

**29th Annual
Baltimore Limb Deformity Course**

Thursday, August 22 – Saturday, August 24, 2019
(as of 06.06.19)



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

Faculty

Hummira Abawi, DPM	Baltimore, Maryland
Kristin Alves, MD	Boston, Massachusetts
Rainer Baumgart, MD	Munich, Germany
Anil Bhave, PT	Baltimore, Maryland
Christopher Bibbo, DO	Baltimore, Maryland
James Binski, MD	Dayton, Ohio
Noam Bor, MD	Afula, Israel
Alexander Cherkashin, MD	Dallas, Texas
Richard Davidson, MD	Philadelphia, Pennsylvania
Ronald Delanois, MD	Baltimore, Maryland
Mark Eidelman, MD	Haifa, Israel
Hady Eltayeby, MD	Alexandria, Egypt
Rudolf Ganger, MD	Vienna, Austria
Marie Gdalevitch, MD	Montreal, Canada
Vache Hambardzumyan, MD	Doha, Qatar
Lee Hlad, DPM	Westerville, Ohio
Byron Hutchinson, DPM	Burien, Washington
Joshua Hyman, MD	New York City, New York
Christopher Iobst, MD	Columbus, Ohio
Guido LaPorta, DPM	North Abington Township, Pennsylvania
Salih Marangoz, MD	Istanbul, Turkey
Scott Nelson, MD	Loma Linda, California
L. Reid Nichols, MD	Wilmington, Delaware
B. Kyle Potter, MD	Washington, District of Columbia
Christof Radler, MD	Vienna, Austria
Jerome Reichmister, MD	Baltimore, Maryland
J. Spence Reid, MD	Hershey, Pennsylvania
Edgardo Rodriguez-Collazo, DPM	Chicago, Illinois
Sanjeev Sabharwal, MD	Lafayette, California
Mikhail Samchukov, MD	Coppell, Texas
Leonid Solomin, MD	Saint Petersburg, Russia
John Sontich, MD	Cleveland, Ohio
William Terrell, MD	Marietta, Georgia
Rishi Thakral, MD	Oklahoma City, Oklahoma
Jacob Wynes, DPM	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>
7:00–7:20	Welcome <i>John Herzenberg, MD, Jerome Reichmister, MD, and Ronald Delanois, MD</i>	<i>Grand Ballroom, Level 2</i>
7:20–7:40	Pre-Op Planning: The Axis/Apex Method <i>Shawn Standard, MD</i>	
7:40–7:50	Alphabet Soup of Limb Alignment (Frontal Plane): MAD, LDFA, MPTA, LDTA, MPFA, LPFA, and JLCA <i>Janet Conway, MD</i>	
7:50–8:05	Frontal Plane Measurements on Normal Bones (Planning Workshop) <i>Janet Conway, MD</i>	
8:05–8:45	Assessment of Limb Alignment: Frontal Plane MAP (M easure Mechanical Axis Deviation, A nalyze Joint Angles, P ick the Bone) (Planning Workshop) <i>John Herzenberg, MD</i>	
8:45–9:15	<u>Coffee Break and Visit Corporate Partners</u>	<i>Grand Ballroom Pre-function</i>
9:15–9:40	The ABCs (A pex, B one Cut, C orrection) <i>Shawn Standard, MD</i>	<i>Grand Ballroom</i>
9:40–10:30	Tibia: Frontal Plane Single-level Deformities (Planning Workshop) <i>Michael Assayag, MD</i>	
10:30–11:15	Tibia: Frontal Plane Double-level Deformities (Planning Workshop) <i>Marie Gdalevitch, MD</i>	
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): PDFA, PPTA, and ADTA <i>Philip McClure, MD</i>	
12:05–12:30	Sagittal Plane Measurements (Planning Workshop) <i>Philip McClure, MD</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 *Azure & Indigo Rooms, Level 2*
Facilitator: *John Sontich, MD*
Lab Assistants: TBA
- 4:55–5:00 Head to next lab
- 5:00–7:00 Six-Axis External Fixation 2 Lab *Grand Ballroom B, Level 2*
Facilitator: *Scott Nelson, MD*
Lab Assistants: TBA

Group B-1:

- 2:55–4:55 Internal Fixation Lab *Sienna Room, Level 2*
Facilitators: *Byron Hutchinson, DPM, and Lee Hlad, DPM*
Lab Assistants: TBA
- 4:55–5:00 Head to next lab
- 5:00–7:00 Six-Axis External Fixation 3 Lab *Marine Room, Level 2*
Facilitators: *William Terrell, MD, Guido LaPorta, DPM, and Edgardo Rodriguez-Collazo, DPM*
Lab Assistants: TBA

Group B-2:

- 2:55–4:55 Six-Axis External Fixation 3 Lab *Marine Room, Level 2*
Facilitators: *William Terrell, MD, Guido LaPorta, DPM, and Edgardo Rodriguez-Collazo, DPM*
Lab Assistants: TBA
- 4:55–5:00 Head to next lab
- 5:00–7:00 Internal Fixation Lab *Sienna Room, Level 2*
Facilitators: *Byron Hutchinson, DPM, and Lee Hlad, DPM*
Lab Assistants: TBA

Groups C-1 and C2:

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

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 *Grand Ballroom*
John Herzenberg, MD
- 7:10–8:00 Femur: Frontal Plane Single-level Deformities (Planning Workshop)
John Herzenberg, MD
- 8:00–8:10 Principles of Frame Assembly for Deformity Correction
Leonid Solomin, 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
Guido LaPorta, DPM *Grand Ballroom B*
- 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
Secondary to Lengthening
Shawn Standard, MD *Grand Ballroom A*
- 11:15–11:55 Femur and Knee: Sagittal Plane Deformities (Lecture and Planning Workshop)
Shawn Standard, MD

Day 2: Friday, August 23

11:55–12:20 Boxed Luncheon (*grab and return to Ballroom*) *Grand Ballroom Pre-function*

12:20–12:45 Special Lecture: Non-orthopedic Distraction Osteogenesis *Grand Ballroom*
Mikhail Samchukov, MD

12:45–12:55 Head to Designated Afternoon Labs

12:55–5:00 Friday Afternoon Labs:

Groups A-1 and A-2:

12:55–1:55 Six-Axis External Fixation 5 Lab *Vermilion & Umber Rooms, Level 4*
Facilitator: *J. Spence Reid, MD*
Lab Assistants: TBA

1:55–2:00 Head to next lab

2:00–5:00 Six-Axis External Fixation 1 Lab *Cobalt Ballroom, Level 2*
Facilitators: *Rudolf Ganger, MD, and Christof Radler, MD*
Lab Assistants: TBA

Groups B-1 and B-2:

12:55–2:55 Circular Fixation for Ankle Fusion Lab *Azure & Indigo Rooms, Level 2*
Facilitators: *Guido LaPorta, DPM, and Noman Siddiqui, DPM*
Lab Assistants: TBA

2:55–3:00 Head to next lab

3:00–5:00 Six-Axis External Fixation 2 Lab *Grand ballroom B, Level 2*
Facilitator: *Lee Hlad, DPM*
Lab Assistants: TBA

Group C-1:

12:55–2:55 Six-Axis External Fixation 3 Lab *Marine Room, Level 2*
Facilitator: *Christopher Iobst, MD*
Lab Assistants: TBA

2:55–3:00 Head to next lab

3:00–5:00 Internal Lengthening Nail Workshop *Sienna Room, Level 2*
Facilitator: *John Herzenberg, MD*
Lecturers: *Rudolph Ganger, MD, and Christof Radler, MD*
Lab Assistants: TBA

Group C-2:

12:55–2:55 Internal Lengthening Nail Workshop *Sienna Room, Level 2*
Facilitator: *John Herzenberg, MD*
Lecturers: *Rudolph Ganger, MD, and Christof Radler, MD*
Lab Assistants: TBA

2:55–3:00 Head to next lab

3:00–5:00 Six-Axis External Fixation 3 Lab *Marine Room, Level 2*
Facilitator: *Christopher Iobst, MD*
Lab Assistants: TBA

Day 2: Friday, August 23

5:00–5:15 Light Refreshment Break and Head to Participant Case Presentations *Cobalt Ballroom Pre-function, Level 2*

5:15–6:45 **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,

Grand Ballroom A, Level 2

L. Reid Nichols, MD, and Sanjeev Sabharwal, MD

5:15–5:35 History of Clubfoot Correction
Mark Eidelman, MD

5:35–6:45 Participant Case Presentations

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

Vermilion Room, Level 4

5:15–5:35 Internal Lengthening Nails
Rainer Baumgart, MD

5:35–6:45 Participant Case Presentations

Foot and Ankle Cases – Moderators: Noman Siddiqui, DPM, and

Grand Ballroom B, Level 2

Christopher Bibbo, DO

Expert Panel: Byron Hutchinson, DPM, Guido LaPorta, DPM,

Lee Hlad, DPM, and Edgardo Rodriguez-Collazo, DPM

5:15–5:35 Nerve Considerations in Deformity Correction
Edgardo Rodriguez-Collazo, DPM

5:35–6:45 Participant Case Presentations

6:45 Adjourn

7:30 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 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 Bhawe, 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 Hambardzumyan, MD
- 10:05–10:20 The AK-47 of Hexapods
Leonid Solomin, MD
- 10:20–10:35 Fixator-Assisted Nailing
Christopher Iobst, MD
- 10:35–10:50 Fixator-Assisted Locked Plating
Janet Conway, MD
- 10:50–11:05 Limb Reconstruction Techniques for Periprosthetic Fracture
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

Breakout Session: Foot and Ankle Specialists

Grand Ballroom B

- 9:30–10:05 Bone Ninja Cases (Workshop)
Hummira Abawi, DPM
- 10:05–10:20 External Fixation Solutions in the Foot and Ankle
Michael Assayag, MD
- 10:20–10:35 Clinical Biomechanics of External Fixation
Mikhail Samchukov, MD

Day 3: Saturday, August 24

- 10:35–10:45 Alternative Solutions for Ankle Arthritis
Guido LaPorta, DPM
- 10:45–11:00 Six-Axis Correction for Pediatric Cases in Foot and Ankle
Lee Hlad, DPM
- 11:00–11:15 Distal Tibial Lengthening and Ankle Fusion in Charcot
Noman Siddiqui, DPM
- 11:15–11:30 Percutaneous Bunion Correction: Method and Outcomes
Marie Gdalevitch, MD
- 11:30–11:45 Foot and Ankle Deformity Correction in Developing Countries
Byron Hutchinson, DPM
- 11:45–12:00 Flaps for the Foot and Ankle: Tips and Tricks
Christopher Bibbo, DO
- 12:00–12:10 Discussion

Breakout Session: Pediatric Orthopedic Specialists

Grand Ballroom A

- 9:30–10:00 Bone Ninja Cases (Workshop)
Shawn Standard, MD
- 10:00–10:15 Six-Axis Correction for Pediatric Cases
Mark Eidelman, MD
- 10:15–10:25 External Fixation Solutions for Missed Monteggia Fractures
Noam Bor, MD
- 10:25–10:45 Workshop: Incorporating The Multiplier into Your Practice
John Herzenberg, MD
- 10:45–10:55 Lessons Learned in Lower Limb Deformity Correction
Sanjeev Sabharwal, MD
- 10:55–11:05 Radiographic Assessment of Limb Length Discrepancy
Shawn Standard, MD
- 11:05–11:10 Contractures that Mimic Limb Length Discrepancy
Kristen Alves, MD
- 11:10–11:15 Introduction to Guided Growth
Hady Eltayeb, MD
- 11:15–11:30 Lengthening for Congenital Femoral Deficiency
Shawn Standard, MD
- 11:30–11:45 Blount Disease: Treatment Options
Sanjeev Sabharwal, MD
- 11:45–11:55 Hemiplateau Elevation for Blount Disease: When, How, and Why
Richard Davidson, MD
- 11:55–12:05 New Concepts in Dynamization of Circular Frames
Alexander Cherkashin, MD
- 12:05–12:10 Discussion

Day 3: Saturday, August 24

12:10–1:20 Luncheon on Own

1:20–1:25 Head to Designated Afternoon Labs

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*
Lab Assistants: TBA

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 Bhavre, PT, John Herzenberg, MD, and Christof Radler, MD*
Lab Assistants: TBA

Group A-2:

1:25–3:25 Internal Lengthening Nail Lab *Sienna Room, Level 2*
Facilitator: *Michael Assayag, MD*
Lecturers: *Anil Bhavre, PT, John Herzenberg, MD, and Christof Radler, MD*
Lab Assistants: TBA

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*
Lab Assistants: TBA

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*
Lab Assistants: TBA

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*
Lab Assistants: TBA

Group C-1:

1:25–3:25 Six-Axis External Fixation 2 Lab *Grand Ballroom B, Level 2*
Facilitator: *L. Reid Nichols, MD*
Lab Assistants: TBA

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*
Lab Assistants: TBA

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*
Lab Assistants: TBA

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*
Lab Assistants: TBA

5:30 Adjourn