



**The American Academy of Foot & Ankle Osteosynthesis**

**presents**

***THE AAFAO RESIDENT COURSE***

***in***

***Basic Fundamentals of Internal Fixation  
For Reconstructive Surgery and  
Trauma of the Foot & Ankle***

**Hyatt DFW Airport**

**SCIENTIFIC COMMITTEE**

**Gage M. Caudell, DPM - Fort Wayne, Indiana**

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**Nahiro Shibuya, DPM - Temple, Texas**

**LAB COORDINATOR**

**Gage M. Caudell, DPM – Fort Wayne, Indiana**

**Thursday**

**7:00 7:25 Registration and Breakfast**  
**7:25 7:30 Welcome and Introduction**

**7:30 9:30 FUNDAMENTALS**

7:30 8:10 Osteosynthesis in Modern Foot and Ankle Surgery  
8:10 8:30 Biomechanics of Bone  
8:30 8:50 Bone Grafting Healing  
8:50 9:10 Orthobiologics  
9:10 9:30 Anatomic Dissection in Foot and Ankle Surgery

**9:30 9:55 BREAK & VISIT VENDORS**

**9:55 11:15 NON-SCREW FIXATION TECHNIQUES**

9:55 10:10 Principles and Techniques of Non Operative Management of Fractures  
10:10 10:25 Fundamentals of K-Wires, Steinman Pins, and Cerclage Wire Fixation  
10:25 10:40 Principles of Tension Banding; Intramedullary Splintage and  
Tension Band Wire Techniques  
10:40 10:55 Staple Fixation (Principles and Devices)  
10:55 11:15 Fundamentals of External Fixation

**11:15 12:00 PRACTICAL EXERCISE I - NON-SCREW FIXATION TECHNIQUES**

11:15 11:20 Assembly and Operation of Power Instrumentation Table Top Instr  
11:20 11:30 Crossed K-Wire Technique (Hallux IPJ Fusion) "Bucket Handle"  
11:30 11:45 K-Wire Splintage and Tension Band Wire Techniques 5th  
Metatarsal Avulsion (Single Loop/ Figure "8"  
11:45 12:00 Staple Lab

**12:00 12:45 LUNCH**

**Thursday, (cont.)**

**12:45 1:45 SCREW FIXATION**

12:45 1:00 Anatomy of a Screw

1:00 1:15 Principles and Techniques of Lag Screw Fixation  
"By Design or by Technique"

1:15 1:30 Cannulated Screws

1:30 1:45 Functional Screw Caddy for Accurate Screw Instrumentation

**1:45 2:45 OBLIQUE ORIENTATIONS: FRACTURES, OSTEOTOMIES AND SCREW INSERTION**

1:45 2:00 Principles and Techniques of Oblique Orientations

2:00 2:15 Lesser Metatarsal Osteotomies / Tailor's bunion

2:15 2:25 Akin Osteotomy

2:25 2:45 Oblique Base Wedge Osteotomy of the 1st Metatarsal

**2:45 3:10 BREAK & VISIT VENDORS**

**Thursday, (cont.)**

**3:10 4:15 PRACTICAL EXERCISE II - LAG SCREW TECHNIQUE**

3:10	3:20	Use of Small Fragment Instrumentation
3:20	3:30	Cancellous Screw-Lag Technique
3:30	3:40	"No Compression" Cortical Screw Insertion
3:40	3:45	Conversion to a "Lag" Screw / Compression
3:45	3:55	Standard Cortical Screw - Lag Technique
3:55	4:05	Small Cortical Screw - Lag Technique
4:05	4:15	"Compromise" Compression Technique

**4:15 5:45 PRACTICAL EXERCISE III - LAG SCREW TECHNIQUES**

4:15	4:25	Hallux IPJ fusion / 3.5 mm fully threaded screw
4:25	4:40	Akin Osteotomy / Short Oblique Osteotomy / Single Screw
4:40	5:00	Tailor bunionectomy / Lesser Metatarsal Osteotomy
5:00	5:15	Long Oblique Fracture / Lesser Metatarsal Anchor and "Compression" Screws
5:15	5:30	Oblique Base Wedge Osteotomy ( <i>Podiatric Modification</i> ) 2 Screw Technique/*compromise and anchor screws
5:30	5:45	Dorsiflexory Wedge Osteotomy / "T" Sleeve Technique

**Friday**

**7:00 7:30 Breakfast**

**7:30 8:05 HALLUX VALGUS OSTEOTOMIES**

7:30 7:45 Chevron Osteotomies - Axis Guide, Austin, Long Dorsal Arm, Screw Fixation

7:45 8:05 "Z" Osteotomies - Axis Guide, SCARF Osteotomies, Screw Fixation

**8:05 9:30 FOOT AND ANKLE ARTHRODESIS**

8:05 8:30 Principles and Techniques of Joint Arthrodesis

8:30 8:45 Hallux Interphalangeal Joint (IPJ) Fusion

8:45 9:00 1st Metatarsal Phalangeal Joint (MPJ) Arthrodesis

9:00 9:15 Lapidus Arthrodesis / Hallux Abducto Valgus (HAV)

9:15 9:30 Midfoot Arthrodesis (Lisfranc, NC)

**9:30 10:00 BREAK & VISIT VENDORS**

**10:00 12:00 PRACTICAL EXERCISE IV: Hallux Valgus / OSTEOTOMIES *and* ARTHRODESIS**

10:00 10:30 Austin / Axis Guide / Osteotomy / Lock pin fixation  
2.7 Cortical Screw

10:30 10:55 Long Dorsal Arm / 2 Screw Fixation

10:55 11:20 SCARF / Axis Guide, Osteotomies, 2 Screw Fixation

11:20 11:40 1st MPJ Arthrodesis (Crossed Screws 4.0 Cancellous)

11:40 12:00 Lapidus / "Seattle" Screw Technique (3.5 Cortical)

**12:00 1:00 LUNCH**

## Friday

### **1:00 1:50 FOOT AND ANKLE ARTHRODESIS**

1:00 1:15 Rearfoot Fusions

1:15 1:30 Ankle Fusion

1:30 1:50 Tricks

### **1:50 2:55 PLATE FIXATION**

1:50 2:10 Principles of Plate Fixation/Locking Plate Technology

2:10 2:30 Implant Design / Clinical Applications of plate fixations in foot surgery

2:30 2:55 Guidelines for Removal of Implants (Complications, Infection, Broken Screws)

### **2:55 3:10 BREAK & VISIT VENDORS**

### **3:10 4:30 PRACTICAL EXERCISE V - TRIPLE ARTHRODESIS / ANKLE FUSION**

3:10 3:30 **STJ** - Subtalar Joint / "Superior" / "Inferior" Approach  
(6.5 Cancellous / 7.0 Cannulated)

3:30 3:45 **TNJ** - Talonavicular Joint (6.5 Cancellous, 4.0 Cancellous)

3:45 4:00 **CCJ** - Calcaneal - Cuboid Joint (Large Cancellous - 6.5mm);  
Staple Fixation (Information Only)

4:00 4:30 **ANK** - Ankle Fusions - Tripod Techniques  
"Home Run" Screws; (7.0 Cannulated)  
Posterior - Medial / Posterior - Lateral

### **4:30 6:15 PRACTICAL EXERCISE VI - PLATE FIXATION**

4:30 4:40 Plate Principles (Video Only) - Axial Plate Compression, Load Screw,  
"Pre-Bending"

4:40 5:00 Lesser Metatarsal Fracture - Axial Compression

5:00 5:20 1st MPJ Fusion - Interfragmental Compression / Axial Compression

5:20 5:45 1st MPJ Fusion with Bone Graft - LC-DCP Plate, Axial Compression

5:45 6:15 Medial Column / Charcot (Combination Fixation) IFC and "Locking" Plate

## Saturday

**7:30 8:00 Breakfast**

**8:00 10:20 MALLEOLAR FRACTURES**

8:00 9:00 Lauge-Hansen Classification

9:00 9:25 Danis-Weber Classification and Syndesmotic Stability

9:25 9:55 Malleolar Fractures; Philosophy, Strategy and Surgical Techniques

9:55 10:20 Anatomic Dissection of Ankle Fractures

**10:20 10:30 BREAK**

**10:30 12:00 PRACTICAL EXERCISE VII - MALLEOLAR FRACTURES**

10:30 10:50 **Weber A (Transverse Avulsion)**

- (K-Wire Splintage / Tension Band
- Medial malleolus – vertical shear fracture with anti-glide plate

10:50 11:10 **Weber B (Spiral Oblique)**

- **SER (Long Oblique)** "Anchor" and "Compression" Screws **(Video Only)**
- **SER (Short Oblique):**
- Interfrag screw + neutralization or posterior anti-glide plate
- Medial malleolus – transverse avulsion – K-wire, splintage (figure “8”)

11:10 12:00 **Weber C (Comminuted High Fibular Fracture)**

- Locking Plate / Syndesmotic Screw
- Medial Malleolus / Transverse Avulsion Fracture / 2 x 4.0 screws
- Posterior Malleolus (Direct)

12:00 Adjourn