Hand and Wrist Fracture Management Course

April 20, 2017
Wyndham Boston Beacon Hill
Boston, Massachusetts
Message from AOHand North America Education Committee Chairman

On behalf of my fellow committee members I would like to welcome you to this AONA Educational Activity. We are committed to making this an exceptional educational activity.

AO was founded in 1958 and has a vision of excellence in the surgical management of trauma and disorders of the musculoskeletal system. Our mission is to foster and expand our network of health care professionals in education, research, development and clinical investigation to achieve more effective patient care worldwide.

AO North America (AONA) is a regional entity established by the foundation in 1992.

The North America Hand Education Committee provides continuing medical education through national and regional courses, symposia and/or workshops targeted to surgeons and residents specializing in the management of upper extremity (hand, wrist) injuries. These educational offerings incorporate lecture presentations by faculty, surgical video instruction, small group instruction and discussions. Case-based learning is emphasized. This includes case presentations, preoperative planning assessments and techniques and hands-on laboratory sessions. These sessions enable the participants to experience practicing surgical techniques and applications utilizing simulated anatomically correct bone models and applicable instruments and implants.

We have worked hard to ensure that the content of the course provides you with a valuable education experience. We appreciate your feedback. We sincerely hope that you enjoy this learning opportunity.

Sincerely,

Amit Gupta
AOHand North America Education Committee Chairman

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Hand and Wrist Fracture Management 2017 Course Schedule

- **June 20, 2017**
  - Winnipeg, MB, Canada
  - Hand and Wrist Fracture Management Course

- **September 23, 2017**
  - Louisville, Kentucky
  - Hand and Wrist Fracture Management Course

- **October 7, 2017**
  - New York, New York
  - Hand and Wrist Fracture Management Course

- **November 11, 2017**
  - Englewood, Colorado
  - Hand and Wrist Fracture Management Course

All activities will be certified for continuing medical education credit. All courses subject to modification.

For additional courses Directly Provided by AO North America, visit our website at [www.aona.org](http://www.aona.org)

For information on AOTrama Membership, please go to [www.aotrauma.org](http://www.aotrauma.org)
Faculty

Chairperson

Chaitanya Mudgal, MD, MS (Ortho), MCh
Associate Professor in Orthopaedics
Harvard Medical School
Hand Surgery Service
Massachusetts General Hospital
Boston, Massachusetts

Faculty

Philip Blazar, MD
Associate Professor
Harvard Hand and Upper Extremity Surgery Fellowship Director
Brigham and Women’s Hospital
Boston, Massachusetts

Mark S. Cohen, MD
Professor
Director, Hand and Elbow Section
Director, Orthopaedic Education
Rush University Medical Center
Chicago, Illinois

Scott Duncan, MD, MPH, MBA
Boston, Massachusetts

Jesse Jupiter, MD, MA
Hansjörg Wyss AO Professor
Harvard Medical School
Visiting Orthopaedic Surgeon
Department of Orthopaedic Surgery
Massachusetts General Hospital
Boston, Massachusetts

David Ruchelsman, MD, FAAOS
Assistant Chief of Hand Surgery, Newton-Wellesley Hospital
Director, Hand Surgery Research and Education Foundation
Clinical Associate Professor of Orthopaedic Surgery
Tufts University School of Medicine
Newton, Massachusetts

Robert Strauch MD
Professor of Orthopaedic Surgery
Columbia University Medical Center
New York, New York
# Hand and Wrist Fracture Management Course

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<th>Time</th>
<th>Activity</th>
<th>Learner Outcomes</th>
<th>Lecturer</th>
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<tbody>
<tr>
<td>8:00 – 8:15</td>
<td>Introduction / Pretest</td>
<td></td>
<td>Mudgal</td>
</tr>
<tr>
<td>8:15 – 8:30</td>
<td><strong>Lecture:</strong> Management of Proximal Phalanx Fractures</td>
<td>List and describe surgical options and indications, describe operative exposures, list indications for closed versus open management, devise a management plan that takes into account both patient factors and fracture factors.</td>
<td>Ruchelsman</td>
</tr>
<tr>
<td>8:30 – 9:00</td>
<td><strong>Practical Exercise:</strong> Lag Screw Moderator: Ruchelsen</td>
<td>Repair a long oblique metacarpal fracture using 2.0 mm screws in a bone model.</td>
<td></td>
</tr>
<tr>
<td>9:00 – 9:15</td>
<td><strong>Lecture:</strong> Management of PIP Joint Fractures and Dislocations</td>
<td>List and describe surgical options and indications, describe operative exposures, list indications for closed versus open management, devise a management plan that takes into account both patient factors and fracture factors.</td>
<td>Mudgal</td>
</tr>
<tr>
<td>9:15 – 9:45</td>
<td><strong>Practical Exercise:</strong> Neutralization Plate Moderator: Cohen</td>
<td>Repair a short oblique metacarpal fracture using a 2.0 mm plate in a bone model.</td>
<td></td>
</tr>
<tr>
<td>9:45 – 10:15</td>
<td>Case Discussions</td>
<td>PIP joint and proximal phalanx fractures.</td>
<td>Blazar</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Cohen</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Ruchelsen</td>
</tr>
<tr>
<td>10:15 – 10:30</td>
<td><strong>Coffee Break</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10:30 – 10:45</td>
<td><strong>Lecture:</strong> Management of Finger Metacarpal Fractures</td>
<td>List and describe surgical options and indications, describe operative exposures for, list indications for closed versus open management, devise a management plan that takes into account both patient factors and fracture factors.</td>
<td>Strauch</td>
</tr>
<tr>
<td>10:45 – 11:15</td>
<td><strong>Practical Exercise:</strong> Compression Plate Moderator: Strauch</td>
<td>Repair a transverse fracture of a metacarpal using a 2.0 compression plate in a bone model.</td>
<td>Duncan</td>
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<td></td>
<td></td>
<td></td>
<td>Mudgal</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Strauch</td>
</tr>
<tr>
<td>11:15 – 11:45</td>
<td>Case Discussions</td>
<td>Metacarpal fractures.</td>
<td></td>
</tr>
<tr>
<td>11:45 – 12:00</td>
<td><strong>Lecture:</strong> Management of Hand Fracture Complications</td>
<td>List the complications, describe a management plan to reduce the risk of complications, describe the management plan for established complications.</td>
<td>Jupiter</td>
</tr>
<tr>
<td>12:00 – 12:30</td>
<td><strong>Lunch</strong></td>
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<tr>
<td>12:30 – 12:45</td>
<td>Lecture: Management for Thumb Metacarpal Fractures</td>
<td>Describe the common fracture patterns, describe the operative exposures, list the evidence-based treatment options for Bennett fracture.</td>
<td>Duncan</td>
</tr>
<tr>
<td>12:45 – 13:15</td>
<td><strong>Practical Exercise:</strong> T-Plate</td>
<td>Repair in a Rolando fracture using a 2.0 mm hand plate in a bone model.</td>
<td></td>
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<tr>
<td></td>
<td><em>Moderator: Duncan</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13:15 – 13:30</td>
<td>Lecture: Small Joint Arthrodesis</td>
<td>Draw and describe the common techniques, list complications and their management.</td>
<td>Mudgal</td>
</tr>
<tr>
<td>13:30 – 14:00</td>
<td><strong>Practical Exercise:</strong> Tension Band</td>
<td>Perform a PIP joint tension band arthrodesis in a bone model.</td>
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<tr>
<td></td>
<td><em>Moderator: Mudgal</em></td>
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<tr>
<td>14:00 – 14:15</td>
<td><em>Coffee Break</em></td>
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<tr>
<td>14:15 – 14:30</td>
<td>Lecture: Management of Scaphoid Fractures</td>
<td>Describe surgical options and indications, describe operative exposures, list indications for closed versus open management, devise a management plan that takes into account both patient factors and fracture factors.</td>
<td>Blazar</td>
</tr>
<tr>
<td>14:30 – 15:00</td>
<td><strong>Practical Exercise:</strong> Compression Scaphoid Screw</td>
<td>Repair a scaphoid fracture in a bone model.</td>
<td>Blazar</td>
</tr>
<tr>
<td></td>
<td><em>Moderator: Blazar</em></td>
<td></td>
<td></td>
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<tr>
<td>15:00 – 15:30</td>
<td>Case Discussions</td>
<td>Scaphoid fractures.</td>
<td>Blazar, Cohen, Strauch</td>
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<tr>
<td>15:30 – 15:45</td>
<td>Lecture: Management of Distal Radius Fractures</td>
<td>Describe common fracture patterns, describe decision-making for operative versus non-operative management, describe surgical exposure, describe evidence-based management plan.</td>
<td>Jupiter</td>
</tr>
<tr>
<td>15:45 – 16:15</td>
<td><strong>Practical Exercise:</strong> Locking Plate Distal Radius Screw</td>
<td>Repair a distal radius fracture in a bone model.</td>
<td>Duncan, Jupiter, Mudgal</td>
</tr>
<tr>
<td>16:15 – 16:45</td>
<td>Case Discussions</td>
<td>Distal radius fractures.</td>
<td>Duncan, Jupiter, Mudgal</td>
</tr>
<tr>
<td>16:45 – 17:00</td>
<td>Post test / Wrap up</td>
<td></td>
<td>Mudgal</td>
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<tr>
<td>17:00</td>
<td><em>Adjourn</em></td>
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*Total learning time: 8 hours*
Course Description
This Course is designed to teach participants how to systematically analyze hand and wrist fractures and apply the treatment methodology based on fracture management principles. Hand fractures are analyzed according to the number of fragments, the fracture configuration, displacement, clinical and radiographic deformity, stability and function, as well as individual patient considerations.

These AO Principles will be stressed:
– Anatomic reduction
– Stable fixation
– Preservation of blood supply
– Functional aftercare
– Early mobilization

The majority of hand fractures are undisplaced or minimally displaced. These fractures are stable (do not lose their position spontaneously or with gentle progressive-range-of-motion exercises) and require only protection and rehabilitation. A smaller but very important cohort of hand fractures are displaced and unstable, may be irreducible, or both.

This Course distinguishes the characteristics between these two groups and emphasizes the reliable, and whenever possible, minimally traumatic treatment of those fractures that require fixation. Correct selection of fractures for stable fixation and the appropriate techniques will be accentuated as well as alternative fixation methods.

Target Audience
Enrollment in this Course is open to surgeons and hand fellows in orthopedic, plastic and general surgery. Residents who are interested in expanding their knowledge, skills and judgment in selecting patients for internal fixation procedures should also attend.

Learner Objectives
At the conclusion of this Course, the participant should be able to:
– Differentiate between management of non-operative fractures and fractures that need operative stabilization
– Describe the indications for internal fixation of hand and wrist fractures, and the criteria for implant selection
– Identify alternative fixation methods and their role in fracture management
– Explain the importance of soft tissue preservation in the operative management of unstable hand fractures

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 (ACME) and awarded Accreditation with Commendation.

Designation Statement
AO North America designates this live educational activity for a maximum of 8 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.

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)
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 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
AO North America 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.

Location Key

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<td>Thursday</td>
<td>0700 – 0800</td>
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<td>Lectures</td>
<td>Beacon Hill BR AB</td>
<td>Thursday</td>
<td>0800</td>
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<tr>
<td>Breakfast</td>
<td>Beacon Hill BR C</td>
<td>Thursday</td>
<td>0700 – 0800</td>
</tr>
<tr>
<td>Break</td>
<td>Beacon Hill BR Foyer</td>
<td>Thursday</td>
<td>1015 – 1030</td>
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<tr>
<td>Lunch</td>
<td>Beacon Hill BR C</td>
<td>Thursday</td>
<td>1200 – 1230</td>
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<tr>
<td>Break</td>
<td>Beacon Hill BR Foyer</td>
<td>Thursday</td>
<td>1400 – 1415</td>
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Name Tag Identification
Gold – Faculty
White – Participants
Beige – AONA Support Staff
Grey – Vendors

Note:
AO North America (AONA) will have official photographers and videographers present at this course; therefore, please note that any photographs and videos taken at the meeting may be used in future AONA publications, on the AONA web site, or in other Society materials.

Other picture taking and video or audio recording of lectures and labs is strictly prohibited

Please turn off all pagers and cellular phones.

Please visit our website: [www.aona.org](http://www.aona.org) to register for this Course and for other course offerings.
Hand and Wrist
Fracture Management Course
April 20, 2017
Wyndham Boston Beacon Hill
Boston, Massachusetts

Course Location
Wyndham Boston Beacon Hill
5 Blossom Street
Boston, MA 02114
617.742.7630