

34th Annual Baltimore Limb Deformity Course

Thursday, August 22 – Saturday, August 24, 2024

(as of 4/5/24)



Four Seasons Hotel Baltimore
Baltimore, Maryland, USA



Rubin Institute for
Advanced Orthopedics

CARE BRAVELY

Course Chairmen

Philip McClure, MD

John Herzenberg, MD

LLRS Liaison

David Podeszwa, MD

Directors

Michael Assayag, MD

Christopher Bibbo, DO

Janet Conway, MD

Noman Siddiqui, DPM

Shawn Standard, MD

Endorsed by:



Invited Faculty and Lab Assistants

Anil Bhave, PT	Baltimore, Maryland
James Blair, MD	Atlanta, Georgia
Pablo Corona, MD	Barcelona, Spain
Brett Crist, MD	Columbia, Missouri
Ronald Delanois, MD	Baltimore, Maryland
Nando Ferreira, MD	Stellenbosch, South Africa
Jill Flanagan, MD	Atlanta, Georgia
Jean Franzone, MD	Wilmington, Delaware
David Frumberg, MD	New Haven, Connecticut
Marie Gdalevitch, MD	Montréal, Canada
Saad Ilyas, MBBS	Lahore, Pakistan
Christopher Iobst, MD	Columbus, Ohio
Guido LaPorta, DPM	Dunmore, Pennsylvania
James McWilliam, MD	White Plains, New York
Kelsey Millonig, DPM	Des Moines, Iowa
Mark Myerson, MD	Denver, Colorado
Scott, Nelson, MD	Port-au-Prince, Haiti
Robert O'Toole, MD	Baltimore, Maryland
Christof Radler, MD	Vienna, Austria
Daniel Ruggles, DO	Miami, Florida
William Terrell, MD	Marietta, Georgia
Kevin Tetsworth, MD	Brisbane, Australia

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>
7:00–7:25	Welcome <i>Philip McClure, MD, or John Herzenberg, MD, and Ronald Delanois, 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>	
7:45–8:05	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>Janet Conway, 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 (M easure Mechanical Axis Deviation, A nalyze Joint Angles, P ick the Bone) (Planning Workshop) <i>Philip McClure, MD, or Michael Assayag, 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>Marie Gdalevitch, MD</i>	
11:50–12:05	It Looks Good, but Does It Feel Better? <i>Brett Crist, MD</i>	
12:05–12:35	<u>Luncheon and Visit with Corporate Partners</u>	<i>Grand Ballroom Pre-function, Level 2</i>
12:35–12:45	Head to Designated Afternoon Labs	
12:45–5:00	Thursday Afternoon Labs:	

Groups A-1 and A-2:

12:45–2:45	Six-axis External Fixation 4 Lab: Malunion and Valgus Deformity Facilitator: <i>TBA</i> Lab Assistants: <i>TBA</i>	<i>Azure & 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 Facilitator: <i>TBA</i> Lab Assistants: <i>TBA</i>	<i>Grand Ballroom B, Level 2</i>

Group B-1:

- 12:45–2:45 External Fixation Lab: Hindfoot/Ankle Fusion *Sienna Room, Level 2*
Facilitators: *Christopher Bibbo, DO, Noman Siddiqui, DPM, and TBA*
Lab Assistants: *TBA*
- 2:45–3:00 Head to Next Lab
- 3:00–5:00 Six-axis External Fixation 3 Lab: Midfoot *Cobalt Ballroom 1, Level 2*
Cavus/Equinovarus Deformity
Facilitators: *TBA*
Lab Assistants: *TBA*

Group B-2:

- 12:45–2:45 Six-axis External Fixation 3 Lab: Midfoot Cavus/
Equinovarus Deformity *Cobalt Ballroom 1, Level 2*
Facilitator: *TBA*
Lab Assistants: *TBA*
- 2:45–3:00 Head to Next Lab
- 3:00–5:00 External Fixation Lab: Hindfoot/Ankle Fusion *Sienna Room, Level 2*
Facilitators: *Christopher Bibbo, DO, Noman Siddiqui, DPM, and TBA*
Lab Assistants: *TBA*

Groups C-1 and C-2:

- 12:45–1:45 Fixator-assisted Plating Lab: Distal Femoral Valgus Deformity *Marine Room, Level 2*
Facilitator: *Janet Conway, MD*
Lab Assistants: *TBA*
- 1:45–1:55 Head to Next Lab
- 1:55–3:55 Six-axis External Fixation 1 Lab: Fracture with Translation,
Equinus Deformity, and Valgus Deformity *Cobalt Ballroom 2, Level 2*
Facilitators: *TBA*
Lab Assistants: *TBA*
- 3:55–4:00 Head to Next Lab
- 4:00–5:00 Small Canal Solutions with Intramedullary Nails *Grand Ballroom A, Level 2*
Facilitator: *Shawn Standard, MD and TBA*
Lab Assistants: *TBA*

5:00–5:15 Coffee Break *Cobalt Ballroom Pre-function, Level 2*
5:15–5:20 Head to Case Presentation Sessions
5:20–7:00 **Case Presentations**

Pediatric Orthopedics – Moderators: *Philip McClure, MD, and Shawn Standard, MD* *Grand Ballroom A, Level 2*
Expert Panel: *David Podeszwa, MD and TBA*

5:20–7:00 Case Calamities: Show Us What You've Got
Presentations by faculty and participants

Adult Orthopedic Deformities – Moderators: *Michael Assayag, MD, and Janet Conway, MD* *Azure Room, Level 2*
Expert Panel: *Brett Crist, MD, Robert O'Toole, MD, and TBA*

5:20–7:00 Case Calamities: Show Us What You've Got
Presentations by faculty and participants

Foot and Ankle – Moderator: *Noman Siddiqui, DPM* *Grand Ballroom B, Level 2*
Expert Panel: *Christopher Bibbo, DO, Mark Myerson, MD, Saad Ilyas, MBBS and TBA*

5:20–7:00 Case Calamities: Show Us What You've Got
Presentations by faculty and participants

7:15–9:15 Welcome Dinner *(ticket required)* *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*
- 7:00–7:05 Announcements *Grand Ballroom, Level 2*
Philip McClure, MD
- 7:05–7:15 Tibia Review Planning Exercises
Philip McClure, MD
- 7:15–7:30 Alphabet Soup of Limb Alignment (Sagittal Plane): PDFa, PPTA, SJLA, ADTA, and SMAA
Philip McClure, MD
- 7:30–8:00 Sagittal Plane Measurements (Planning Workshop)
Philip McClure, MD
- 8:00–8:45 Tibia: Sagittal Plane Deformities (Planning Workshop)
Michael Assayag, MD
- 8:45–9:10 Tibia: Introduction to the Oblique Plane
Shawn Standard, MD
- 9:10–9:30 Tibia: Oblique Plane Deformities (Planning Workshop)
Janet Conway, MD
- 9:30–9:45 Physical Exam of Limb Deformities
Janet Conway, MD
- 9:45–10:15 Health Break and Visit with Corporate Partners *Grand Ballroom Pre-function, Level 2*
- 10:15–12:45 *Please visit one of the two breakout sessions listed below:*
- Breakout Session: Focus on Ankle and Foot Deformities**
- 10:15–11:00 Preoperative Foot and Ankle Deformity Planning *Grand Ballroom B, Level 2*
Noman Siddiqui, DPM
- 11:00–11:35 Complex Deformity and Acute Deformity Correction Principles
Mark Myerson, MD
- 11:35–12:10 Complex Deformity Planning and Gradual Correction with Ilizarov Device
Saad Ilyas, MBBS
- 12:10–12:45 Gradual Correction of Complex Midfoot Deformity/Hindfoot Deformity with Gradual Correction
Guido LaPorta, DPM
- Breakout Session: Focus on Femoral Deformities and Limb Length Discrepancy (Pediatric and Adult Orthopedics)**
- 10:15–11:15 Femur: Frontal Plane Single-level Deformities (Planning Workshop) *Grand Ballroom A, Level 2*
Scott Nelson, MD
- 11:15–11:55 Femur: Frontal Plane Double-level Deformities (Planning Workshop)
Scott Nelson, MD
- 11:55–12:45 Femur and Knee: Sagittal Plane Femur (Planning Workshop)
Shawn Standard, MD

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 *Marine Room, Level 2*
Facilitator: *TBA*
Lab Assistants: *TBA*
- 2:25–2:30 Head to Next Lab
- 2:30–5:30 Six-axis External Fixation 1 Lab: Fracture with Translation, *Cobalt Ballroom 2, Level 2*
Valgus Deformity, and Blount Disease
Facilitators: *TBA*
Lab Assistants: *TBA*

Groups B-1 and B-2:

- 1:25–3:25 Six-axis External Fixation 4 Lab: Post-traumatic Valgus Malunion *Azure & Indigo Rooms, Level 2*
Facilitator: *TBA*
Lab Assistants: *TBA*
- 3:25–3:30 Head to Next Lab
- 3:30–5:30 Six-axis External Fixation 2 Lab: Miter Frame *Grand Ballroom B, Level 2*
Facilitators: *Michael Assayag, MD, Noman Siddiqui, DPM, and TBA*
Lab Assistants: *TBA*

Group C-1:

- 1:25–3:25 Six-axis External Fixation 3 Lab: Blount Disease *Cobalt Ballroom 1, Level 2*
Facilitator: *TBA*
Lab Assistants: *TBA*
- 3:25–3:30 Head to Workshop
- 3:30–5:30 Internal Lengthening Nail Workshop *Sienna Room, Level 2*
Facilitators: *Philip McClure, MD, and TBA*
Lecturers: *John Herzenberg, MD, Shawn Standard, MD, and TBA*

Group C-2:

1:25–3:25	Internal Lengthening Nail Workshop Facilitators: <i>Michael Assayag, MD, and Philip McClure, MD</i> Lecturers: <i>John Herzenberg, MD, Shawn Standard, MD, and TBA</i>	<i>Sienna Room, Level 2</i>
3:25–3:30	Head to Next Lab	
3:30–5:30	Six-axis External Fixation 3 Lab: Blount Disease Facilitator: <i>TBA</i> Lab Assistants: <i>TBA</i>	<i>Cobalt Ballroom 1, Level 2</i>
6:00	Depart Hotel for Faculty and Former Fellows Dinner (<i>invitation only</i>)	<i>Four Seasons Hotel, Lobby</i>

Day 3: Saturday, August 24

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 breakout sessions listed below:*

Breakout Session: Foot and Ankle Specialists

Grand Ballroom B, Level 2

- 7:30–7:50 Soft Tissue Defect Reconstruction in the Foot and Ankle Deformity
Christopher Bibbo, DO
- 7:50–8:10 Minimally Invasive Cavus Deformity Correction
Noman Siddiqui, DPM
- 8:10–8:30 Arthroeresis... When and Why
Guido LaPorta, DPM
- 8:30–8:50 International Neurogenic Feet, Stirrup Method, and Other Complex Cases
Saad Ilyas, MBBS
- 8:50–9:15 Biometrics of Foot and Ankle
Anil Bhave, PT
- 9:15–9:45 Charcot Deformity Correction via Minimally Invasive Surgery
James McWilliam, MD
- 9:45–10:00 Discussion

Breakout Session: Pediatric Orthopedic Specialists

Grand Ballroom A, Level 2

- 7:30–7:50 Acute Correction of Tibia Vara
Philip McClure, MD
- 7:50–8:05 Extramedullary Lengthening of the Femur: Tips and Tricks
Shawn Standard, MD
- 8:05–8:20 Multiple Hereditary Exostosis: Treatment of the Elbow/Forearm
Aaron Huser, MD
- 8:20–8:35 Mastering Surgical Hip Dislocation for SCFE
David Podeszwa, MD
- 8:35–8:50 Update on Deformity in Osteogenesis Imperfecta
Jeanne Franzone, MD
- 8:50–9:05 What to do with Poor Regeneration
David Frumberg, MD
- 9:05–9:20 Unlocking the Complex Congenital Knee
Shawn Standard, MD
- 9:20–9:35 Deformity In X-linked Hypophosphatemic Rickets
Jill Flanagan, MD
- 9:35–9:50 Role of the Physis in Limb Deformity
TBA
- 9:50–10:00 Discussion

Breakout Session: Adult Orthopedic Specialists

Sienna Room, Level 2

- 7:30–7:45 Osseousintegration: Where Are We Now?
Kevin Tetsworth, MD
- 7:45–8:00 Deformity Correction and Total Joint Arthroplasty
Matthew Deren, MD
- 8:00–8:15 Periprosthetic Fractures and Nonunions
Brett Crist, MD
- 8:15–8:30 One State Treatment of Infected Nonunions
Nando Ferreira, MD
- 8:30–8:45 When to Call it Quits: Amputation and Unsalvageable Limb
Pablo Corona, MD
- 8:45–9:00 Cosmetic Stature Lengthening: Not Taboo Anymore
Michael Assayag, MD
- 9:00–9:15 Limb Salvage in the Polytrauma Patient
James Blair, MD
- 9:15–9:30 Deformity Correction and Simultaneous Lengthening Using Plates and Nails:
Maximizing Your Surgery
Marie Gdalevietch, MD
- 9:30–9:45 Limb Reconstruction in the Limited Resource Environment
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 *Grand Ballroom, Level 2*
Daniel Ruggles, DO
- 10:40–11:05 Contracture Management and the Latest Advances in Physical Therapy
Anil Bhave, PT
- 11:05–11:25 Radiology Considerations
Janet Conway, MD
- 11:25–11:45 Surgeon Wellness
Christopher Iobst, MD
- 11:45–11:55 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*
- 12:25–12:40 Limb Reconstruction in the Low-Resource Environment
Saad Ilyas, MBBS
- 12:40–12:45 Groups A and B: Head to Afternoon Lab

12:45–5:00 Groups A and B: Saturday Afternoon Labs

Group A-1:

- 12:45–2:45 Six-axis External Fixation 3 Lab: Hyper Equinus *Cobalt Ballroom 1, Level 2*
Facilitator: *TBA*
Lab Assistants: *TBA*
- 2:45–3:00 Head to Workshop
- 3:00–5:00 Internal Lengthening Nail Workshop *Sienna Room, Level 2*
Facilitator: *Michael Assayag, MD*
Lecturers: *John Herzenberg, MD, Philip McClure, MD, Christof Radler, MD,*
and Daniel Ruggles, DO
Lab Assistant: *TBA*

Group A-2:

- 12:45–2:45 Internal Lengthening Nail Workshop *Sienna Room, Level 2*
Facilitator: *Michael Assayag, MD*
Lecturers: *John Herzenberg, MD, Philip McClure, MD, Christof Radler, MD,*
and Daniel Ruggles, DO
Lab Assistant: *TBA*
- 2:45–3:00 Head to Next Lab
- 3:00–5:00 Six-axis External Fixation 3 Lab: Hyper Equinus *Cobalt Ballroom 1, Level 2*
Facilitator: *TBA*
Lab Assistants: *TBA*

Groups B-1 and B-2:

- 12:45–1:45 Six-axis External Fixation 5 Lab: Ankle Varus and Recurvatum *Marine Room, Level 2*
Facilitators: *Guido LaPorta, DPM, and Noman Siddiqui, DPM*
Lab Assistants: *TBA*
- 1:45–2:00 Head to Next Lab
- 2:00–5:00 Six-axis External Fixation 1 Lab: Fracture with Translation, *Cobalt Ballroom 2, Level 2*
Varus Deformity, and Rotational Deformity
Facilitators: *TBA*
Lab Assistants: *TBA*

5:00 Groups A and B: Conclusion

12:40–1:15 Group C: Head to Afternoon Lab

1:15–5:30 **Group C: Saturday Afternoon Labs**

Group C-1:

1:15–3:15 Six-axis External Fixation 2 Lab: Malunion with Procurvatum *Grand Ballroom A, Level 2*
Facilitator: *TBA*
Lab Assistants: *TBA*

3:15–3:30 Head to Next Lab

3:30–5:30 Coxa Vara and Knee Flexion Deformity Lab *Azure & Indigo Rooms, Level 2*
Facilitators: *John Herzenberg, MD, and Shawn Standard, MD*
Lab Assistants: *TBA*

Group C-2:

1:15–3:15 Coxa Vara and Knee Flexion Deformity Lab *Azure & Indigo Rooms, Level 2*
Facilitators: *John Herzenberg, MD, and Shawn Standard, MD*
Lab Assistants: *TBA*

3:15–3:30 Head to Next Lab

3:30–5:30 Six-axis External Fixation 2 Lab: Malunion with Procurvatum *Grand Ballroom A, Level 2*
Facilitator: *TBA*
Lab Assistants: *TBA*

5:30 Group C: Conclusion