

**29<sup>th</sup> Annual  
Baltimore Limb Deformity Course**

**Thursday, August 22 – Saturday, August 24, 2019**  
(as of 3.18.19)



Four Seasons Hotel  
Baltimore, Maryland, USA



---

**Course Chair**

**John Herzenberg, MD**

---

**Course Directors**

**Michael Assayag, MD**  
**Janet Conway, MD**  
**Philip McClure, MD**  
**Noman Siddiqui, DPM**  
**Shawn Standard, MD**

## **Invited Faculty**

<b>Hummira Abawi, DPM</b>	Baltimore, Maryland
<b>Rainer Baumgart, MD</b>	Munich, Germany
<b>Anil Bhave, PT</b>	Baltimore, Maryland
<b>Christopher Bibbo, DO</b>	Baltimore, Maryland
<b>James Binski, MD</b>	Dayton, Ohio
<b>Noam Bor, MD</b>	Afula, Israel
<b>Alexander Cherkashin, MD</b>	Dallas, Texas
<b>Mark Eidelman, MD</b>	Haifa, Israel
<b>Hady Eltayeb, MD</b>	Alexandria, Egypt
<b>Rudolf Ganger, MD</b>	Vienna, Austria
<b>Marie Gdalevitch, MD</b>	Montreal, Canada
<b>Vache Hambardzumyan, MD</b>	Doha, Qatar
<b>Lee Hlad, DPM</b>	Westerville, Ohio
<b>Joshua Hyman, MD</b>	New York City, New York
<b>Christopher Iobst, MD</b>	Columbus, Ohio
<b>Guido LaPorta, DPM</b>	North Abington Township, Pennsylvania
<b>Salih Marangoz, MD</b>	Istanbul, Turkey
<b>Scott Nelson, MD</b>	Loma Linda, California
<b>L. Reid Nichols, MD</b>	Wilmington, Delaware
<b>B. Kyle Potter, MD</b>	Washington, District of Columbia
<b>Christof Radler, MD</b>	Vienna, Austria
<b>Jerome Reichmister, MD</b>	Baltimore, Maryland
<b>Mikhail Samchukov, MD</b>	Coppell, Texas
<b>Leonid Solomin, MD</b>	Saint Petersburg, Russia
<b>John Sontich, MD</b>	Cleveland, Ohio
<b>William Terrell, MD</b>	Marietta, Georgia
<b>Rishi Thakral, MD</b>	Oklahoma City, Oklahoma
<b>Jacob Wynes, DPM</b>	Baltimore, Maryland

## Day 1: Thursday, August 22

---

6:00–7:00	<u>Registration, Breakfast, and Visit with Corporate Partners</u>	<i>Marine Room and Grand Ballroom Pre-function, Level 2</i>
7:00–7:15	Welcome <i>John Herzenberg, MD, and Jerome Reichmister, MD</i>	<i>Grand Ballroom, Level 2</i>
7:15–7:35	Pre-Op Planning: The Axis/Apex Method <i>Shawn Standard, MD</i>	
7:35–7:45	Alphabet Soup of Limb Alignment (Frontal Plane): MAD, LDFA, MPTA, LDTA, MPFA, LPFA, and JLCA <i>Janet Conway, MD</i>	
7:45–8:00	Frontal Plane Measurements on Normal Bones (Planning Workshop) <i>Janet Conway, MD</i>	
8:00–8:40	Assessment of Limb Alignment: Frontal Plane MAP ( <u>M</u> Measure Mechanical Axis Deviation, <u>A</u> nalyze Joint Angles, <u>P</u> ick the Bone) (Planning Workshop) <i>John Herzenberg, MD</i>	
8:40–9:10	<u>Coffee Break and Visit Corporate Partners</u>	<i>Grand Ballroom Pre-function</i>
9:10–9:35	The ABCs ( <u>A</u> pex, <u>B</u> one Cut, <u>C</u> orrection) <i>Shawn Standard, MD</i>	<i>Grand Ballroom</i>
9:35–10:25	Tibia: Frontal Plane Single-level Deformities (Planning Workshop) <i>Marie Gdalevitch, MD</i>	
10:25–11:10	Tibia: Frontal Plane Double-level Deformities (Planning Workshop) <i>Michael Assayag, MD</i>	
11:10–11:15	Discussion	
11:15–11:45	<u>Buffet Luncheon</u>	<i>Grand Ballroom Pre-function</i>
11:45–11:55	Radiography Considerations in Limb Deformity <i>Janet Conway, MD</i>	<i>Grand Ballroom</i>
11:55–12:05	Alphabet Soup of Limb Alignment (Sagittal Plane): PDFFA, PPTA, and ADTA <i>Philip McClure, MD</i>	
12:05–12:30	Sagittal Plane Measurements (Planning Workshop) <i>TBA</i>	
12:30–1:15	Tibia: Sagittal Plane Deformities (Planning Workshop) <i>Michael Assayag, MD</i>	
1:15–1:30	Tibia: Oblique Plane Deformities Overview <i>Shawn Standard, MD</i>	
1:30–1:50	Tibia: Oblique Plane Deformities (Planning Workshop) <i>Janet Conway, MD</i>	
1:50–2:10	Pin and Wire Placement for External Fixators <i>Leonid Solomin, MD</i>	
2:10–2:45	Introduction to the Bone Ninja <i>Shawn Standard, MD</i>	
2:45–2:55	Head to Designated Afternoon Labs	

## Day 1: Thursday, August 22

---

2:55–7:00 Thursday Afternoon Labs:

### Groups A-1 and A-2:

2:55–4:55	Six-Axis External Fixation 4 Lab Facilitator: <i>John Sontich, MD</i>	<i>Azure &amp; Indigo Rooms, Level 2</i>
4:55–5:00	Head to next lab	
5:00–7:00	Six-Axis External Fixation 2 Lab Facilitator: <i>Scott Nelson, MD</i>	<i>Grand Ballroom B, Level 2</i>

### Group B-1:

2:55–4:55	Internal Fixation Lab Facilitators: <i>TBA</i>	<i>Sienna Room, Level 2</i> <b>Lab Assistants:</b>
4:55–5:00	Head to next lab	
5:00–7:00	Six-Axis External Fixation 3 Lab Facilitators: <i>William Terrell, MD, and Guido LaPorta, DPM</i>	<i>Marine Room, Level 2</i>

### Group B-2:

2:55–4:55	Six-Axis External Fixation 3 Lab Facilitators: <i>William Terrell, MD, and Guido LaPorta, DPM</i>	<i>Marine Room, Level 2</i>
4:55–5:00	Head to next lab	
5:00–7:00	Internal Fixation Lab Facilitators: <i>TBA</i>	<i>Sienna Room, Level 2</i> <b>Lab Assistants:</b>

### Groups C-1 and C2:

2:55–3:55	Fixator-Assisted Plating Lab: Distal Femoral Valgus Deformity Facilitator: <i>Janet Conway, MD</i>	<i>Vermilion &amp; Umber Rooms, Level 4</i>
3:55–4:00	Head to next lab	
4:00–7:00	Six-Axis External Fixation 1 Lab Facilitators: <i>Rudolf Ganger, MD, and Christof Radler, MD</i>	<i>Cobalt Ballroom, Level 2</i>

7:30–9:30 Welcome Reception and Dinner (*ticket required, resort attire recommended*) *Splash Pool Terrace, Level 4*

## Day 2: Friday, August 23

---

- 6:15–7:00 Breakfast and Visit with Corporate Partners *Grand Ballroom Pre-function, Level 2*
- 7:00–7:10 Announcements and Evaluate Thursday Sessions *Grand Ballroom*  
*John Herzenberg, MD*
- 7:10–8:10 Femur: Frontal Plane Single-level Deformities (Planning Workshop)  
*John Herzenberg, MD*
- 8:10–8:30 Coffee Break and Visit with Corporate Partners *Grand Ballroom Pre-function*
- 8:30–11:55 *Please visit one of the two breakout sessions listed below:*
- Breakout Session: Focus on Ankle and Foot Deformities** *Grand Ballroom B*
- 8:30–9:05 Pre-Op Planning: The Axis/Apex/Third Line Method  
*Lee Hlad, DPM*
- 9:05–9:30 Alphabet Soup of Foot and Ankle Alignment: Frontal, Sagittal, and Transverse Planes  
*Jacob Wynes, DPM*
- 9:30–10:30 Foot and Ankle: Frontal, Sagittal, and Transverse Plane Deformities  
(Planning Workshop)  
*Noman Siddiqui, DPM*
- 10:30–10:50 Coffee Break and Visit with Corporate Partners *Grand Ballroom Pre-function*
- 10:50–11:10 Assessment of Limb Alignment and Subtalar/Ankle Joint Function *Grand Ballroom B*  
*Guido LaPorta, DPM*
- 11:10–11:50 Surgical Biomechanics for Foot and Ankle Deformity Correction  
*Guido LaPorta, DPM*
- 11:50–11:55 Discussion
- Breakout Session: Focus on Femoral Deformities** *Grand Ballroom A*
- 8:30–9:20 Femur: Frontal Plane Double-level Deformities (Planning Workshop)  
*Rishi Thakral, MD*
- 9:20–10:05 Reverse Planning Method (Lecture and Planning Workshop)  
*Rainer Baumgart, MD*
- 10:05–10:30 Femoral Planning in Reverse with Bone Ninja (Demonstration)  
*Philip McClure, MD*
- 10:30–10:50 Coffee Break and Visit with Corporate Partners *Grand Ballroom Pre-function*
- 10:50–11:15 Sagittal Plane Deformities: Knee Flexion Contracture *Grand Ballroom A*  
Secondary to Lengthening  
*Shawn Standard, MD*
- 11:15–11:55 Femur and Knee: Sagittal Plane Deformities (Lecture and Planning Workshop)  
*Shawn Standard, MD*
- 11:55–12:25 Boxed Luncheon *Grand Ballroom Pre-function*
- 12:25–12:30 Head to Designated Afternoon Labs

## Day 2: Friday, August 23

---

12:30–4:35 Friday Afternoon Labs:

### **Groups A-1 and A-2:**

- 12:30–1:30 Fixator-Assisted Plating Lab: Distal Femoral Valgus Deformity Vermilion &  
Umber Rooms, Level 4  
Facilitator: *Janet Conway, MD*
- 1:30–1:35 Head to next lab
- 1:35–4:35 Six-Axis External Fixation 1 Lab Cobalt Ballroom, Level 2  
Facilitators: *Rudolph Ganger, MD, and Christof Radler, MD*

### **Groups B-1 and B-2:**

- 12:30–2:30 Circular Fixation for Ankle Fusion Lab Azure & Indigo Rooms, Level 2  
Facilitators: *Guido LaPorta, DPM, and Noman Siddiqui, DPM*
- 2:30–2:35 Head to next lab
- 2:35–4:35 Six-Axis External Fixation 2 Lab Grand ballroom B, Level 2  
Facilitator: *Lee Hlad, DPM*

### **Group C-1:**

- 12:30–2:30 Six-Axis External Fixation 3 Lab Marine Room, Level 2  
Facilitator: *Christopher Iobst, MD*
- 2:30–2:35 Head to next lab
- 2:35–4:35 Internal Lengthening Nail Workshop Sienna Room, Level 2  
Facilitator: *John Herzenberg, MD*  
Lecturers: *Rudolph Ganger, MD, and Christof Radler, MD*

### **Group C-2:**

- 12:30–2:30 Internal Lengthening Nail Workshop Sienna Room, Level 2  
Facilitator: *John Herzenberg, MD*  
Lecturers: *Rudolph Ganger, MD, and Christof Radler, MD*
- 2:30–2:35 Head to next lab
- 2:35–4:35 Six-Axis External Fixation 3 Lab Marine Room, Level 2  
Facilitator: *Christopher Iobst, MD*

4:35–5:00 Light Refreshment Break and Head to Participant Case Presentations Cobalt Ballroom Pre-function, Level 2

### 5:00–6:30 **Curbside Consults: Participant Case Presentations**

*Cases must be provided to the Registration Desk by 6 p.m. on Thursday on a USB drive in either PowerPoint or KeyNote format. Cases submitted after this time may not be considered for presentation. All cases will be previewed and sequenced by a moderator.*

#### **Pediatric Cases – Moderators: Joshua Hyman, MD, and L. Reid Nichols, MD**

*Grand Ballroom A, Level 2*

- 5:00–5:20 History of Clubfoot Correction  
*Mark Eidelman, MD*
- 5:20–6:30 Participant Case Presentations

#### **Adult Cases – Moderators: Michael Assayag, MD, and William Terrell, MD**

*Vermilion Room, Level 4*

- 5:00–5:20 Internal Lengthening Nails  
*Rainer Baumgart, MD*
- 5:20–6:30 Participant Case Presentations

## Day 2: Friday, August 23

---

**Foot and Ankle Cases – Moderators: Noman Siddiqui, DPM, and  
Christopher Bibbo, DO**

*Grand Ballroom B, Level 2*

**Expert Panel: Guido LaPorta, DPM, and Lee Hlad, DPM**

5:00–5:20 Orthoplastic Reconstructive Ladder

*Christopher Bibbo, DO*

5:20–6:30 Participant Case Presentations

6:30 Adjourn

7:15 Faculty and Former Fellows Crab Feast (*invitation only*)

*Four Seasons Hotel, Lobby*

## Day 3: Saturday, August 24

---

- 7:15–8:00 Breakfast and Visit Corporate Partners *Grand Ballroom Pre-function, Level 2*
- 8:00–8:10 Announcements, Evaluate Friday Sessions, and Raffles *Grand Ballroom*  
*John Herzenberg, MD*
- 8:10–8:25 Physical Exam of Limb Deformities  
*Janet Conway, MD*
- 8:25–8:35 Contracture Management  
*Anil Bhave, PT*
- 8:35–9:00 Special Lecture: Osseointegration for Amputees  
*B. Kyle Potter, MD*
- 9:00–9:30 Coffee Break and Visit Corporate Partners *Grand Ballroom Pre-function*  
*Please vacate the Grand Ballroom so that we may close the wall for the breakout sessions.*

9:30–12:10 *Please visit one of the three breakout sessions listed below:*

### **Breakout Session: Adult Orthopedic Specialists**

*Sienna Room, Level 2*

- 9:30–9:55 Bone Ninja Cases (Workshop)  
*John Herzenberg, MD*
- 9:55–10:05 Bone Ninja as an Educational Tool for Patients  
*Vache Hambarzumyan, MD*
- 10:05–10:20 The AK-47 of Hexapods  
*Leonid Solomin, MD*
- 10:20–10:35 Fixator-Assisted Nailing  
*TBA*
- 10:35–10:50 Fixator-Assisted Locked Plating  
*Janet Conway, MD*
- 10:50–11:05 Limb Reconstruction Techniques for Periprosthetic Fracture and Joint Infection  
*Rishi Thakral, MD*
- 11:05–11:35 Limb Reconstruction Strategies for Tumors  
*Rainer Baumgart, MD*
- 11:35–11:50 Hexapods at 20: Where Are We?  
*Salih Marangoz, MD*
- 11:50–12:05 Bone Transport Options  
*Janet Conway, MD*
- 12:05–12:10 Discussion and Course Evaluation

### **Breakout Session: Foot and Ankle Specialists**

*Grand Ballroom B*

- 9:30–10:10 Bone Ninja Cases (Workshop)  
*Hummira Abawi, DPM*
- 10:10–10:25 External Fixation Solutions in the Foot and Ankle  
*Michael Assayag, MD*
- 10:25–10:35 Alternative Solutions for Ankle Arthritis  
*Guido LaPorta, DPM*



## Day 3: Saturday, August 24

---

- 10:35–10:50 Six-Axis Correction for Pediatric Cases in Foot and Ankle  
*Lee Hlad, DPM*
- 10:50–11:05 Flaps for the Foot and Ankle: Tips and Tricks  
*Christopher Bibbo, DO*
- 11:05–11:25 Distal Tibial Lengthening and Ankle Fusion in Charcot  
*Noman Siddiqui, DPM*
- 11:25–11:45 Percutaneous Bunion Correction: Method and Outcomes  
*TBA*
- 11:45–12:05 TBA
- 12:05–12:10 Discussion and Course Evaluation

### Breakout Session: Pediatric Orthopedic Specialists

*Grand Ballroom A*

- 9:30–9:55 Bone Ninja Cases (Workshop)  
*Shawn Standard, MD*
- 9:55–10:10 Six-Axis Correction for Pediatric Cases  
*Mark Eidelman, MD*
- 10:10–10:20 External Fixation Solutions for Missed Monteggia Fractures  
*Noam Bor, MD*
- 10:20–10:50 Workshop: Incorporating The Multiplier into Your Practice (Workbook Page 77)  
*John Herzenberg, MD*
- 10:50–11:00 Radiographic Assessment of Limb Length Discrepancy  
*Shawn Standard, MD*
- 11:00–11:05 Introduction to Guided Growth  
*Hady Eltayeb, MD*
- 11:05–11:20 Lengthening for Congenital Femoral Deficiency  
*Shawn Standard, MD*
- 11:20–11:30 Blount Disease  
*Christopher Iobst, MD*
- 11:30–11:40 Hemiplateau Elevation for Blount's: When and How?  
*Philip McClure, MD*
- 11:40–11:55 High Grade Fibular Hemimelia: Super Ankle  
*John Herzenberg, MD*
- 11:55–12:10 Discussion and Course Evaluation
- 12:10–1:20 Luncheon on Own
- 1:20–1:25 Head to Designated Afternoon Labs

## Day 3: Saturday, August 24

---

1:25–5:30 Saturday Afternoon Labs:

### **Group A-1:**

- 1:25–3:25 Six-Axis External Fixation 3 Lab *Marine Room, Level 2*  
Facilitator: *William Terrell, MD*
- 3:25–3:30 Head to next lab
- 3:30–5:30 Internal Lengthening Nail Lab *Sienna Room, Level 2*  
Facilitator: *Michael Assayag, MD*  
Lecturers: *Anil Bhavé, PT, John Herzenberg, MD, and Christof Radler, MD*

### **Group A-2:**

- 1:25–3:25 Internal Lengthening Nail Lab *Sienna Room, Level 2*  
Facilitator: *Michael Assayag, MD*  
Lecturers: *Anil Bhavé, PT, John Herzenberg, MD, and Christof Radler, MD*
- 3:25–3:30 Head to next lab
- 3:30–5:30 Six-Axis External Fixation 3 Lab *Marine Room, Level 2*  
Facilitator: *William Terrell, MD*

### **Groups B-1 and B-2:**

- 1:25–2:25 Fixator-Assisted Plating Lab: Distal Tibial Varus Deformity *Vermilion & Umber Rooms, Level 4*  
Facilitator: *Noman Siddiqui, DPM*
- 2:25–2:30 Head to next lab
- 2:30–5:30 Six-Axis External Fixation 1 Lab *Cobalt Ballroom, Level 2*  
Facilitators: *Rudolf Ganger, MD, and Christof Radler, MD*

### **Group C-1:**

- 1:25–3:25 Six-Axis External Fixation 2 Lab *Grand Ballroom B, Level 2*  
Facilitator: *L. Reid Nichols, MD*
- 3:25–3:30 Head to next lab
- 3:30–5:30 Coxa Vara and Knee Flexion Deformity Lab *Azure & Indigo Rooms, Level 2*  
Facilitators: *Shawn Standard, MD, and Joshua Hyman, MD*

### **Group C-2:**

- 1:25–3:25 Coxa Vara and Knee Flexion Deformity Lab *Azure & Indigo Rooms, Level 2*  
Facilitators: *Shawn Standard, MD, and Joshua Hyman, MD*
- 3:25–3:30 Head to next lab
- 3:30–5:30 Six-Axis External Fixation 2 Lab *Grand Ballroom B, Level 2*  
Facilitator: *L. Reid Nichols, MD*

5:30 Adjourn