

# 19<sup>th</sup> ANNUAL IPOS<sup>®</sup>

International Pediatric Orthopaedic Symposium

**December 5-9, 2023 | Orlando, FL**

**Suken Shah, MD, FAOA, FAAOS**  
Co-Director

**Derek Kelly, MD, FAOA, FAAOS**  
Co-Director



IPOS<sup>®</sup> aspires to be the  
best pediatric orthopaedic  
educational event in the world

Final Program



**POSNA**  
PEDIATRIC ORTHOPAEDIC SOCIETY  
OF NORTH AMERICA



The Pediatric Orthopaedic Society of North America gratefully acknowledges these sponsors for their generous financial support in 2023.

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## Explore All Areas of Pediatric Orthopaedics

Immerse yourself in this exciting and interactive four-day program alongside hundreds of pediatric orthopaedic professionals from around the world. Discover new insights and technology and learn how to integrate best practices and new techniques into your care of children and adolescents. From fundamental fracture care to advanced surgical reconstruction, our world-renowned faculty share their expertise in every subspecialty field of pediatric orthopaedics.

### Learning Objectives

- Describe foundational aspects of pediatric orthopaedic principles and techniques
- Analyze and incorporate innovations and advances in pediatric orthopaedic surgery when applicable
- Identify potential for and apply improvements to your practice and treatment/outcomes optimization plans
- Practice hands-on techniques for a wide variety of procedures to improve performance
- Develop a growth mindset, soft skills, and emotional intelligence for practice success

## Registration

Sponsored by Stryker

Tuesday, December 5	3:00 PM–7:00 PM
Wednesday, December 6	7:00 AM–5:00 PM
Thursday, December 7	7:00 AM–3:00 PM
Friday, December 8	7:00 AM–3:00 PM
Saturday, December 9	8:00 AM–10:00 AM

## Exhibit Hall

Join your colleagues in the Exhibit Hall for networking and discovery of new pediatric orthopaedic products and services. Meals and breaks will be served in the Exhibit Hall.

Wednesday, December 6	7:00 AM–5:00 PM
Wednesday, December 6 Happy Hour in the Hall	2:35 PM–3:35 PM
Thursday, December 7	7:00 AM–4:00 PM
Friday, December 8	7:00 AM–3:00 PM



## Residents and Fellows: Programming just for you!

**Case Competition:** Hear the faculty discuss your cases and put your knowledge to the test during the Arabella Leet session!

**Career Planning and Professional Development:** Get perspectives and advice on handling what you do not find in textbooks.

**Lunchtime Career Development:** Join IPOS<sup>®</sup> faculty, Wednesday–Friday, for a 30-minute case review and discussion.

**Top Gun:** The 11th annual surgical skills competition allows you to showcase your maverick skill set (by invitation only).

**Breakfast with Faculty:** This is a unique, direct-access opportunity with leaders in the field to feed your mind, ask questions, and seek professional guidance on Thursday morning over breakfast from 7:00 AM–8:00 AM.

## Craft Your Own IPOS<sup>®</sup> Adventure with Over 30 Breakout Sessions and 11 Different Topic Tracks Featuring:

- Focused lectures and engaging case discussions
- Surgical skills demonstrations
- Industry-sponsored sessions on cutting edge techniques
- Small group discussions
- Essentials Session on how to teach and learn Pediatric Orthopaedic Surgery

## Hands-on Sessions You Don't Want to Miss:

- On the Go Sessions: Halo, Pavlik, and Ponseti
- Pelvic Osteotomies I and II
- Pinning an Elbow
- Ponseti Casting and Congenital Vertical Talus

## IPOS<sup>®</sup> Lounge

Network, Relax, and  
Recharge

Located in the back of  
the Exhibit Hall

## NEW for 2023

- **The Future Direction of AI and ML in Peds Ortho**
- **Mid-Career Programming**
  - Leadership Institute
  - CMS Coding Update
  - ABOS Re-Certification Changes
  - Changing Jobs Mid-Career
- **General Session 2: Syndromes Managed by Multi-Disciplinary Teams**
  - Focuses on topics like AMC, OI, and CTD



**Suken Shah, MD,  
FAOA, FAAOS**  
Co-Director



**Derek Kelly, MD,  
FAOA, FAAOS**  
Co-Director

## IPOS® 2023 Faculty

Lindsay Andras, MD  
Alexandre Arkader, MD  
**Donald Bae, MD\***  
Pablo Castañeda, MD  
**Robert Cho, MD, FAAOS\***  
Jon Davids, MD  
Craig Ebersson, MD, FAOA  
**Eric Edmonds, MD\***  
Henry Ellis, MD  
Nicholas Fletcher, MD  
**John (Jack) Flynn, MD\***  
Theodore Ganley, MD  
Michael Glotzbecker, MD  
Christine Ho, MD  
**Mininder Kocher, MD, MPH\***  
**Jennifer Laine, MD\***  
John Lovejoy III, MD, FAAOS  
Scott Luhmann, MD  
**Jeff Martus, MD, MS\***  
James McCarthy, MD  
**Philip McClure, MD\***  
Thomas McPartland, MD  
**Todd Milbrandt, MD\***  
**L. Reid Boyce Nichols, MD, FAOA, FAAOS\***  
Kenneth Noonan, MD, MHCDS  
Matthew Oetgen, MD, MBA  
David Podeszwa, MD  
Anthony Riccio, MD  
**Julie Samora, MD, PhD\***  
**Wudbhav (Woody) Sankar, MD\***  
Jeffrey Sawyer, MD  
**Jonathan Schoenecker, MD, PhD\***  
Kevin Shea, MD  
Benjamin Shore, MD, MPH, FRCS  
**M. Wade Shrader, MD\***  
Daniel Sucato, MD, MS  
Vishwas Talwalkar, MD, FAAOS  
V. Salil Upasani, MD  
**Michael Vitale, MD, MPH\***  
Burt Yaszay, MD

## International Faculty

Alaric Aroojis, MS, D'Ortho, DNB  
**Maryse Bouchard, MD, MSc\***  
**Ron El-Hawary, MD, MSc, FRCS(C)\***  
Sandra Jarvis-Selinger, PhD  
Simon Kelley, MBChB, PhD, FRCS  
**Javier Masquijo, MD\***  
**Firoz Miyanji, MD, FRCS\***  
Kishore Mulpuri, MBBS, MS, MHSc, FRCS  
Manoj Ramachandran, MD, FRCS (Orth)  
Stefan Parent, MD, PhD, FRCS(C)  
Daniel Perry, MA(Oxon), PhD, FRCS (Orth)  
Christof Radler, MD

## Instructors

Jennifer Bauer, MD, MS  
Andrea Bauer, MD  
Jaysson Brooks, MD  
Jaime Rice Denning, MD  
Corinna Franklin, MD  
Jeanne Franzone, MD  
Raymond Liu, MD  
Craig Louer Jr., MD  
Mihir Thacker, MD  
Rachel Thompson, MD  
Kali Tileston, MD, FAAOS  
Lindley Wall, MD, MSc  
Michelle Welborn, MD

## Advanced Practice Provider (APP) Faculty

John Ansiaux PA-C  
Adriana Glazier, PA-C  
Lauren Hewins, PA-C  
Ben Johnson, PA-C  
**Jessica King, PA-C\***  
Ray Kleposki MSN, CPNP  
Valerie Parrish, PA-C  
Caitlin Parsons, PA-C  
Christopher Tremonti, PA-C  
**Tracy Warhoover, MSN, APRN, CPNP\***



## Advanced Practice Providers

### Wednesday, December 6

3:40 PM–4:40 PM **Oceana Grand 2-5**  
**APP CME Breakout 1:** What You See on Sports Center–Top Injuries in the Adolescent Athlete

### Thursday, December 7

10:35 AM–11:35 AM **Oceana Grand 2-5**  
**APP CME Breakout 2:** Put Me in Coach–Injury Prevention and Return to Sports After an Injury

### Friday, December 8

8:05 AM–9:35 AM **Banda Sea**  
**APP CME Breakout 3:** Respect the Past, Embrace the Future–Recent Advances in Treatment Options for Common Sports Injuries in the Adolescent Athlete



## Essentials of Pediatric Orthopaedics

### Wednesday, December 6

10:35 AM–11:50 AM **Pacifica 11-12**  
**CME Breakout 1:** Essentials of Pediatric Orthopaedics I

### Thursday, December 7

2:45 PM–2:00 PM **Pacifica 11-12**  
**CME Breakout 2:** Essentials of Pediatric Orthopaedics II

### Saturday, December 9

10:05 AM–11:20 AM **Pacifica 8-10**  
**CME Breakout 4:** Essentials of Pediatric Orthopaedics III



## Foot

### Wednesday, December 6

1:30 PM–2:15 PM **South China Sea**  
**Ponseti on the Go** (Hands-on)

### Thursday, December 7

12:45 PM–2:00 PM **Banda Sea**  
**CME Breakout 2:** Ponseti Casting (Hands-on)  
2:30 PM–4:00 PM **Oceana Grand 6-7**  
**Concurrent Session 2:** When a Clubfoot That Isn't Just a Clubfoot–Managing Clubfeet in Infants with Syndromes and Multiple Deformities

## Friday, December 8

3:00 PM–4:15 PM **Banda Sea**  
**CME Breakout 3:** Congenital Vertical Talus: Topic Update and Hands-on Casting (Hands-on)



## General Pediatric Orthopaedics/Trauma

### Wednesday, December 6

8:05 AM–10:05 AM **Oceana Grand 6-7**  
**General Session 1:** Trauma, Fractures, & Complications

10:35 AM–11:50 AM **Pacifica 8-10**  
**CME Breakout 1:** Tumors and Infections

### Thursday, December 7

8:05 AM–10:05 AM **Oceana Grand 6-7**  
**General Session 2:** Combination Problems in Syndromic Children–AMC, OI, and CTD

### Friday, December 8

12:15 PM–2:15 PM **Oceana Grand 6-7**  
**General Session 3:** Author's Preferred Techniques

### Saturday, December 9

10:05 AM–11:20 AM **Pacifica 11-12**  
**CME Breakout 4:** Reconstruct, Rotate, or Amputate? Difficult Decisions in Limb Reconstruction



## Hand & Upper Extremity

### Wednesday, December 6

10:35 AM–11:50 AM **Banda Sea**  
**CME Breakout 1:** Pinning an Elbow (Hands-on)

### Thursday, December 7

2:30 PM–4:00 PM **Oceana Grand 6-7**  
**Concurrent Session 2:** Upper Extremity and Sports Case-Based Learning

### Saturday, December 9

10:05 AM–11:20 AM **Java Sea**  
**CME Breakout 4:** Pediatric Upper Limb Surgery: Concepts, Cases, and Controversies



### Hip

#### Wednesday, December 6

10:35 AM–11:50 AM **Timor Sea**

**CME Breakout 1:** Pelvic Osteotomies Part 1: Salter, Pemberton, Dega, San Diego

#### Thursday, December 7

12:45 PM–2:00 PM **Pacifica 8-10**

**CME Breakout 2:** Challenging Hips in the Elementary Years

3:00 PM–3:45 PM **South China Sea**

**Pavlik on the Go** (Hands-on)

#### Friday, December 8

8:05 AM–9:35 AM **Oceana Grand 6-7**

**Concurrent Session 3:** Femoroacetabular Impingement: Where Are We in 2023?

3:00 PM–4:15 PM **Timor Sea**

**CME Breakout 3:** Pelvic Osteotomies Part 2: Triple, PAO (Hands-on)



### Lower Extremity/Deformity

#### Saturday, December 9

8:05 AM–9:35 AM **Coral Sea**

**Concurrent Session 4:** Managing Congenital Differences Below the Knee



### Mid-Career

#### Friday, December 8

8:05 AM–9:35 AM **Pacifica 3-5**

**Concurrent Session 3:** Course for Mid-Career Surgeons

3:00 PM–4:15 PM **Pacifica 3-5**

**CME Breakout 3:** Course for Mid-Career Surgeons

#### Saturday, December 9

7:30 AM–9:30 AM **Pacifica 8-10**

**Concurrent Session 4:** Course for Mid-Career Surgeons



### Neuromuscular & Cerebral Palsy

#### Wednesday, December 6

1:00 PM–2:30 PM **Oceana Grand 6-7**

**Concurrent Session 1:** Contemporary Management of the Complex Neuromuscular Child

#### Thursday, December 7

12:45 PM–2:00 PM **Coral Sea**

**CME Breakout 2:** Gait Analysis and Cerebral Palsy Interactive Session



### Spine

#### Thursday, December 7

12:45 PM–2:00 PM **Pacifica 3-5**

**CME Breakout 2:** Early Onset Scoliosis (Big Curves in Little Kids) and Neuromonitoring Challenges

3:00 PM–3:45 PM **South China Sea**

**Halo on the Go** (Hands-on)

#### Friday, December 8

8:05 AM–9:35 AM **Oceana Grand 2-5**

**Concurrent Session 3:** Neuromuscular Scoliosis and Syndromic Spine

3:00 PM–4:15 PM **Pacifica 8-10**

**CME Breakout 3:** Growth Modulation of the Spine



### Sports

#### Wednesday, December 6

10:35 AM–11:50 AM **Oceana Grand 2-5**

**CME Breakout 1:** Pediatric Sports Medicine Debates





1:00 PM–2:30 PM **Oceana Grand 2-5**

**Concurrent Session 1:** Success and Failure in Pediatric Sports Medicine

**WiFi Information**  
**Conference WiFi:**  
**IPOS2023**  
**Password:**  
**orlando2023**










## Topics

-  Advanced Practice Providers
-  Essentials of Pediatric Orthopaedics
-  Foot
-  General Pediatric Orthopaedics/Trauma
-  Hand & Upper Extremity
-  Hip
-  Lower Extremity/Deformity
-  Mid-Career
-  Neuromuscular & Cerebral Palsy
-  Spine
-  Sports

## Tuesday, December 5

3:00 PM–7:00 PM	Registration
4:00 PM–5:30 PM <b>Oceana Grand 6-7</b>	Arabella Leet Resident and Fellow Forum* (Sponsored by Shriners Children's™)
5:35 PM–6:35 PM <b>Oceana Grand 6-7</b>	Career Planning and Professional Development for Residents and Fellows* (Sponsored by Medtronic)
6:35 PM–6:50 PM <b>Oceana Grand 6-7</b>	Mingle with Medtronic
7:00 PM–8:15 PM <b>Oceana Grand 2-5</b>	<b>Industry Pre-Course*</b> (Sponsored by OrthoPediatrics)
8:20 PM–9:20 PM <b>Java Sea</b>	Industry-Sponsored Reception (Sponsored by OrthoPediatrics)

## Wednesday, December 6

7:00 AM–5:00 PM	Registration
7:00 AM–8:00 AM <b>Pacifica 6-7</b>	Breakfast and Exhibits
8:05 AM–10:05 AM <b>Oceana Grand 6-7</b>	<b>General Session 1:</b> Trauma, Fractures, & Complications 
10:10 AM–10:30 AM <b>Pacifica 6-7</b>	Break and Exhibits
10:35 AM–11:50 AM <b>Pacifica 11-12</b>	<b>CME Breakout 1:</b> Essentials of Pediatric Orthopaedics I 
10:35 AM–11:50 AM <b>Oceana Grand 2-5</b>	<b>CME Breakout 1:</b> Pediatric Sports Medicine Debates 
10:35 AM–11:50 AM <b>Timor Sea</b>	<b>CME Breakout 1:</b> Pelvic Osteotomies Part 1: Salter, Pemberton, Dega, San Diego 
10:35 AM–11:50 AM <b>Banda Sea</b>	<b>CME Breakout 1:</b> Pinning an Elbow (Hands-on) 
10:35 AM–11:50 AM <b>Pacifica 8-10</b>	<b>CME Breakout 1:</b> Tumors and Infections 
11:55 AM–12:55 PM <b>Pacifica 6-7</b>	Lunch and Exhibits
12:25 PM–12:55 PM <b>Pacifica 6-7</b>	Lunchtime Career Development*
1:00 PM–2:30 PM <b>Oceana Grand 6-7</b>	<b>Concurrent Session 1:</b> Contemporary Management of the Complex Neuromuscular Child 

\*Indicates non-CME session





1:00 PM–2:30 PM  
**Oceana Grand 2-5**  **Concurrent Session 1:**  
 Success and Failure in  
 Pediatric Sports Medicine

1:30 PM–2:15 PM  
**South China Sea**  **Ponseti on the Go**  
 (Hands-on)

2:35 PM–3:35 PM  
**Pacifica 6-7** Happy Hour in the Hall

3:40 PM–4:40 PM  
**Oceana Grand 2-5**  **APP CME Breakout 1:**  
 What You See on Sports  
 Center–Top Injuries in the  
 Adolescent Athlete

3:40 PM–4:40 PM  
**Pacifica 8-10** **Industry Spotlight**  
 Sessions 1\*: DePuy

3:40 PM–4:40 PM  
**Pacifica 3-5** **Industry Spotlight**  
 Sessions 1\*: NuVasive

3:40 PM–4:40 PM  
**Banda Sea** **Industry Spotlight**  
 Sessions 1\*: Arthrex

3:40 PM–4:40 PM  
**Timor Sea** **Industry Spotlight**  
 Sessions 1\*: DePuy

3:40 PM–4:40 PM  
**Coral Sea** **Industry Spotlight**  
 Sessions 1\*:  
 OrthoPediatrics

4:45 PM–5:45 PM  
**Pacifica 11-12** **Industry Spotlight**  
 Sessions 2\*: NuVasive

4:45 PM–5:45 PM  
**Timor Sea** **Industry Spotlight**  
 Sessions 2\*: DePuy


4:45 PM–5:45 PM  
**Java Sea** **Industry Spotlight**  
 Sessions 2\*  
 OrthoPediatrics

**Thursday, December 7**


7:00 AM–3:00 PM Registration

7:00 AM–8:00 AM  
**Pacifica 6-7** Breakfast and Exhibits

7:00 AM–8:00 AM  
**Pacifica 6-7** Breakfast with Faculty\*

8:05 AM–10:05 AM  
**Oceana Grand 6-7**  **General Session 2:**  
 Combination Problems in  
 Syndromic Children–AMC,  
 OI, and CTD

10:10 AM–10:30 AM  
**Pacifica 6-7** Break and Exhibits

10:35 AM–11:35 AM  
**Oceana Grand 2-5**  **APP CME Breakout 2:**  
 Put Me in Coach–Injury  
 Prevention and Return to  
 Sports After an Injury

10:35 AM–11:35 AM  
**Pacifica 3-5** **Industry Spotlight**  
 Sessions 3\*: Medtronic

10:35 AM–11:35 AM  
**Pacifica 8-10** **Industry Spotlight**  
 Sessions 3\*: Orthofix

10:35 AM–11:35 AM  
**Pacifica 11-12** **Industry Spotlight**  
 Sessions 3\*: Pacira  
 Biosciences

10:35 AM–11:35 AM  
**Timor Sea** **Industry Spotlight**  
 Sessions 3\*: Nview

10:35 AM–11:35 AM  
**Coral Sea** **Industry Spotlight**  
 Sessions 3\*:  
 OrthoPediatrics

10:35 AM–11:35 AM  
**Java Sea** **Industry Spotlight**  
 Sessions 3\*:  
 OrthoPediatrics

11:40 AM–12:40 PM  
**Pacifica 6-7** Lunch and Exhibits

\*Indicates non-CME session



## Thursday continued

12:10 PM–12:40 PM <b>Pacifica 6-7</b>	Lunchtime Career Development*
12:45 PM–2:00 PM <b>Pacifica 8-10</b>	<b>CME Breakout 2:</b> Challenging Hips in the Elementary Years
12:45 PM–2:00 PM <b>Pacifica 3-5</b>	<b>CME Breakout 2:</b> Early Onset Scoliosis (Big Curves in Little Kids) and Neuromonitoring Challenges
12:45 PM–2:00 PM <b>Pacifica 11-12</b>	<b>CME Breakout 2:</b> Essentials of Pediatric Orthopaedics II
12:45 PM–2:00 PM <b>Coral Sea</b>	<b>CME Breakout 2:</b> Gait Analysis and Cerebral Palsy Interactive Session
12:45 PM–2:00 PM <b>Banda Sea</b>	<b>CME Breakout 2:</b> Ponseti Casting (Hands-on)
2:05 PM–2:25 PM <b>Pacifica 6-7</b>	Break and Exhibits
2:30 PM–4:00 PM <b>Oceana Grand 2-5</b>	<b>Concurrent Session 2:</b> Upper Extremity and Sports Case-Based Learning
2:30 PM–4:00 PM <b>Oceana Grand 6-7</b>	<b>Concurrent Session 2:</b> When a Clubfoot That Isn't Just a Clubfoot—Managing Clubfeet in Infants with Syndromes and Multiple Deformities
3:00 PM–3:45 PM <b>South China Sea</b>	Pavlik on the Go (Hands-on)
3:00 PM–3:45 PM <b>South China Sea</b>	Halo on the Go (Hands-on)
5:00 PM–7:30 PM	Top Gun Surgical Skills Competition* (by invitation only)

## Friday, December 8

7:00 AM–3:30 PM	Registration
7:00 AM–8:00 AM <b>Pacifica 6-7</b>	Breakfast and Exhibits
8:05 AM–9:35 AM <b>Pacifica 3-5</b>	<b>Concurrent Session 3:</b> Course for Mid-Career Surgeons
8:05 AM–9:35 AM <b>Oceana Grand 6-7</b>	<b>Concurrent Session 3:</b> Femoroacetabular Impingement: Where Are We in 2023?
8:05 AM–9:35 AM <b>Oceana Grand 2-5</b>	<b>Concurrent Session 3:</b> Neuromuscular Scoliosis and Syndromic Spine
8:05 AM–9:35 AM <b>Banda Sea</b>	<b>APP CME Breakout 3:</b> Respect the Past, Embrace the Future—Recent Advances in Treatment Options for Common Sports Injuries in the Adolescent Athlete
9:40 AM–10:00 AM <b>Pacifica 6-7</b>	Break and Exhibits
10:05 AM–11:05 AM <b>Pacifica 8-10</b>	<b>Industry Spotlight Sessions 4*:</b> DePuy
10:05 AM–11:05 AM <b>Pacifica 11-12</b>	<b>Industry Spotlight Sessions 4*:</b> Globus Medical
10:05 AM–11:05 AM <b>Coral Sea</b>	<b>Industry Spotlight Sessions 4*:</b> BioMarin
10:05 AM–11:05 AM <b>Java Sea</b>	<b>Industry Spotlight Sessions 4*:</b> OrthoPediatrics
11:10 AM–12:10 PM <b>Pacifica 6-7</b>	Lunch and Exhibits

# SCHEDULE AT A GLANCE



11:40 AM–12:10 PM <b>Pacifica 6-7</b>	Lunchtime Career Development*
12:15 PM–2:15 PM <b>Oceana Grand 6-7</b>	<b>General Session 3:</b> Author's Preferred Techniques
2:15 PM–2:30 PM <b>Oceana Grand 6-7</b>	Awards Presentation
2:35 PM–2:55 PM <b>Pacifica 6-7</b>	Break and Exhibits
3:00 PM–4:15 PM <b>Banda Sea</b>	<b>CME Breakout 3:</b> Congenital Vertical Talus: Topic Update and Hands-on Casting (Hands-on)
3:00 PM–4:15 PM <b>Pacifica 3-5</b>	<b>CME Breakout 3:</b> Course for Mid-Career Surgeons
3:00 PM–4:15 PM <b>Pacifica 8-10</b>	<b>CME Breakout 3:</b> Growth Modulation of the Spine
3:00 PM–4:15 PM <b>Timor Sea</b>	<b>CME Breakout 3:</b> Pelvic Osteotomies Part 2: Triple, PAO (Hands-on)

9:40 AM–10:00 AM <b>Pacifica 6-7</b>	Break
10:05 AM–11:20 AM <b>Pacifica 8-10</b>	<b>CME Breakout 4:</b> Essentials of Pediatric Orthopaedics III
10:05 AM–11:20 AM <b>Java Sea</b>	<b>CME Breakout 4:</b> Pediatric Upper Limb Surgery: Concepts, Cases and Controversies
10:05 AM–11:20 AM <b>Pacifica 11-12</b>	<b>CME Breakout 4:</b> Reconstruct, Rotate, or Amputate? Difficult Decisions in Limb Reconstruction
11:25 AM–12:25 PM <b>Pacifica 6-7</b>	Lunch

\*Indicates non-CME session  
(Schedule Subject to Change)

## Saturday, December 9

7:00 AM–8:00 AM <b>Pacifica 6-7</b>	Breakfast
8:00 AM–10:00 AM	Registration
8:05 AM–9:35 AM <b>Coral Sea</b>	<b>Concurrent Session 4:</b> Managing Congenital Differences Below the Knee
7:30 AM–9:30 AM <b>Pacifica 8-10</b>	<b>Concurrent Session 4:</b> Course for Mid-Career Surgeons



## POSNA DIRECT

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**Tuesday, December 5**

3:00 PM–7:00 PM **Registration**

**4:00 PM–5:30 PM** **Oceana Grand 6-7**

**Arabella Leet Resident and Fellows Forum**



**Sponsored by Shriners Children's™**

**Chair: Julie Samora, MD, PhD**

Co-Chair: Jennifer Laine, MD

Panelists: Jaysson Brooks, MD;

Jaime Rice Denning, MD;

Jeanne Franzone, MD; Raymond Liu, MD



In honor and memory of Dr. Arabella Leet's career and contributions she made improving the lives of children through her work and commitment to both personally and systemically providing quality and safe musculoskeletal care for children,

the Arabella Leet Resident Forum, sponsored by Shriners Children's™, is an opportunity for all to attend an exciting case competition. The top ten cases are provided by this year's scholarship winners with stimulating discussion from IPOS® faculty. Attend to demonstrate your trivia knowledge for prizes and fun!

4:00 PM–4:05PM	<b>Introduction</b>
4:06 PM–4:11 PM	<b>Case 1: Andrew Kirk</b>
4:12 PM–4:17 PM	<b>Case 2: Jeffrey Henstenburg</b>
4:18 PM–4:23 PM	<b>Case 3: Guillermo Marquez</b>
4:24 PM–4:29 PM	<b>Trivia</b>
4:30 PM–4:35 PM	<b>Case 4: Michael O'Brien</b>
4:36 PM–4:41 PM	<b>Case 5: Stefano Cardin</b>
4:42 PM–4:47 PM	<b>Case 6: Christina Herrero</b>
4:48 PM–4:53 PM	<b>Trivia</b>
4:54 PM–4:59 PM	<b>Case 7: Brendon Mitchell</b>
5:00 PM–5:05 PM	<b>Case 8: Florencia Turazza</b>
5:06 PM–5:11 PM	<b>Trivia</b>
5:12 PM–5:17 PM	<b>Case 9: William Scott Fravel</b>
5:18 PM–5:23PM	<b>Case 10: Lee Haruno</b>
5:24 PM–5:30 PM	<b>Trivia</b>



“There are so many reasons to attend IPOS®. I think the most important thing is that it's the most high-yield pediatric conference out there. There is so much jam-packed into four days. With all the different subspecialty tracks, you could attend multiple years in a row and get a totally different experience learning new things at each one.”

Amelia Lindgren, MD



5:35 PM–6:35 PM

Oceana Grand 6-7

### Career Planning and Professional Development



#### Sponsored by Medtronic

This interactive hour-long session from POSNA leaders is designed for orthopaedic trainees to learn pearls on how to have a successful career. The faculty will discuss how to build a robust practice early, provide pearls on teaching the next generation and options for research and service endeavors, and address work-life integration.

5:35 PM–5:39 PM

#### Introduction and Welcome

Julie Samora, MD, PhD  
Jennifer Laine, MD

5:40 PM–5:45 PM

#### How Do I Build a Busy Practice? Is it Better to Stay Broad or Sub-specialize?

Jaime Rice Denning, MD

5:46 PM–5:51 PM

#### How to Incorporate Meaningful Teaching While Staying Patient-Focused (and On Time)

Donald Bae, MD

5:52 PM–5:57 PM

#### How Can I Contribute to Discovery in Pediatric Orthopaedics? Finding Ideas, Support, and Time

Raymond Liu, MD

5:58 PM–6:03 PM

#### How to Become Involved in Service in Orthopaedics

Wudbhav (Woody)  
Sankar, MD

6:04 PM–6:09 PM

#### The Importance of Life and Family, Outside of Work

Jeffrey Sawyer, MD

6:10 PM–6:23 PM

**Finance and Wealth Management for Orthopaedic Surgeons**  
Ian Rose, LACP, CRES

6:24 PM–6:35 PM

**Questions and Answers**  
Julie Samora, MD, PhD  
Jennifer Laine, MD  
Jaime Rice Denning, MD  
Donald Bae, MD  
Raymond Liu, MD  
Wudbhav (Woody)  
Sankar, MD  
Jeffrey Sawyer, MD  
Ian Rose, LACP, CRES  
Medtronic Representative

6:35 PM–6:50 PM

**Mingle with Medtronic**

7:00 PM–8:15 PM

Oceana Grand 2-5

#### Pre-Course

(Sponsored by OrthoPediatrics)

#### Ego in the OR, Empathy in the Clinic

We train for years to become outstanding technical surgeons, but we know that our job entails far more than that. Our patients come with parents, and an equally important part of our job is to educate and reassure them, providing the confidence that they can trust us with their child. It can be a challenge to have the confidence and leadership that is required in the operating room, while at the same time having empathy and listening skills necessary in the clinic. To be successful, you will need both. We will hear from some technically outstanding surgeons who have mastered the ability to have both ego and empathy and participate in some role-play scenarios.

Alexandre Arkader, MD  
Maryse Bouchard, MD, MSc  
Scott Luhmann, MD

8:20 PM–9:20 PM

Java Sea

**Industry-Sponsored Cocktail Reception (Sponsored by OrthoPediatrics)**

# Leading the world in pediatric orthopaedic care.

Campbell Clinic is committed to attracting and nurturing the world's top talent in pediatric orthopaedics. We're proud to support surgeons whose research, insight, and expertise built our reputation as an international leader in musculoskeletal care and continue to shape the future of pediatric care.



Back row from left to right:

**William C. Warner, M.D.**

**Derek M. Kelly, M.D.** (Current IPOS<sup>®</sup> Co-Director)

**Keith J. Orland, M.D.**

**Jeffrey R. Sawyer, M.D.** (Past President of POSNA)

Front row from left to right:

**Benjamin W. Sheffer, M.D.** | **David D. Spence, M.D.**



**Wednesday, December 6**

7:00 AM–5:00 PM **Registration**

7:00 AM–8:00 AM **Breakfast and Exhibits**  
**Pacifica 6-7**

**GENERAL SESSION 1**

**8:05 AM–10:05 AM Oceana Grand 6-7**



**Mastering Call in Pediatric Orthopaedics**



You won't want to miss the Mastering Call in Pediatric Orthopaedics session. This year's course provides a comprehensive overview of what it takes to care for pediatric orthopedic injuries, including critical concepts such as the role of the periosteum in pediatric fractures and the pathophysiology behind complications such as pulmonary embolus and necrotizing fasciitis.

Our course will be structured into three sessions that will cover the basics of the periosteum and how to use it in diagnosing and treating fractures, managing injuries to vital structures around fractures, and understanding the acute phase response in both severely injured and infected patients. We will be using interactive technology that allows learners to participate throughout the session by answering questions on their mobile devices, making this an engaging and immersive learning experience.

As experienced educators in pediatric orthopaedics, we are passionate about delivering a high-quality educational experience that will be valuable to your clinical practice. We have received great feedback from previous learners, who have found our content to be relevant, engaging, and useful in their every day work.

7:45 AM–8:00 AM **Onboarding**

8:00 AM–8:04 AM **Introduction to IPOS® and Teams**  
Co-Director:  
Suken Shah, MD, FAOA,  
FAAOS

8:05 AM–8:07 AM **Introduction to Session and App**  
Moderators: Jonathan Schoenecker, MD, PhD  
Nicholas Fletcher, MD

**8:08 AM–8:39 AM Trauma Periosteum**

8:08 AM–8:14 AM **Periosteum Introduction**  
Jonathan Schoenecker, MD, PhD

8:15 AM–8:21 AM **Periosteum Intact Fracture Principles**  
Thomas McPartland, MD

8:22 AM–8:28 AM **Periosteum Not Intact Fracture Principles**  
Jennifer Laine, MD

8:29 AM–8:33 AM **Quiz/Survey 1**  
Moderator: Nicholas Fletcher, MD

8:34 AM–8:39 AM **Discussion Periosteum**  
Moderator: Nicholas Fletcher, MD

**8:40 AM–9:11 AM Trauma Colateral Damage**

8:40 AM–8:46 AM **Open Fracture Management**  
Alexandre Arkader, MD

8:47 AM–8:53 AM **Nerve and Vascular Injury Management**  
Lindley Wall, MD, MSc

8:54 AM–9:00 AM **Physeal Injury Management**  
Nicholas Fletcher, MD

9:01 AM–9:05 AM **Quiz/Survey 2 Collateral Damage**  
Moderator:  
Lindsay Andras, MD

9:06 AM–9:11 AM **Discussion Collateral Damage**  
Moderator:  
Lindsay Andras, MD





**9:11 AM–9:38 AM Trauma Severe Injury**

9:12 AM–9:18 AM **Acute Phase Response in Severe Injury**  
Jonathan Schoenecker, MD, PhD

9:19 AM–9:25 AM **Multi Trauma Patient Management**  
Lindsay Andras, MD

9:26 AM–9:32 AM **Septic Patient**  
Thomas McPartland, MD

9:33 AM–9:35 AM **Quiz/Survey 3 Severe Injury**  
Moderator: Alexandre Arkader, MD

9:36 AM–9:38 AM **Discussion Severe Injury**  
Moderator: Alexandre Arkader, MD

**9:39 AM–10:05 AM Trauma Wrap Up**

9:39 AM–9:41 AM **Score Recap**  
Moderators: Nicholas Fletcher, MD  
Jonathan Schoenecker, MD, PhD

9:42 AM–9:45 AM **Quiz 5/Survey Potpourri**  
Moderators: Nicholas Fletcher, MD  
Jonathan Schoenecker, MD, PhD

9:46 AM–9:55 AM **Discussion All-Review Audience Response**  
Moderators: Nicholas Fletcher, MD  
Jonathan Schoenecker, MD, PhD

9:56 AM–10:05 AM **Final Results and Discussion**  
Moderators: Nicholas Fletcher, MD  
Jonathan Schoenecker, MD, PhD

10:10 AM–10:30 AM **Break and Exhibits**  
**Pacifica 6-7**

**CME BREAKOUT 1**



**10:35 AM–11:50 AM Pacifica 11-12**

**Essentials of Pediatric Orthopaedics**

This session covers the basics of pediatric orthopaedics with a focus on recognition, evaluation, and treatment of common conditions. The information is geared toward residents, fellows, and newer advanced practice providers who desire a strong foundational knowledge and strategy to synthesize clinical data into appropriate treatment plans.

**Moderator: Jeff Martus, MD**

10:35 AM–10:40 AM **Normal Growth and Alignment**  
L. Reid Boyce Nichols, MD, FAOA, FAAOS

10:41 AM–10:46 AM **Normal Gait and Gait Deviations**  
M. Wade Shrader, MD

10:47 AM–10:54 AM **MSK Imaging Essentials**  
Jeff Martus, MD

10:55 AM–11:01 AM **Discussion**  
L. Reid Boyce Nichols, MD, FAOA, FAAOS  
M. Wade Shrader, MD  
Jeff Martus, MD

11:02 AM–11:07 AM **Approach to the Child with Developmental Delay**  
James McCarthy, MD

11:08 AM–11:13 AM **CP: Lower Extremity (Hip Dysplasia, Crouch Gait, and Foot Deformity)**  
Benjamin Shore, MD, MPH, FRCSC

11:14 AM–11:19 AM **CP: Upper Extremity**  
Lindley Wall, MD, MSc



11:20 AM–11:28 AM **Discussion**  
 Jeff Martus, MD  
 James McCarthy, MD  
 Benjamin Shore, MD, MPH,  
 FRCSC  
 Lindley Wall, MD, MSc

11:29 AM–11:34 AM **Limb Length  
 Discrepancy and Limb  
 Deficiency**  
 Raymond Liu, MD

11:35 AM–11:40 AM **Hip: DDH, Perthes, SCFE**  
 Rachel Thompson, MD

11:41 AM–11:50 AM **Discussion**  
 Jeff Martus, MD  
 Raymond Liu, MD  
 Rachel Thompson, MD

10:56 AM–11:01 AM **First-Time Patella  
 Dislocation Conservative  
 Management**  
 Corinna Franklin, MD

11:02 AM–11:07 AM **First-Time Patella  
 Dislocation Operative  
 Management**  
 Henry Ellis, MD

11:07 AM–11:13 AM **Discussion**  
 Corinna Franklin, MD  
 Henry Ellis, MD

11:14 AM–11:19 AM **Ankle Instability  
 Conservative  
 Management**  
 Javier Masquijo, MD

11:20 AM–11:25 AM **Ankle Instability  
 Operative Management**  
 Maryse Bouchard, MD, MSc

11:26 AM–11:31 AM **Discussion**  
 Javier Masquijo, MD  
 Maryse Bouchard, MD, MSc

11:32 AM–11:37 AM **First-Time Elbow  
 Dislocation Conservative  
 Management**  
 Kevin Shea, MD

11:38 AM–11:43 AM **First-Time Elbow  
 Dislocation Operative  
 Management**  
 Christine Ho, MD

11:43 AM–11:50 AM **Discussion**  
 Kevin Shea, MD  
 Christine Ho, MD

## CME BREAKOUT 1



10:35 AM–11:50 AM **Oceana Grand 2-5**

### Pediatric Sports Medicine Debates

First-Time Joint Dislocations Debated: Vote Early  
 and Vote Often for Surgery or No Surgery

**Moderator: Theodore Ganley, MD**

10:35 AM–10:37 AM **Opening Remarks and  
 Pre-Debate Voting**  
 Moderator: Theodore  
 Ganley, MD

10:38 AM–10:43 AM **First-Time Shoulder  
 Dislocation Conservative  
 Management**  
 Eric Edmonds, MD

10:44 AM–10:49 AM **First-Time Shoulder  
 Dislocation Operative  
 Management**  
 Mininder Kocher, MD, MPH

10:50 AM–10:55 AM **Discussion**  
 Eric Edmonds, MD  
 Mininder Kocher, MD, MPH



## CME BREAKOUT 1



10:35 AM–11:50 AM Timor Sea

### Pelvic Osteotomies Part 1 : Salter, Pemberton, Dega, San Diego (Hands-on)

Part 1: Salter, Dega, Pemberton, San Diego Osteotomies

**Moderator: Pablo Castañeda, MD**

- 10:35 AM–10:40 AM **Salter Osteotomy**  
Simon Kelley, MBChB, PhD, FRCS
- 10:41 PM–10:46 PM **Dega/Pemberton Osteotomy**  
Nicholas Fletcher, MD
- 10:47 AM–10:52 AM **San Diego Acetabuloplasty**  
V. Salil Upasani, MD
- 10:53 PM–11:09 AM **Short Case Review**  
Pablo Castañeda, MD
- 11:10 AM–11:50 AM **Table Instruction**  
Hands-on Faculty:  
Kishore Mulpuri, MBBS, MS, MHS, FRCS  
Alaric Aroojis, MS, D'Ortho, DNB  
V. Salil Upasani, MD  
Pablo Castañeda, MD  
Nicholas Fletcher, MD  
Simon Kelley, MBChB, PhD, FRCS

## CME BREAKOUT 1



10:35 AM–11:50 AM Banda Sea

### Pinning an Elbow (Hands-on)

A Hands-on and interactive session on pinning of supracondylar humerus fractures, guided by our esteemed IPOS® faculty. Space is limited, so register early!

**Moderator: Donald Bae, MD**

- 10:35 AM–10:40 AM **Why Skiing Is Such a Great Family Activity**  
Donald Bae, MD
- 10:41 AM–10:46 AM **Beginning with BOGERD**  
Julie Samora, MD, PhD
- 10:47 AM–10:50 AM **Table Assignments**  
Donald Bae, MD
- 10:50 AM–11:35 AM **Hands-on Exercise**  
Hands-on Faculty:  
Donald Bae, MD  
Julie Samora, MD, PhD  
Kali Tileston, MD, FAAOS  
John (Jack) Flynn, MD  
Jeffrey Sawyer, MD  
Jennifer Laine, MD  
Jaysson Brooks, MD  
Andrea Bauer, MD  
Matthew Oetgen, MD, MBA  
Derek Kelly, MD, FAAOS, FAOA  
Jennifer Bauer, MD, MS  
Vishwas Talwalkar, MD, FAAOS  
Thomas McPartland, MD
- 11:35 AM–11:40 AM **Debrief**  
Kali Tileston, MD, FAAOS
- 10:41 AM–10:47 AM **String of Pearls**  
Moderator: Donald Bae, MD

**WiFi  
Information**

**Conference WiFi:  
IPOS2023**

**Password:  
orlando2023**



- 10:42 AM–10:43 AM **My Favorite Room Setup Tip**  
Kali Tileston, MD, FAAOS
- 10:43 AM–10:44 AM **My Go-to Closed Reduction Maneuver**  
Vishwas Talwalkar, MD, FAAOS
- 10:44 AM–10:45 AM **The Key to an Open Reduction**  
Andrea Bauer, MD
- 10:45 AM–10:46 AM **Pinning Pearl: Lateral Pins**  
Jeffrey Sawyer, MD
- 10:46 AM–10:47 AM **Pinning Pearl: The Medial Pin**  
John (Jack) Flynn, MD
- 10:48 AM–10:50 AM **Making Your CAST**  
Julie Samora, MD, PhD

## CME BREAKOUT 1



**10:35 AM–11:50 AM Pacifica 8-10**

### Tumors and Infections

This session will discuss the overlap between infectious and neoplastic conditions, including modern treatment of the most common pathologies and update on related differential diagnosis. The goal is to walk through several cases and allow for audience participation and interaction.

**Moderator: Craig Ebersson, MD, FAOA**

- 10:35 AM–10:41 AM **Is it a Tumor or Infection?**  
Alexandre Arkader, MD
- 10:42 AM–10:48 AM **The Metastatic Infection and Predicting Complications in MSKI**  
Jonathan Schoenecker, MD, PhD

- 10:49 AM–10:55 AM **Understanding (Maybe) and Managing Non-Bacterial Osteomyelitis**  
Craig Louer Jr., MD
- 10:56 AM–11:02 AM **Pediatric Septic Hip–The UK Approach**  
Daniel Perry, MA (Oxon), PhD, FRCS (Orth)
- 11:03 AM–11:08 AM **Discussion**
- 11:09 AM–11:15 AM **Benign Tumors of the Spine: When to Cut, When to Instrument, When to Burn**  
Craig Ebersson, MD, FAOA
- 11:16 AM–11:22 AM **Bone Tumors Meet Limb Deformities (MHE, Ollier's, FD...)**  
Mihir Thacker, MD
- 11:23 AM–11:29 AM **“The Quick Guide” to Managing Benign Cystic Lesions**  
Ron El-Hawary, MD, MSc, FRCS(C)
- 11:30 AM–11:36 AM **Generalist Approach to Malignant Bone Tumors: Pearls, Pitfalls, and Staging**  
Mihir Thacker, MD
- 11:37 AM–11:50 AM **Discussion**  
Alexandre Arkader, MD  
Jonathan Schoenecker, MD, PhD  
Craig Louer Jr., MD  
Daniel Perry, MA (Oxon), PhD, FRCS (Orth)  
Ron El-Hawary, MD, MSc, FRCS(C)  
Craig Ebersson, MD, FAOA  
Mihir Thacker, MD

11:55 AM–12:55 PM **Lunch and Exhibits**  
**Pacifica 6-7**

12:25 PM–12:55 PM **Lunchtime Career Development (non-CME)**  
**Pacifica 6-7**

# Medtronic

## Leading the way in pediatric patient-specific spine solutions



**Josephine™** the giraffe is our ambassador for education to children with early onset scoliosis and their families.



**CD Horizon™ ModuLeX™ spinal system**, building on 40 years of patient history using **CD Horizon™ system** technology.



**UniD™ ASI** is a longitudinal data collection platform that leverages artificial intelligence and patient specific implants to support planning, execution, and analysis of alignment goals. UniD™ ASI is FDA cleared for use with CD Horizon™ Solera™ and CD Horizon™ ModuLeX™ 5.5/6.0 spinal systems.



**LigaPASS™ 2.0 system** is designed to help achieve a well-balanced spine in both coronal and sagittal planes when screws, hooks, or wires cannot be placed and axial derotation and reduction are both desired.



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See the device manual for detailed information regarding the instructions for use, indications, contraindications, warnings, precautions, and potential adverse events. For further information, contact your local Medtronic representative and/or consult the Medtronic website at [medtronic.eu](http://medtronic.eu). An electronic version of the package insert may be found at [www.medtronic.com/manuals](http://www.medtronic.com/manuals) and [www.medtronic.com/UniD](http://www.medtronic.com/UniD).

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**CONCURRENT SESSION 1** 

**1:00 PM–2:30 PM** **Oceana Grand 6-7**

**Contemporary Management of the Complex Neuromuscular Child**

Broad discussion of the care of children with cerebral palsy, spinal muscle atrophy, and similar pediatric disabilities, including new techniques of growth modulation, complex care coordination, gene therapy in SMA, and how new therapy is changing the prognosis of SMA.

**Moderator: M. Wade Shrader, MD**

**eModerator:**

**Benjamin Shore, MD, MPH, FRCSC**

- 1:00 PM–1:02 PM **Introduction**  
M. Wade Shrader, MD
- 1:03 PM–1:10 PM **Minimizing Postoperative Complications in the Neuromuscular Child**  
M. Wade Shrader, MD
- 1:11 PM–1:17 PM **Who Should We Not Operate On? Ethics, Palliative Care, and Shared Decision-Making**  
Rachel Thompson, MD
- 1:18 PM–1:23 PM **Hip Guided Growth in Cerebral Palsy: Technical Details and Early Results**  
Jon Davids, MD
- 1:24 PM–1:29 PM **Knee Guided Growth in Cerebral Palsy: Implants, Technique, and Results**  
Kenneth Noonan, MD, MHCDS
- 1:30 PM–1:45 PM **Q&A/Case Discussion**  
M. Wade Shrader, MD  
Rachel Thompson, MD  
Jon Davids, MD  
Kenneth Noonan, MD, MHCDS

- 1:46 PM–1:53 PM **SMA: New Genetic Diagnosis and Treatment Changes Everything**  
Jaysson Brooks, MD
- 1:54 PM–2:00 PM **SMA Hips, PRO: We Should Operate with the Changing Prognosis**  
Benjamin Shore, MD, MPH, FRCSC
- 2:01 PM–2:07 PM **SMA Hips, CON: Still Approach with Caution**  
Kishore Mulpuri, MBBS, MS, MHSc, FRCSC
- 2:08 PM–2:14 PM **SMA Spine: From EOS to PSF to Intrathecal Access**  
Michael Vitale, MD, MPH
- 2:15 PM–2:30 PM **Q&A/Case Discussion**  
Jaysson Brooks, MD  
Benjamin Shore, MD, MPH, FRCSC  
Kishore Mulpuri, MBBS, MS, MHSc, FRCSC  
Michael Vitale, MD, MPH





**CONCURRENT SESSION 1** 

**1:00 PM–2:30 PM    Oceana Grand 2-5**

**Success and Failure in Pediatric Sports Medicine**

How to Successfully Approach Sports Medicine and What to Do When Things Go Wrong in a 101 (Beginner) to 401 (Expert) Course.

**Moderator: Eric Edmonds, MD**  
**eModerator: Javier Masquijo, MD**

- 1:00 PM–1:01 PM    **Opening Remarks and Introduction of 101 to 401**  
Eric Edmonds, MD
- 1:02 PM–1:07 PM    **How to Manage Osteochondral Lesions of the Talus**  
Javier Masquijo, MD
- 1:08 PM–1:13 PM    **How to Manage the Failures of OLT Surgery**  
Kevin Shea, MD
- 1:14 PM–1:19 PM    **How to Manage Knee Cartilage Injuries**  
Corinna Franklin, MD
- 1:20 PM–1:25 PM    **How to Manage the Failures of Knee Cartilage Surgery**  
Mininder Kocher, MD, MPH
- 1:26 PM–1:32 PM    **Discussion**  
Eric Edmonds, MD  
Javier Masquijo, MD  
Kevin Shea, MD  
Corinna Franklin, MD  
Mininder Kocher, MD, MPH
- 1:33 PM–1:38 PM    **How to Manage Meniscus Tears**  
John Lovejoy III, MD, FAAOS
- 1:39 PM–1:44 PM    **How to Manage Failed Meniscus Surgery**  
Henry Ellis, MD

1:45 PM–1:50 PM

**How to Manage Ankle Instability**  
Jennifer Laine, MD

1:51 PM–1:56 PM

**How to Manage Failed Ankle Surgery**  
Maryse Bouchard, MD, MSc

1:57 PM–2:03 PM

**Discussion**  
John Lovejoy III, MD, FAAOS  
Henry Ellis, MD  
Jennifer Laine, MD  
Maryse Bouchard, MD, MSc

2:04 PM–2:10 PM

**Motion Analysis in Sports Medicine**  
Corinna Franklin, MD

2:11 PM–2:17 PM


**Discoid Meniscus Technique**  
Eric Edmonds, MD

2:18 PM–2:24 PM

**Elbow Arthroscopy Techniques**  
Theodore Ganley, MD

2:25 PM–2:30 PM

**Discussion**  
Corinna Franklin, MD  
Eric Edmonds, MD  
Theodore Ganley, MD

**1:30 PM–2:15 PM    South China Sea**  
**Ponseti on the Go (Hands-on)** 

This session will provide a brief introduction with Ponseti tips and tricks followed by a Hands-on casting lab with ample opportunity to learn and practice.

**Hands-on Faculty:**

- L. Reid Boyce Nichols, MD, FAOA, FAAOS
- Derek Kelly, MD, FAAOS, FAOA
- Alaric Aroojis, MS, D'Ortho, DNB
- Vishwas Talwalkar, MD, FAAOS



2:35 PM–3:35 PM **Happy Hour in the Hall**  
**Pacifica 6-7**

3:40 PM–4:40 PM **Industry Spotlight Sessions 1 (non-CME)**  
See page 26 for details

**APP CME BREAKOUT 1** 

**3:40 PM–4:40 PM Oceana Grand 2-5**

**What You See on Sports Center–Top Injuries in the Adolescent Athlete**

Making the Diagnosis: The Participant Will Understand the Importance of Detailed History, Recognize Key Exam and X-Ray Findings, Identify Common Pitfalls, and Determine Best Next Steps When Diagnosing Common Sports Injuries in the Adolescent Athlete.

**Moderator: Tracy War Hoover, MSN, RN, CPNP**

3:40 PM–3:45 PM **Taking the Hit–Concussions, Neck, and Back Injuries**  
Caitlin Parsons, PA-C

3:46 PM–3:51 PM **Take Me Out to the Ball Game–Common Shoulder Injuries in the Adolescent Athlete**  
Ben Johnson, PA-C

3:52 PM–3:57 PM **What's Your Pitch Count? Elbow Injuries Seen in Young Throwing Athletes**  
Ray Kleposki, MSN, CPNP

3:58 PM–4:03 PM **Making the Catch–Common Sports-Related Wrist and Hand Injuries**  
John Ansiaux, PA-C

4:04 PM–4:12 PM **Discussion**  
Caitlin Parsons, PA-C  
Ben Johnson, PA-C  
Ray Kleposki, MSN, CPNP  
John Ansiaux, PA-C

4:13 PM–4:18 PM **One Too Many Hurdles to Overcome–Sports Related Hip Injuries**  
Valerie Parrish, PA-C

4:19 PM–4:24PM **Not a Slam Dunk–Common Knee Injuries in Adolescent Athletes**  
Adriana Glazier, PA-C

4:25 PM–4:30 PM **Don't Get Tripped Up–Ankle and Foot Injuries**  
Christopher Tremonti, PA-C

4:31 PM–4:40 PM **Discussion**  
Valerie Parrish, PA-C  
Adriana Glazier, PA-C  
Christopher Tremonti, PA-C

4:45 PM–5:45 PM **Industry Spotlight Sessions 2 (non-CME)**  
See page 26 for details

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### Industry Spotlight Session 1

3:40 PM–4:40 PM

**Arthrex, Inc. (Non-CME)**

**Banda Sea**

Eric Edmonds, MD

#### **Managing ACL Tears in Adolescent Patients**

Immerse yourself in an engaging discussion focused on managing ACL injuries in adolescent patients guided by expert faculty. Gain valuable insights and hands-on experience through a dry lab session, where you'll have the exclusive opportunity to use the first and only FDA cleared device designed specifically for pediatric ACL surgery."

**OrthoPediatrics (Non-CME)**

**Coral Sea**

Nicholas Fletcher, MD; Jeanne Franzone, MD

#### **Small Canal Solutions for Pediatrics**

This case-based session will focus on unique treatments for patients with small canals for both deformity correction and trauma indications.

**DePuy (Non-CME)**

**Timor Sea**

Walter Samora, MD; Khristinn Kellie Leitch, MD

#### **Lower Extremity Pediatric Fracture Management**

Explore myriad lower extremity pediatric fracture treatment options in this hands-on session with Dr. Walter Samora of Nationwide Children's Hospital and the Hon. Dr. Khristinn Kellie Leitch of the University of Mississippi Medical Center Children's Hospital. A case-based discussion on when and where to utilize harness, casting, nailing, plating, and framing treatment plans will be followed by rotating labs of the DePuy Synthes adolescent nail, submuscular plating, and framing product portfolios.

**DePuy (Non-CME)**

**Pacifica 8-10**

Keith Bachmann, MD; Firoz Miyajani, MD, FRCSC; V. Salil Upasani, MD; Jennifer Bauer, MD, MS

#### **Complex Spine: Transition from Early Onset to Young Adult**

Please join our expert surgeon panel for an interactive, case-based discussion following the surgical progression from EOS to skeletally mature patients. The cases presented will touch upon the unique challenges that present for each pathology and the important considerations that drive the panel's treatment plan.

**NuVasive (Non-CME)**

**Pacifica 11-12**

Christof Radler, MD; Philip McClure, MD; Shawn Standard, MD

#### **Precice Case Mash Up: Unveiling Fundamental Pearls and Principles for Success**

Drs. Radler, McClure, and Standard will lead an interactive walk-through of multiple case scenarios using Precice, covering patient selection, pre-op planning, intra-op execution, and post-op case management. Special focus will be directed towards the core Precice principles and fundamentals that are applicable to all case examples shown. Open Q&A exchange is encouraged throughout.

### Industry Spotlight Session 2

4:45 PM–5:45 PM

**OrthoPediatrics (Non-CME)**

**Java Sea**

Andrea Kramer, MD; Jonas Owen, MD;

David Speers, CPO

#### **Femur Fracture/Bracing Workshop (DF2 Debut)**

Recent studies suggest that functional bracing may be equivalent to spica casting for patients with femur fractures. This session will highlight a commercially available brace, the research supporting its use, and how to integrate into a busy pediatric orthopaedic practice.

**DePuy (Non-CME)**

**Timor Sea**

Walter Samora, MD; Khristinn Kellie Leitch, MD

#### **Lower Extremity Pediatric Fracture Management**

Explore myriad lower extremity pediatric fracture treatment options in this hands-on session with Dr. Walter Samora of Nationwide Children's Hospital and the Hon. Dr. Khristinn Kellie Leitch of the University of Mississippi Medical Center Children's Hospital. A case-based discussion on when and where to utilize harness, casting, nailing, plating, and framing treatment plans will be followed by rotating labs of the DePuy Synthes adolescent nail, submuscular plating, and framing product portfolios.

**NuVasive (Non-CME)**

**Pacifica 11-12**

Lindsay Andras, MD; Michelle Welborn, MD; Megan Johnson, MD

#### **Addressing Pediatric Spinal Deformity from Occiput to Pelvis: Holistic Strategies to Optimize Patient OutcomesN33**

Please join our esteemed faculty as they share their insights, tips, and tricks around treating the full pediatric spine across ages and indications. This will be an interactive case-based discussion around best practices in the cervical, thoracolumbar, and pelvic pediatric spine followed by a hands-on session to demonstrate the latest techniques in treating pediatric spinal deformity. Learn techniques in treating pediatric spinal deformity.



Children's Health



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- **2** IPOS® 2023 faculty: Kevin Shea, MD and Kali Tileston, MD
- **70** retrospective and prospective active trials
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- **25** national and regional presentations
- **38,000** outpatient visits a year
- **2,000** surgeries a year
- **15** pediatric orthopedic surgeons and sports medicine specialists

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### Thursday, December 7

- 7:00 AM–3:00 PM **Registration**
- 7:00 AM–8:00 AM **Breakfast and Exhibits**  
**Pacifica 6-7**
- 7:00 AM–8:00 AM **Breakfast with Faculty**  
**(non-CME)**  
**Pacifica 6-7**

### GENERAL SESSION 2



**8:05 AM–10:05 AM Oceana Grand 6-7**

#### Combination Problems in Syndromic Children–AMC, OI, and CTD

Providing good care for complex patients with musculoskeletal conditions often requires comprehensive knowledge and a multidisciplinary approach. In this session, we will discuss three conditions in a case-based format to reveal and discuss central and peripheral issues critical to manage.

**Moderator: John (Jack) Flynn, MD**  
**eModerator: Lindsay Andras, MD**

- 8:05 AM–8:05 AM **Opening Remarks**  
Co-Director:  
Suken Shah, MD, FAOA,  
FAAOS
- 8:05 AM–8:52 AM Arthrogryposis Multiplex Congenita**
- 8:05 AM–8:11 AM **Current Knowledge About the Etiology and Spectrum of AMC**  
Alaric Aroojis, MS, D'Ortho,  
DNB
- 8:12 AM–8:18 AM **Scoliosis in AMC and Bruck Syndrome: How to Navigate the Challenges**  
Michael Vitale, MD, MPH
- 8:19 AM–8:27 AM **Upper Limb in Arthrogryposis: How to Give Kids Some ADLs**  
Lindley Wall, MD, MSc

- 8:29 AM–8:34 AM **The Arthrogrypotic Hip: What Can We Do with It?**  
Pablo Castañeda, MD
- 8:35 AM–8:40 AM **Talk about Miserable Malalignment ... The Lower Extremity in AMC**  
L. Reid Boyce Nichols, MD,  
FAOA, FAAOS
- 8:41 AM–8:46 AM **Foot and Ankle Challenges in Arthrogryposis**  
Anthony Riccio, MD
- 8:47 AM–8:52 AM **Discussion**  
Alaric Aroojis, MS,  
D'Ortho, DNB  
Michael Vitale, MD, MPH  
Lindley Wall, MD, MSc  
Pablo Castañeda, MD  
L. Reid Boyce Nichols, MD,  
FAOA, FAAOS  
Anthony Riccio, MD
- 8:53 AM–9:28 AM Osteogenesis Imperfecta**
- 8:53 AM–8:58 AM **Spine Problems in OI from Occiput to Sacrum**  
Suken Shah, MD, FAOA,  
FAAOS
- 8:59 AM–9:04 AM **Humeral Shaft Deformity in OI and Reconstruction with Function in Mind**  
Jeanne Franzone, MD
- 9:05 AM–9:10 AM **Consequences of Acetabular Protrusion in OI ... Can Anything Be Done?**  
Kishore Mulpuri, MBBS, MS,  
MHSc, FRCSC
- 9:11 AM–9:16 AM **Long Bone Rodding in OI: Rationale and Deformity Correction**  
Derek Kelly, MD, FAAOS,  
FAOA



9:17 AM–9:22 AM

**Bisphosphonate Therapy in OI and Future Modalities of Treatment**

Vishwas Talwalkar, MD, FAAOS

9:23 AM–9:28 AM

**Discussion**

Suken Shah, MD, FAOA, FAAOS  
 Jeanne Franzone, MD  
 Kishore Mulpuri, MBBS, MS, MHSc, FRCSC  
 Derek Kelly, MD, FAAOS, FAOA  
 Vishwas Talwalkar, MD, FAAOS

**9:29 AM–10:05 AM**

**Connective Tissue Disorders**

9:29 AM–9:34 AM

**Cervical Spine in CTD: Instability, Kyphosis, and Cerebrovascular Issues**

Jennifer Bauer, MD, MS

9:35 AM–9:40 AM

**Thoracolumbar Spine in CTD**

Jaysson Brooks, MD

9:41 AM–9:46 AM

**Late Onset Hip Dysplasia in CTD: Successes and Failures**

Mihir Thacker, MD

9:47 AM–9:52 AM

**Managing the Unstable Patella in CTD**

Mininder Kocher, MD, MPH

9:52 AM–9:57 AM

**Ankle Instability in CTD: Bone and Soft Tissue Concerns**

Maryse Bouchard, MD, MSc

9:58 AM–10:05 AM

**Discussion**

Jennifer Bauer, MD, MS  
 Jaysson Brooks, MD  
 Mihir Thacker, MD  
 Mininder Kocher, MD, MPH  
 Maryse Bouchard, MD, MSc

10:10 AM–10:30 AM

**Break and Exhibits**

**Pacifica 6-7**

**APP CME BREAKOUT 2**



**10:35 AM–11:35 AM**

**Oceana Grand 2-5**

**Put Me in Coach—Injury Prevention and Return to Sports After an Injury**

The participant will be able to identify key ways to prevent season ending injuries (improving form, rest, time off from specific sports, warm ups). They will also be able to determine next steps after an injury has occurred (rest, immobilization, rehab, or surgery) and appreciate the importance of a multidisciplinary approach to getting these athletes back to their sports.

**Moderator: Tracy War Hoover, MSN, RN, CPNP**

10:35 AM–10:40 AM

**Thinking Clearly—Protocol for Return to Sports After a Concussion**

Caitlin Parsons, PA-C

10:41 AM–10:46 AM

**Coming Full Circle—Return to Sport Considerations Following Shoulder Injury/Surgery**

Ben Johnson, PA-C

10:47 AM–10:52 AM

**Orthopaedic Manifestations of Eating Disorders**

Ray Kleposki, MSN, CPNP

10:53 AM–10:58 AM

**Catching Up with the Team—Returning to Play After a Wrist or Hand Injury**

John Ansiaux, PA-C

10:59 AM–11:07 AM

**Discussion**

Caitlin Parsons, PA-C  
 Ben Johnson, PA-C  
 Ray Kleposki, MSN, CPNP  
 John Ansiaux, PA-C

11:08 AM–11:13 AM

**Hip Hip Hooray, When Can I Go Back to Play—Hip Injuries**

Valerie Parrish, PA-C



11:14 AM–11:19 AM **Making the Cut–Protocol for Returning to Full Sports After a Knee Injury**  
Adriana Glazier, PA-C

11:20 AM–11:25 AM **Bouncing Back From the Bench–Return to Sports After an Ankle or Foot Injury**  
Christopher Tremonti, PA-C

11:26 AM–11:35 AM **Discussion**  
Valerie Parrish, PA-C  
Adriana Glazier, PA-C  
Christopher Tremonti, PA-C

10:35 AM–11:35 AM **Industry Spotlight Sessions 3 (non-CME)**  
See page 36 for details

11:40 AM–12:40 PM **Lunch and Exhibits**  
**Pacifica 6-7**

12:10 PM–12:40 PM **Lunchtime Career Development (non-CME)**  
**Pacifica 6-7**

## CME BREAKOUT 2



12:45 PM–2:00 PM **Pacifica 8-10**

### Challenging Hips in the Elementary Years

This session will cover the diagnosis and management of atypical hips in the 6-11 year age group.

**Moderator: Wudbhav (Woody) Sankar, MD**

12:45 PM–12:50 PM **DDH: Decision-Making in Mild-Moderate Dysplasia**  
Daniel Perry, MA(Oxon), PhD, FRCS (Orth)

12:51 PM–12:56 PM **DDH: Managing Growth Arrest**  
Kishore Mulpuri, MBBS, MS, MHSc, FRCSC

12:57 PM–1:02 PM **DDH: Late Neglected Dislocations**  
Simon Kelley, MBChB, PhD, FRCS

1:03 PM–1:08 PM **Questions**  
Wudbhav (Woody) Sankar, MD  
Daniel Perry, MA(Oxon), PhD, FRCS (Orth)  
Kishore Mulpuri, MBBS, MS, MHSc, FRCSC  
Simon Kelley, MBChB, PhD, FRCS

1:09 PM–1:14 PM **MHE Hip Deformity: Elements and Solutions**  
Mihir Thacker, MD

1:15 PM–1:20 PM **Charcot Marie Tooth: It May See You More Than You See It!**  
Wudbhav (Woody) Sankar, MD

1:21 PM–1:26 PM **Sickle Cell Anemia and Osteonecrosis of the Hip**  
Jonathan Schoenecker, MD, PhD

1:27 PM–1:32 PM **Questions**  
Mihir Thacker, MD  
Wudbhav (Woody) Sankar, MD  
Jonathan Schoenecker, MD, PhD

1:33 PM–2:00 PM **Cases**  
Wudbhav (Woody) Sankar, MD  
Daniel Perry, MA(Oxon), PhD, FRCS (Orth)  
Kishore Mulpuri, MBBS, MS, MHSc, FRCSC  
Simon Kelley, MBChB, PhD, FRCS  
Mihir Thacker, MD  
Jonathan Schoenecker, MD, PhD



**CME BREAKOUT 2**



**12:45 PM–2:00 PM Pacifica 3-5**

**Early Onset Scoliosis (Big Curves in Little Kids) and Neuromonitoring Challenges**

Spine geeks rejoice! This two-part interactive breakout will feature all stops on the EOS journey and faculty-led small groups dealing with simulated neuromonitoring changes.

**Moderator: Firoz Miyanji, MD, FRCSC**

12:45 PM–12:50 PM **Casting and NonOp Strategies in EOS: Treatment Plan or Delaying Tactic?**  
Michelle Welborn, MD

12:51 PM–12:56 PM **Abandon Ship: When to Start the Surgical Journey in EOS**  
Michael Glotzbecker, MD

12:57 PM–1:02 PM **Conversion of Growing Rods to Final Fusion: Why, When, and How**  
Lindsay Andras, MD

1:03 PM–1:08 PM **Challenges in Congenital Cervicothoracic Deformity Management**  
Firoz Miyanji, MD, FRCSC

1:08 PM–1:12 PM **Discussion**  
Michelle Welborn, MD  
Michael Glotzbecker, MD  
Lindsay Andras, MD  
Firoz Miyanji, MD, FRCSC

1:13 PM–1:29 PM

**Case Presentations and Discussion**

Moderator: Firoz Miyanji, MD, FRCSC  
John (Jack) Flynn, MD  
Jennifer Bauer, MD, MS  
Michael Vitale, MD, MPH  
Jeff Martus, MD

**1:30 PM–2:00 PM**

**Adolescent Idiopathic Scoliosis (Small Group-Based Discussion): Neuromonitoring Challenges**

Moderator:  
Firoz Miyanji, MD, FRCSC  
Facilitator:  
Michael Vitale, MD, MPH

1:30 PM–1:54 PM

**Small Group Breakout: “Responding to Real-Time Neuromonitoring Changes”**

Small Group Faculty:  
Robert Cho, MD, FAAOS  
Michael Glotzbecker, MD  
Lindsay Andras, MD  
Jennifer Bauer, MD, MS  
John (Jack) Flynn, MD  
Todd Milbrandt, MD  
Burt Yaszay, MD  
Ron El-Hawary, MD, MSc, FRCSC(C)

1:55 PM–2:00 PM

**Summary: How I Repond to Intraop Monitoring Changes**

Michael Vitale, MD, MPH



“Having attended one of the first IPOS® meetings nearly 20 years ago, I have watched it progress. It allows you to be around the greatest minds in pediatric orthopaedics and learn about nearly any topic that you’re interested in.”

Jeffrey Shilt, MD



### CME BREAKOUT 2



12:45 PM–2:00 PM **Pacifica 11-12**

#### Essentials of Pediatric Orthopaedics II

This session covers the basics of pediatric orthopaedics with a focus on recognition, evaluation, and treatment of common conditions. The information is geared toward residents, fellows, and newer advanced practice providers who desire a strong foundational knowledge and strategy to synthesize clinical data into appropriate treatment plans.

**Moderator: Matthew Oetgen, MD, MBA**

12:45 PM–12:50 PM **Approach to the Limping Child**  
Craig Ebersson, MD, FAOA

12:51 PM–12:56 PM **Acute and Chronic MSK Infections**  
Raymond Liu, MD

12:57 PM–1:02 PM **MSK Tumors: Staying Out of Trouble**  
Alexandre Arkader, MD

1:03 PM–1:11 PM **Discussion**  
Craig Ebersson, MD, FAOA  
Raymond Liu, MD  
Alexandre Arkader, MD

1:12 PM–1:17 PM **Neonatal Foot (Clubfoot, CVT, Calcaneovalgus, Met Add, Polydactyly)**  
Jaime Rice Denning, MD

1:18 PM–1:23 PM **Child/Adolescent Foot (Accessory Navicular, Curly Toes, Hallux Valgus, Pes Planus, Tarsal Coalition)**  
Christof Radler, MD

1:24 PM–1:32 PM **Discussion**  
Jaime Rice Denning, MD  
Christof Radler, MD

1:33 PM–1:38 PM

**Sports: Knee/Ankle (ACL, Meniscus Tear, Discoid Meniscus, OCD, Patellar Instability, Ankle Instability)**  
Corinna Franklin, MD

1:39 PM–1:44 PM

**Sports: Shoulder/Elbow (Shoulder Instability, Elbow OCD)**  
Eric Edmonds, MD

1:45 PM–1:50 PM

**Approach to the Patient with Multifocal Musculoskeletal Symptoms**  
John Lovejoy III, MD, FAAOS

1:51 PM–2:00 PM

**Discussion**  
Corinna Franklin, MD  
Eric Edmonds, MD  
John Lovejoy III, MD, FAAOS

### CME BREAKOUT 2



12:45 PM–2:00 PM **Coral Sea**

#### Gait Analysis and Cerebral Palsy Interactive Session

Practical learning of gait impairments and treatment in cerebral palsy, including small group discussion, flipped classroom, and basics of observational and instrumented gait analysis.

**Moderator: M. Wade Shrader, MD**

12:45 PM–12:47 PM **Introduction**  
M. Wade Shrader, MD

12:48 PM–12:53 PM **Identifying Pathological Gait in CP**  
Benjamin Shore, MD, MPH, FRCSC

12:54 PM–12:59 PM **How I Approach Gait Analysis: The Diagnostic Matrix**  
Jon Davids, MD



1:00 PM–1:15 PM

**Flipped Classroom:  
Jump Gait**

M. Wade Shrader, MD  
Benjamin Shore, MD, MPH,  
FRCS  
Jon Davids, MD  
James McCarthy, MD  
Jennifer Laine, MD  
Rachel Thompson, MD

1:15 PM–1:30 PM

**Flipped Classroom:  
Miserable Malalignment**

M. Wade Shrader, MD  
Benjamin Shore, MD, MPH,  
FRCS  
Jon Davids, MD  
James McCarthy, MD  
Jennifer Laine, MD  
Rachel Thompson, MD

1:30 PM–1:45 PM

**Flipped Classroom:  
Adolescent Crouch Gait**

M. Wade Shrader, MD  
Benjamin Shore, MD, MPH,  
FRCS  
Jon Davids, MD  
James McCarthy, MD  
Jennifer Laine, MD  
Rachel Thompson, MD

1:46 PM–1:50 PM

**Master Review Case 1  
(Jump Gait): Take Home  
Points**

James McCarthy, MD

1:51 PM–1:55 PM

**Master Review  
Case 2 (Miserable  
Malalignment): Take  
Home Points**

Jennifer Laine, MD

1:56 PM–2:00 PM

**Master Review Case  
3 (Adolescent Crouch  
Gait): Take Home Points**

Rachel Thompson, MD

## CME BREAKOUT 2



**12:45 PM–2:00 PM Banda Sea**

### Ponseti Casting (Hands-on)

This session will provide a brief introduction with Ponseti casting and bracing tips and tricks followed by a Hands-on casting lab with ample opportunity to learn and practice. Braces will also be available to practice application.

**Moderator: Maryse Bouchard, MD, MSc**

12:45 PM–12:50 PM

**Clubfoot Ponseti Video**  
Derek Kelly, MD, FAAOS,  
FAOA

12:51 PM–12:56 PM

**5 Things to Do for the  
Complex Clubfoot**  
Javier Masquijo, MD

12:57 PM–1:03 PM

**5 Things Never to Do  
When Casting Clubfeet**  
Todd Milbrandt, MD

1:04PM–1:09 PM

**5 Things to Do for  
Running the Optimal  
Clubfoot Clinic**  
Kenneth Noonan, MD,  
MHCDS

1:10 PM–1:15 PM

**Clubfoot Bracing  
Compliance Tricks**  
Alaric Aroojis, MS, D'Ortho,  
DNB

1:16 PM–2:00 PM

**Hands-on Instruction**  
Hands-on Faculty:  
L. Reid Boyce Nichols, MD,  
FAOA, FAAOS  
Derek Kelly, MD, FAAOS,  
FAOA  
Javier Masquijo, MD  
Maryse Bouchard, MD, MSc  
Kenneth Noonan, MD,  
MHCDS  
Alaric Aroojis, MS, D'Ortho,  
DNB

2:05 PM–2:25 PM  
**Pacifica 6-7**

**Break and Exhibits**



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**CONCURRENT SESSION 2**



**2:30 PM–4:00 PM Oceana Grand 2-5**

**Upper Extremity and Sports Case-Based Learning**

Shoulder, elbow, and wrist instability are common and often challenging problems in the pediatric athlete. Join our esteemed experts for this case-based session on sports injuries of the upper limb!

**Moderator: Donald Bae, MD**  
**eModerator: Christine Ho, MD**

2:30 PM–2:32 PM **Introduction**  
Moderator: Donald Bae, MD

2:33 PM–2:38 PM **Ulnar Sided Wrist Pain: A Black Box?**  
Lindley Wall, MD, MSc

2:39 PM–2:46 PM **ECU Instability: Case**  
Andrea Bauer, MD

2:47 PM–2:54 PM **Ulnar Impaction Secondary to Gymnast Wrist: Case**  
Julie Samora, MD, PhD

2:55 PM–3:02 PM **Discussion**  
Lindley Wall, MD, MSc  
Andrea Bauer, MD  
Julie Samora, MD, PhD

3:03 PM–3:08 PM **Scapula Alata: Diagnosis and Management**  
Theodore Ganley, MD

3:09 PM–3:16 PM **SC Traumatic Fracture/Dislocation: Case**  
Mininder Kocher, MD, MPH

3:17 PM–3:24 PM **AC Joint: A Case of Separation Anxiety**  
Eric Edmonds, MD

3:25 PM–3:32 PM **Discussion**  
Theodore Ganley, MD  
Mininder Kocher, MD, MPH  
Eric Edmonds, MD

3:33 PM–3:38 PM

**Elbow Dislocations and Sequelae**  
Christine Ho, MD

3:39 PM–3:46 PM

**Elbow Dislocation with Medial Epicondyle Fracture**  
Julie Samora, MD, PhD

3:47 PM–3:54 PM

**My Elbow Is Stiff: Now What?**  
Andrea Bauer, MD

3:55 PM–4:00 PM

**Discussion**  
Christine Ho, MD  
Julie Samora, MD, PhD  
Andrea Bauer, MD

**CONCURRENT SESSION 2**



**2:30 PM–4:00 PM Oceana Grand 6-7**

**When a Clubfoot That Isn't Just a Clubfoot—Managing Clubfeet in Infants with Syndromes and Multiple Deformities**

This session will discuss complexities and controversies in clubfoot management of children with concurrent medical and orthopaedic issues.

**Moderator: Maryse Bouchard, MD, MSc**

2:30 PM–2:32 PM **Welcome Remarks**  
Moderator: Maryse Bouchard, MD, MSc

**2:33 PM–2:58 PM Clubfoot in the Infant with Concurrent Orthopaedic and Medical Diagnoses**  
Moderator: Maryse Bouchard, MD, MSc

2:33 PM–2:38 PM **The Infant with Clubfoot and DDH**  
Mihir Thacker, MD

2:39 PM–2:44 PM **The Infant with Ipsilateral Clubfoot and Congenital Knee Dislocation**  
Alaric Aroojis, MS,  
D'Ortho, DNB



2:45 PM–2:50 PM

### **The Infant with Clubfoot Requiring a Prolonged NICU Admission**

Derek Kelly, MD, FAAOS, FAOA

2:51 PM–2:58 PM

### **Discussion**

Maryse Bouchard, MD, MSc  
Mihir Thacker, MD  
Alaric Aroojis, MS, D'Ortho, DNB  
Derek Kelly, MD, FAAOS, FAOA

**2:59 PM–3:28 PM**

### **The Stiff Non-Idiopathic Clubfoot**

Moderator: Alaric Aroojis, MS, D'Ortho, DNB

2:59 PM–3:05 PM

### **The Infant with a Stiff Arthrogryposis Clubfoot**

L. Reid Boyce Nichols, MD, FAOA, FAAOS

3:06 PM–3:12 PM

### **The Infant with an Equinovarus Foot with Fibular Hemimelia**

Anthony Riccio, MD

3:13 PM–3:19 PM

### **The Infant with a Clubfoot and Amniotic Bands**

Javier Masquijo, MD

3:20 PM–3:28 PM

### **Discussion**

Alaric Aroojis, MS, D'Ortho, DNB  
L. Reid Boyce Nichols, MD, FAOA, FAAOS  
Anthony Riccio, MD  
Javier Masquijo, MD

**3:29 PM–4:00 PM**

### **The Neuromuscular and Syndromic Clubfoot**

Moderator:  
Anthony Riccio, MD

3:29 PM–3:35 PM

### **Clubfoot in Children with Trisomy 21**

Kenneth Noonan, MD, MHCDS

3:36 PM–3:42 PM

### **Clubfoot in Children with Spina Bifida**

Vishwas Talwalkar, MD, FAAOS

3:42 PM–3:48 PM

### **The Undiagnosed Paralytic Clubfoot**

Jaime Rice Denning, MD

3:49 PM–4:00 PM

### **Discussion**

Anthony Riccio, MD  
Kenneth Noonan, MD, MHCDS  
Vishwas Talwalkar, MD, FAAOS  
Jaime Rice Denning, MD

**3:00 PM–3:45 PM**

### **South China Sea**

#### **Pavlik on the Go (Hands-on)**



Join the faculty for a Hands-on experience to learn bracing tips and tricks, including the Pavlik method and other commonly used braces used to treat hip dysplasia.

#### **Hands-on Faculty:**

Wudbhav (Woody) Sankar, MD  
Simon Kelley, MBChB, PhD, FRCS  
Pablo Castañeda, MD  
Kishore Mulpuri, MBBS, MS, MHSc, FRCSC  
Valerie Parrish, PA-C

**3:00 PM–3:45 PM**

### **South China Sea**

#### **Halo on the Go (Hands-on)**



Brief introduction with Halo tips and tricks with the opportunity to learn and practice on a simulator with real equipment.

#### **Hands-on Faculty:**

Firoz Miyanji, MD, FRCSC  
Ron El-Hawary, MD, MSc, FRCS(C)  
Jennifer Bauer, MD, MS  
Michael Glotzbecker, MD  
Burt Yaszay, MD  
John Lovejoy III, MD, FAAOS  
Suken Shah, MD, FAOA, FAAOS

5:00 PM–7:30 PM

### **Top Gun Surgical Skills Competition (non-CME)**

(by invitation only)



**Industry Spotlight Session 3**

**10:35 AM–11:35 AM**

**OrthoPediatrics (Non-CME) Coral Sea**

Ron El-Hawary, MD, MSc, FRCS(C);  
Scott Luhmann, MD

**Motion Preservation Options in the EOS and AIS Patient Population—Advancements in Guided Growth and Posterior Distraction**

The technologies highlighted in this session allow maintenance of growth and motion in two distinct patient populations. Appropriate patient selection and surgical technique review will be discussed.

**OrthoPediatrics (Non-CME) Java Sea**

Marie Gdalevitch, MD; Mark Seeley, MD

**Treatment Choices for SCFE – What to Choose and When?**

Unique implants allow for continued growth of patient after SCFE while a more traditional approach is to fuse the patient post-SCFE. This session will explore what to use and when, how to handle post SCFE deformities, and impact of contralateral pinning.

**nView Medical (Non-CME) Timor Sea**

Kali Tileston, MD, FAAOS; Matthew Oetgen, MD, MBA; Allen Kadado, MD; V. Salil Upasani, MD

**Next Generation Pediatric 3D Imaging and Navigation—Simplifying Your Current Surgical Workflow**

Hands-on experience with the nView S1 imaging system. Demonstrating one system can localize, navigate, verify screw placement, and stitch a final image together with a dramatic reduction in radiation.

**Medtronic (Non-CME) Pacifica 3-5**

Nicholas Fletcher, MD; Mark Erikson, MD

**The Evolving Role of AI, Navigation, and Robotics in Pediatric Deformity**

The next disruptive advances in pediatric spine surgery are happening now. Medtronic is leading this revolution by integrating powerful complementary technologies: artificial intelligence driven surgical planning, personalized spinal implants, navigation, and robotic-assisted surgical delivery, which together advance standardization and reduce variability. This workshop will provide a unique opportunity to discover how spine surgeons are incorporating these integrated solutions into their practice and how Medtronic is accelerating the transition to a new era of personalized medicine to deliver optimal patient care.

**Ortho ix (Non-CME) Pacifica 8-10**

David Podeszwa, MD; David Frumberg, MD

**Radiolucent Circular Fixation: An enLIGHTening New Vision for Pediatrics**

Join us for case-based discussion and hands-on demonstration where the experienced faculty take you through a myriad of applications, benefits, and best practices utilizing a light-weight, stable, radiolucent frame for pediatric complex limb reconstruction and deformity correction procedures.

**Pacira Biosciences (Non-CME) Pacifica 11-12**

Suken Shah, MD, FAOA, FAAOS;  
Robert Cho, MD, FAAOS

**Post-Surgical Pain Management in Children—Achieving Opioid Minimization**

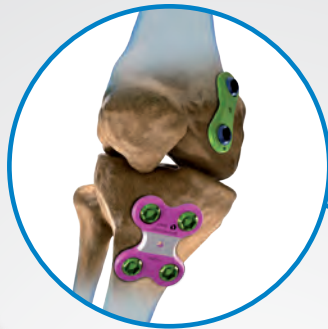
Join us for an interactive presentation where we will discuss key insights that led pediatric scoliosis spine surgeons to change their pain management protocols. We will also review the data that led to FDA approval of the first and only long-acting local-anesthetic in pediatrics. Our featured speakers will share their experience utilizing EXPAREL® (bupivacaine liposome injectable suspension) in adolescent idiopathic spine surgery and demonstrate how their administration technique evolved from surgical site infiltration to fascial plane infiltration for an Erector Spinae Plane (ESP) block. Multimodal protocols, recovery milestones, and implementation best practices will also be reviewed.

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**ORTHOFIX®**



### Friday, December 8

7:00 AM–3:00 PM **Registration**

7:00 AM–8:00 AM **Breakfast and Exhibits**  
Pacifica 6-7

## CONCURRENT SESSION 3



8:05 AM–9:35 PM **Pacifica 3-5**

### Course for Mid-Career Surgeons

Been an attending for a while and trying to get to the next level? Want to be a better teacher, speaker, mentor, and leader? Who doesn't? Join us for the interactive Leadership Institute, Teach the Teacher 2.0, and a panel discussion for new leaders.

**Moderator: James McCarthy, MD**  
**Moderator: Suken Shah, MD, FAOA, FAAOS**

8:05 AM–8:30 AM **IPOS® XC Leadership Institute**  
Moderator:  
James McCarthy, MD

8:05 AM–8:09 AM **Managing Your Team**  
Peter Waters, MD, MMSc

8:10 AM–8:14 AM **Managing Up**  
Daniel Sucato, MD, MS

8:15 AM–8:19 AM **Managing Your Micro-Environment: What's Your Currency?**  
Michael Vitale, MD, MPH

8:20 AM–8:24 AM **Managing Your Emotional Intelligence (EQ 101)**  
Jeffrey Sawyer, MD

8:25 AM–8:30 AM **Discussion**  
Moderator:  
James McCarthy, MD  
Panelists:  
Daniel Sucato, MD, MS  
Jeffrey Sawyer, MD

8:31 AM–8:54 AM **Teach the Teacher 2.0**  
Craig Eberson, MD, FAOA  
Thomas McPartland, MD  
Sandra Jarvis-Selinger, PhD

8:55 AM–9:00 AM **Discussion**  
Craig Eberson, MD, FAOA  
Thomas McPartland, MD  
Sandra Jarvis-Selinger, PhD

9:00 AM–9:06 AM **Answering Challenging Questions and Messaging with Intention (Media Training)**  
Sandra Jarvis-Selinger, PhD

9:07 AM–9:12 AM **Soliciting Feedback to Improve Leadership Skills**  
James McCarthy, MD

9:13 AM–9:29 AM **I Just Became Division Chief ... Now What?**  
Moderator:  
James McCarthy, MD  
Panelists:  
Michael Glotzbecker, MD  
Corinna Franklin, MD  
Lindley Wall, MD, MSc  
Burt Yaszay, MD

9:30 AM–9:35 AM **Changing Jobs Mid Career—Opportunities and Challenges**  
Todd Milbrandt, MD



“It’s a really big deal to be able to collaborate with APPs, residents, and physicians at IPOS® and then translate that back to what we are doing at our home institutions.”

Valerie Parrish, PA-C



### CONCURRENT SESSION 3



8:05 AM–9:35 PM Oceana Grand 6-7

#### Femoroacetabular Impingement: Where Are We in 2023?

This session will highlight the state of the art in treatment of FAI, etiology, and diagnosis.

**Moderator: Jonathan Schoenecker, MD, PhD**

- 8:05 AM–8:10 AM **FAI Is More Than Just Cam**  
Jonathan Schoenecker, MD, PhD
- 8:11 AM–8:16 AM **Is It FAI or Is It Normal?**  
Mininder Kocher, MD, MPH
- 8:17 AM–8:22 AM **Where's This Stuff Coming From? Theories on the Etiology of FAI**  
Jennifer Laine, MD
- 8:23 AM–8:28 AM **Natural History of FAI**  
Wudbhav (Woody) Sankar, MD
- 8:29 AM–8:34 AM **Questions**  
Jonathan Schoenecker, MD, PhD  
Mininder Kocher, MD, MPH  
Jennifer Laine, MD  
Wudbhav (Woody) Sankar, MD
- 8:35 AM–8:40 AM **Arthroscopy for FAI: Pelvic Side; Technique and Results**  
Henry Ellis, MD
- 8:41 AM–8:46 AM **Acetabular Retroversion: When to Work on the Pelvis**  
V. Salil Upasani, MD
- 8:47 AM–8:52 AM **Arthroscopy for FAI: Femoral Side; Technique, and Results**  
Manoj Ramachandran, MD, FRCS (Orth)

8:53 AM–8:58 AM

**SHD: When is Open the Better Way to Go for FAI?**

Daniel Sucato, MD, MS

8:59 AM–9:04 AM

**Questions**

Henry Ellis, MD  
V. Salil Upasani, MD  
Manoj Ramachandran, MD, FRCS (Orth)  
Daniel Sucato, MD, MS

9:05 AM–9:35 AM

**Challenging FAI Cases**

Moderator: Jonathan Schoenecker, MD, PhD  
Panelists:  
Manoj Ramachandran, MD, FRCS (Orth)  
Henry Ellis, MD  
V. Salil Upasani, MD  
Daniel Sucato, MD, MS  
Mininder Kocher, MD, MPH

### CONCURRENT SESSION 3



8:05 AM–9:35 PM Oceana Grand 2-5

#### Neuromuscular Scoliosis and Syndromic Spine

Complex spine topics for neuromuscular and syndromic patients who require optimization before life-changing surgery. Faculty review preoperative, intraoperative, and postoperative care pathways to get the job done well.

**Moderator: Ron El-Hawary, MD, MSc, FRCS(C)**  
**eModerator: Lindsay Andras, MD**

- 8:05 AM–8:10 AM **Neuromuscular Scoliosis: The Biomechanics of Deformity Correction: Tips and Tricks on How to Correct an NM Curve**  
Burt Yaszay, MD
- 8:11 AM–8:16 AM **The Role and Value of Traction in NM Deformity**  
Scott Luhmann, MD



8:17 AM–8:22 AM **Stopping Short of the Pelvis: When You Can and When You Shouldn't**  
Lindsay Andras, MD

8:23 AM–8:28 AM **Discussion**  
Burt Yaszay, MD  
Scott Luhmann, MD  
Lindsay Andras, MD

8:29 AM–8:34 AM **Setting the Stage: What Is Quality, Safety, Value, in Spine and Healthcare and How Is the Landscape Is Changing?**  
Michael Vitale, MD, MPH

8:35 AM–8:40 AM **Optimizing the Patient's Surgical Journey I: How to Optimize and Prepare the NM Patient Preoperatively**  
Robert Cho, MD, FAAOS

8:41 AM–8:46 AM **Optimizing the Patient's Surgical Journey II: Operating Room Team Culture—How to Build It and Why It Helps**  
Firoz Miyajji, MD, FRCS

8:47 AM–8:52 AM **Optimizing the Patient's Surgical Journey III: Care Pathways and ERAS in NM patients. Is This Feasible and the Future Model of Care Delivery?**  
Nicholas Fletcher, MD

8:53 AM–8:58 AM **Discussion**  
Michael Vitale, MD, MPH  
Robert Cho, MD, FAAOS  
Firoz Miyajji, MD, FRCS  
Nicholas Fletcher, MD

8:59 AM–9:04 AM **My Approach to DMD and SMA in 2023—How Medical Management Has Changed My Practice**  
Michelle Welborn, MD

9:05 AM–9:10 AM **My 5 Pearls for Managing Myelomeningocele Spinal Deformity**  
Jeffrey Sawyer, MD

9:11 AM–9:16 AM **Neuromuscular Scoliosis Tweeners: The Rationale for Early Fusion**  
Craig Louer Jr., MD

9:17 AM–9:35 AM **Rapid Fire Case Panel: Neuromuscular Spine Deformity**  
Moderator: Ron El-Hawary, MD, MSc, FRCS(C)  
Panelists:  
Jeffrey Sawyer, MD  
Nicholas Fletcher, MD  
Scott Luhmann, MD  
Jeff Martus, MD, MS  
Michelle Welborn, MD

## APP CME BREAKOUT 3



8:05 AM–9:35 AM **Banda Sea**

### Respect the Past, Embrace the Future—Recent Advances in Treatment Options for Common Sports Injuries in the Adolescent Athlete

The participant will be introduced to the top changes and advancements in treatment options and surgeries for common sports injuries. The participants will have an opportunity to learn ultrasound-guided joint injections and aspirations through a Hands-on portion.

**Moderator: Ray Kleposki, MSN, CPNP**

8:05 AM–8:11 AM **Don't Play Through the Pain—Treatment Options for Shoulder Injuries**  
Ben Johnson, PA-C

8:12 AM–8:18 AM **It's Up for Debate—Treatment of Common Elbow Injuries in the Adolescent Athlete**  
Henry Ellis, MD





8:19 AM–8:27 AM	<b>Discussion</b> Ben Johnson, PA-C Henry Ellis, MD
8:28 AM–8:34 AM	<b>Lights, Camera, Action– Hip Arthroscopy</b> Valerie Parrish, PA-C
8:35 AM–8:41 AM	<b>When Surgery Is the Only Option–Advances in Surgical Treatment of ACL Injuries</b> Lauren Hewins, PA-C
8:42 AM–8:48 AM	<b>Tips and Tricks for Management of Foot and Ankle Injuries</b> Christopher Tremonti, PA-C
8:49 AM–8:57 AM	<b>Discussion</b> Valerie Parrish, PA-C Lauren Hewins, PA-C Christopher Tremonti, PA-C
8:58 AM–9:35 AM	<b>Hands-on–Ultrasound Guided Joint Injections/ Aspirations</b> Hands-on Faculty: Pablo Casteñeda, MD Valerie Parrish, PA-C
9:40 AM–10:00 AM	<b>Break and Exhibits</b> <b>Pacifica 6-7</b>
10:05 AM–11:05 AM	<b>Industry Spotlight Sessions 4 (non-CME)</b> See page XXX for details
11:10 AM–12:10 PM	<b>Lunch and Exhibits</b> <b>Pacifica 6-7</b>
11:40 AM–12:10 PM	<b>Lunchtime Career Development (non-CME)</b> <b>Pacifica 6-7</b>

## GENERAL SESSION 3



**12:15 PM–2:15 PM** **Oceana Grand 6-7**

### Author's Preferred Techniques

An IPOS® signature session! Join our international faculty as they share master surgical techniques and soft skills in short, video-based presentations.

**Moderator: Suken Shah, MD, FAOA, FAAOS**  
**eModerator: Christine Ho, MD**

12:15 PM–12:16 PM	<b>Introduction</b> Co-Director: Suken Shah, MD, FAOA, FAAOS
12:17 PM–12:22 PM	<b>Tibial Tubercle Periosteum Transfer (TTPT) for Patella Instability</b> Javier Masquijo, MD
12:23 PM–12:28 PM	<b>Modified Brostrom Repair for Ankle Instability</b> Eric Edmonds, MD
12:29 PM–12:34 PM	<b>Patellar Sleeve Fracture: Recognition and Management</b> Corinna Franklin, MD
12:35 PM–12:40 PM	<b>Discussion</b> Moderator: Suken Shah, MD, FAOA, FAAOS eModerator: Christine Ho, MD
12:41 PM–12:46 PM	<b>First MTP Arthrodesis</b> M. Wade Shrader, MD
12:47 PM–12:52 PM	<b>Cavus Foot Reconstruction</b> Anthony Riccio, MD
12:53 PM–12:58 PM	<b>Intraoperative Distraction for Severe Spinal Deformity</b> Robert Cho, MD, FAAOS



12:59 PM–1:04 PM	<b>Discussion</b> Moderator: Suken Shah, MD, FAOA, FAAOS eModerator: Christine Ho, MD
1:05 PM–1:10 PM	<b>Hybrid Spine Surgery: Selective Thoracic Fusion and Lumbar Vertebral Body Tethering</b> Firoz Miyanji, MD, FRCS
1:11 PM–1:16 PM	<b>Machine Vision Image Guided Navigation in Spine Surgery</b> Derek Kelly, MD, FAAOS, FAOA
1:17 PM–1:22 PM	<b>Modified Bohlman Procedure for High-Grade Spondylolisthesis Reconstruction</b> Suken Shah, MD, FAOA, FAAOS
1:23 PM–1:28 PM	<b>Discussion</b> Moderator: Suken Shah, MD, FAOA, FAAOS eModerator: Christine Ho, MD
1:29 PM–1:34 PM	<b>Pollicization: How to Do It and What Not to Do</b> Julie Samora, MD, PhD
1:35 PM–1:40 PM	<b>ORIF of Thumb Salter-Harris 3 Fracture (Pediatric Gamekeeper)</b> Donald Bae, MD
1:41 PM–1:46 PM	<b>Distal Femoral Physeal Fractures: Pearls and Pitfalls</b> Simon Kelley, MBChB, PhD, FRCS
1:47 PM–1:52 PM	<b>Discussion</b> Moderator: Suken Shah, MD, FAOA, FAAOS eModerator: Christine Ho, MD

1:53 PM–1:58 PM	<b>Combo PAO/SHD and Osteochondral Allograft for Symptomatic Femoral Head OCD</b> Daniel Sucato, MD, MS
1:59 PM–2:04 PM	<b>Reconsidering How You Should Code for Fractures</b> Matthew Oetgen, MD, MBA
2:05 PM–2:10 PM	<b>Why and How to Be a Better Listener</b> Lindsay Andras, MD
2:11 PM–2:15 PM	<b>Discussion and Audience Voting</b> Moderator: Suken Shah, MD, FAOA, FAAOS eModerator: Christine Ho, MD
2:15 PM–2:30 PM	<b>Awards: Presentation of Resident Cases, Top Gun, and Author's Preferred Techniques</b> Co-Director: Derek Kelly, MD, FAAOS, FAOA

2:35 PM–2:55 PM **Break and Exhibits**  
**Pacifica 6-7**

## CME BREAKOUT 3



**3:00 PM–4:15 PM** **Banda Sea**

### Congenital Vertical Talus: Topic Update and Hands-on Casting

This session will discuss current practices and controversies in CVT management and will provide a Hands-on casting session for practice.

3:00 PM–3:05 PM	<b>Welcome Remarks</b> Moderator: Maryse Bouchard, MD, MSc
3:05 PM–3:12 PM	<b>CVT—Making the Diagnosis and Initial Assessment</b> Todd Milbrandt, MD



3:13 PM–3:20 PM	<b>Serial Casting Technique for CVT</b> Jaime Rice Denning, MD	3:06 PM–3:11 PM	<b>AI in Medical Imaging: Taking Ideas to Market</b> Manoj Ramachandran, MD, FRCS (Orth)
3:21 PM–3:28 PM	<b>Initial Surgical Management and Pinning the Talonavicular Joint</b> Javier Masquijo, MD	3:12 PM–3:17 PM	<b>AI and Medical Ethics</b> Jennifer Bauer, MD, MS
3:29 PM–3:36 PM	<b>What to Do When Initial Management Fails</b> Maryse Bouchard, MD, MSc	3:18 PM–3:24 PM	<b>Discussion</b> Kevin Shea, MD Manoj Ramachandran, MD, FRCS (Orth) Jennifer Bauer, MD, MS
3:37 PM–3:44 PM	<b>Managing the Arthrogyrotic or Syndromic CVT</b> Anthony Riccio, MD	3:25 PM–3:30 PM	<b>Bringing Digital Solutions to Pediatric Orthopaedics</b> Kevin Shea, MD
3:45 PM–4:15 PM	<b>CVT Casting (Hands-on)</b> Hands-on Faculty: Maryse Bouchard, MD, MSc Todd Milbrandt, MD Jaime Rice Denning, MD Javier Masquijo, MD Anthony Riccio, MD Derek Kelly, MD, FAAOS, FAOA	3:31 PM–3:36 PM	<b>Healthcare Data: Moving from Web 2.0 to 3.0</b> Manoj Ramachandran, MD, FRCS (Orth)
		3:37 PM–3:43 PM	<b>Discussion</b> Kevin Shea, MD Manoj Ramachandran, MD, FRCS (Orth)

## CME BREAKOUT 3



**3:00 PM–4:15 PM**      **Pacifica 3-5**

### Course for Mid-Career Surgeons

Digital innovation in pediatric orthopaedics: from AI to social media. PLUS, we've added a can't miss session on personal financial management.

**Moderator: James McCarthy, MD**

**Moderator: Kevin Shea, MD**

**3:00 PM–3:43 PM**      **Digital Solutions in Peds Ortho**

3:00 PM–3:05 PM      **Integrating Imaging Into Pediatric Orthopaedics: Current and Future Opportunities**  
Kevin Shea, MD

3:44 PM–3:49 PM      **EMR Hacks to Improve Wellness and Patient Experience**  
Matthew Oetgen, MD, MBA

3:50 PM–3:55 PM      **Social Media in Your Practice**  
Craig Louer Jr., MD  
Jaysson Brooks, MD

3:56 PM–4:01 PM      **Don't Make These Social Media Mistakes**  
Robert Cho, MD, FAAOS

4:02 PM–4:15 PM      **Financial Management for the Mid-Career Orthopaedic Surgeon**  
Ian Rose LACP, CRES



### CME BREAKOUT 3



3:00 PM–4:15 PM

Pacifica 8-10

#### Growth Modulation of the Spine

Experts discuss and debate the latest in growth assessment, modulation, and VBT. Faculty will also cover patient assessment, selection, and best practices in this session.

**Moderator: Stefan Parent, MD, PhD, FRCS(C)**

3:00 PM–3:01 PM

#### Introduction

Moderator: Stefan Parent, MD, PhD, FRCS(C)

3:01 PM–3:06 PM

#### Spinal Growth: Current Concepts and Best Methods to Predict

Michelle Welborn, MD

3:07 PM–3:12 PM

#### Brace Treatment for Scoliosis: Best Practices

Kali Tileston, MD, FAAOS

3:13 PM–3:18 PM

#### VBT: Ideal Patient Selection and the Preop Discussion

Stefan Parent, MD, PhD, FRCS(C)

3:19 PM–3:25 PM

#### VBT: Tips/Tricks and Complication Avoidance

Firoz Miyanji, MD, FRCS(C)

3:26 PM–3:35 PM

#### Discussion

Michelle Welborn, MD  
Kali Tileston, MD, FAAOS  
Stefan Parent, MD, PhD, FRCS(C)  
Firoz Miyanji, MD, FRCS(C)

3:36 PM–3:39 PM

#### Debate: Lenke 1C, 3C, and 6C Curves in Skeletally Immature, Active Patient

Ron El-Hawary, MD, MSc, FRCS(C)

3:40 PM–3:45 PM

**Best Treatment: Fusion**  
Suken Shah, MD, FAOA, FAAOS

3:46 PM–3:51 PM

**Best Treatment: Single or Bilateral VBT**  
Stefan Parent, MD, PhD, FRCS(C)

3:52 PM–3:57 PM

**Best Treatment: Hybrid**  
Burt Yaszay, MD

3:58 PM–4:15 PM

#### Debate Summary and Discussion with Case Examples

Firoz Miyanji, MD, FRCS(C)  
Ron El-Hawary, MD, MSc, FRCS(C)  
Stefan Parent, MD, PhD, FRCS(C)  
Burt Yaszay, MD  
Suken Shah, MD, FAOA, FAAOS

### CME BREAKOUT 3



3:00 PM–4:15 PM

Timor Sea

#### Pelvic Osteotomies Part 2: Triple, PAO (Hands-on)

Part 2: Triple and Periacetabular Osteotomies

**Moderator: Daniel Sucato, MD, MS**

3:00 PM–3:09 PM

#### PAO

Daniel Sucato, MD, MS

3:10 PM–3:19 PM

#### Triple Osteotomy

V. Salil Upasani, MD

3:20 PM–4:15 PM

#### Table Instruction

Hands-on Faculty:  
Daniel Sucato, MD, MS  
Jonathan Schoenecker, MD, PhD  
Wudbhav (Woody) Sankar, MD  
V. Salil Upasani, MD  
Thomas McPartland, MD  
Pablo Castañeda, MD



**Industry Spotlight Session 4**

**10:05 AM–11:05 AM**

**BioMarin Pharmaceuticals  
(Non-CME)**

**Coral Sea**

Klane White, MD

**Skeletal Dysplasia Diagnosis for the  
Pediatric Orthopaedic Surgeon: Changing  
the Paradigm**

Clinicians around the globe are changing the paradigm toward an etiology-driven approach for diagnosis of skeletal dysplasia. In this session, Dr. Klane White will discuss the following topics:

- Diagnostic challenges in patients with skeletal dysplasia
- How accurate diagnosis of these patients may be facilitated by genetic testing
- Practical considerations for implementing genetic testing in the diagnostic work-up

**OrthoPediatrics (Non-CME) Java Sea**

Roger Widmann, MD; Christine Hardesty, MD;  
Stefan Parent, MD, PhD, FRCS

**Navigating the Spine—Choose Your Own  
Adventure**

Choose your own adventure! Come learn about the various navigation technologies out there for spinal surgery, including robotics, patient-specific pedicle screw guides, and image-guided navigation systems. You will hear from the experts about what unmet needs are being addressed and what the future looks like for each, how the technologies fit in clinical practice, and the challenges associated with each—all helping you form a perspective on which might fit best in your practice. The session will feature talks from experts in each area, a moderated faculty discussion, and Q&A with the participants.

**DePuy Spine (Non-CME)**

**Pacifica 8-10**

Suken Shah, MD, FAOA, FAAOS;  
Craig Louer Jr., MD; Michelle Welborne, MD;  
Ryan Fitzgerald, MD

**Complex Spine: Optimizing AIS Correction**

Join our faculty to learn how to optimize AIS correction through level selection, derotation techniques, and rod materials. Round out the workshop with a hands-on rod bending session on differential rod contouring featuring DePuy Synthes's innovative treatment option for complex pediatric spine patients: the ALTALYNE Ultra Alignment System.

**Globus Medical (Non-CME)**

**Pacifica 11-12**

Juan Carlos Rodriguez-Olaverri, MD, PhD

**Latest Trends in Vertebral Body Tethering**

Faculty will discuss deformity correction for skeletally immature AIS patients through the application of the innovative REFLECT™ Scoliosis Correction System, which is a U.S. Humanitarian device. Attendees will have the opportunity to delve into various aspects of non-fusion deformity correction surgery, such as patient selection, preoperative planning, and surgical techniques, through the utilization of REFLECT™. The workshop will conclude with clinical case examples and a live Q&A.

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References:

1. DePuy Synthes. Altalyne Calculation of Rod Bending Yield Strength and Stiffness Memorandum, June 7, 2022. Adaptiv #103782175 Rev. B

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### Saturday, December 10

7:00 AM–8:00 AM **Breakfast**  
**Pacifica 6-7**

8:00 AM–10:00 AM **Registration**

## CONCURRENT SESSION 4



**8:05 AM–9:35 AM Coral Sea**

### Managing Congenital Differences Below the Knee

Small Group Interactive Case-Based Learning on Lower Extremity Deficiencies Below the Knee

#### Moderator:

**L. Reid Boyce Nichols, MD, FAOA, FAAOS**

8:05 AM–8:07 AM **Introduction**  
 Moderator: L. Reid Boyce Nichols, MD, FAOA, FAAOS

8:08 AM–8:15 AM **Case 1: Congenital Differences: Working the Problem: Life Plans and Other Decision-Making**  
 Philip McClure, MD

8:16 AM–8:23 AM **Case 2: Congenital Differences: The Femur Bone Is Connected to the Shin Bones (Or Not)**  
 Christof Radler, MD

8:24 AM–8:32 AM **Discussion**  
 L. Reid Boyce Nichols, MD, FAOA, FAAOS  
 Philip McClure, MD  
 Christof Radler, MD  
 David Podeszwa, MD  
 Jeanne Franzone, MD  
 Mihir Thacker, MD  
 Anthony Riccio, MD

8:33 AM–8:39 AM **Case 3: Congenital Differences: SUPER SUPER: When to Address Both the Knee and Ankle in Fibular Hemimelia**  
 Philip McClure, MD

8:40 AM–8:48 AM **Discussion**  
 L. Reid Boyce Nichols, MD, FAOA, FAAOS  
 Philip McClure, MD  
 Christof Radler, MD  
 David Podeszwa, MD  
 Jeanne Franzone, MD  
 Mihir Thacker, MD  
 Anthony Riccio, MD

8:49 AM–8:55 AM **Case 4: Congenital Differences: This Ankle Is Dynamic!**  
 David Podeszwa, MD

8:56 AM–9:04 AM **Discussion**  
 L. Reid Boyce Nichols, MD, FAOA, FAAOS  
 Philip McClure, MD  
 Christof Radler, MD  
 David Podeszwa, MD  
 Jeanne Franzone, MD  
 Mihir Thacker, MD  
 Anthony Riccio, MD

9:05 AM–9:11 AM **Case 5: Congenital Differences: Something Is Not Quite Right!**  
 Jeanne Franzone, MD

9:12 AM–9:18 AM **Discussion**  
 L. Reid Boyce Nichols, MD, FAOA, FAAOS  
 Philip McClure, MD  
 Christof Radler, MD  
 David Podeszwa, MD  
 Jeanne Franzone, MD  
 Mihir Thacker, MD  
 Anthony Riccio, MD

9:19 AM–9:24 AM **Case 6: Congenital Differences: Can You Kick Me? Tibial Hemimelia**  
 L. Reid Boyce Nichols, MD, FAOA, FAAOS



9:25 AM–9:32 AM **Discussion**  
 L. Reid Boyce Nichols, MD,  
 FAOA, FAAOS  
 Philip McClure, MD  
 Christof Radler, MD  
 David Podeszwa, MD  
 Jeanne Franzone, MD  
 Mihir Thacker, MD  
 Anthony Riccio, MD

9:33 AM–9:35 AM **Wrap Up**  
 L. Reid Boyce Nichols, MD,  
 FAOA, FAAOS

### CONCURRENT SESSION 4



7:30 AM–9:30 AM **Pacifica 8-10**

#### Course for Mid-Career Surgeons

This session is a must for fellowship program directors and all aspiring leaders in pediatric orthopaedics. We will dig into up-to-the-minute news on pediatric orthopaedic fellowships, the POSNA Workforce Initiative, skills for division chiefs, chairs, and practice leads... and don't miss the updates on coding and ABOS re-certification.

**Moderator: James McCarthy, MD**  
**Moderator: Suken Shah, MD, FAOA, FAAOS**

7:30 AM–7:40 AM **Fellowship Update**  
 Meghan Imrie, MD

7:41 AM–7:47 AM **POSNA Workforce Initiative Update**  
 Wudbhav (Woody)  
 Sankar, MD

7:48 AM–8:00 AM **Recruitment for Peds Ortho, Pipeline Options, and What Can We Do Everyday?** Moderator: James McCarthy, MD; Panelists: Corinna Franklin, MD; Jaysson Brooks, MD; Jennifer Bauer, MD, MS; Michelle Welborn, MD

8:01 AM–8:07 AM **PSSP Where Are We Now, What Your Center Needs to Know, Where Are We Going?** Kevin Shea, MD; Kali Tileston, MD, FAAOS

8:08 AM–8:18 AM **Innovations in Surgical Coaching**  
 Benjamin Shore, MD, MPH,  
 FRCS

8:19 AM–8:25 AM **Simulation in Pediatric Orthopaedic Education**  
 Todd Milbrandt, MD

8:26 AM–8:31 AM **QI 101: How to Do a Hospital-Based Quality Project**  
 Michael Glotzbecker, MD

8:32 AM–8:42 AM **Pediatric Orthopedic Coding: How the Sausage Gets Made**  
 Kevin Neal, MD

8:43 AM–8:48 AM **How a Very Busy Surgeon Can Make PLENTY of Time for Family, Fun, and Volunteer Leadership**  
 John (Jack) Flynn, MD

8:49 AM–8:56 AM **Mentorship: Paying It Forward**  
 Suken Shah, MD, FAOA,  
 FAAOS

8:57 AM–9:02 AM **Clinical Research: Intention to Action**  
 John Lovejoy III, MD, FAAOS

9:03 AM–9:09 AM **ABOS Re-Certification: What's New and the WLA Pathway Explained**  
 John (Jack) Flynn, MD





9:10 AM–9:20 AM **Compensation Models in Peds Ortho Drive Desired Behaviors and Institutional Strategy**  
James McCarthy, MD

9:21 AM–9:30 AM **Discussion**  
Moderator:  
James McCarthy, MD

9:40 AM–10:00 AM **Break**  
**Pacifica 6-7**

## CME BREAKOUT 4



**10:05 AM–11:20 AM Pacifica 8-10**

### Essentials of Pediatric Orthopaedics III

This session covers the basics of pediatric orthopaedics with a focus on recognition, evaluation, and treatment of common conditions. The information is geared toward residents, fellows, and newer advanced practice providers who desire a strong foundational knowledge and strategy to synthesize clinical data into appropriate treatment plans.

**Moderator: Matthew Oetgen, MD, MBA**

10:05 AM -10:10 AM **AIS, EOS, NM Scoli: Bracing, Casting, Therapy**  
Lindsay Andras, MD

10:11 AM–10:16 AM **Spine Trauma**  
Jennifer Bauer, MD, MS

10:17 AM–10:22 AM **Back Pain, Kyphosis, Spondy, Disc Disease**  
Matthew Oetgen, MD, MBA

10:23 AM–10:31 AM **Discussion**  
Matthew Oetgen, MD, MBA  
Lindsay Andras, MD  
Jennifer Bauer, MD, MS

10:32 AM–10:37 AM **Skeletal Dysplasias and Orthopaedic-Related Syndromes**  
Robert Cho, MD, FAAOS

10:38 AM–10:43 AM **Practice Management: Practical Integration of Research into a Busy Clinical Practice**  
Wudbhav (Woody) Sankar, MD

10:44 AM–10:52 AM **Discussion**  
Matthew Oetgen, MD, MBA  
Robert Cho, MD, FAAOS  
Wudbhav (Woody) Sankar, MD

10:53 AM–10:58 AM **Child Abuse**  
John (Jack) Flynn, MD

10:59 AM–11:04 AM **Lower Extremity Trauma in the Outpatient Setting**  
John Lovejoy III, MD, FAAOS

11:05 AM–11:10 AM **Upper Extremity Trauma in the Outpatient Setting**  
Christine Ho, MD

11:11 AM–11:20 AM **Discussion**  
Matthew Oetgen, MD, MBA  
John (Jack) Flynn, MD  
John Lovejoy III, MD, FAAOS  
Christine Ho, MD





**CME BREAKOUT 4**



**10:05 AM–11:20 AM**      **Java Sea**

**Pediatric Upper Limb Surgery:  
Concepts, Cases, and Controversies**

Join our internationally renowned faculty for this case-based discussion of challenging pediatric upper extremity conditions. From the fundamental concepts to late complications of treatment, we will explore the totality of care. There will be principles and pearls for providers of every level!

**Moderator: Donald Bae, MD**

10:05 AM–10:10 AM      **Surgeons Are Not Replaceable!**  
Donald Bae, MD

10:11 AM–10:15 AM      **Madelung Deformity: Concepts**  
Donald Bae, MD

10:16 AM–10:25 AM      **Madelung Deformity: Case**  
Julie Samora, MD, PhD  
Donald Bae, MD  
Andrea Bauer, MD  
Christine Ho, MD

10:26 AM–10:31 AM      **Madelung Deformity: WTF**  
Christine Ho, MD

10:32 AM–10:36 AM      **Arthrogyrotic Elbow: Concepts**  
Julie Samora, MD, PhD

10:37 AM–10:47 AM      **Arthrogyrosis Elbow: Case Presentation**  
Andrea Bauer, MD  
Donald Bae, MD  
Julie Samora, MD, PhD  
Lindley Wall, MD, MSc

10:48 AM–10:53 AM      **Arthrogyrosis Elbow: WTF**  
Lindley Wall, MD, MSc

10:54 AM–10:58 AM      **Shoulder in Brachial Plexus Birth Injury: Concepts**  
Donald Bae, MD

10:59 AM–11:07 AM      **Shoulder in Brachial Plexus Birth Injury: Case**  
Julie Samora, MD, PhD  
Donald Bae, MD  
Andrea Bauer, MD  
Lindley Wall, MD, MSc

11:08 AM–11:13 AM      **Shoulder in Brachial Plexus Birth Injury: WTF**  
Andrea Bauer, MD

11:14 AM–11:20 AM      **Summary**  
Julie Samora, MD, PhD

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### CME BREAKOUT 4



10:05 AM–11:20 AM **Pacifica 11-12**

#### Reconstruct, Rotate, or Amputate? Difficult Decisions in Limb Reconstruction

This session will describe the key principles of pediatric lower limb amputation and prosthetic reconstructive options. This will be followed by debate-style discussions of treatment options for Congenital Pseudarthrosis of the Tibia, Proximal Focal Femoral Deficiency, and Fibular Hemimelia.

**Moderator: Jeanne Franzone, MD**

- 10:05 AM–10:06 AM **Introduction**  
Jeanne Franzone, MD  
Jennifer Laine, MD
- 10:07 AM–10:12 AM **Amputation Principles:  
Early Keys to Long-Term  
Success**  
Jennifer Laine, MD
- 10:13 AM–10:18 AM **Multidisciplinary  
Prosthesis Care:  
Approach to Helping  
Families Make Tough  
Decisions, Ongoing  
Follow-up**  
Jeanne Franzone, MD
- 10:19 AM–10:24 AM **Maximizing Gait for  
Pediatric Prosthetic  
Patients**  
Sheila Mason, PNP
- 10:25 AM–10:29 AM **Considerations in  
Maximizing Long-Term  
Outcomes for Patients  
with Prostheses**  
Mihir Thacker, MD
- 10:30 AM–10:33 AM **Debate 1: CPT–  
Reconstruction**  
Philip McClure, MD

- 10:34 AM–10:37 AM **Debate 1: CPT–  
Amputation**  
Mihir Thacker, MD
- 10:38 AM–10:47 AM **Discussion**  
Philip McClure, MD  
Mihir Thacker, MD  
L. Reid Boyce Nichols, MD,  
FAOA, FAAOS  
David Podeszwa, MD
- 10:48 AM–10:51 AM **Debate 2: PFFD–  
Rotationplasty**  
David Podeszwa, MD
- 10:52 AM–10:55 AM **Debate 2: PFFD–  
Amputation**  
Jeanne Franzone, MD
- 10:56 AM–10:59 AM **Debate 2: PFFD–  
Reconstruction**  
Christof Radler, MD
- 11:00 AM–11:03 AM **Debate 3: Fibular  
Hemimelia–Amputation**  
Jennifer Laine, MD
- 11:04 AM–11:07 AM **Debate 3: Fibular  
Hemimelia–  
Reconstruction**  
L. Reid Boyce Nichols, MD,  
FAOA, FAAOS
- 11:08 AM–11:18 AM **Discussion**  
David Podeszwa, MD  
Jeanne Franzone, MD  
Christof Radler, MD  
Jennifer Laine, MD  
L. Reid Boyce Nichols, MD,  
FAOA, FAAOS
- 11:19 AM–11:20 AM **Conclusion**  
Jeanne Franzone, MD  
Jennifer Laine, MD

11:25 AM–12:25 PM **Lunch**  
**Pacifica 6-7**

CINCINNATI CHILDREN'S ORTHOPEDICS

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- POSNA's QSVI program, setting the standard for quality in Pediatric Orthopedics
- Cincinnati Children's is involved with 12 research and study groups.



THANK YOU!





FOOT

**ePoster 1**

**Ability of the Area Deprivation Index to Predict Idiopathic Clubfoot Recurrence<sup>1</sup>**

**Smitha E. Mathew, MBBS;** *William Schaberg; Matthew E. Oetgen, MD, MBA*  
*Children's National Hospital, Washington, DC*

**ePoster 2**

**Is Computed Tomography Scan Necessary in the Preoperative Evaluation of Calcaneonavicular Tarsal Coalition?**

**Lauren M. Harte, MD;** *Charles M. Gordon, MD; Corey T. Clyde, MD; Sonja Pavlesen, MD, MS;*  
*Jeremy P. Doak, MD*  
*University at Buffalo, Buffalo, NY*

**ePoster 3**

**Putting a Better Foot Forward: Prospective Cohort Study of Flatfoot Reconstruction for Painful Pediatric Idiopathic Flexible Flatfoot**

**Christopher J. DeFrancesco, MD;** *Matthew S. Conti, MD; Howard J. Hillstrom, PhD;*  
*John Blanco, MD; Silvia Zanini, MS; Emily Dodwell, MD, MPH; David M. Scher, MD*  
*Children's Hospital of Philadelphia, Philadelphia, PA*

**ePoster 4**

**Understanding Clubfoot Recurrence: Insights from a Social Determinants Perspective**

*Tasha Garayo, MS; Nadim Kheir, MD; Maralexa Martínez-Valcárce; Robert Schmidt Cianchini;*  
**Karim Masrouha, MD**  
*NYU Langone Health, New York, NY*

HAND & UPPER EXTREMITY

**ePoster 5**

**Cubital Tunnel Syndrome in Children and Adolescents: Clinical Presentation and Surgical Outcomes**

**Nathan Chaclas;** *Scott Mahon; Joseph Yellin, MD; Christine Goodbody, MD, MBE;*  
*Apurva S. Shah, MD, MBA*  
*The Children's Hospital of Philadelphia, Philadelphia, PA*

**ePoster 6**

**Does Fixation Type Affect Symptomatic Implant Removal Rates in Operatively Treated Pediatric Medial Epicondyle Fractures?**

**Matthew J. Siebert, MD;** *Emily Zhang; Jayden Nicole Brennan; Aaron Wey, MD;*  
*Stephanie Holmes, MD; Christopher A. Makarewich, MD*  
*University of Utah Health, Salt Lake City, UT*



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**ePoster 7**

**Does Time to Surgery Impact Nerve Recovery in Supracondylar Humerus Fractures with Nerve Injury?**

**Mikaela H. Sullivan, MD;** Brian D. Wahlig, MD; Samuel E. Broida, MD; A. Noelle Larson, MD; William J. Shaughnessy, MD; Anthony A. Stans, MD; Emmanouil Grigoriou, MD; Brandon J. Yuan, MD; Todd A. Milbrandt, MD  
Mayo Clinic, Rochester, MN

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**ePoster 8**

**Intraoperative Cardiothoracic Intervention Rates During Open Surgery Following Traumatic Posterior Sternoclavicular Joint Injury: A Case Series and Systematic Review**

**Jesse M. Galina;** Sawyer Miller; Sonja Pavlesen, MD, MS; Michael R. Ferrick, MD  
University at Buffalo, Buffalo, NY

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**ePoster 9**

**The Relationship between Obesity and Lateral Condyle Fracture Healing**

**Jacob Smithey, MD;** Hunter Gillon, MD; Kellie Leitch, MD  
University of Mississippi Medical Center, Jackson, MS

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**ePoster 10**

**Who Should See My Kids? Clavicle Fracture Management across Orthopaedic Subspecialties**

**Robert W. Gomez, MD;** Dustin A. Greenhill, MD; Zachary J. Lamb; David Jessen; Morgan Storino  
St. Luke's University Health Network, Bethlehem, PA

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**HIP**

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**ePoster 11**

**An Investigation into the Public's Most Frequently Asked Questions About Developmental Dysplasia of the Hip and Evaluating Online Information About Management and Treatment**

Elizabeth Garrett; Christena Abraham; **Madison Blackwell, DO;** Samuel Shepard, DO; Nicholas Sajjadi, DO; Brylie Schafer, DO; Mark Schwarz, DO; Steven Brown, DO  
Oklahoma State University, Tulsa, Oklahoma

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**ePoster 12**

**Colder Weather and Likelihood of Surgical Intervention for Developmental Dysplasia of the Hip within the First 5-Years of Life: A National Database Analysis**

Samantha L. Ferraro; Anthony K. Chiu; Tanner Seibold; Alex Gu, MD; Amil R. Agarwal; Savyasachi Thakkar, MD; **Ahmed Elabd, MD;** Sean A. Tabaie, MS, MD, FAAOS  
Children's National Hospital, Washington, DC

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**ePoster 13**

**Effects of Hip Muscle Fatiguability as Assessed by Surface Electromyography**

Olivia Dyer; Benjamin Wheatley, PhD; **Mark Seeley, MD**  
Geisinger Medical Center, Danville, PA



**ePoster 14**

**Labral Support Shelf Acetabuloplasty for Late Presenting Perthes Disease: Outcomes in Indian Patients**

**Chaitrali Gundawar**; Udit Vinayak, MS Orth, DNB Orth; Parag Sancheti, MS Orthopaedics, DNB Orth; Sandeep V. Vaidya, MS Orthopaedics, DNB Orth; Mandar V. Agashe, MS Orth; Sandeep Patwardhan, MS Orth  
SRCC Childrens Hospital, Mumbai, India

**ePoster 15**

**Preliminary Study on the Stabilization of Varus Proximal Femoral Osteotomies using Pediatric LCP Plates in Adults undergoing Combined Correction of Proximal Femoral and Acetabular Dysplasia**

**Ian Hollyer**; Taylor R. Johnson; Harsh Wadhwa; Michael J. Chen; Stephanie Y. Pun, MD; Michael J. Bellino  
Stanford University, Palo Alto, CA

**ePoster 16**

**Radiological Measure of Femoral Neck Height, Epiphyseal Extrusion, and Greater Trochanter Overgrowth Can Predict Reported Outcomes of Legg-Calve-Perthes Disease in Adulthood**

**Alberto Losa-Sanchez, MD**; Luis Moraleda-Novo, MD, PhD; Ricardo Fernandez-Fernandez, MD, PhD; Gaspar Gonzalez-Moran, MD  
Hospital Universitario La Paz, Madrid, Spain

**ePoster 17**

**Skeletal Maturity May Not be a Factor in Optimizing Outcome in Total Hip Arthroplasty**

**Correggio L. Peagler Jr.**; Philip M. Parel; Anthony K. Chiu; Savyasachi Thakkar, MD; Sean Tabaie, MD, FAAOS  
George Washington University, Washington, DC

**LOWER EXTREMITY/DEFORMITY**

**ePoster 18**

**A Biomechanical Evaluation of Casting Technique and Cast Core Size Effect**

**Trenton P. Sprenkle**; Alexander CM Chong; Jordan Shearer; Brandon Fisher; Brian R. Sauer, MD  
University of North Dakota, Fargo, ND

**ePoster 19**

**A Midterm Follow-Up of Trident Fixation Technique for Pediatric Knee Arthrodesis with Recycled Bone Graft**

**Yu-Min Lin, MD, PhD**; Yuan-Ya Liao, MD, PhD  
Taichung Veterans General Hospital, Taichung, Taiwan

**ePoster 20**

**Can We Determinate the Degree of External Tibial Torsion on a Simple X-Ray? ... Saving Radiation.**

**Natalia Penelas Abelleira**; Pedro González Herranz; Llanos Rodríguez Rodríguez; Clara Domenech Bendaña; Miguel Castro Torre  
Hospital Materno Infantil Teresa Herrera, A Coruña, Spain



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**ePoster 21**

**Comparing Pediatric Femoral Shaft Fracture Repair Patient Outcomes Between Pediatric and Non-Pediatric Orthopedic Surgeons**

*B. Tanner Seibold; Theodore Quan, MD; Jordan Pizzarro; Benjamin Farley, MD; **Ahmed Elabd, MD;** Sean A. Tabaie, MS, MD, FAAOS*

*Children's National Hospital, Washington, DC*

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**ePoster 22**

**Computer Prediction of Pediatric Occult Ankle Fracture Using Assessment of Non-Weight Bearing and X-Ray Measures of Acute Swelling**

*Denise Kerut, MD; **Srikanth Mudiganty, MD;** Joseph A. Gonzalez, MD*

*Childrens Hospital New Orleans, New Orleans, LA*

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**ePoster 23**

**Evaluation of Compensatory Rotational Gait Kinematics in Children with Pathological Genu Valgum**

***Chaitrali Gundawar, D. Orthopaedic;** Atul Bhaskar, MS Ortho; Mayuri Lad;*

*Chasanal Rathod, MS Ortho*

*SRCC Children's Hospital, Mumbai, India*

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**ePoster 24**

**Frida Kahlo: The Artist who Turned Pain into Art**

*Carla M. Bridges, MD; Laura I. Marrero; **Melissa Esparza, MD***

*Phoenix Children's Hospital, Phoenix, AZ*

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**ePoster 25**

**Idiopathic Toe Walking: Retrospective Cohort Study Demonstrates Surgery Results in Greatest Resolution Rate and Improvement in Range of Motion (ROM)**

*Kiranpreet Nagra; Erikson Nichols; Peter Cirrincione; Akshitha Adhiyaman; John Blanco, MD;*

*David Scher, MD; Shevaun M. Doyle, MD; **Emily Dodwell, MD, MPH***

*Hospital for Special Surgery, New York, NY*

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**ePoster 26**

**Nailed it! Can Rigid Femoral Nailing be Safely Used for Pediatric Femoral Shaft Fractures in Patients 8-10 Years of Age?**

*Kwangwon Park, MD, PhD; **Stefano Cardin, MD;** Bensen Fan, MD; James Toledano, MD;*

*Mark Birnbaum, MD; José A. Herrera-Soto, MD*

*Orlando Health, Arnold Palmer Hospital for Children, Orlando, FL*

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**ePoster 27**

**Optimizing Tibial Torsion Measurements in Pediatric Patients**

*Kiranpreet Nagra; Peter Cirrincione; Erikson Nichols, MS, MMS; Olivia C. Tracey; Julia Retzky, MD;*

*Kathryn Barth, MD; Noah Cha, MD; Jessica Heyer, MD; Shevaun M. Doyle, MD;*

***Emily Dodwell, MD, MPH***

*Hospital for Special Surgery, New York, NY*

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**ePoster 28**

**Orthopedic Fixation of Skeletally Immature Ankle Fractures in Children and Adolescents Using Bio-Integrative Implants**

Mark Solomon, DPM, FACFAS; David Lin, MD, FAAOS; **Evan McNall**; Joslin Seidel, DPM, AACFAS; Hannah Schneiders, DPM

The Pediatric Orthopedic Center, Cedar Knolls, NJ

**ePoster 29**

**Systematic Review and Reference for Pediatric Physeal Fractures and Premature Physeal Arrests; How Often and When Do They Occur?**

Bianca Parker, MS; Frass Ahmed; Erickson Andrews, MD; **Walter H. Truong, MD, FAOA, FAAOS** Gillette Children's, Saint Paul, MN

**NEUROMUSCULAR & CEREBRAL PALSY**

**ePoster 30**

**Differences in School Services Offered and Accessibility for Children with Cerebral Palsy Based on Race, Income, and GMFCS Level**

**Tara A. Saxena, MD**; Joseph Andary, MPH; Philip E. Gates, MD

Louisiana State University Shreveport Health Sciences, Shreveport, LA

**ePoster 31**

**Improving the Quality of Interpretation of Pelvic Radiographs for Hip Surveillance in Cerebral Palsy – a Quality Improvement Project**

Alexandra Rocha; Ian Ross; Scott McKillop; Jacob Davidson; Debra Bartley, MD; Sarah Pilon; Kevin Morash; Ryan Katchky, MD; **Patrick Thornley, MD**

London Health Sciences Centre, London, ON

**ePoster 32**

**Radiographic Angles after Posterior Medial Lateral Release are Associated with Increased Rates of Reoperation in Neuromuscular Clubfoot**

Jared M. May; **Emily L. DeMaio, MD**; Jill E. Larson, MD

Ann & Robert H. Lurie Children's Hospital of Chicago, Chicago, IL

**ePoster 33**

**Trends in Timing of Hip Surgery in Children with Cerebral Palsy: Is Surgery Being Performed Earlier? A National Observational Study from 2010-2020**

Anthony K. Chiu; Sarah Dance; Samantha L. Ferraro; Alana O'Mara, MD; **Ahmed Elabd, MD**; Savyasachi C. Thakkar, MD; Sean Tabaie, MD

Children's National Hospital, Washington, DC



## QUALITY, SAFETY, AND VALUE INDICATORS

### ePoster 34

#### Can We Screen for Limb Length Discrepancy on Spinal Radiographs of Patients with Scoliosis?

**Neeraj Mishra, MRCSEd**; Nicole Kim Luan Lee, PhD; Liang Hui Loo, BSc(Hons); Kai Yet Lam, FRCSEd(Orth); Kevin Boon Leong Lim, FRCS(Eng.), FRCSEd(Orth), MBA  
KK Women's & Children's Hospital, Singapore

### ePoster 35

#### Evaluation of Patient-Reported Outcome Measures (PROMs) in the Pediatric Musculoskeletal Oncology Literature: A Systematic Review Using the EMPRO Tool

**David VanEenaam**; Soroush Baghdadi, MD; Divya Talwar, PhD, MPH; Alexandre Arkader, MD  
The Children's Hospital of Philadelphia, Philadelphia, PA

### ePoster 36

#### Nonoperative vs. Operative Management of Pediatric Grade 1 Open Fractures

Kevin Schauer, MD; Dylan Lis; Ellen Lutnick, MD; **Lauren M. Harte, MD**;  
Mohammad Nadir Haider, MD, PhD; Jeremy Doak, MD  
University at Buffalo, Buffalo, NY

### ePoster 37

#### Parent Perspectives on Firearm Safety Discussions in a Pediatric Orthopaedic Surgery Clinic

**William Allen MD**; Emily Wilson; Gabrielle Rauls; Thomas Geiger; Ryan McFadden;  
William Barfield, PhD; Matthew A. Dow, MD; Robert F. Murphy, MD; Sara Van Nortwick, MD  
The Medical University of South Carolina, Charleston, SC

### ePoster 38

#### Preferences for Return to Sport for Patients Undergoing Cast Treatment for Distal Radial Metaphyseal Fractures: A Cross Sectional Survey of Primary Care Orthopedic Physicians and Orthopedic Surgeons

Erikson Nichols, MS MMS; Olivia C. Tracey; Jessica Heyer, MD; **Emily Dodwell, MD, MPH**  
Hospital for Special Surgery, New York, NY

## SPINE

### ePoster 39

#### Are 3D-Printed Anatomic Haptic Adolescent Idiopathic Scoliosis Spine Models Better Resident Training Tools when Compared to Conventional Training Modalities

Selina Poon, MD, MPH; Haleh Badkoobei, MD, MPH; Cynthia Nguyen, MD; **Robert H. Cho, MD, FAAOS, FAOA**; Ryan A. Finkel, MD; Reginald Fayssoux, MD  
Shriners Children's Southern California, Pasadena, CA

### ePoster 40

#### Characterizing the Spectrum of Scoliosis in Autism

**Ravi Rajendra, MD**; Matthew Bratton; Claudia Leonardi, PhD; R. Carter Clement, III, MD, MBA  
Louisiana State University, New Orleans, LA



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**ePoster 41**

**Coronal and Sagittal Spinal Alignment Two Years after Posterior Dynamic Distraction Device (PDDD) Instrumentation for Adolescent Idiopathic Scoliosis**

**Kevin Boon Leong Lim, FRCS(Eng), FRCSEd(Orth), MBA;** Grace Hui Min Chew, BComms (Hons); Stacy Wei Ling Ng, MBBS, MRCS(Ed), FRCSEd (Orth); Woei Jack Pan, MB ChB BAO, FRCSEd (Orth); Nicole Kim Luan Lee, PhD  
KK Women's & Children's Hospital, Singapore

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**ePoster 42**

**Early Results from a Prospective Study on a Posterior Dynamic Distraction Device for Adolescent Idiopathic Scoliosis (NCT04296903)**

**Michael C. Albert, MD;** Gilbert Chan, MD; Geoffrey Haft, MD; Timothy Oswald, MD; Kevin M. Neal, MD; Noelle Larson, MD; Ryan E. Fitzgerald, MD; Alvin Jones, MD; Nigel Price, MD, FAAP, FRCSC, FAAOS; Baron Lonner, MD; Todd Milbrandt, MD; Christina K. Hardesty, MD; John T. Anderson, MD  
Dayton Children's Hospital, Dayton, OH

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**ePoster 43**

**High BMI Limits Initial Correction but Not Growth Modulation After Vertebral Body Tethering**

William ElNemer; Daniel Badin, MD; Stefan Parent, MD; Firoz Miyanji, MD; Daniel Hoernschemeyer, MD; Ahmet Alanay, MD; **John Avendano;** Harms Study Group; Paul Sponseller, MD, MBA  
Johns Hopkins University, Baltimore, MD

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**ePoster 44**

**How Effective is the 'Scolibrace' in the Management of Adolescent Idiopathic scoliosis (AIS)**

**Kevin Boon Leong Lim, FRCS(Eng), FRCSEd (Orth), MBA;** Heidi Ka Wing Mak; Siti Hauzah Binte Abdul Rahaman, RN; Ling Ling, Ong, RN; Jess Shi Yang Ooi, RN; Nicole Kim Luan Lee, PhD  
KK Women's & Children's Hospital, Singapore, Singapore

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**ePoster 45**

**Is Rib-on-Pelvis Deformity associated with Reported Pain in Neuromuscular Early-Onset Scoliosis?**

**Vineet Desai;** Margaret A. Bowen; Jason B. Anari, MD; John M. Flynn, MD; Jaysson Brooks, MD; Brian Snyder, MD; Brandon A. Ramo, MD; Jason Howard, MD; O. Hank Mayer, MD; Hiroko Matsumoto, PhD; Lawrence Karlin, MD; Robert K. Lark, MD, MS; G. Ying Li, MD; Lindsay Andras, MD; Walter Truong, MD; Ryan Fitzgerald, MD; Kenny Kwan, MD; Nan Wu, MD; Amy McIntosh, MD; Susan Nelson, MD; Pediatric Spine Study Group; Patrick J. Cahill, MD  
Children's Hospital of Philadelphia, Philadelphia, PA

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**ePoster 46**

**Safety and Efficacy of a Novel Technique for Posterior Column Osteotomy in Patients with Adolescent Idiopathic Scoliosis Undergoing Posterior Spinal Fusion**

Alec Stall, MD; Ryan Ilgenfritz, MD; **Michael Read, MD;** Naveed Nabizadeh, MD; Tyler Anderson, MD  
Nemours Children's Hospital, Orlando, FL



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**ePoster 47**

**Surgical Site Infection Risk in Neuromuscular Scoliosis Undergoing Long Posterior Spinal Fusion**

**Ryan Sefcik MD**; Michael Kreft, MD; Richard Steiner, PhD; Lorena Floccari, MD;  
Todd Ritzman, MD, FAAOS, FAOA  
Summa Health System, Akron, OH

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**ePoster 48**

**The Effect of Preoperative Mental Health Diagnosis on Pain Management in Patients with Adolescent Idiopathic Scoliosis Undergoing Surgery**

James Bennett, MD; **Vivek M. Abraham, MD**; Hoon Chung; Nicholas Artz; Albert Andrews; Douglas Wells Jr.; Marc Cardelia, MD; Carl St. Remy, MD  
Children's Hospital of The King's Daughters, Norfolk, VA

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**ePoster 49**

**The Link Between a Growth Mindset and Health-related Quality of Life in AIS Patients on Brace Treatment.**

Joelle Liwen Wang, M.Psych.(Clinical); Nicole Kim Luan Lee, PhD; **Kevin Boon Leong Lim, FRCS(Eng), FRCSEd (Orth), MBA**  
KK Women's & Children's Hospital, Singapore

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**ePoster 50**

**Vitamin D Deficiency in Scheuermann's Disease is Associated with Increased Adverse Outcomes**

Shivan N. Chokshi, BBA; **Srikanth Mudiganty, MD**; R. Carter Clement III, MD, MBA;  
William Accousti, MD  
Childrens Hospital - New Orleans, New Orleans, LA

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**SPORTS**

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**ePoster 51**

**Comparison of KT-1000 Results in Hamstring and Quadriceps Tendon Graft Types after Adolescent ACL Reconstruction**

Julianna Kennedy; Jennifer Prue, MEd, ATC; Adam Weaver, DPT; **Matthew J. Brown, MD**  
Connecticut Children's Medical Center, Farmington, CT

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**ePoster 52**

**Postoperative Outcomes of Ischial Tuberosity Avulsion Fracture in Adolescents**

Brendan A. Williams, MD; Matthew Titus; **Nathan Chaclas**; Kathleen J. Maguire, MD; J. Todd Lawrence, MD, PhD  
Children's Hospital of Philadelphia, Philadelphia, PA



**ePoster 53**

**Relationship between Early Objective Measures and Patient Reported Outcomes after Adolescent Shoulder Stabilization Surgery**

Haya Qutob, DO; Adam P. Weaver, PT, DPT; Michael Brimacombe, PhD; Lisa Cruz; Nicholas Giampetruzzi, PT, MSPT; Allison E. Crepeau, MD; Michael Saper, DO, ATC, CSCS; Donna Pacicca, MD; Dylan P. Roman, PT, DPT; **Matthew Brown, MD**  
Connecticut Children's Medical Center, Farmington, CT

**SYNDROMES, DYSPLASIAS & GENETIC CONDITIONS**

**ePoster 54**

**Fidrisertib (IPN60130) for the Treatment of Fibrodysplasia Ossificans Progressiva: Methodology of the Randomized, Double-Blind, Placebo-Controlled Phase II FALKON Trial**

Negar Karimian, MD, PhD; Caroline Brard, PhD; **Jeanna Cooper, PharmD**; Fei Shih, MD, PhD  
Ipsen Biopharmaceuticals Canada, Mississauga, ON

**ePoster 55**

**Functional Independence of Children with Arthrogryposis**

**Lauren C. Hyer, MD**; Emily R. Shull, PhD; Lisa Wagner, DHS, OTR/L; David E. Westberry, MD  
Shriners Children's Greenville, Greenville, SC

**ePoster 56**

**Investigation into the Development and Progression of Coxa Vara after Intramedullary Rodding in Children with Osteogenesis Imperfecta**

**Currey Zalman, MS3**; Maegen Wallace, MD; Matthew VanOrmer, PhD  
University of Nebraska Medical Center, Omaha, NE

**ePoster 57**

**Radiographic Outcomes and Recurrence Rates of Pediatric Patients Treated with PRO-DENSE for Benign Bone Tumors**

Maralexa Martínez-Valcárcel; Robert Schmidt Cianchini; **Karim Masrouha, MD**  
NYU Langone Health, New York, NY

**ePoster 58**

**Understanding the Impact of Fibrodysplasia Ossificans Progressiva on the Quality of Life of Patients and Their Family Members Using an International Burden of Illness Survey: Results From the United States and Canada**

Mona Al Mukaddam, MD; Katherine S. Toder, MRA; Michelle Davis; Kim Croskery, PhD; Anne-Sophie Grandoulier, MSc; Elaine A. Böing, MPH; Nisreen Shamseddine, PharmD; Frederick S. Kaplan, MD; **Jeanna Cooper, PharmD**  
University of Pennsylvania, Philadelphia, PA



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References: 1. Jelin AC, O'Hare E, Blakemore K, et al. Skeletal dysplasias: growing therapy for growing bones. *Front Pharmacol*. 2017;8(79):1-6.

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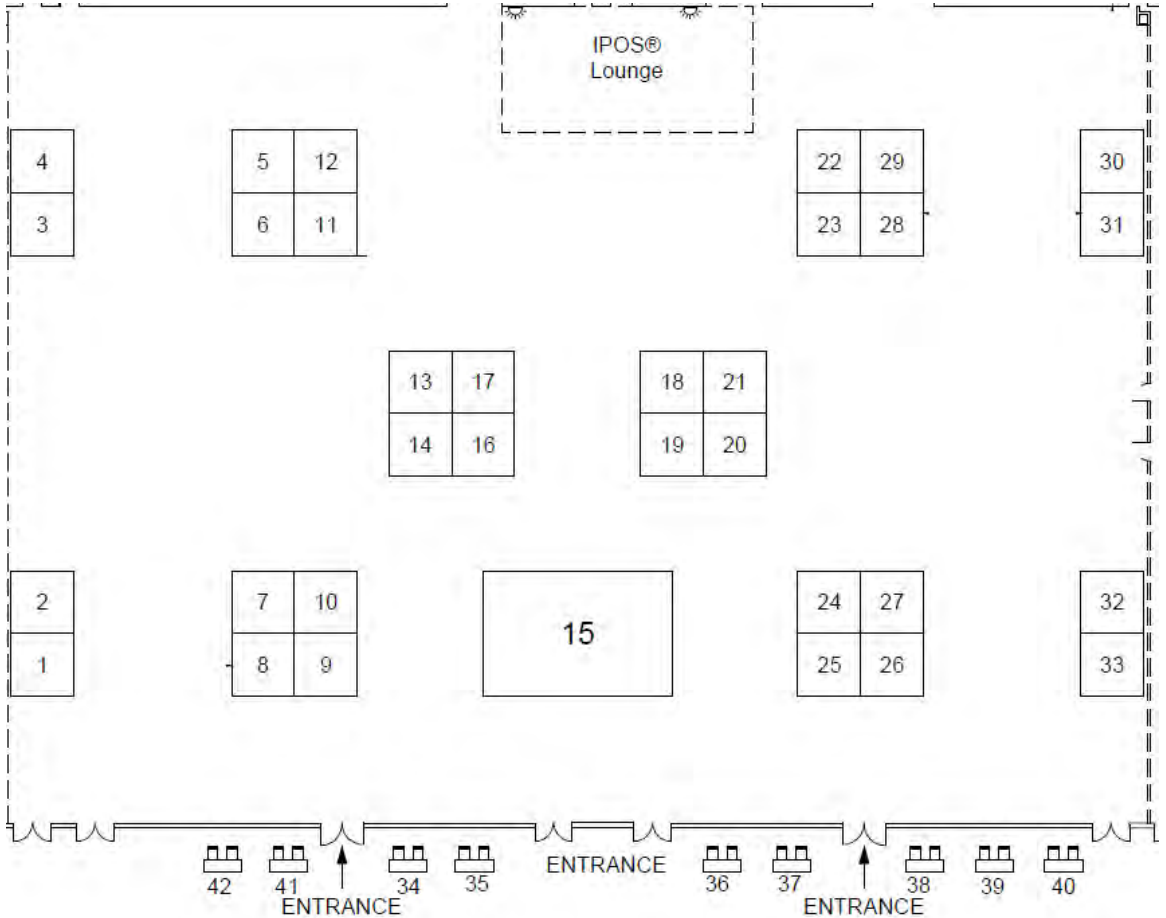
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## Exhibit Hall Pacifica 6-7



### Exhibit Hall Hours

Wednesday, December 6	7:00 AM–5:00 PM
Wednesday, December 6 Happy Hour in the Hall	2:35 PM–3:35 PM
Thursday, December 7	7:00 AM–4:00 PM
Friday, December 8	7:00 AM–3:00 PM



## ASSOCIATION OF CHILDREN'S PROSTHETIC-ORTHOTIC CLINICS

Booth 41

The Association of Children's Prosthetic-Orthotic Clinics (ACPOC) provides a comprehensive resource of treatment options provided by professionals who serve children, adolescents, and young adults with various musculoskeletal

differences. ACPOC is recognized as the worldwide leader in multidisciplinary rehabilitative care of children, adolescents, and young adults with musculoskeletal differences.



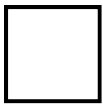
## AQUACAST LINER, BSN MEDICAL, AN ESSITY COMPANY

Booth 17

Essity aspires to be the global leader in health and hygiene.

Key brands driving this vision include Delta-Cast®, AquaCast®,

and Leukoplast®. Delta-Cast® is a global market leader in Fracture Management, drawing on a strong brand heritage while offering a comprehensive portfolio to rely on. Our newly added brand, AquaCast®, offers waterproof, breathable cast padding. Leukoplast® provides effective and efficient solutions for acute wound care.



## BIEDERMANN MOTECH

## BIEDERMANN MOTECH

Booth 18

100 YEARS OF INNOVATION

Since 1916, Biedermann has been working in synergy with world-class surgeons to solve clinical challenges through the development of next-generation technology. Specializing in spine since the 1980s has allowed us to become a leader in spinal innovation, bringing life-changing technology to the world through specialist surgeons.

Biedermann is a mid-sized, international, family-owned and operated group of companies with headquarters in the Black Forest, Germany (Villingen-Schwenningen) and the USA (Miami). Our focus is on the development, production, and distribution of innovative implants and instruments for spinal and extremity surgery. We research, develop, manufacture, and distribute high-quality implant systems in collaboration with healthcare professionals, technology partners, scientific institutions, and specialist companies with the goal of achieving improved clinical outcomes.



## BIOCOMPOSITES

Booth 2

At Biocomposites, we are distinct in that our team of specialists is singularly focused on the development of innovative calcium compounds for surgical use. Our

innovative products are at the forefront of calcium technology and range from bone grafts to matrices that can be used in the presence of infection. We are proud to be driving improved outcomes across a wide range of clinical applications, in musculoskeletal infection, trauma, spine and sports injuries, for surgeons and patients alike.





## BIOMARIN®

### BIOMARIN PHARMACEUTICALS Booth 10 and 27

BioMarin is a world leader in developing and commercializing innovative therapies for rare diseases driven by genetic causes. With a 20-year history, BioMarin remains steadfast

to its original mission—to bring new treatments to market that will make a big impact on small patient populations. These conditions are often inherited, difficult to diagnose, progressively debilitating, have few, if any, treatment options, and are usually ignored. Visit [www.biomarin.com](http://www.biomarin.com) to learn more.



### BLUEWAVE TECHNOLOGIES, INC. Booth 33

The Bluewave Disinfection and Deodorization System is specifically designed to treat pediatric orthopedic devices, such as cranial helmets, TLSOs, AFOs, etc. It uses our patented activated oxygen infusion technology and works in as little as 6 minutes. It is completely dry and leaves no

harmful residues, allowing the patient device to be put back on immediately after treatment. With over a 95% satisfaction rate from over 2,000 patients treated, Bluewave is the new standard for refreshing pediatric orthopedic devices and improving compliance and patient outcomes.



### CERAPEDICS Booth 26

Cerapedics is a global, commercial-stage orthopedics company that aspires to redefine the standard of care for bone repair by healing bones faster and at higher rates,

without compromising safety, so that patients can live their healthiest lives. Bone grafts, including Cerapedics' products, are used in over four million annual spine, orthopedics, trauma, and interventional procedures worldwide. i-FACTOR is a Class III FDA-approved product indicated for single-level ACDF. Cerapedics' next-generation product is currently being evaluated for use in lumbar interbody fusion through ASPIRE, a pivotal clinical study, and has been granted a Breakthrough Device Designation by the FDA.



## Children's National

### CHILDREN'S NATIONAL HOSPITAL Booth 42

Children's National Hospital is home to the only pediatric-focused orthopaedic program in the region. Consistently ranked among the top 10 pediatric orthopaedic surgery programs in the nation by U.S. News & World Report, our

specialists treat more than 25,000 patients annually. Our expertise and innovative care allow us to provide the most efficient treatment while obtaining the best patient outcomes. Our orthopaedic surgeons are leaders in a wide range of subspecialties, including spinal deformities, limb lengthening and reconstruction, pediatric and adolescent sports medicine, bone health and hip preservation. We have attained Level 1 Surgery Verification from the American College of Surgeons, a distinction that recognizes surgery centers that have improved surgical quality, prevented complications, reduced costs and saved lives. Our Spinal Fusion Surgical Home is the first pediatric program of its kind in the nation that delivers safe, effective and family-centered care to children undergoing posterior spinal fusion. To learn more about the programs and services offered at Children's National, please visit: [www.childrensnational.org/ortho](http://www.childrensnational.org/ortho).



### CURVEBEAM AI

Booth 7

CurveBeam AI's HiRise weight bearing CT imaging system provides true 3D alignment data of the entire lower extremities, as well as the distal upper extremities, at the fraction of the dose of conventional CT imaging. Pediatric programs using HiRise include The Paley Orthopedic & Spine Institute in Florida and The Luskyn Orthopaedic Institute for Children in Alliance with UCLA Health. Scans are reimbursed via CPT codes 73700 and 73200. Systems plug into a standard appliance outlet and can be operated by an RT®. Learn more at [www.curvebeamai.com](http://www.curvebeamai.com).



### DEPUY SYNTHES

Booth 14

DePuy Synthes, the Orthopaedics Company of Johnson & Johnson, provides one of the most comprehensive orthopaedics portfolios in the world that helps heal and restore movement for the millions of patients we serve.



### GILLETTE CHILDREN'S

Booth 35

Gillette Children's is a global beacon of care for patients who have brain, bone, and movement conditions that start in childhood. Gillette Children's hospital and clinics have earned national and world renown for excellence in the treatment of cerebral palsy, gait and motion analysis, pediatric orthopedics, pediatric neurology and neurosurgery, and pediatric rehabilitation medicine. Through innovative research, treatments, and supportive technologies, Gillette Children's focuses on what is possible. If a solution does not exist, we build it. If a question is unanswered, we research it. If a child has a dream, it becomes our dream, too.



### GLOBUS MEDICAL

Booth 13

Globus Medical, a leading musculoskeletal solutions company, is driving significant technological advancements across a complete suite of products ranging from spinal, trauma, and joint reconstruction therapies to imaging, navigation, and robotics. Founded in 2003, Globus' single-minded focus on advancing spinal surgery has made it the fastest growing company in the history of orthopedics. Globus is driven to utilize high-level engineering and technology to achieve pain-free, active lives for all patients with musculoskeletal disorders.



### GREEN SUN MEDICAL

Booth 4

Green Sun Medical has launched the dynamic adjustable Whisper Brace for Adolescent Idiopathic Scoliosis. The Whisper improves the quality of life for adolescents struggling with rigid clamshell braces by allowing them to move freely while maintaining continuous corrective pressure. The Whisper is enhanced with an advanced pressure sensor system that allows physicians to ensure that their patients are receiving the proper treatment in real time.



## IMED INNOVATIVE MEDICAL DEVICES Booth 1

Helping Children EveryWhere. We're iMed, dedicated to children's orthopedic care.

Our adjustable implantable and non-implantable devices are transforming pediatric orthopedics, bringing hope to children worldwide.



## IPSEN Booth 32

Oncology, Neuroscience and Rare Disease. We work to provide hope for patients whose lives are challenged by difficult-to-treat diseases, including rare diseases such as acromegaly and certain growth disorders. The patients we serve live with rare and debilitating diseases, and we pride ourselves on putting these patients first. We are always ready to listen to—and learn from—patients. Every day, our more than 5,700 employees worldwide, including over 600 in North America, work diligently to improve the lives of patients around the world. For more information please visit [www.ipsenus.com](http://www.ipsenus.com).

## KYOWA KIRIN Booth 12



Kyowa Kirin strives to create and deliver novel medicines with life-changing value. As a Japan-based Global Specialty Pharmaceutical Company, we apply cutting-edge science and expertise in antibody research and engineering to address

the needs of patients and society across multiple therapeutic areas, including Nephrology, Oncology, Immunology/Allergy and Neurology. Across four global regions – Japan, Asia Pacific, North America and EMEA/International – we are united by our shared values of commitment to life, teamwork/Wa, innovation, and integrity, and a drive to advance innovations that have a profound impact on patients. You can learn more about Kyowa Kirin North America at: <https://kkna.kyowakirin.com>.



## LIMB LENGTHENING AND RECONSTRUCTION SOCIETY (LLRS) Booth 40

The Limb Lengthening and Reconstruction Society (LLRS) is a professional organization of diverse orthopaedic surgeons, physicians, and allied health professionals devoted to advancing the science of limb reconstruction for patients of all ages. This includes fostering research, stimulating scientific

exchange, and collaboration to provide excellent clinical care in the arena of limb lengthening, limb reconstruction, extremity deformity correction, as well as complex fracture treatment.



## Medtronic

### MEDTRONIC

Booth 24

Bold thinking. Bolder actions. We are Medtronic. We lead global healthcare technology and boldly attack the most challenging health problems facing humanity by searching out and finding solutions. Our Mission — to alleviate pain, restore health, and extend life — unites a global team of 95,000+ passionate people. Powered by our diverse knowledge, insatiable curiosity, and desire to help all those who need it, we deliver innovative technologies that transform the lives of two people every second, every hour, every day. Expect more from us as we empower insight-driven care, experiences that put people first, and better outcomes for our world. In everything we do, we are engineering the extraordinary. Learn more at [www.medtronic.com](http://www.medtronic.com).



### MHE RESEARCH FOUNDATION

Booth 34

The MHE Research Foundation is a nonprofit 501(c) (3) organization dedicated to the support of Researchers, Physicians & Families dealing with Multiple Hereditary Exostoses Syndrome (MHE) Multiple Osteochondroma Syndrome (MO) a rare genetic bone disease. The MHE Research Foundation Five-point mission is to REACH, advance and support the following.

**RESEARCH:** to assist and support researchers in order to one day discover a treatment / cure for MHE. Our foundation works hand in hand with researchers and physicians from around the world in this mission.

**EDUCATION:** to provide vital clinical informational guides & accompanying video benefiting both families and physicians.

**ADVOCACY:** to bring awareness about this disease throughout the world.

**CLINICAL:** to provide resources directly to families enabling them to locate the medical care they require.

**HOPE:** the research being conducted on MHE/MO/HME & the informational resources will bring a better quality of life to the families affected by this disease around the world.



### NEMOURS CHILDREN'S HEALTH

Booth 36

Nemours Children's Health is an international destination in orthopedic care for complex disorders including skeletal dysplasia, cerebral palsy, osteogenesis imperfecta and spine conditions such as scoliosis. It also provides a full range of comprehensive orthopedic care through other highly specialized programs including sports medicine, clubfoot, complex hip disorders, fractures, and limb lengthening and reconstruction. Nemours has developed treatment protocols

and innovations used worldwide for the care of complex pediatric orthopedic conditions and has trained among the nation's largest number of residents and fellows in pediatric orthopedic surgery. Nemours orthopedic specialists are also actively involved in life-changing research and clinical trials focused on helping children with musculoskeletal diseases experience the world more independently.



### NUVASIVE

Booth 6

Globus Medical is committed to providing innovative technologies and industry-leading clinical support

to help surgeons and healthcare providers deliver better care around the globe. The Company provides one of the most comprehensive offerings of musculoskeletal solutions and enabling technologies to impact the care continuum, now including the procedurally integrated portfolio of NuVasive. The Company's employees are relentlessly focused on advancing patient care. For more information, please visit [www.globusmedical.com/uniting](http://www.globusmedical.com/uniting).



## nView medical

### NVIEW MEDICAL

Booth 23

nView medical is a young company focused on “what’s best for patients.” nView’s imaging and guidance system, the nView s1 + true-map navigation™, is a breakthrough 3D imaging system that provides instant 3D imaging in the operating room with very low levels of radiation. Improved workflow, imaging versatility, and being instrument/implant agnostic are only a few highlights. The nView platform has also added imaging versatility to many pediatric orthopedic procedures. It is a fully integrated AI-enabled imaging and navigation solution. The nView s1 + true-map is FDA cleared, has been used in more than 300 surgeries, and is commercially available.

Come check us out!

## NYRC BRACE WITH SMART BRACE TECHNOLOGY™

### NYRC BRACE

Booth 3

The **NYRC Brace™ with Smart Brace Technology™** is a tension-based, custom-made, three-dimensional back brace with wearable technology for scoliosis treatment. Each brace is highly customized to the patient’s anatomy and its native sagittal profile to maximize coronal and sagittal balance improvements. The strapping mechanism with wearable technology is a system that allows the continuous monitoring of the scoliosis brace use, strap tension, and patient balance. The NYRC Brace™ strapping mechanism is set up in the custom rigid shell according to the patient scoliosis curve pattern. The wearable device is able to communicate with a companion proprietary mobile application that stores and processes the collected data and is responsible for data synchronization. All the data related to the system, including data collected by the wearable device, is stored in a cloud infrastructure, which can be accessed through a proprietary web-based application.

Our company headquarters is located in New York and has a multidisciplinary team of experts who have extensive experience dealing with patients with scoliosis.

[www.nyrcbrace.com](http://www.nyrcbrace.com)

## ORTHOFIX®

### ORTHOFIX

Booth 19

The newly merged Orthofix-SeaSpine organization is a leading global orthopedics and spine company with a comprehensive portfolio of specialized orthopedic solutions, biologics, innovative spinal hardware, bone growth therapies, and a leading surgical navigation system. Its products are distributed in approximately 68 countries worldwide. The company’s pediatric portfolio specifically addresses the most challenging pediatric orthopedic conditions worldwide including bone deformity, trauma, and limb lengthening procedures. The company is headquartered in Lewisville, Texas, and has primary offices in Carlsbad, CA, with a focus on spine and biologics product innovation and surgeon education, and Verona, Italy, with an emphasis on product innovation, production, and medical education for orthopedics. The combined company’s global R&D, commercial, and manufacturing footprint also includes facilities and offices in Irvine, CA; Toronto, Canada; Sunnyvale, CA; Wayne, PA; Olive Branch, MS; Maidenhead, UK; Munich, Germany; Paris, France; and São Paulo, Brazil. To learn more, visit [Orthofix.com](http://Orthofix.com).



## ORTHOPEDIATRICS

Booth 15

Founded in 2006, OrthoPediatrix is an orthopedic company focused exclusively on advancing the field of pediatric orthopedics. As such, it has developed the most comprehensive product offering to the pediatric orthopedic market to improve the lives of children

with orthopedic conditions. OrthoPediatrix currently markets 50 surgical systems that serve three of the largest categories within the pediatric orthopedic market. This product offering spans trauma and deformity, scoliosis, and sports medicine/other procedures. OrthoPediatrix' global sales organization is focused exclusively on pediatric orthopedics and distributes its products in the United States and over 70 countries outside the United States. For more information, please visit [www.orthopediatrics.com](http://www.orthopediatrics.com).



## OSF HEALTHCARE/CHILDREN'S HOSPITAL OF ILLINOIS

Booth 22

**OSF HealthCare** is an integrated health system owned and operated by The Sisters of the Third Order of St. Francis, headquartered in Peoria, Illinois. OSF HealthCare has 16 hospitals – 10 acute care, five critical

access, one transitional care - with 2,131 licensed beds throughout Illinois and Michigan. OSF employs nearly 24,000 Mission Partners across 150+ locations; has two colleges of nursing; operates OSF Home Care Services, an extensive network of home health and hospice services; owns Pointcore, Inc., comprised of health care-related businesses; OSF HealthCare Foundation, the philanthropic arm for the organization; and OSF Ventures, which provides investment capital for promising health care innovation startups. In 2020, OSF OnCall was established, a digital health operating unit, including a hospital-at-home. OSF OnCall delivers care and services when, where, and how patients prefer to receive them. OSF HealthCare has been recognized by Fortune as one of the most innovative companies in the country. More at [osfhealthcare.org](http://osfhealthcare.org).



## PACIRA BIOSCIENCES, INC.

Booth 8

Pacira BioSciences, Inc. (Nasdaq: PCRX) is committed to providing non-opioid options to as many patients as possible to redefine the role of opioids as rescue therapy only. The company is also developing innovative interventions to address debilitating conditions

involving the sympathetic nervous system, such as cardiac electrical storm, chronic pain, and spasticity. Pacira has three commercial-stage non-opioid options for treating pain: EXPAREL® (bupivacaine liposome injectable suspension), a long-acting, local analgesic currently approved for postsurgical pain management; ZILRETTA® (triamcinolone acetonide extended-release injectable suspension), an extended-release, intra-articular, injection indicated for the management of osteoarthritis knee pain; and iovera®, a novel, handheld device for delivering immediate, long-acting, drug-free pain control using precise, controlled doses of cold temperature to a targeted nerve. To learn more about Pacira, including the corporate mission to reduce overreliance on opioids, visit [www.pacira.com](http://www.pacira.com).



## PEDIATRIC ORTHOPAEDIC PRACTITIONERS SOCIETY

Booth 38

The Pediatric Orthopaedic Practitioners Society (POPS) is a non-profit, volunteer-run organization, established in 2005 that exists to advance and enhance the care provided by the Advanced Practice Nurse and Physician Assistant specializing in Pediatric Orthopaedics. By bringing members together, we aim to support continuing education, specialized training, research collaboration, mentoring, networking and promotion of our role.



Rubin Institute for  
Advanced Orthopedics

**CARE BRAVELY**

## RUBINS INSTITUTE FOR ADVANCED ORTHOPEDICS Booth 39

The 34th Annual Baltimore Limb Deformity Course will take place August 21-25, 2024. This course is intended for orthopedic surgeons, podiatrists, and allied health professionals who treat lower extremity deformities. No prior experience required. The course features lectures, deformity planning sessions, innovative apps, case presentations from experts, and an internationally renowned faculty.

The course will introduce basic and advanced limb reconstruction concepts, including limb alignment, limb lengthening, corrective osteotomies, and internal and external fixation. The 2023 course was attended by clinicians from 37 countries and 30 U.S. states.



## SMITH+NEPHEW

Booth 42

Smith+Nephew is a global medical technology business with global leadership positions in Orthopaedic Reconstruction,

Sports Medicine, Trauma Fixation, Extremities & Limb Restoration, and Advanced Wound Management. Visit [www.smith-nephew.com](http://www.smith-nephew.com) for more information.



## STRYKER

Booth 9

At Stryker, we deliver the total spine experience, empowering our customers to keep the world moving. Together, we do more to challenge the standard, respond to clinical needs

and pioneer new possibilities. Our core technologies include biologic solutions, spinal implants and surgical instruments for use in spine procedures. Our enabling technologies include digital health, guidance and imaging for both cranial and spine procedures.



## ULTRAGENYX

Booth 31

Ultragenyx is a biopharmaceutical company committed to bringing novel products to patients for the treatment of serious rare and ultrarare genetic diseases. The company has built

a diverse portfolio of approved therapies and product candidates aimed at addressing diseases with high unmet medical need and clear biology for treatment, for which there are typically no approved therapies treating the underlying disease. For more information visit: [www.ultragenyx.com](http://www.ultragenyx.com) or [medinfo@ultragenyx.com](mailto:medinfo@ultragenyx.com).



## WOLTERS KLUWER

Booth 37

Wolters Kluwer provides trusted clinical technology and evidence-based solutions that engage clinicians, patients,

researchers, and the next generation of healthcare providers. With a focus on clinical effectiveness, research and learning, safety and surveillance, and interoperability and data intelligence, our proven solutions drive effective decision-making and consistent outcomes across the continuum of care.



## ZIMVIE SPINE

Booth 21

ZimVie Spine is dedicated to restoring daily life for patients through comprehensive spinal solutions with a focus on education, training, and clinical support for surgeons. Along

with cervical disc replacement, vertebral body tethering, comprehensive spinal fixation, and fusion implants, ZimVie Spine offers minimally invasive procedural solutions and a complete suite of biologic solutions.



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- Pediatric foot deformities, including clubfoot
- Spine injuries and deformities, including spina bifida and skeletal dysplasia



[ortho.wustl.edu/kids](https://ortho.wustl.edu/kids)  
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Gillette Children's is internationally recognized for treating pediatric orthopedic and spine conditions. From innovative treatments and procedures to never-been-done-before research, Gillette has the orthopedic expertise to care for the unique needs of children, teens, and adults who have highly complex bone and movement conditions.



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by dreams, not diagnosis.



It shall be the policy of the Pediatric Orthopaedic Society of North America (POSNA) to be in strict compliance with all Federal and State Antitrust laws, rules, and regulations. Therefore, these policies and procedures apply to all membership, board, committee, and all meetings attended by representatives of POSNA.

Discussions at POSNA meetings often cover a broad range of topics pertinent to the interests or concerns of orthopaedic surgeons. As a general rule, except as noted below, discussions at POSNA meetings can address topics without raising antitrust concerns if the discussions are kept scrupulously free of even the suggestion of private regulation of the profession. However, a number of topics that might be (and have been) discussed at POSNA meetings may raise significant complex antitrust concerns. These include:

- Membership admissions, rejections, restrictions, and terminations;
- Method of provision and sale of POSNA products and services to non-members;
- Restrictions in the selection and requirements for exhibitors at the POSNA Annual Meeting or in CME activities;
- Collecting and distributing certain orthopaedic practice information, particularly involving practice charges and costs;
- Obtaining and distributing orthopaedic industry price and cost information;
- Professional certification programs;
- Group buying and selling; and
- Inclusions or exclusion of other medical societies in organizational activities or offerings.

When these and related topics are discussed, the convener or members of the POSNA group should seek counsel from its General Counsel.

POSNA urges its Board, committees, and other groups not to participate in discussions that may give the appearance of or constitute an agreement that would violate the antitrust laws. Notwithstanding this reliance, it is the responsibility of each POSNA Board or committee member to avoid raising improper subjects for discussion. This policy has been prepared to ensure that POSNA members and other participants in POSNA meetings are aware of this obligation.

The “Do Not’s” and “Do’s” presented below highlight only the most basic antitrust principles. POSNA members and others participating in POSNA meetings should consult with the General Counsel in all cases involving specific questions, interpretations, or advice regarding antitrust matters.

### Do Not’s

1. Do not, in fact or appearance, discuss or exchange information regarding:
  - a. Individual company prices, price changes, price differentials, mark-ups, discounts, allowances, credit terms, etc. or any other data that may bear on price, such as costs, production, capacity, inventories, sales, etc.
  - b. Raising, lowering, or “stabilizing” orthopaedic prices or fees;
  - c. What constitutes a fair profit or margin level;
  - d. The availability of products or services; or
  - e. The allocation of markets, territories or patients.
2. Do not suggest or imply that POSNA members should or should not deal with certain other persons or companies.
3. Do not foster unfair practices regarding advertising, standardization, certification or accreditation.
4. Do not discuss or exchange information regarding the above matters during social gatherings, incidental to POSNA-sponsored meetings.
5. Do not make oral or written statements on important issues on behalf of POSNA without appropriate authority to do so.



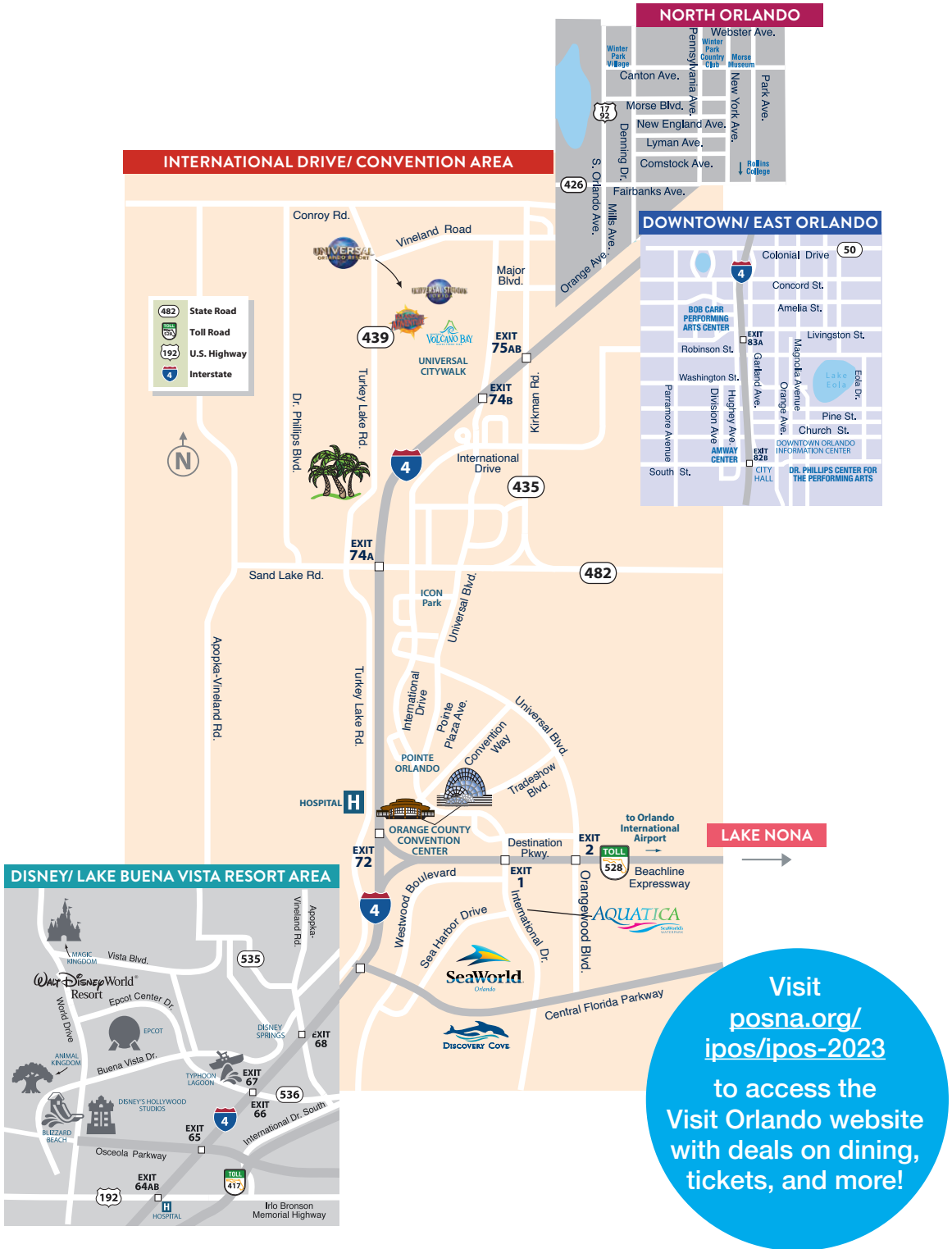
### The Do's

1. Do adhere to a prepared agenda for all POSNA meetings. It is generally permissible for agendas to include discussions of such varied topics as professional economic trends, advances, and problems in relevant technology or research, various aspects of the science and art of management, and relationships with local, state, or federal governments.
2. Do object whenever meeting summaries do not accurately reflect the matters that occurred.
3. Do consult with General Counsel on all antitrust questions relating to discussions at POSNA meetings.
4. Do object to and do not participate in any discussions or meeting activities that you believe violate the antitrust laws; dissociate yourself from any such discussions or activities and leave any meeting in which they continue.

### Special Guidelines for Collecting and Distributing Information

The collection and distribution of information regarding business practices is a traditional function of associations and is well-recognized under the law as appropriate, legal, and consistent with the antitrust laws. However, if conducted improperly, such information gathering and distributing activities might be viewed as facilitating an express or implied agreement among association members to adhere to the same business practices. For this reason, special general guidelines have developed over time regarding association's reporting on information collected from and disseminated to members. Any exceptions to these general guidelines should be made only after discussion with General Counsel. These general guidelines include:

1. Member participation in a statistical reporting program is voluntary. A statistical reporting program should be conducted without coercion or penalty. Non-members should be allowed to participate in a statistical reporting program if eligible; however, if a fee is involved, non-members may be charged a reasonably higher fee than members.
2. Information should be collected via a written instrument that clearly sets forth what is being requested.
3. The data that is collected should be about past transactions or activities, particularly if the survey deals with prices and price terms (including charges, costs, wages, benefits, discounts, etc.), it should be historic, i.e., more than three months old.
4. The data should be collected by either POSNA or an independent third party not connected with any one member.
5. Data on individual orthopaedic surgeons should be kept confidential.
6. There should be a sufficient number of participants to prevent specific responses or data from being attributable to any one respondent. As a general rule, there should be at least five respondents reporting data upon which any statistic or item is based, and no individual's data should represent more than 25% on a weighted average of that statistic or item.
7. Composite/aggregate data should be available to all participants—both members and non-members. The data may be categorized, e.g., geographically, and ranges and averages may be used. No member should be given access to the raw data. Disclosure of individual data could serve to promote uniformity and reduce competition.
8. As a general rule, there should be no discussion or agreement as to how members and non-members should adjust, plan, or carry out their practices based on the results of the survey. Each member should analyze the data and make business decisions independently.



Visit [posna.org/ipos/ipos-2023](http://posna.org/ipos/ipos-2023) to access the Visit Orlando website with deals on dining, tickets, and more!



## EXPERIENCE ORLANDO'S DISTINCTIVE DINING & NIGHTLIFE

Explore Orlando's expansive dining and entertainment areas, where you can choose from dishes prepared by nationally recognized chefs and local legends, or enjoy live music, sleek lounges, and other options that are all part of our brilliant nightlife. No matter where you choose to go in Orlando, you'll find a vibrant, walkable entertainment area close by, including those featured here. For a complete list, please visit [ORLANDOMEETING.COM](http://ORLANDOMEETING.COM).

### CONVENTION AREA

#### DINING

A Land Remembered  
(Rosen Shingle Creek)  
Bahama Breeze Island Grille  
BJ's Restaurants & Brewhouse  
Cafe Tu Tu Tango\*  
Cala Bella (Rosen Shingle Creek)  
The Capital Grille  
Ciao Italia Italian Ristorante  
Cooper's Hawk Winery & Restaurant  
Cuba Libre Restaurant & Rum Bar  
David's Club Bar & Grill (Hilton Orlando)  
Del Frisco's Double Eagle Steak House  
Everglades Restaurant  
(Rosen Centre Hotel)  
Fiorenzo (Hyatt Regency Orlando)  
Fogo de Chao Brazilian Steakhouse  
The Grill (Marriott's Grande Vista)  
Hanamizuki Japanese Restaurant  
Harry's Poolside Bar & Grill  
(Rosen Centre Hotel)

Jack's Place (Rosen Plaza Hotel)  
Joe's Crab Shack  
Knife & Spoon (The Ritz-Carlton Orlando,  
Grande Lakes)  
Mia's Italian Kitchen  
The Oceanaire Seafood Room Orlando  
Primo by Melissa Kelly (JW Marriott  
Orlando, Grande Lakes)  
The Pub Orlando  
Rodizio Grill  
Sakura Sushi (Rosen Inn Closest to Universal)  
Saltgrass Steakhouse  
Shogun Japanese Restaurant  
(Rosen Inn closest to Universal)  
Spencer's for Steaks and Chops  
(Hilton Orlando)  
Tapa Toro Tapas Bar & Paella Pit  
Taverna Opa  
Vincenzo Cucina Italiana  
Walk-On's Bistreaux  
Yard House

#### ENTERTAINMENT

3NINE (Rosen Plaza Hotel)  
Andretti Indoor Karting & Games\*  
Axecelsior  
Dave & Buster's Inc.\*  
Dezerland Park\*  
The Hampton Social\*  
Howl at the Moon  
ICEBAR Orlando  
ICON Park\*  
Kings Dining & Entertainment\*  
Main Event Entertainment Orlando\*  
Mango's Tropical Cafe Orlando\*  
Ole Red\*  
Pointe Orlando\*  
Rocks (Hyatt Regency Orlando)  
Tin Roof\*  
Topgolf\*

### DISNEY/ LAKE BUENA VISTA RESORT AREA

#### DINING

A Richard Blais Florida Kitchen  
(Hyatt Regency Grand Cypress)  
Boma – Flavors of Africa  
(Animal Kingdom Lodge)  
Bull & Bear (Waldorf Astoria)  
California Grill (Contemporary Resort)  
Capa Steakhouse & Bar  
(Four Seasons Resort Orlando)  
Chef Art Smith's Homecomin' Florida Kitchen  
Citricos (Grand Floridian)  
City Works Eatery & Pour House  
Deep Blu Seafood Grill (Wyndham Grand  
Orlando Resort Bonnet Creek)  
The Edison\*  
Four Flamingos, A Richard Blais Florida  
Kitchen (Hyatt Regency Grand Cypress)  
Flying Fish Café  
Frontera Cucina  
Il Mulino New York Trattoria (Swan Resort)  
Jaleo by José Andrés

Jiko – The Cooking Place  
(Animal Kingdom Lodge)  
La Luce (Hilton Orlando Bonnet Creek)  
Lakeside Bar and Grill  
Landry's Seafood House  
Maya Grill (Coronado Springs)  
Morimoto Asia  
Narcoossee's (Grand Floridian)  
'Ohana (Polynesian)  
Paddlefish  
Planet Hollywood  
Rainforest Café  
Ravello  
Sanaa (Animal Kingdom Lodge)  
Sear & Sea (JW Marriott Orlando Bonnet  
Creek Resort & Spa)  
Shula's Steak House (Dolphin Resort)  
Siro Italian Kitchen (Orlando World Center  
Marriott)  
STK Orlando  
Terralina Crafted Italian

Todd English's bluezoo (Dolphin Resort)  
Toledo (Coronado Springs)  
T-REX  
Trattoria al Forno  
The Venetian Chop House (Caribe Royale)  
Victoria & Albert's  
Whispering Canyon Café (Wilderness Lodge)  
Wolfgang Puck Bar & Grill  
Yachtsman Steakhouse (Yacht Club)  
Zeta Asia (Signia by Hilton Orlando  
Bonnet Creek)

#### ENTERTAINMENT

Cirque Du Soleil – Drawn to Life  
Disney's Boardwalk\*  
Disney Springs\*  
ESPN Club\*  
Jock Lindsey's Hangar Bar\*  
Kimono's (Swan Resort)\*  
Rix Sports Bar & Grill (Coronado Springs)\*  
Splitville Luxury Lanes\*

\*Location has both dining and entertainment available.

## POSNA Membership

The Pediatric Orthopaedic Society of North America (POSNA) is a not-for-profit professional organization of over 1,500 surgeons, physicians, and allied health members passionately dedicated to advancing musculoskeletal care for children and adolescents through education, research, and quality care.

**Mission:** To advance pediatric orthopaedics by promoting education, research, and quality care

**Vision:** A world with optimal musculoskeletal health for all children

Diversity Statement: The Pediatric Orthopaedic Society of North America (POSNA) values diversity, and we are committed to creating an equitable and inclusive environment for all of our current and future members. We strive to eliminate healthcare disparities and deliver the highest quality orthopaedic care to all the children and families we serve. Please visit [posna.org/our-society](https://posna.org/our-society) to view the full statement.

POSNA members benefit from a robust and diverse array of resources that advance and fulfill the society's commitment to education, research, and quality care. There are excellent opportunities to forge enduring professional relationships and mentorship. Many members utilize the POSNA platform and its collegial network of colleagues to develop innovative, multi-institution, and multi-national programs.

### Benefits:

- Reduced registration fees for Annual Meeting and International Pediatric Orthopaedic Symposium (IPOS®)
- \$400,000+ in research awarded annually
- Committee Appointment Program (CAP) – make your voice heard in 30+ committees
- Participate in the POSNA-Sponsored Traveling Fellowship Program
- Reduced subscription rate to the *Journal of Pediatric Orthopaedics*
- Become a mentor or mentee through the Mentorship Program
- Be a part of the POSNA Safe Surgery Program (PSSP)

Become a  
POSNA Member and  
Advance Your Pediatric  
Orthopaedic Career!

Applications for 2024  
are closed. Stay tuned  
for more information on  
membership for 2025.

## Additional Education

- POSNA.org Study Guide – over 100 topics available!
- *JPOSNA*® - The official Journal of POSNA.
- POSNAcademy - POSNA's video education platform featuring webinars, tutorials, past meeting content, podcasts, and more!
- The Resident Review blog

## Follow us!

[POSNA.org](https://posna.org)

[OrthoKids.org](https://OrthoKids.org)

[JPOSNA.org](https://JPOSNA.org)

[POSNAcademy.org](https://POSNAcademy.org)



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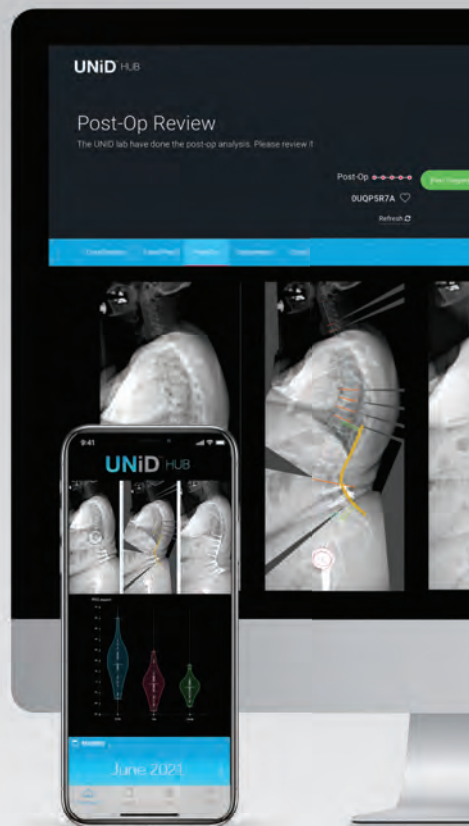


# Medtronic

UNiD™ Adaptive Spine Intelligence

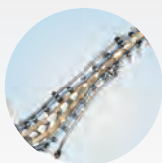
# Plan. Execute. Analyze.

UNiD™ ASI uses artificial intelligence—backed by data science—to produce implants industrially manufactured to achieve patient-specific spinal alignment goals. Powered by data aggregation and a concierge planning service, the plan, execute, analyze process creates an iterative virtuous cycle that improves with each procedure. Choose the confidence of data and the convenience of patient-specific alignment to your OR with UNiD™ ASI.



FDA cleared for use with UNiD™ patient-specific rods.

CD Horizon™  
Solera™ System



Infinity™ OCT  
System



CD Horizon™ Solera™  
Voyager™ System



To learn more, contact your Medtronic representative.

Implantable devices are intended for spinal fusion, fixation, and/or stabilization in certain patient populations, quantities, regions of/approaches to the spine; have certain bone graft option limitations and supplemental device requirements; and are indicated to treat one or more pathologies only as listed in their labeling.

For instruments and implant-specific indications, contraindications, warnings, precautions, and other important medical information, please see the package inserts for the respective product(s). An electronic version of the package insert may be found at <https://bit.ly/3uPauYK>.

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@Medtronic\_Spine

# Save the Date

## Future POSNA Annual Meetings

**EPOSNA (Combined POSNA and EPOS Meeting)**  
**May 8-11, 2024**  
National Harbor, MD

## Future IPOS® Meetings

**December 3-7, 2024**  
Orlando, FL

**December 2-6, 2025**  
Orlando, FL

**December 1-5, 2026**  
Orlando, FL



**POSNA**  
PEDIATRIC ORTHOPAEDIC SOCIETY  
OF NORTH AMERICA

**1 Tower Lane, Suite 2410**  
**Oakbrook Terrace, IL 60181**  
**Phone: (630) 478-0480**  
**E-mail: [ipos@posna.org](mailto:ipos@posna.org)**

The Pediatric Orthopaedic Society of North America (POSNA) is a not-for-profit professional organization of over 1,500 surgeons, physicians, and allied health members passionately dedicated to advancing musculoskeletal care for children and adolescents through education, research, and quality care.

### IPOS® Mission Statement

To provide the highest quality, most comprehensive, and most interactive pediatric orthopaedic education to learners and practitioners of all levels.

### IPOS® Vision Statement

Through our inspiring international faculty, innovative programming, and vibrant interactions among all attendees, IPOS® aspires to be the best pediatric orthopaedic educational event in the world.

