum of 31 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

For Canadian Based Physicians Attending AONA Courses

All live conferences or live courses held outside of Canada can be reported as accredited group learning activities under Section 1 of the MOC Program if they are developed by a university, academy, college, academic institution or physician organization.

Courses sponsored by AO North America meet the criteria of the Royal College of Physicians and Surgeons for accredited group learning activities.

Basic Course Agenda – Day 1

Time	Agenda Title
07:45 – 08:00	Introduction / Welcome
08:00 – 08:20	AIRS PreTest
08:20 – 09:20	MODULE 1: SOFT TISSUE
08:20 – 08:35	History of Fracture Care and Evolution of Principles
08:35 – 08:45	Bone: Fracture Classification – A Guide to Clinical Decision Making
08:45 – 09:00	Soft Tissue Injury and Compartment Syndrome
09:00 – 09:10	Open Fractures
09:10 – 09:20	Questions / Answers and AIRS
09:20 – 10:20	MODULE 2: STABILITY AND BONE HEALING
09:20 – 09:35	Bone Healing
09:35 – 09:50	Spectrum of Stability
09:50 – 10:05	Surgical Reduction Techniques: Respecting the Behavior of Bone
10:05 – 10:20	Questions / Answers and AIRS
10:20 – 10:40	Coffee Break
10:40 – 11:30	MODULE 3: PRINCIPLES – ABSOLUTE STABILITY
10:40 – 10:50	Screw Design and Function
10:50 – 11:00	Plate Design and Function
11:00 – 11:10	Tension Band Principles
11:10 – 11:30	Questions / Answers and AIRS
11:30 – 12:15	Lunch
12:15 – 13:55	PRACTICAL EXERCISE I: (Absolute Stability)
	A. Introduction to Implants
	B. Lag Screw
	C. Neutralization Plate
	D. Buttress Plate
13:55 – 14:05	Break
14:05 – 15:45	PRACTICAL EXERCISE I: (Absolute Stability-Continued);
	E. Axial Compression with Plates
	F. Oblique Fracture: Lag Through Plate
	G. Olecranon Fixation

Basic Course Agenda – Day 1 (continued)

Time	Agenda Title
15:45 – 16:05	Coffee Break

16:05 – 17:15 MODULE 4: PRINCIPLES – RELATIVE STABILITY

16:05 – 16:15	External Fixation Relative Stability
16:15 – 16:30	Bridge Plating with Traditional Implants and Techniques
16:30 – 16:45	Locked Plating – Biology, Biomechanics, Clinical Applications
16:45 – 16:55	Intramedullary Techniques, Relative Stability
16:55 – 17:15	Questions / Answers and AIRS

17:15 – 17:25 Travel to Lab

17:25 – 18:55 PRACTICAL EXERCISE II: (Relative Stability)

- A. External Fixation
- B. Bridge Plating
- C. Comparison of Locked and Unlocked Screws in Osteoporotic Bone



Basic Course Agenda – Day 2

Time	Agenda Title
08:00 – 09:30	Discussion Group One: (with Breakfast) Review of Principles and Decision Making
09:30 – 09:40	Travel to Lab
09:40 – 11:40	PRACTICAL EXERCISE III: AO Skills Lab
11:40 – 12:30	Lunch
12:30 – 13:40	MODULE 5: DIAPHYSEAL MANAGEMENT
12:30 – 12:40	Radiation Safety
12:40 – 12:50	Femur
12:50 – 13:00	Tibia
13:00 – 13:10	Humerus
13:10 – 13:20	Radius & Ulna
13:20 – 13:40	Questions / Answers and AIRS
13:40 – 13:50	Travel to Discussion Groups
13:50 – 16:00	PRACTICAL EXERCISE IV: (Intramedullary Nailing) A. Femur B. Tibia
13:50 – 14:40	Discussion in Small Group Rooms
14:40 – 14:50	Travel to Lab
14:50 – 16:00	Hands on Exercise in Lab
16:00 – 16:10	Travel to Lecture Hall
16:10 – 16:25	Preoperative Planning
16:25 – 16:40	Unique Learning Resources of the AO Foundation
16:40 – 17:50	PRACTICAL EXERCISE V: Preoperative Planning – Forearm Model
18:00 – 19:00	Reception – (Participants and Faculty Only)

Basic Course Agenda – Day 3

Time	Agenda Title
08:00 – 09:30	Discussion Group Two: Diaphyseal Fractures (with Breakfast)
09:30 – 09:40	Travel to Lab
09:40 – 10:55	PRACTICAL EXERCISE VI: Fixation of Radius / Ulna
10:55 – 11:05	Travel to Lectures
11:05 – 12:05	MODULE 6: LOWER EXTREMITY – ARTICULAR FRACTURES
11:05 – 11:15	Principles of Management – Articular
11:15 – 11:30	Ankle Fractures
11:30 – 11:40	Introduction to Pilon Fractures
11:40 – 11:50	Introduction to Tibial Plateau
11:50 – 12:05	Questions / Answers and AIRS
12:05 – 12:50	Lunch
12:50 – 14:00	PRACTICAL EXERCISE VII: Ankle Fractures – Type C Malleolar
14:00 – 14:10	Travel to Lectures
14:10 – 15:00	MODULE 6: LOWER EXTREMITY – ARTICULAR FRACTURES (Continued)
14:10 – 14:20	Distal Femur
14:20 – 14:30	Extracapsular Hip Fracture
14:30 – 14:40	Intracapsular Hip Fracture
14:40 – 14:50	Olecranon and Patellar Fractures
14:50 – 15:00	Questions / Answers and AIRS
15:00 – 15:15	Travel to Lab

Basic Course Agenda – Day 3 (continued)

Time	Agenda Title
15:15 – 16:05	PRACTICAL EXERCISE VIII: (Fractures of the Hip) A. Compression Hip Screw Fixation B. Cannulated Screw Fixation Video
16:05 – 16:15	Travel to Lectures
16:15 – 17:00	MODULE 7: UPPER EXTREMITY - ARTICULAR FRACTURES 16:15 – 16:25 Proximal Humerus 16:25 – 16:35 Distal Humerus 16:35 – 16:45 Distal Radius 16:45 – 17:00 Questions / Answers and AIRS
17:00 – 18:45	MODULE 8: SPECIAL FRACTURE PROBLEMS 17:00 – 17:15 Polytrauma 17:15 – 17:25 Radiographic Evaluation and Classification of Pelvic Ring Disruptions 17:25 – 17:35 Acute Management of Pelvic Ring Injuries 17:35 – 17:45 Questions / Answers and AIRS 17:45 – 18:45 AIRS Post Test

16:15 – 17:00 MODULE 7: UPPER EXTREMITY - ARTICULAR FRACTURES

16:15 – 16:25 Proximal Humerus

16:25 – 16:35 Distal Humerus

16:35 – 16:45 Distal Radius

16:45 – 17:00 Questions / Answers and AIRS

17:00 – 18:45 MODULE 8: SPECIAL FRACTURE PROBLEMS

17:00 – 17:15 Polytrauma

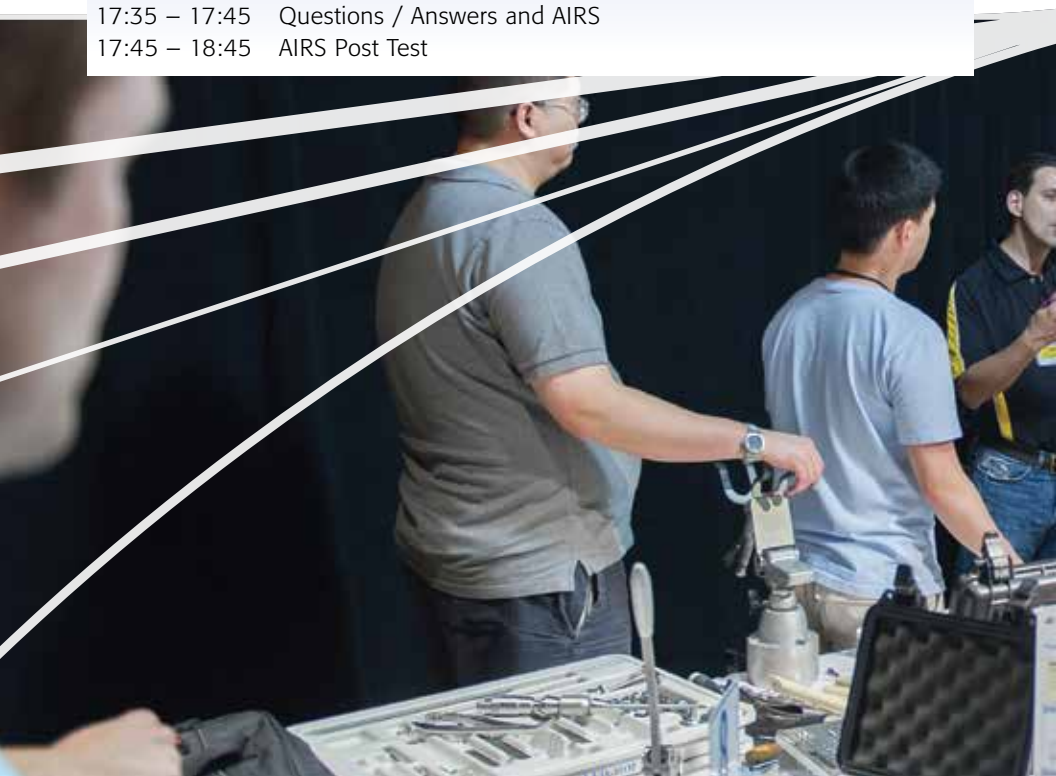
17:15 – 17:25 Radiographic Evaluation and

Classification of Pelvic Ring Disruptions

17:25 – 17:35 Acute Management of Pelvic Ring Injuries

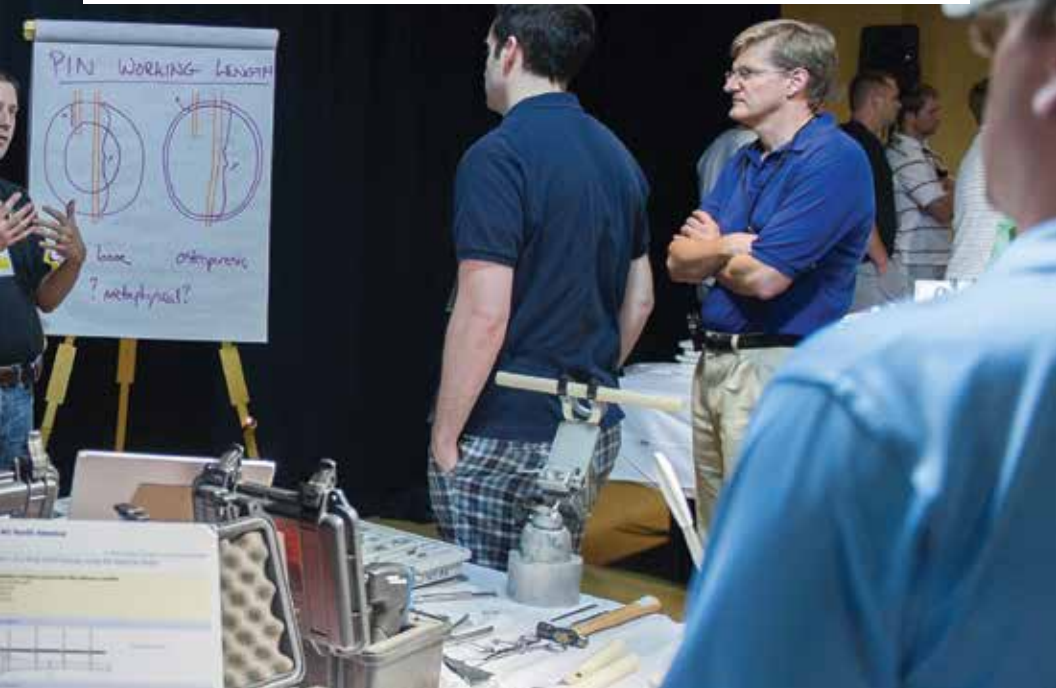
17:35 – 17:45 Questions / Answers and AIRS

17:45 – 18:45 AIRS Post Test



Basic Course Agenda – Day 4

Time	Agenda Title
08:00 – 09:15	Discussion Group Three: Articular Fractures (with Breakfast)
09:15 – 09:20	Travel to Lab
09:20 – 10:50	PRACTICAL EXERCISE IX: (External Fixation) A. Pelvic Fracture B. Spanning External Fixation
10:50 – 10:55	Travel to Lectures
10:55 – 12:10	MODULE 8: (Continued) SPECIAL FRACTURE PROBLEMS
10:55 – 11:10	Infection
11:10 – 11:20	Nonunions
11:20 – 11:30	Malunions
11:30 – 11:50	Violations of AO Principles: How Not To Do AO
11:50 – 12:00	Questions / Answers and AIRS
12:00 – 12:10	Closing Comments (Introduce Principles II) End of Course AIRS Questions



Past Participants' Comments:

"Superb faculty and very well organized. Excellent course!"



The labs were awesome!"

"Case presentations were the most helpful aspect of the course."



"The course has literally changed the way I think."

"This course was extremely beneficial to my orthopedic education. Every resident should attend this course."



Presentation 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 faculty with a relevant financial or other relationships 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.

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.

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.

Liability Statement

AO North America faculty and staff assume no personal liability for the techniques or the use of any equipment and accessories used for teaching purposes in the laboratory. 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.

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.

Tuition, Registration, Hotel and Travel

Tuition: Resident \$1095.00 (US funds)
 Attending \$1495.00 (US funds)

Tuition Includes: Registration, laboratory materials, breakfast, lunch and break refreshments.

Registration is available online only at www.aona.org

We encourage early registration, as seating is limited.

Upon receipt of your registration and payment, you will receive an email confirmation of your registration in the Course, along with hotel and travel information to assist you in making your arrangements.

Cancellation Policy

PLEASE NOTE: Full refunds will be made only if written notice of cancellation is received by the Course registration deadline date. Cancellations received after the deadline date will be charged a 10% cancellation fee. No tuition refund will be issued for cancellations after the start date of the course.

ADA Statement

AO North America fully intends to comply with the legal requirements of the Americans with Disabilities Act. If any registrant is in need of accommodation, please do not hesitate to submit a written request at least one month prior to this activity.

Hotel and Travel

Hotel Reservations and Travel Accommodations are the responsibility of the individual registrant. Complete information regarding hotel room rates will be available in the participant confirmation letter. Complete hotel information for individual Courses can be found on our website at www.aona.org

Please do not consider yourself registered in a Course until a confirmation email is received.

For Information:

Contact: AONA Customer Service Department

Phone: (800) 769-1391
 (610) 695-2459

Fax: (610) 695-2420

Email: customerservice@aona.org

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- Case Forum, AO Surgery Reference,
AO Traumaline™, online lectures/videos
- Special member offers



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