

# 35<sup>th</sup> Annual Baltimore Limb Deformity Course

Thursday, August 21 – Saturday, August 23, 2025

(as of 04/30/25)



Four Seasons Hotel Baltimore  
Baltimore, Maryland, USA



Rubin Institute for  
Advanced Orthopedics

**CARE BRAVELY**

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## Course Chair

**Philip McClure, MD**

## Course Chair Emeritus

**John Herzenberg, MD**

## LLRS Liaison

**David Podeszwa, MD**

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## Course Directors

**Michael Assayag, MD**

**Janet Conway, MD**

**Connor Green, MD**

**Noman Siddiqui, DPM**

**Shawn Standard, MD**

**Endorsed by:**



### Invited Faculty and Lab Assistants

<b>Hummira Abawi, DPM</b>	Columbia, Maryland
<b>Marcel Abouassaly, MD</b>	Calgary, Canada
<b>Mohamed Abu Ain, MD</b>	Amman, Jordan
<b>Samantha Bark, DPM</b>	Galion, Ohio
<b>Elhanan Bar-On, MD</b>	Ramat Gan, Israel
<b>Anil Bhawe, PT</b>	Baltimore, Maryland
<b>Christopher Bibbo, DO</b>	Baltimore, Maryland
<b>James Blair, MD</b>	Atlanta, Georgia
<b>Lindsey Calligaro, DPM</b>	Wayne, New Jersey
<b>Alexander Cherkashin, MD</b>	Dallas, Texas
<b>Ronald Delanois, MD</b>	Baltimore, Maryland
<b>Yuriy Demyan, MD</b>	Mukachevo, Ukraine
<b>Matthew Deren, MD</b>	Cleveland, Ohio
<b>Nikola Dobrasevic, MD</b>	Warren, Michigan
<b>Kimberly Doll, DPT</b>	Baltimore, Maryland
<b>Michael Downey, MD</b>	Fort Worth, Texas
<b>Mark Eidelman, MD</b>	Haifa, Israel
<b>Yasser Elbatrawy, MD</b>	Cairo, Egypt
<b>Jill Flanagan, MD</b>	Atlanta, Georgia
<b>Jeanne Franzone, MD</b>	Wilmington, Delaware
<b>Marie Gdalevitch, MD</b>	Montréal, Canada
<b>Christine Goodbody, MD</b>	Philadelphia, Pennsylvania
<b>Matthew Greenblatt, DPM</b>	West Palm Beach, Florida
<b>Vache Hambardzumyan, MD</b>	Peterborough, New Hampshire
<b>Aaron Huser, DO</b>	Saint Louis, Missouri
<b>Saad Ilyas, MBBS</b>	Lahore, Pakistan
<b>Christopher Iobst, MD</b>	Columbus, Ohio
<b>Julio Jauregui, MD</b>	Baltimore, Maryland
<b>Jessica Knight, DPM</b>	Elmhurst, Illinois
<b>Iara Lacerda, MD</b>	Danville, Pennsylvania
<b>Guido LaPorta, DPM</b>	Binghamton, New York
<b>Paul Matuszewski, MD</b>	Lexington, Kentucky
<b>James McWilliam, MD</b>	White Plains, New York
<b>Kenji Miki, MD</b>	Osaka, Japan
<b>Katherine Miller, MD</b>	West Palm Beach, Florida
<b>James Nace, DO</b>	Baltimore, Maryland
<b>Scott Nelson, MD</b>	Loma Linda, California
<b>L. Reid Boyce Nichols, MD</b>	Wilmington, Delaware
<b>Benjamin Ollivere, MD</b>	Nottingham, United Kingdom
<b>Robert O'Toole, MD</b>	Baltimore, Maryland
<b>Patrick Powell, MD</b>	Shreveport, Louisiana
<b>Stephen Quinnan, MD</b>	West Palm Beach, Florida
<b>Christof Radler, MD</b>	Vienna, Austria
<b>J. Spence Reid, MD</b>	Hershey, Pennsylvania
<b>Jessica Rivera, MD</b>	New Orleans, Louisiana

<b>Daniel Ruggles, DO</b>	Miami, Florida
<b>Babar Shafiq, MD</b>	Baltimore, Maryland
<b>Sanoj Shahul, MD</b>	Washington, DC
<b>Daniel Weltsch, MD</b>	Ramat Gan, Israel
<b>Philip Wrotslavsky, DPM</b>	San Diego, California
<b>Jeffrey Young, MD</b>	Stanford, California

## Day 1: Thursday, August 21

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6:00–7:00	<u>Registration, Breakfast, and Visit with Corporate Partners</u>	<i>Marine Room and Grand Ballroom Pre-function, Level 2</i>
6:00–6:50	Industry Spotlight <i>Orthofix</i>	<i>Grand Ballroom, Level 2</i>
7:00–7:25	Welcome <i>Philip McClure, MD, and Ronald Delanois, MD</i>	
7:25–7:45	Introduction to Deformity Planning Concepts: The Apex/Axis Method and MAP the ABCs <i>Shawn Standard, MD</i>	
7:45–8:05	Bone Ninja Sensei Introduction <i>Shawn Standard, MD</i>	
8:05–8:15	Alphabet Soup of Limb Alignment (Frontal Plane): MAD, LDFA, MPTA, LDTA, MPFA, LPFA, and JLCA <i>L. Reid Boyce Nichols, MD</i>	
8:15–8:30	Frontal Plane Measurements on Normal Bones (Planning Workshop) <i>Janet Conway, MD</i>	
8:30–9:15	Assessment of Limb Alignment: Frontal Plane MAP ( <u>M</u> easure Mechanical Axis Deviation, <u>A</u> nalyze Joint Angles, <u>P</u> ick the Bone) (Planning Workshop) <i>Marie Gdalevitch, MD</i>	
9:15–9:45	<u>Health Break and Visit with Corporate Partners</u>	<i>Grand Ballroom Pre-function, Level 2</i>
9:45–10:15	ABCs of Deformity Correction: How to Approach Deformity Analysis and Osteotomy Planning <i>Shawn Standard, MD</i>	<i>Grand Ballroom, Level 2</i>
10:15–11:05	Tibia: Frontal Plane Single-level Deformities (Planning Workshop) <i>Michael Assayag, MD</i>	
11:05–11:50	Tibia: Frontal Plane Double-level Deformities (Planning Workshop) <i>Jill Flanagan, MD</i>	
11:50–12:05	Tips and Tricks on Rotation, Length, and Fixation in the Blasted Extremity <i>Robert O'Toole, MD</i>	
12:05–12:40	<u>Luncheon and Visit with Corporate Partners</u>	<i>Grand Ballroom Pre-function, Level 2</i>
12:40–12:45	Head to Designated Afternoon Labs	
12:45–5:00	<b>Thursday Afternoon Labs</b>	

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

12:45–2:45	Six-axis External Fixation 4 Lab: Malunion and Valgus Deformity Lead Facilitator: <i>TBA</i> Facilitators: <i>TBA</i>	<i>Azure &amp; Indigo Rooms, Level 2</i>
2:45–3:00	Head to Next Lab	
3:00–5:00	Six-axis External Fixation 2 Lab: Blount Disease	<i>Sienna Room, Level 2</i>

Lead Facilitator: *TBA*  
Facilitators: *TBA*

**Group B-1:**

12:45–1:30	TBA Lead Facilitator: <i>TBA</i> Facilitators: <i>TBA</i>	<i>Vermillion, Level 4</i>
1:30–1:45	Head to Next Lab	
1:45–2:45	TBA Lead Facilitator: <i>TBA</i> Facilitators: <i>TBA</i>	<i>Grand Ballroom B, Level 2</i>
2:45–3:00	Head to Next Lab	
3:00–5:00	Hexapod/Nail Workshop: Motorized Nail Bone Transport 3 Lab Lead Facilitator: <i>TBA</i> Facilitators: <i>TBA</i>	<i>Cobalt Ballroom 1, Level 2</i>

**Group B-2:**

12:45–2:45	Hexapod/Nail Workshop: Motorized Nail Bone Transport 3 Lab Lead Facilitator: <i>TBA</i> Facilitators: <i>TBA</i>	<i>Cobalt Ballroom 1, Level 2</i>
2:45–3:00	Head to Next Lab	
3:00–3:45	TBA Lead Facilitator: <i>TBA</i> Facilitators: <i>TBA</i>	<i>Vermillion, Level 4</i>
3:45–4:00	Head to Next Lab	
4:00–5:00	TBA Lead Facilitator: <i>TBA</i> Facilitators: <i>TBA</i>	<i>Grand Ballroom B, Level 2</i>

**Groups C-1 and C-2:**

12:45–1:45	Fixator-assisted Plating 5 Lab: Distal Femoral Valgus Deformity Lead Facilitator: <i>TBA</i> Facilitators: <i>TBA</i>	<i>Marine Room, Level 2</i>
1:45–1:55	Head to Next Lab	
1:55–3:55	Six-axis External Fixation 1 Lab: Malunion, Proximal Tibia Varus Lead Facilitator: <i>TBA</i> Facilitators: <i>TBA</i>	<i>Cobalt Ballroom 2, Level 2</i>
3:55–4:00	Head to Next Lab	
4:00–5:00	Small Canal Solutions with Intramedullary Nails 2 Lab Lead Facilitator: <i>TBA</i> Facilitators: <i>TBA</i>	<i>Grand Ballroom A, Level 2</i>

6:15	Depart Hotel for Faculty and Former Fellows Dinner ( <i>invitation only, ticket required</i> )	<i>Four Seasons Hotel, Lobby</i>
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## Day 2: Friday, August 22

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6:00–7:00	<u>Breakfast and Visit with Corporate Partners</u>	<i>Grand Ballroom Pre-function, Level 2</i>
6:00–6:50	Industry Spotlight <i>J&amp;J MedTech</i>	<i>Grand Ballroom, Level 2</i>
7:00–7:05	Announcements <i>Philip McClure, MD</i>	
7:05–7:15	Tibia Review Planning Exercises <i>Philip McClure, MD</i>	
7:15–7:30	Alphabet Soup of Limb Alignment (Sagittal Plane): PDFA, PPTA, SJLA, ADTA, and SMAA <i>Connor Green, MD</i>	
7:30–8:00	Sagittal Plane Measurements (Planning Workshop) <i>Connor Green, MD</i>	
8:00–8:45	Tibia: Sagittal Plane Deformities (Planning Workshop) <i>Michael Assayag, MD</i>	
8:45–9:10	Tibia: Introduction to the Oblique Plane <i>Shawn Standard, MD</i>	
9:10–9:30	Tibia: Oblique Plane Deformities (Planning Workshop) <i>Janet Conway, MD</i>	
9:30–9:45	Contracture Management and the Latest Advances in Physical Therapy <i>Anil Bhawe, PT</i>	
9:45–10:15	<u>Health Break and Visit with Corporate Partners</u>	<i>Grand Ballroom Pre-function, Level 2</i>
10:15–12:45	<i>Please visit one of the two breakout sessions listed below:</i>	
	<b>Breakout Session 1: Focus on Foot and Ankle Deformities</b>	
10:15–10:45	Biomechanics of Foot and Ankle <i>Anil Bhawe, PT</i>	<i>Grand Ballroom B, Level 2</i>
10:45–11:45	Alphabet Soup and Deformity Planning Workshop <i>Noman Siddiqui, DPM</i>	
11:45–12:15	Complex Deformity Planning and Gradual Correction with Ilizarov Device <i>Saad Ilyas, MBBS</i>	
12:15–12:45	Ankle Deformity Correction <i>Guido LaPorta, DPM</i>	
	<b>Breakout Session 2: Focus on Femoral Deformities and Limb Length Discrepancy (Pediatric and Adult Orthopedics)</b>	
10:15–11:10	Femur: Frontal Plane Single-level Deformities (Planning Workshop) <i>Connor Green, MD</i>	<i>Grand Ballroom A, Level 2</i>
11:10–11:45	Femur: Frontal Plane Double-level Deformities (Planning Workshop) <i>Scott Nelson, MD</i>	
11:45–12:30	Femur and Knee: Sagittal Plane Femur (Planning Workshop) <i>Shawn Standard, MD</i>	

12:30–12:45 Blood Flow Restriction Therapy (BFR) for Limb Lengthening  
*Kimberly Doll, DPT*

12:45–1:15 Luncheon and Visit with Corporate Partners

*Grand Ballroom Pre-function, Level 2*

1:15–1:25 Head to Designated Afternoon Labs

1:25–5:30 **Friday Afternoon Labs**

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

1:25–2:25 Six-axis External Fixation 5 Lab: Mid-shaft Tibial Deformity  
Lead Facilitators: *TBA*  
Facilitators: *TBA*

*Marine Room, Level 2*

2:25–2:30 Head to Next Lab

2:30–5:30 Six-axis External Fixation 1 Lab: Fracture, Distal Tibial Malunion  
with Varus  
Lead Facilitator: *TBA*  
Facilitators: *TBA*

*Cobalt Ballroom 2, Level 2*

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

1:25–3:25 Six-axis External Fixation 4 Lab: Post-traumatic Valgus Malunion  
Lead Facilitator: *TBA*  
Facilitators: *TBA*

*Azure & Indigo Rooms, Level 2*

3:25–3:30 Head to Next Lab

3:30–5:30 Six-axis External Fixation 2 Lab: Miter Frame  
Lead Facilitators: *TBA*  
Facilitators: *TBA*

*Sienna Room, Level 2*

**Group C-1:**

1:25–3:25 Six-axis External Fixation 3 Lab: Blount Disease  
Lead Facilitator: *TBA*  
Facilitators: *TBA*

*Cobalt Ballroom 1, Level 2*

3:25–3:30 Head to Workshop

3:30–5:30 Internal Lengthening Nail Workshop  
Facilitator: *TBA*  
Lecturers: *TBA*

*Grand Ballroom B, Level 2*

**Group C-2:**

1:25–3:25 Internal Lengthening Nail Workshop  
Facilitator: *TBA*  
Lecturers: *TBA*

*Grand Ballroom B, Level 2*

3:25–3:30 Head to Next Lab

3:30–5:30 Six-axis External Fixation 3 Lab: Blount Disease  
Lead Facilitator: *TBA*  
Facilitators: *TBA*

*Cobalt Ballroom 1, Level 2*

5:30–7:00 **Case Discussions** (Light snacks to be served)

## **Pediatric Orthopedics**

**Moderators: Philip McClure, MD, and Jill Flanagan, MD**

*Grand Ballroom A, Level 2*

**Expert Panel: Shawn Standard, MD; Connor Green, MD; and L. Reid Boyce Nichols, MD**

5:30–7:00 Case Discussions: From Mild to Wild  
*Presentations by faculty and participants*

## **Adult Orthopedic Deformities**

**Moderators: Michael Assayag, MD, and Janet Conway, MD**

*Azure Room, Level 2*

**Expert Panel: Paul Matuszewski, MD; Benjamin Ollivere, MD; and  
Stephen Quinnan, MD**

5:30–7:00 Case Discussions: From Mild to Wild  
*Presentations by faculty and participants*

## **Foot and Ankle**

**Moderator: Noman Siddiqui, DPM**

*Grand Ballroom B, Level 2*

**Expert Panel: Michael Downey, MD; Saad Ilyas, MBBS; Guido LaPorta, DPM; and  
James McWilliam, MD**

5:30–7:00 Case Discussions: From Mild to Wild  
*What Would You Do? Expert panel to present cases to participants*

7:15–9:15 **BLDC Dinner** *(ticket required)*

*Splash Pool Terrace, Level 4*



## Day 3: Saturday, August 23

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6:15–6:50 Breakfast and Visit with Corporate Partners

*Grand Ballroom Pre-function, Level 2*

7:00–10:00 *Please visit one or more of the three breakout sessions listed below:*

### **Breakout Session 1: Adult Orthopedic Specialists**

*Sienna Room, Level 2*

- 7:00–7:15 Osseointegration: Where Are We Now?  
*Stephen Quinnan, MD*
- 7:15–7:30 Demystifying the Bone Void Fillers – What to Do with the Data Out There  
*Paul Matuszewski, MD*
- 7:30–7:45 Knee and Ankle Contractures  
*Michael Assayag, MD*
- 7:45–8:00 Discussion
- 8:00–8:15 Bone Transport Nails – Tips and Tricks  
*James Blair, MD*
- 8:15–8:30 Deformity Correction and Total Joint Arthroplasty  
*Matthew Deren, MD*
- 8:30–8:45 Discussion
- 8:45–9:00 How Many Ways Can I Fix This Tibial Segmental Bone Defect?  
*Janet Conway, MD*
- 9:00–9:15 Orthopedic Infection Frontiers  
*Benjamin Ollivere, MD*
- 9:15–9:30 Management of Severe Tibial Pilon Fractures – Fix It, Fuse It, or Frame It?  
*Babar Shafiq, MD*
- 9:30–9:45 Periprosthetic Fractures and Nonunions  
*James Nace, DO*
- 9:45–10:00 Discussion

### **Breakout Session 2: Foot and Ankle Specialists**

*Grand Ballroom B, Level 2*

- 7:00–7:20 What to Do with Soft Tissue and Bone Defects in Foot and Ankle Surgery?  
*Christopher Bibbo, DO*
- 7:20–7:40 Novel Techniques to Improve Vascular Wounds  
*Alexander Cherkashin, MD*
- 7:40–8:00 Minimally Invasive Deformity Correction in Foot and Ankle Surgery  
*James McWilliam, MD*
- 8:00–8:10 Discussion
- 8:10–8:30 Biomechanically Building a More Stable External Fixator  
*Guido LaPorta, DPM*
- 8:30–8:50 International Neurogenic Feet, Stirrup Method, and Other Complex Cases  
*Saad Ilyas, MBBS*
- 8:50–9:00 Discussion

- 9:00–9:20      Obtaining Arthrodesis in Complex Patients: What I Do  
*Michael Downey, MD*
- 9:20–9:40      Lambrinudi Triple Arthrodesis for Deformity Correction  
*Noman Siddiqui, DPM*
- 9:40–10:00      Discussion

### **Breakout Session 3: Pediatric Orthopedic Specialists**

*Grand Ballroom A, Level 2*

- 7:00–7:20      Management of Soft Tissue Defects in Tibial Fractures  
*Connor Green, MD*
- 7:20–7:35      Innovative Approaches to the Congenital Ankle  
*Katherine Miller, MD*
- 7:35–7:50      Innovations in Limb Lengthening Nails  
*Christopher Iobst, MD*
- 7:50–8:00      Discussion
- 8:00–8:15      Update on Medical Treatment for Skeletal Dysplasia  
*Aaron Huser, DO*
- 8:15–8:30      3D Printed Osteotomy Guides: The Future?  
*Daniel Weltsch, MD*
- 8:30–8:45      What You Didn't Know about Ilizarov  
*Alexander Cherkashin, MD*
- 8:45–9:00      Discussion
- 9:00–9:15      Unlocking the Congenital Knee  
*Shawn Standard, MD*
- 9:15–9:30      Lengthening and the Congenital Spine  
*Julio Jauregui, MD*
- 9:30–9:45      Congenital Pseudarthrosis of the Tibia  
*Philip McClure, MD*
- 9:45–10:00      Discussion

### **10:00–10:30      Health Break and Visit with Corporate Partners**

*Grand Ballroom Pre-function, Level 2*

- 10:30–10:40      Femur Review: Planning Exercises  
*Daniel Ruggles, DO*
- 10:40–10:55      Impact of Deformity on Knee Arthroplasty  
*Matthew Deren, MD*
- 10:55–11:10      Prevention of Contractures During Lengthening  
*Anil Bhawe, PT*
- 11:10–11:25      Managing Torsional Malalignment  
*Christof Radler, MD*
- 11:25–11:50      LLRS Recap 2025 and Surgeon Wellness  
*Christopher Iobst, MD*

*Grand Ballroom, Level 2*

- 11:50–11:55 Discussion
- 11:55–12:05 Closing Remarks and Exhibitor Contest Drawing  
*Philip McClure, MD, or John Herzenberg, MD*
- 12:05–12:25 Luncheon (grab lunch and return to the Grand Ballroom) *Grand Ballroom Pre-function, Level 2*
- 12:15–1:05 Industry Spotlight  
*Globus* *Grand Ballroom, Level 2*
- 1:05–1:15 Head to Designated Afternoon Labs
- 1:15–5:30 **Saturday Afternoon Labs**

**Group A-1:**

- 1:15–3:15 Six-axis External Fixation 3 Lab: Tibial Malunion Software Workshop *Cobalt Ballroom 1, Level 2*  
Lead Facilitator: *TBA*  
Facilitators: *TBA*
- 3:15–3:30 Head to Workshop
- 3:30–5:30 Internal Lengthening Nail Workshop *Grand Ballroom B, Level 2*  
Facilitator: *TBA*  
Lecturers: *TBA*

**Group A-2:**

- 1:15–3:15 Internal Lengthening Nail Workshop *Grand Ballroom B, Level 2*  
Facilitator: *TBA*  
Lecturers: *TBA*
- 3:15–3:30 Head to Next Lab
- 3:30–5:30 Six-axis External Fixation 3 Lab: Tibial Malunion Software Workshop *Cobalt Ballroom 1, Level 2*  
Lead Facilitator: *TBA*  
Facilitators: *TBA*

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

- 1:15–2:15 Six-axis External Fixation 5 Lab: Ankle Varus and Recurvatum *Marine Room, Level 2*  
Lead Facilitator: *TBA*  
Facilitators: *TBA*
- 2:15–2:30 Head to Next Lab
- 2:30–5:30 Six-axis External Fixation 1 Lab: Malunion, Equinus Deformity *Cobalt Ballroom 2, Level 2*  
Lead Facilitator: *TBA*  
Facilitators: *TBA*

**Group C-1:**

- 1:15–3:15 Six-axis External Fixation 2 Lab: Malunion with Procurvatum *Sienna Room, Level 2*  
Lead Facilitator: *TBA*  
Facilitators: *TBA*
- 3:15–3:30 Head to Next Lab
- 3:30–5:30 Superhip Procedure with Infant Locking Cannulated Blade Plates and Extensions Osteotomies 2 Lab *Azure & Indigo Rooms, Level 2*  
Lead Facilitator: *TBA*  
Facilitators: *TBA*

**Group C-2:**

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|-----------|--|--|
| 1:15–3:15 | Superhip Procedure with Infant Locking Cannulated Blade Plates<br>and Extensions Osteotomies 2 Lab | <i>Azure &amp; Indigo Rooms, Level 2</i> |
|           | Lead Facilitator: <i>TBA</i>   |  |
|           | Facilitators: <i>TBA</i>   |  |
| 3:15–3:30 | Head to Next Lab   |  |
| 3:30–5:30 | Six-axis External Fixation 2 Lab: Malunion with Procurvatum  | <i>Sienna Room, Level 2</i>              |
|           | Lead Facilitator: <i>TBA</i>   |  |
|           | Facilitators: <i>TBA</i>   |  |