

**32nd Annual
Baltimore Limb Deformity Course**

Thursday, August 25 – Saturday, August 27, 2022
(as of 06.09.2022)



Four Seasons Hotel
Baltimore, Maryland, USA



Course Chairmen

**John Herzenberg, MD
Philip McClure, MD**

LLRS Liaison

David Podeszwa, MD

Directors

**Michael Assayag, MD
Christopher Bibbo, DO
Janet Conway, MD
Noman Siddiqui, DPM
Shawn Standard, MD**

Endorsed by:



Faculty and Lab Assistants

Samantha Bark, DPM	Galion, Ohio
Anil Bhave, PT	Baltimore, Maryland
Alexander Cherkashin, MD	Dallas, Texas
Gavin de Kiewiet, MD	Newcastle-upon-Tyne, United Kingdom
Ronald Delanois, MD	Baltimore, Maryland
David Dycus, DVM	Baltimore, Maryland
Mark Eidelman, MD	Haifa, Israel
Ahmed Elhessy, MD	Baltimore, Maryland
Jill Flanagan, MD	Atlanta, Georgia
Rudolf Ganger, MD	Vienna, Austria
Marie Gdalevitch, MD	Montreal, Canada
Christine Goodbody, MD	Philadelphia, Pennsylvania
Lee Hlad, DPM	Waycross, Georgia
Byron Hutchinson, DPM	Burien, Washington
Alireza Khosroabadi, DPM	Arcadia, California
Guido LaPorta, DPM	Dunmore, Pennsylvania
Salih Marangoz, MD	Istanbul, Turkey
Kenji Miki, MD	Osaka, Japan
Kelsey Millonig, DPM	Des Moines, Iowa
Mark Myerson, MD	Denver, Colorado
Scott Nelson, MD	Port-au-Prince, Haiti
L. Reid Boyce Nichols, MD	Wilmington, Delaware
Benjamin Ollivere, MD	Nottingham, United Kingdom
Jhon Jairo Pérez Casado, MD	Cali, Colombia
Christof Radler, MD	Vienna, Austria
J. Spence Reid, MD	Hershey, Pennsylvania
Jessica Rivera, MD	New Orleans, Louisiana
Valentyn Rohozynskyi, MD	Kyiv, Ukraine
Daniel Ruggles, DO	Miami, Florida
Mikhail Samchukov, MD	Dallas, Texas
John Sontich, MD	Cleveland, Ohio
William Terrell, MD	Marietta, Georgia
Michael Thomas, DPM	Baltimore, Maryland
Philip Wroslavsky, DPM	San Diego, California

Day 1: Thursday, August 25

6:00–7:00	<u>Registration, Continental Breakfast and Visit with Corporate Partners</u>	<i>Marine Room and Grand Ballroom Pre-function, Level 2</i>
7:00–7:30	Welcome and Pre-test <i>John Herzenberg, MD and Ronald Delanois, MD</i>	<i>Grand Ballroom, Level 2</i>
7:30–7:50	Pre-op Planning: The Axis/Apex Method <i>Shawn Standard, MD</i>	
7:50–8:00	Alphabet Soup of Limb Alignment (Frontal Plane): MAD, LDFA, MPTA, LDTA, MPFA, LPFA, and JLCA <i>Janet Conway, MD</i>	
8:00–8:15	Frontal Plane Measurements on Normal Bones (Planning Workshop) <i>Janet Conway, MD</i>	
8:15–9:00	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>John Herzenberg, MD</i>	
9:00–9:30	<u>Health Break and Visit with Corporate Partners</u>	<i>Grand Ballroom Pre-function, Level 2</i>
9:30–10:00	The ABCs (<u>A</u> pex, <u>B</u> one Cut, <u>C</u> orrection) <i>Shawn Standard, MD</i>	<i>Grand Ballroom, Level 2</i>
10:00–10:50	Tibia: Frontal Plane Single-level Deformities (Planning Workshop) <i>Michael Assayag, MD</i>	
10:50–11:30	Bone Ninja Introduction <i>Shawn Standard, MD</i>	
11:30–12:15	Tibia: Frontal Plane Double-level Deformities (Planning Workshop) <i>Marie Gdalevitch, MD</i>	
12:15–1:00	<u>Luncheon and Visit with Corporate Partners</u>	<i>Grand Ballroom Pre-function, Level 2</i>
1:00–1:30	Special Pre-recorded Lecture: War Surgery in Ukraine <i>Valentyn Rohozynskyi, MD</i> with Introduction by <i>John Herzenberg, MD</i>	<i>Grand Ballroom, Level 2</i>
1:30–1:45	Head to Designated Afternoon Labs	
1:45–6:00	Thursday Afternoon Labs:	
<u>Group A-1 and A-2:</u>		
1:45–3:45	Six-axis External Fixation 4 Lab Facilitator: <i>John Sontich, MD</i> Lab Assistants: <i>TBA</i>	<i>Azure & Indigo Rooms, Level 2</i>
3:45–4:00	Head to Next Lab	
4:00–6:00	Six-axis External Fixation 2 Lab Facilitator: <i>Scott Nelson, MD</i> Lab Assistants: <i>TBA</i>	<i>Grand Ballroom B, Level 2</i>

Day 1: Thursday, August 25

Group B-1:

1:45–3:45	External Fixation Lab Facilitators: <i>Byron Hutchinson, DPM, Guido LaPorta, DPM, Mark Myerson, MD, and Noman Siddiqui, DPM</i> Lab Assistants: <i>TBA</i>	<i>Sienna Room, Level 2</i>
3:45–4:00	Head to Next Lab	
4:00–6:00	Six-axis External Fixation 3 Lab Facilitator: <i>William Terrell, MD</i> Lab Assistants: <i>Christopher Bibbo, DO, Alexander Cherkashin, MD, Kelsey Millonig, DPM, and Mikhail Samchukov, MD</i>	<i>Marine Room, Level 2</i>

Group B-2:

1:45–3:45	Six-axis External Fixation 3 Lab Facilitator: <i>William Terrell, MD</i> Lab Assistants: <i>Christopher Bibbo, DO, Alexander Cherkashin, MD, Kelsey Millonig, DPM, and Mikhail Samchukov, MD</i>	<i>Marine Room, Level 2</i>
3:45–4:00	Head to Next Lab	
4:00–6:00	External Fixation Lab Facilitators: <i>Byron Hutchinson, DPM, Guido LaPorta, DPM, Mark Myerson, MD, and Noman Siddiqui, DPM</i> Lab Assistants: <i>TBA</i>	<i>Sienna Room, Level 2</i>

Groups C-1 and C-2:

1:45–2:45	Fixator-assisted Plating Lab: Distal Femoral Valgus Deformity Facilitator: <i>Janet Conway, MD</i> Lab Assistants: <i>TBA</i>	<i>Grand Ballroom A, Level 2</i>
2:45–2:55	Head to Next Lab	
2:55–4:55	Six-axis External Fixation 1 Lab Facilitators: <i>Rudolf Ganger, MD and Christof Radler, MD</i> Lab Assistants: <i>Benjamin Ollivere, MD and TBA</i>	<i>Cobalt Ballroom, Level 2</i>
4:55–5:00	Head to Next Lab	
5:00–6:00	Varus Derotational Osteotomy Lab Facilitator: <i>Shawn Standard, MD</i> Lab Assistants: <i>TBA</i>	<i>Grand Ballroom A, Level 2</i>
7:15–9:15	<u>Welcome Reception</u> (<i>ticket required, resort attire recommended</i>)	<i>Splash Pool Terrace, Level 4</i>

Day 2: Friday, August 26

- 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*
John Herzenberg, MD
- 7:05–7:15 Tibia Review Planning Exercises
John Herzenberg, MD
- 7:15–7:30 Alphabet Soup of Limb Alignment (Sagittal Plane): PDFAs, PPTAs, 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
- 8:45–9:05 Tibia: Oblique Plane Deformities Overview
Shawn Standard, MD
- 9:05–9:30 Tibia: Oblique Plane Deformities (Planning Workshop)
Janet Conway, MD
- 9:30–9:55 Health Break and Visit with Corporate Partners *Grand Ballroom Pre-function, Level 2*
- 9:55–1:50 *Please visit one of the two breakout sessions listed below:*
- Breakout Session: Focus on Ankle and Foot Deformities**
- 9:55–10:25 Pre-op Planning: The Axis/Apex/Third Line Method *Grand Ballroom B, Level 2*
Noman Siddiqui, DPM
- 10:25–10:45 Alphabet Soup of Foot and Ankle Alignment: Frontal, Sagittal, and Transverse Planes
Noman Siddiqui, DPM
- 10:45–11:35 Foot and Ankle: Frontal, Sagittal, and Transverse Plane Deformities
(Planning Workshop)
Noman Siddiqui, DPM
- 11:35–1:50 All Those Except Groups B-1 and B-2:
Luncheon and Visit with Corporate Partners *Grand Ballroom Pre-function, Level 2*
- 11:35–1:50 Groups B-1 and B-2:
- 11:35–11:45 Head to Sienna Room
- 11:45–1:15 Triplanar Correction of Hallux Valgus Deformity *Sienna Room, Level 2*
Facilitators: *Alireza Khosroabadi, DPM and Guido LaPorta, DPM*
- 1:15–1:50 Luncheon *Cobalt Ballroom Pre-function, Level 2*
- Breakout Session: Focus on Femoral Deformities and Limb Length Discrepancy
(Pediatrics and Adults)**
- 9:55–10:55 Femur: Frontal Plane Single-level Deformities (Planning Workshop) *Grand Ballroom A, Level 2*
John Herzenberg, MD
- 10:55–11:15 Limb Length Discrepancy (LLD) and Radiographic Assessment of LLD
Shawn Standard, MD

Day 2: Friday, August 26

11:15–11:55 Femur: Frontal Plane Double-level Deformities (Planning Workshop)
John Herzenberg, MD

11:55–12:15 Luncheon and Visit with Corporate Partners *Grand Ballroom Pre-function, Level 2*

12:15–1:50 Reverse Planning and Retrograde Nailing: LLD *Grand Ballroom B, Level 2*
Facilitator: *Philip McClure, MD*
Lab Assistants: *Michael Assayag, MD, Janet Conway, MD, and William Terrell, MD*

1:50–1:55 Head to Designated Afternoon Labs

1:55–6:00 Friday Afternoon Labs:

Groups A-1 and A-2:

1:55–2:55 Six-axis External Fixation 5 Lab *Grand Ballroom A, Level 2*
Facilitator: *J. Spence Reid, MD*
Lab Assistants: *TBA*

2:55–3:00 Head to Next Lab

3:00–6:00 Six-axis External Fixation 1 Lab *Cobalt Ballroom, Level 2*
Facilitators: *Rudolf Ganger, MD, John Herzenberg, MD, and Christof Radler, MD*
Lab Assistants: *Benjamin Ollivere, MD and TBA*

Groups B-1 and B-2:

1:55–3:55 Six-axis External Fixation 4 Lab *Azure & Indigo Rooms, Level 2*
Facilitator: *Guido LaPorta, DPM*
Lab Assistants: *Lee Hlad, DPM and Byron Hutchinson, DPM*

3:55–4:00 Head to Next Lab

4:00–6:00 Six-axis External Fixation 2 Lab *Grand Ballroom B, Level 2*
Facilitators: *Byron Hutchinson, DPM, Guido LaPorta, DPM, Kelsey Millonig, DPM, and Noman Siddiqui, DPM*
Lab Assistants: *TBA*

Group C-1:

1:55–3:55 Six-axis External Fixation 3 Lab *Marine Room, Level 2*
Facilitators: *Alexander Cherkashin, MD and Mikhail Samchukov, MD*
Lab Assistants: *Christopher Bibbo, DO, William Terrell, MD, and TBA*

3:55–4:00 Head to Next Lab

4:00–6:00 Internal Lengthening Nail Workshop *Umber Room, Level 4*
Facilitator: *John Herzenberg, MD*
Lecturers: *Rudolf Ganger, MD, Philip McClure, MD, Christof Radler, MD, Daniel Ruggles, DO, and Shawn Standard, MD*

Day 2: Friday, August 26

Group C-2:

- 1:55–3:55 Internal Lengthening Nail Workshop *Umber Room, Level 4*
Facilitator: *John Herzenberg, MD*
Lecturers: *Rudolf Ganger, MD, Philip McClure, MD, Christof Radler, MD, Daniel Ruggles, DO, and Shawn Standard, MD*
- 3:55–4:00 Head to Next Lab
- 4:00–6:00 Six-axis External Fixation 3 Lab *Marine Room, Level 2*
Facilitators: *Alexander Cherkashin, MD and Mikhail Samchukov, MD*
Lab Assistants: *Christopher Bibbo, DO, William Terrell, MD, and TBA*
- 6:00–6:25 Refreshment Break *Cobalt Ballroom Pre-function, Level 2*
- 6:25–6:30 Head to Case Presentation Sessions
- 6:30–7:45 **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.
- Pediatrics – Moderators: Philip McClure, MD and Shawn Standard, MD** *Grand Ballroom A, Level 2*
- 6:30–6:45 Gradual Correction in Children and Adolescents
Mark Eidelman, MD
- 6:45–7:45 Participant Case Presentations
- Adult – Moderators: Michael Assayag, MD and Janet Conway, MD** *Sienna Room, Level 2*
- 6:30–6:45 Immunology for Orthopedists
Janet Conway, MD
- 6:45–7:45 Participant Case Presentations
- Foot and Ankle – Moderators: Noman Siddiqui, DPM and Christopher Bibbo, DO** *Grand Ballroom B, Level 2*
Expert Panel: Guido LaPorta, DPM and Jhon Jairo Pérez Casado, MD
- 6:30–6:45 Acute Management of Severe Foot and Ankle Deformity on Global Humanitarian Programs
Mark Myerson, MD
- 6:45–7:45 Participant Case Presentations
- 7:45 Conclude
- 8:00 Depart Hotel for Faculty and Former Fellows Dinner (*invitation only*) *Four Seasons Hotel, Lobby*

Day 3: Saturday, August 27

6:30–7:00 Breakfast and Visit with Corporate Partners

Grand Ballroom Pre-function, Level 2

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

Breakout Session: Foot and Ankle Specialists

Grand Ballroom B, Level 2

- 7:00–7:15 Evolution of Internal Fixation Techniques of the Charcot Midfoot
Mark Myerson, MD
- 7:15–8:00 Distal Hallux Valgus Correction: Where is the Apex?
Alireza Khosroabadi, DPM
- 8:00–8:15 Brachymetatarsia Correction: My Approach to Correction
Alireza Khosroabadi, DPM
- 8:15–8:35 Complex External Fixation Methods and Soft Tissue Management in Foot and Ankle Cases
Jhon Jairo Pérez Casado, MD
- 8:35–8:55 Distal Distraction Osteogenesis Principles in a Complex Neuropathic Ankle Collapse
Noman Siddiqui, DPM
- 8:55–9:10 Biomechanical Impact of Deformity on Foot and Ankle
Anil Bhave, PT
- 9:10–9:30 Tips, Tricks, and Pitfalls in Late Stage Posterior Tibial Tendon Dysfunction
Guido LaPorta, DPM
- 9:30–9:45 Role of Biologics in Foot and Ankle Surgery
Christopher Bibbo, DO
- 9:45–10:00 Discussion

Breakout Session: Pediatric & Adult Orthopedic Specialists (Combined)

Grand Ballroom A, Level 2

- 7:00–7:30 Sagittal Plane Deformities: Knee Flexion Contracture Secondary to Lengthening
Shawn Standard, MD
- 7:30–8:15 Femur and Knee: Sagittal Plane Deformities (Lecture and Planning Workshop)
Shawn Standard, MD
- 8:15–8:20 Adult Specialists Head to Grand Ballroom B While Pediatric Specialists Remain

Breakout Session: Pediatric Orthopedic Specialists

Grand Ballroom A, Level 2

- 8:20–8:35 Tips, Tricks, and Pitfalls for Slipped Capital Femoral Epiphysis
David Podeszwa, MD
- 8:35–8:55 Incorporating the Multiplier Method into Your Pediatric Orthopedic Practice
John Herzenberg, MD

Day 3: Saturday, August 27

- 8:55–9:10 Growth Plate Modulation
L. Reid Boyce Nichols, MD
- 9:10–9:35 Lengthening for Congenital Femoral Deficiency
Shawn Standard, MD
- 9:35–9:50 Congenital Dislocation of the Patella Diagnosis
Philip McClure, MD
- 9:50–10:00 Discussion

Breakout Session: Adult Orthopedic Specialists

Sienna Room, Level 2

- 8:20–8:30 Acute Deformity Wound Closure
Philip McClure, MD
- 8:30–8:45 Stature Lengthening
Michael Assayag, MD
- 8:45–9:05 Deformity Correction with Intramedullary Nails
Benjamin Ollivere, MD
- 9:05–9:20 Fixator-assisted Locked Plating
Philip McClure, MD
- 9:20–9:35 Periarticular Tibia Fracture
Benjamin Ollivere, MD
- 9:35–9:50 Complications of Internal Lengthening
Janet Conway, MD
- 9:50–10:00 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*
John Herzenberg, MD
- 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
- 11:25–11:40 Natural History of Malalignment
Philip McClure, MD
- 11:40–12:10 Luncheon and Visit with Corporate Partners *Grand Ballroom Pre-function, Level 2*
- 12:10–12:40 Realignment Surgery in Animals *Grand Ballroom, Level 2*
David Dycus, DVM with Introduction by Michael Assayag, MD
- 12:40–12:55 Closing Remarks and Post-test
John Herzenberg, MD

Day 3: Saturday, August 27

12:55–1:00 Head to Lab Afternoon Lab

1:00–5:15 Saturday Afternoon Labs:

Group A-1:

1:00–3:00 Six-axis External Fixation 3 Lab *Marine Room, Level 2*
Facilitator: *William Terrell, MD*
Lab Assistants: *Alexander Cherkashin, MD, Mikhail Samchukov, MD, Michael Thomas, DPM, and TBA*

3:00–3:15 Head to Next Lab

3:15–5:15 Internal Lengthening Nail Lab *Sienna Room, Level 2*
Facilitator: *Michael Assayag, MD*
Lecturers: *John Herzenberg, MD, Philip McClure, MD, Christof Radler, MD, Daniel Ruggles, DO, and Shawn Standard, MD*

Group A-2:

1:00–3:00 Internal Lengthening Nail Lab *Sienna Room, Level 2*
Facilitator: *Michael Assayag, MD*
Lecturers: *John Herzenberg, MD, Philip McClure, MD, Christof Radler, MD, Daniel Ruggles, DO, and Shawn Standard, MD*

3:00–3:15 Head to Next Lab

3:15–5:15 Six-axis External Fixation 3 Lab *Marine Room, Level 2*
Facilitator: *William Terrell, MD*
Lab Assistants: *Alexander Cherkashin, MD, Mikhail Samchukov, MD, Michael Thomas, DPM, and TBA*

Group B-1 and B-2:

1:00–2:00 Six-axis External Fixation 6 Lab *Grand Ballroom A, Level 2*
Facilitators: *Guido LaPorta, DPM and Noman Siddiqui, DPM*
Lab Assistants: *Lee Hlad, DPM and Kelsey Millonig, DPM*

2:00–2:15 Head to Next Lab

2:15–5:15 Six-axis External Fixation 1 Lab *Cobalt Ballroom, Level 2*
Facilitators: *Rudolf Ganger, MD and Christof Radler, MD*
Lab Assistants: *Benjamin Ollivere, MD and TBA*

Group C-1:

1:00–3:00 Six-axis External Fixation 2 Lab *Grand Ballroom B, Level 2*
Facilitators: *L. Reid Boyce Nichols, MD and Michael Assayag, MD*
Lab Assistants: *TBA*

3:00–3:15 Head to Next Lab

3:15–5:15 Coxa Vara and Knee Flexion Deformity Lab *Azure and Indigo Rooms, Level 2*
Facilitators: *Shawn Standard, MD and John Herzenberg, MD*
Lab Assistants: *TBA*

Day 3: Saturday, August 27

Group C-2:

1:00–3:00 Coxa Vara and Knee Flexion Deformity Lab *Azure and Indigo Rooms, Level 2*

Facilitators: *Shawn Standard, MD and John Herzenberg, MD*

Lab Assistants: *TBA*

3:00–3:15 Head to Next Lab

3:15–5:15 Six-axis External Fixation 2 Lab

Grand Ballroom B, Level 2

Facilitators: *L. Reid Boyce Nichols, MD and Michael Assayag, MD*

Lab Assistants: *TBA*

5:15 Conclusion