

36th Annual Baltimore Limb Deformity Course

Thursday, August 20 – Saturday, August 22, 2026

(as of 7/2/26)



Four Seasons Hotel Baltimore
Baltimore, Maryland, USA



Rubin Institute for
Advanced Orthopedics

CARE BRAVELY

Course Chair

Philip McClure, MD

Course Chair Emeritus

John Herzenberg, MD

LLRS Liaison

David Podeszwa, MD

Course Directors

Michael Assayag, MD

Janet Conway, MD

Connor Green, MD

Noman Siddiqui, DPM

Endorsed by:



Invited Faculty and Lab Assistants

Talal Abalkhail, MBBS	Riyadh, Saudi Arabia
Marcel Abouassaly, MD	Calgary, Canada
Paul Balthrop, MD	Savannah, Georgia
Samantha Bark, DPM	Galion, Ohio
Andrew Bauder, MD	San Diego, California
Anil Bhave, PT	Baltimore, Maryland
Christopher Bibbo, MD	Philadelphia, Pennsylvania
Lindsey Calligaro, DPM	Wayne, New Jersey
Alexander Cherkashin, MD	Dallas, Texas
Angela Collins, MD	Columbus, Ohio
Yuriy Demyan, MD	Mukachevo, Ukraine
Matthew Deren, MD	Cleveland, Ohio
Kimberly Doll, DPT	Baltimore, Maryland
Wiemi Douoguih, MD	Washington, DC
Mark Eidelman, MD	Haifa, Israel
Diego Faria, MD	Vitória, Espírito Santo, Brazil
Jill Flanagan, MD	Atlanta, Georgia
Jeanne Franzone, MD	Wilmington, Delaware
Marie Gdalevitch, MD	Montréal, Canada
Christine Goodbody, MD	Philadelphia, Pennsylvania
H. David Gottlieb, DPM	Baltimore, Maryland
Vache Hambardzumyan, MD	Peterborough, New Hampshire
Elizabeth Hubbard, MD	Dallas, Texas
Aaron Huser, DO	West Palm Beach, Florida
Julio Jauregui, MD	Baltimore, Maryland
Carroll Jones, MD	Charlotte, North Carolina
Muayad Kadhim, MD	Portland, Oregon
Jessica Knight, DPM	Chicago, Illinois
Guido LaPorta, DPM	Binghamton, New York
Shuyuan Li, MD	Austin, Texas
Richard Luzzi, MD	Curitiba, Brazil
Christopher Makarewich, MD	Salt Lake City, Utah
Paul Matuszewski, MD	Lexington, Kentucky
James McWilliam, MD	White Plains, New York
Kenji Miki, MD	Osaka, Japan
Jennifer Monaco, DPM	Columbus, Georgia
Elizabeth Moulder, MD	Hull, United Kingdom
L. Reid Boyce Nichols, MD	Wilmington, Delaware
Christof Radler, MD	Vienna, Austria
Taylor Reif, MD	New York, New York
Jessica Rivera, MD	New Orleans, Louisiana
Jan Duedel Rölfing, MD	Aarhus, Denmark
Daniel Ruggles, DO	Orlando, Florida

Sanoj Shahul, MD
Shawn Standard, MD
Rishi Thakral, MD

Washington, DC
Orlando, Florida
Oklahoma City, Oklahoma

Day 1: Thursday, August 20

6:15–7:00	<u>Registration, Breakfast, and Visit with Corporate Partners</u>	<i>Mica Pre-Function and Grand Ballroom Pre-Function, Level 2</i>
7:00–7:25	Welcome <i>Philip McClure, MD</i>	<i>Grand Ballroom, Level 2</i>
7:25–7:45	Introduction to Deformity Planning Concepts: The Apex/Axis Method and MAP the ABCs <i>Shawn Standard, MD</i>	
7:45–7:55	Alphabet Soup of Limb Alignment (Frontal Plane): MAD, LDFA, MPTA, LDTA, MPFA, LPFA, and JLCA <i>L. Reid Boyce Nichols, MD</i>	
7:55–8:10	Frontal Plane Measurements on Normal Bones (Planning Workshop) <i>Janet Conway, MD</i>	
8:10–8:55	Assessment of Limb Alignment: Frontal Plane MAP (M ea s ure M echanical A xis D eviation, A nalyze Joint Angles, P ick the Bone) (Planning Workshop) <i>Marie Gdalevitch, MD</i>	
8:55–9:40	ABCs of Deformity Correction: How to Approach Deformity Analysis and Osteotomy Planning <i>Shawn Standard, MD</i>	
9:40–9:55	Blood Flow Restriction Therapy (BFR) for Limb Lengthening <i>Kimberly Doll, DPT</i>	
9:55–10:15	<u>Health Break and Visit with Corporate Partners</u>	<i>Grand Ballroom Pre-Function, Level 2</i>
10:15–11:00	Tibia: Frontal Plane Single-level Deformities (Planning Workshop) <i>Michael Assayag, MD</i>	<i>Grand Ballroom, Level 2</i>
11:00–11:45	Tibia: Frontal Plane Double-level Deformities (Planning Workshop) <i>Jill Flanagan, MD</i>	
11:45–12:00	Consequences of Malalignment and Leg Length Differences <i>Anil Bhave, PT</i>	
12:00–1:00	<u>Luncheon and Visit with Corporate Partners</u>	<i>Grand Ballroom Pre-Function, Level 2</i>
12:15–1:00	Industry Spotlight	<i>Grand Ballroom, Level 2</i>
1:00–1:15	Head to Designated Afternoon Labs	
1:15–5:30	Thursday Afternoon Labs Groups A and B	
1:15–5:45	Thursday Afternoon Labs Group C	
<u>Groups A-1 and A-2:</u>		
1:15–3:15	Six-Axis External Fixation: Malunion and Valgus Deformity Lead Facilitator: <i>Paul Matuszewski, MD</i> Facilitators: <i>Lindsey Calligaro, DPM; James McWilliam, MD; Kenji Miki, MD; and Sanoj Shahul, MD</i>	<i>Azure & Indigo Rooms, Level 2</i>
3:15–3:30	<u>Health Break</u> Groups A & B and Head to Next Lab	<i>Cobalt Pre-Function, Level 2</i>
3:30–5:30	Six-Axis External Fixation: Blount Disease	<i>Sienna Room, Level 2</i>

Lead Facilitator: *Jill Flanagan, MD*

Facilitators: *Diego Faria, MD; Jeanne Franzone, MD; Marie Gdalevitch, MD; Christine Goodbody, MD; Vache Hambarzumyan, MD (3:30-4:30); L. Reid Boyce Nichols, MD; and Taylor Reif, MD*

Group B-1:

- 1:15–3:15 Retrograde TTC Nail *Vermilion, Level 4*
Facilitator: *Carroll Jones, MD*
Lecturers: *John Herzenberg, MD (2:00-2:35); Daniel Ruggles, DO (1:15-1:30); and Noman Siddiqui, DPM (1:45-2:00)*
- 3:15–3:30 Health Break Groups A & B and Head to Next Lab *Cobalt Pre-Function, Level 2*
- 3:30–5:30 External Fixation: Transverse Bone Transport *Cobalt Ballroom 1, Level 2*
Lead Facilitator: *Alexander Cherkashin, MD*
Facilitators: *Angela Collins, MD (3:30-4:30); Connor Green, MD; Elizabeth Hubbard, MD; and Jessica Rivera, MD*

Group B-2:

- 1:15–3:15 External Fixation: Transverse Bone Transport *Cobalt Ballroom 1, Level 2*
Lead Facilitator: *Alexander Cherkashin, MD*
Facilitators: *Angela Collins, MD; Connor Green, MD; Elizabeth Hubbard, MD; and Jessica Rivera, MD*
- 3:15–3:30 Health Break Groups A & B and Head to Next Lab *Cobalt Pre-Function, Level 2*
- 3:30–5:30 Retrograde TTC Nail *Vermilion, Level 4*
Facilitator: *Carroll Jones, MD*
Lecturers: *John Herzenberg, MD (4:15-4:50); Daniel Ruggles, DO (3:30-3:45); and Noman Siddiqui, DPM (4:00-4:15)*

Groups C-1 and C-2:

- 1:15–2:15 Small Canal Solutions with Intramedullary Nails *Sienna Room, Level 2*
Lead Facilitators: *Jill Flanagan, MD; and Jeanne Franzone, MD*
Facilitators: *Vache Hambarzumyan, MD; and Aaron Huser, DO*
- 2:15–2:25 Head to Next Lab
- 2:25–4:25 Six-Axis External Fixation: Malunion, Proximal Tibia Varus *Cobalt Ballroom 2, Level 2*
Lead Facilitator: *Christof Radler, MD*
Facilitators: *Paul Balthrop, MD; Andrew Bauder, MD; Yuriy Demyan, MD; Mark Eidelman, MD; Aaron Huser, DO; Elizabeth Moulder, MD; and Shawn Standard, MD*
- 4:25–4:45 Health Break Group C and Head to Next Lab *Cobalt Pre-Function, Level 2*
- 4:45–5:45 Fixator-Assisted Plating: Distal Femoral Valgus Deformity *Marine Room, Level 2*
Lead Facilitator: *Janet Conway, MD*
Facilitators: *Angela Collins, MD; Matthew Deren, MD; and Vache Hambarzumyan, MD*
- 6:45 Depart Hotel for Faculty and Former Fellows Dinner *(invitation only, ticket required)* *Four Seasons Hotel, Lobby*

Day 2: Friday, August 21

- 6:15–7:00 Breakfast and Visit with Corporate Partners *Grand Ballroom Pre-Function, Level 2*
- 7:00–7:05 Announcements *Grand Ballroom, Level 2*
Philip McClure, MD
- 7:05–7:15 Tibia Review Planning Exercises
Elizabeth Moulder, MD
- 7:15–7:30 Alphabet Soup of Limb Alignment (Sagittal Plane): PDFAs, PPTA, SJLA, ADTA, and SMAA
Christof Radler, MD
- 7:30–8:00 Sagittal Plane Measurements (Planning Workshop)
Connor Green, MD
- 8:00–8:45 Tibia: Sagittal Plane Deformities (Planning Workshop)
Michael Assayag, MD
- 8:45–9:00 Tibia: Introduction to the Oblique Plane
Shawn Standard, MD
- 9:00–9:20 Tibia: Oblique Plane Deformities (Planning Workshop)
Janet Conway, MD
- 9:20–9:35 Contracture Management and the Latest Advances in Physical Therapy
Anil Bhawe, PT
- 9:35–10:00 Health Break and Visit with Corporate Partners *Grand Ballroom Pre-Function, Level 2*
- 10:00–12:00 *Please visit one of the two breakout sessions listed below:*
- Breakout Session 1: Focus on Foot and Ankle Deformities**
- 10:00–10:20 Biomechanics of Foot and Ankle *Grand Ballroom B, Level 2*
Anil Bhawe, PT
- 10:20–10:40 Pediatric Examination and X-ray Planning for Osteotomy
John Herzenberg, MD
- 10:40–11:00 Adult Deformity Radiographic Planning Considerations
Guido LaPorta, DPM
- 11:00–11:40 Alphabet Soup and Deformity Planning Workshop
Noman Siddiqui, DPM
- 11:40–12:00 Ankle Equinus Deformity Correction
Guido LaPorta, DPM
- Breakout Session 2: Focus on Femoral Deformities and Limb Length Discrepancy (Pediatric and Adult Orthopedics)**
- 10:00–10:55 Femur: Frontal Plane Single-level Deformities (Planning Workshop) *Grand Ballroom A, Level 2*
Connor Green, MD
- 10:55–11:30 Femur: Frontal Plane Double-level Deformities (Planning Workshop)
Shawn Standard, MD
- 11:30–12:00 Femur and Knee: Sagittal Plane Femur (Planning Workshop)
Philip McClure, MD

- 12:00–1:00 Luncheon and Visit with Corporate Partners *Grand Ballroom Pre-Function, Level 2*
- 12:15–1:00 Industry Spotlight *Grand Ballroom, Level 2*
- 1:00–1:15 Head to Designated Afternoon Labs
- 1:15–5:30 **Friday Afternoon Labs**

Groups A-1 and A-2:

- 1:15–4:15 Six-Axis External Fixation: Distal Tibial Malunion with Varus *Cobalt Ballroom 2, Level 2*
 Lead Facilitator: *Christof Radler, MD (1:15-2:00 and 2:30-3:30)*
 Facilitators: *Paul Balthrop, MD; Andrew Bauder, MD; Yuriy Demyan, MD; Mark Eidelman, MD (2:00-3:50); Connor Green, MD; Aaron Huser, DO; Paul Matuszewski, MD; and Elizabeth Moulder, MD*
- 4:15–4:30 Health Break Group A and Head to Next Lab *Grand Ballroom Pre-Function, Level 2*
- 4:30–5:30 Six-Axis External Fixation: Mid-shaft Tibial Deformity *Marine Room, Level 2*
 Lead Facilitator: *Angela Collins, MD*
 Facilitators: *Marcel Abouassaly, MD; Janet Conway, MD; Matthew Deren, MD; Vache Hambardzumyan, MD; Paul Matuszewski, MD; and L. Reid Boyce Nichols, MD*

Groups B-1 and B-2:

- 1:15–3:15 Six-Axis External Fixation: Post-traumatic Valgus Malunion *Azure & Indigo Rooms, Level 2*
 Lead Facilitator: *Guido LaPorta, DPM*
 Facilitators: *Lindsey Calligaro, DPM; James McWilliam, MD; Kenji Miki, MD; and Sanoj Shahul, MD*
- 3:15–3:30 Health Break Groups B and C and Head to Next Lab *Grand Ballroom Pre-Function, Level 2*

Group C-1:

- 1:15–3:15 Six-Axis External Fixation: Blount Disease *Cobalt Ballroom 1, Level 2*
 Lead Facilitator: *David Podeszwa, MD*
 Facilitators: *Alexander Cherkashin, MD; Angela Collins, MD; and Daniel Ruggles, DO (1:35-3:15)*
- 3:15–3:30 Health Break Groups B and C and Head to Next Lab *Grand Ballroom Pre-Function, Level 2*
- 3:30–5:30 Internal Lengthening Nail Workshop *Vermilion, Level 4*
 Facilitator: *Daniel Ruggles, DO*
 Lecturers: *Mark Eidelman, MD (4:00-4:10); Philip McClure, MD (4:10-5:30); Christof Radler, MD (3:40-3:50); and Shawn Standard, MD (3:50-4:00)*

Group C-2:

- 1:15–3:15 Internal Lengthening Nail Workshop *Vermilion, Level 4*
 Facilitator: *Michael Assayag, MD*
 Lecturers: *Mark Eidelman, MD (1:35-1:45); John Herzenberg, MD (2:20-3:15); Philip McClure, MD (1:45-1:55); Christof Radler, MD (2:10-2:20); Daniel Ruggles, DO (1:15-1:25); and Shawn Standard, MD (1:25-1:35)*
- 3:15–3:30 Health Break Groups B and C and Head to Next Lab *Grand Ballroom Pre-Function, Level 2*
- 3:30–5:30 Six-Axis External Fixation: Blount Disease *Cobalt Ballroom 1, Level 2*
 Lead Facilitator: *David Podeszwa, MD*
 Facilitators: *Michael Assayag, MD; Alexander Cherkashin, MD; and Angela Collins, MD*

5:30–8:00 BLDC Reception

Grand Ballroom Pre-Function, Level 2

6:00–7:30 **Case Discussions**

Pediatric Orthopedics

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

Grand Ballroom A, Level 2

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

6:00–6:15 Deformity Care in Osteogenesis Imperfecta
Jeanne Franzone, MD

6:15–7:30 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: Angela Collins, MD; Vache Hambardzumyan, MD; and Paul Matuszewski, MD

6:00–7:30 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: Christopher Bibbo, DO; Carroll Jones, MD; Guido LaPorta, DPM; Shuyuan Li, MD; and James McWilliam, MD

6:00–7:30 Case Discussions: From Mild to Wild
Presentations by Faculty and Participants

Day 3: Saturday, August 22

6:45–7:30 Breakfast and Visit with Corporate Partners

Grand Ballroom Pre-Function, Level 2

7:30–10:00 *Please visit one or more of the three breakout sessions listed below:*

Breakout Session 1: Adult Orthopedic Specialists

Azure Room, Level 2

- 7:30–7:45 Stature Lengthening: The Elephant in The Room
Michael Assayag, MD
- 7:45–8:00 Internal Motorized Lengthening and Bone Transport – Things I Wish I Knew Before Getting Started
Jan Duedal Rölfing, MD
- 8:00–8:15 Tibiotalar Fusion and Proximal Tibial Lengthening for Complex Ankle Deformities
Mark Eidelman, MD
- 8:15–8:30 How Many Ways Can I Fix This Tibial Segmental Bone Defect?
Janet Conway, MD
- 8:30–8:45 Discussion
- 8:45–9:00 Limb Lengthening and Reconstruction in Brazil – How BLDC Shaped My Practice
Diego Faria, MD
- 9:00–9:15 Strategies for High Tibial Osteotomies with Ligamentous Deficiencies
Wiemi Douoguih, MD
- 9:15–9:30 TBA
- 9:30–10:00 Discussion

Breakout Session 2: Foot and Ankle Specialists

Grand Ballroom B, Level 2

- 7:30–7:50 Local/Regional Tissue Coverage Solutions in Foot and Ankle Surgery
Christopher Bibbo, DO
- 7:50–8:10 Novel Techniques to Improve Vascular Wounds
Alexander Cherkashin, MD
- 8:10–8:20 Case Series for Transverse Transport
Jessica Rivera, MD
- 8:20–8:40 Distal Axial Tibial Transport in Neuropathic Limb Reconstruction
Noman Siddiqui, DPM
- 8:40–9:00 Internal Lengthening Nails in Foot and Ankle Surgery: What to Know
Carroll Jones, MD
- 9:00–9:20 Minimally Invasive Foot and Ankle Deformity Correction: Beyond Bunion Surgery
James McWilliam, MD
- 9:20–9:40 International Perspectives for Foot and Ankle Deformity Correction
Shuyuan Li, MD

9:40–10:00 Discussion

Breakout Session 3: Pediatric Orthopedic Specialists

Grand Ballroom A, Level 2

7:30–7:45 External Fixation in the Pediatric Foot
Mark Eidelman, MD

7:45–8:00 Comprehensive Care of Perthes Disease
Shawn Standard, MD

8:00–8:15 Multiplier App
John Herzenberg, MD

8:15–8:30 Hip Dysplasia
Connor Green, MD

8:30–8:45 Guided Growth in Limb Deformity
Elizabeth Hubbard, MD

8:45–8:55 Discussion

8:55–9:10 Decision Making in Limb Reconstruction
Philip McClure, MD

9:10–9:25 Outcomes in Arthrogyrosis
Aaron Huser, DO

9:25–9:40 Limb Length Discrepancy and Scoliosis
Julio Jauregui, MD

9:40–9:55 Congenital Pseudoarthrosis of the Tibia
Richard Luzzi, MD

9:55–10:00 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

Grand Ballroom, Level 2

10:40–10:55 Impact of Deformity on Knee Arthroplasty (Resection Level and Constraint)
Matthew Deren, MD

10:55–11:10 Natural History of Malalignment
Philip McClure, MD

11:10–11:25 Managing Torsional Malalignment
Christof Radler, MD

11:25–11:50 LLRS Recap: 2026
Jill Flanagan, MD

11:50–12:00 Closing Remarks and Exhibitor Contest Drawing
Philip McClure, MD, or John Herzenberg, MD

12:00–1:00 Luncheon (grab lunch and return to the Grand Ballroom)

Grand Ballroom Pre-Function, Level 2

12:15–1:00 Industry Spotlight

Grand Ballroom, Level 2

1:00–1:15 Head to Afternoon Labs

1:15–5:30 Saturday Afternoon Labs

Group A-1:

- 1:15–3:15 Motorized Trochanteric Lengthening Nail Workshop *Cobalt Ballroom 1, Level 2*
Lead Facilitator: *David Podeszwa, MD*
Facilitators: *Michael Assayag, MD; Jill Flanagan, MD; and Marie Gdalevitch, MD*
- 3:15–3:30 Health Break Groups A and C and Head to Next Lab *Cobalt Ballroom Pre-Function, Level 2*
- 3:30–5:30 Internal Lengthening Nail Workshop *Vermilion, Level 4*
Facilitator: *Daniel Ruggles, DO*
Lecturers: *Mark Eidelman, MD (3:45-3:55); Philip McClure, MD (3:40-3:45, 3:55-4:10 and 4:35-5:30); and Christof Radler, MD (4:10-4:20)*

Group A-2:

- 1:15–3:15 Internal Lengthening Nail Workshop *Vermilion, Level 4*
Facilitator: *Philip McClure, MD*
Lecturers: *Mark Eidelman, MD (1:30-1:40); John Herzenberg, MD (2:20-3:15); Christof Radler, MD (1:55-2:05); and Daniel Ruggles, DO (1:15-1:25 and 2:05-2:20)*
- 3:15–3:30 Health Break Groups A and C and Head to Next Lab *Cobalt Ballroom Pre-Function, Level 2*
- 3:30–5:30 Motorized Trochanteric Lengthening Nail Workshop *Cobalt Ballroom 1, Level 2*
Lead Facilitator: *David Podeszwa, MD*
Facilitators: *Michael Assayag, MD; Jill Flanagan, MD; and Marie Gdalevitch, MD*

Groups B-1 and B-2:

- 1:15–2:15 Six-Axis External Fixation: Ankle Varus and Recurvatum *Marine Room, Level 2*
Lead Facilitator: *Guido LaPorta, DPM*
Facilitators: *Matthew Deren, MD; and Noman Siddiqui, DPM*
- 2:15–2:30 Health Break Group B and Head to Next Lab *Cobalt Ballroom Pre-Function, Level 2*
- 2:30–5:30 Six-Axis External Fixation: Tibial Malunion and Equinus Deformity *Cobalt Ballroom 2, Level 2*
Lead Facilitator: *Christof Radler, MD (2:30-4:00 and 4:30-5:30)*
Facilitators: *Andrew Bauder, MD; Yuriy Demyan, MD; Mark Eidelman, MD (2:30-3:35 and 4:10-5:30); Connor Green, MD; Paul Matuszewski, MD; and Elizabeth Moulder, MD*

Group C-1:

- 1:15–3:15 Six-Axis External Fixation: Malunion with Procurvatum *Sienna Room, Level 2*
Lead Facilitator: *Christine Goodbody, MD*
Facilitators: *Diego Faria, MD; Jill Flanagan, MD; Jeanne Franzone, MD; Vache Hambarzumyan, MD; Jessica Rivera, MD; and Taylor Reif, MD*
- 3:15–3:30 Health Break Groups A and C and Head to Next Lab *Cobalt Ballroom Pre-Function, Level 2*
- 3:30–5:30 Superhip Procedure and Drive Rail Spanning the Knee *Azure & Indigo Rooms, Level 2*
Lead Facilitator: *Aaron Huser, DO*
Facilitators: *Kenji Miki, MD; and Shawn Standard, MD*

Group C-2:

- 1:15–3:15 Superhip Procedure and Drive Rail Spanning the Knee *Azure & Indigo Rooms, Level 2*
Lead Facilitators: *Aaron Huser, DO*
Facilitators: *Kenji Miki, MD; Shawn Standard, MD; and Daniel Ruggles, DO (2:30-3:15)*
- 3:15–3:30 Health Break Groups A and C and Head to Next Lab *Cobalt Ballroom Pre-Function, Level 2*
- 3:30–5:30 Six-Axis External Fixation: Malunion with Procurvatum *Sienna Room, Level 2*
Lead Facilitator: *Jill Flanagan, MD*
Facilitators: *Diego Faria, MD; Jeanne Franzone, MD; Christine Goodbody, MD; Vache Hambarzumyan, MD; Jessica Rivera, MD; and Taylor Reif, MD*

5:30 **Conclusion of 3-Day BLDC**