### Wednesday, April 6, 2022

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>12:00-14:30</td>
<td>PRE-MEETING COURSE: THE PAEDIATRIC KNEE: TRAUMATIC INJURIES</td>
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<tr>
<td>14:30-15:00</td>
<td>Coffee break</td>
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<tr>
<td>15:00-17:50</td>
<td>PRE-MEETING COURSE: THE PAEDIATRIC KNEE: TRAUMATIC INJURIES</td>
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<tr>
<td>18:00-20:00</td>
<td>WELCOME CEREMONY</td>
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### Thursday, April 7, 2022

<table>
<thead>
<tr>
<th>Time</th>
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<tbody>
<tr>
<td>08:00-08:20</td>
<td>OPENING CEREMONY</td>
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<tr>
<td>08:20-09:20</td>
<td>BASIC SCIENCE</td>
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<tr>
<td>09:20-10:20</td>
<td>BEST OF LOWER LIMB DEFORMITY</td>
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<tr>
<td>10:20-10:50</td>
<td>Coffee break</td>
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<tr>
<td>10:50-12:00</td>
<td>DEVELOPMENTAL DYSPLASIA OF THE HIP</td>
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<tr>
<td>12:00-12:50</td>
<td>MEET THE MENTOR</td>
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<td>12:50-13:50</td>
<td>Lunch break</td>
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<tr>
<td>13:50-14:50</td>
<td>INDUSTRY SIMPOSUM</td>
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<tr>
<td>14:50-15:40</td>
<td>HIP 1</td>
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<tr>
<td>15:40-16:30</td>
<td>HIP 2</td>
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<tr>
<td>16:30-17:00</td>
<td>Coffee break</td>
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<tr>
<td>17:00-18:00</td>
<td>SPINE 1</td>
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<td>18:00-19:00</td>
<td>SPINE 2</td>
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<tr>
<td>19:00-20:00</td>
<td>WOW MEETING</td>
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### Friday, April 8, 2022

<table>
<thead>
<tr>
<th>Time</th>
<th>TIVOLI CONGRESS HALL</th>
<th>AUDITORIUM CARSTENSEN</th>
<th>HARLEKIN &amp; COLUMBINE</th>
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<tbody>
<tr>
<td>08:30-09:30</td>
<td>BEST OF TRAUMA</td>
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<tr>
<td>09:30-10:30</td>
<td>BEST OF HIP &amp; NEUROMUSCULAR</td>
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<td>10:30-11:00</td>
<td>Coffee break</td>
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<tr>
<td>11:00-13:00</td>
<td>GENERAL ASSEMBLY</td>
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<td>13:00-14:00</td>
<td>Lunch break</td>
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<tr>
<td>14:00-15:00</td>
<td>INDUSTRY SIMPOSIUM</td>
<td>INDUSTRY SIMPOSIUM</td>
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<td>15:00-16:00</td>
<td>LOWER LIMB DEFORMITY</td>
<td>UPPER LIMB</td>
<td>TUMOURS / MISCELLANEOUS</td>
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<tr>
<td>16:00-17:00</td>
<td>STUDY GROUP NEUROMUSCULAR</td>
<td>STUDY GROUP UPPER LIMB</td>
<td>STUDY GROUP TUMOURS</td>
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<td>17:00-18:00</td>
<td>STUDY GROUP TRAUMA</td>
<td>STUDY GROUP SPINE</td>
<td>STUDY GROUP METABOLICS</td>
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### Saturday, April 9, 2022

<table>
<thead>
<tr>
<th>Time</th>
<th>TIVOLI CONGRESS HALL</th>
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<tbody>
<tr>
<td>08:00-09:00</td>
<td>BEST OF THE BEST</td>
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<td>09:00-10:00</td>
<td>BEST E-POSTERS</td>
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<td>10:00-10:30</td>
<td>PRESIDENTIAL GUEST LECTURE</td>
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<td>10:30-11:00</td>
<td>Coffee break</td>
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<tr>
<td>11:00-12:00</td>
<td>AWARDS 2020, PRO MAXIMIS MERITIS, TRAVELLING FELLOWSHIPS</td>
</tr>
<tr>
<td>12:00-12:30</td>
<td>PRESIDENCY TRANSFER</td>
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<tr>
<td>12:30-13:00</td>
<td>CLOSING REMARKS</td>
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PRE-MEETING COURSE : THE PAEDIATRIC KNEE: TRAUMATIC INJURIES

AUDITORIUM CARSTENSEN

Chairs: Martin Gottliebsen (Denmark), Marco Turati (Italy)

12:00 Introduction
12:10 Marco Turati (Italy)

12:10 SESSION 1: PATELLO-FEMORAL INSTABILITY

13:25 Chairs: Julio Duart (Spain), Martin Gottliebsen (Denmark)

12:10 Epidemiology and aetiology. Treatment of first time dislocation
Jaakko Sinikumpu (Finland)

12:20 Imaging, measurements and classifications in PF instability
Nicolas Nicolau (UK)

12:30 Surgical procedures according to growth potential
Daniel Green (USA)

12:45 MPFL and medial quadriceps tendon-femoral ligament for PFI: Surgical
technique and outcomes
Mininder Kocher (USA)

13:00 How to manage MPFLR failures?
Franck Accadbled (France)

13:10 Discussion

13:25 SESSION 2: OSTEOCHONCRITIS DISSECANS

14:30 Chairs: Nicolas Nicolau (UK), Jaakko Sinikumpu (Finland)

13:25 Epidemiology, aetiology and natural history
Marco Turati (Italy)

13:35 Imaging and Instability concept & criteria
Franck Accadbled (France)

13:45 OCD of medial femoral condyle: Surgical strategies
Joao Cabral (Portugal)

13:55 OCD in lateral femoral condyle / patella / trochlea / tibial plateau: How to
 treat them?
Julio Duart (Spain)
PRE-MEETING COURSE: THE PAEDIATRIC KNEE: TRAUMATIC INJURIES

AUDITORIUM CARSTENSEN

13:25 SESSION 2: OSTEOCHONCRITIS DISSECANS (cont.)

14:05 News from the ROCK Study Group
Mininder Kocher (USA), Daniel Green (USA)

14:20 Discussion

14:30 Coffee break

15:00 SESSION 3: PEDIATRIC ACL I

16:10 Chairs: Virginie Pollet (UK), Marco Turati (Italy)

15:00 Epidemiology, diagnostic process and imaging
Julio Duart (Spain)

15:10 Non operative management: How? Indications and risks
Virginie Pollet (UK)

15:20 Transphyseal or all-epiphyseal ACL reconstruction? The battle
Franck Accadbled (France), Nicolas Nicolau (UK)

15:30 Extraphyseal ACL reconstruction
Mininder Kocher (USA)

15:45 Quadriceps tendon autograft in skeletally ACL reconstruction
Daniel Green (USA)

16:00 Discussion
PRE-MEETING COURSE: THE PAEDIATRIC KNEE: TRAUMATIC INJURIES

16:10 SESSION 4: PEDIATRIC ACL II
17:00 Chairs: Joao Cabral (Portugal), Jaakko Sinikumpu (Finland)

16:10 Is there a role of lateral tenodesis in children with ACL injuries?
Daniel Green (USA)

16:20 ACL tears and associated lesions in skeletally immature patients
Marco Turati (Italy)

16:30 ACL Injury prevention programs in pediatric sports
Virginie Pollet (UK)

16:40 Pediatric ACL rerupture: Risk factors and management
Mininder Kocher (USA)

16:50 Discussion

17:00 SESSION 5: MENISCAL INJURIES
17:50 Chairs: Franck Accadbled (France), Martin Gottliebsen (Denmark)

17:00 MRI: Anatomical and pathologic characteristics in traumatic meniscal tears
Joao Cabral (Portugal)

17:10 Epidemiology, aetiology and physical examination
Manoj Ramachandran (UK)

17:20 Surgical management of traumatic meniscal tears
Manoj Ramachandran (UK)

17:30 Rehabilitation, return to play and performance after ACL reconstruction
Jaakko Sinikumpu (Finland)

17:40 Discussion

18:00 WELCOME CEREMONY
20:00
08:00 OPENING CEREMONY

08:20 BASIC SCIENCE

08:20 Chairs: Darko Anticevic (Croatia), Joachim Horn (Norway)
E-Moderator: Federico Canavese (France)

08:20 Can manipulation of the mechanical environment improve regenerate
bone healing during the consolidation phase of distraction osteogenesis?
Christopher Iobst, Vaida Glatt, Anirejuorite Bazor, Mikhail Samchukov,
Alex Cherkashin, Satbir Singh (USA)

08:25 The influence of transepiphyseal implantation of Mg-Zn-Ca screws on the
growth plate of growing sheep
Romy Marek, Valentin Herber, Patrick Holweg, Maxim Honea, Annelie
Martina Weinberg (Austria)

08:30 Changes in the avascular area of the meniscus using growth plate
chondrocytes in a pig model
Ryszard Tomaszewski, Magdalena Rost-Roszkowska (Poland)

08:35 Uncovering pathways regulating chondrogenic differentiation of CHH
fibroblasts
Alzbeta Chabronova¹, Guus van den Akker¹, Mandy Meekels-Steinbusch¹,
Franziska Friedrich², Andy Cremers¹, Don Surtel¹, Mandy Peffers³,
Lodewijk van Rhijn¹, Ekkehart Lausch², Bernhard Zabel², Marjolein Caron¹,
Tim Welting¹ (¹The Netherlands, ²Germany, ³UK)

08:40 Discussion

08:50 Anatomical variations of the lateral cutaneous femoral nerve in a paediatric
population - an in vivo study
Line Kjeldgaard Pedersen, Lise Larsen, Ole Rahbek, Bjarne Moeller-Madsen
(Denmark)
08:20 BASIC SCIENCE (cont.)
09:20

08:55 Systematic isolation of key parameters for estimating skeletal maturity on AP wrist radiographs
OP-006
Ryan Furdock, Lauren Huang, James Sanders, Daniel Cooperman, Raymond Liu (USA)

09:00 Immersive VR increased the pain threshold and reduced anxiety in children
OP-007
Lucas Yang Vincents Fisker, Line Kjeldgaard Pedersen, Jan Duedal Rölfing, Alexander Juan Møller-San Pedro, Peter Ahlburg, Mette Veien, Lene Vase, Bjarne Moeller-Madsen (Denmark)

09:05 An ovine study of retrograde femoral nail removal with and without fat grafting across the open distal femoral physis
OP-008
Kouami Amakoutou, Alex Benedick, Derrick M. Knapik, Lewis Zirkle, James M. Anderson, Raymond Liu (USA)

09:10 Discussion

09:20 BEST OF LOWER LIMB DEFORMITY
10:20 Chairs: Jaroslaw Czubak (Poland), Mark Eidelman (Israel)
E-Moderator: Dmitry Popkov (Russian Federation)

09:20 The long-term effect of femoral leg lengthening on muscle strength - a 10 year follow-up
OP-009
Bernhard Speth, Corina Nüesch, Petros Ismailidis, Marc Schmid, Andreas Krieg (Switzerland)

09:25 The Precice plate: An initial experience
OP-010 Claire Shannon, Aaron Huser, Dror Paley (Poland)
09:20  BEST OF LOWER LIMB DEFORMITY (cont.)

09:30  How balance changes during growth in pediatric patients: the role of age and patient anthropometry
       Luca Rigamonti\textsuperscript{1,2}, Marco Turati\textsuperscript{2}, Massimiliano Piatti\textsuperscript{2}, Diego Gaddi\textsuperscript{2}, Carlo Alberto Augusti\textsuperscript{2}, Andrea Riganti\textsuperscript{2}, Marta Gandolla\textsuperscript{2}, Giovanni Zatti\textsuperscript{2}, Aaron Krych\textsuperscript{1}, Todd Milbrandt\textsuperscript{1}, Marco Bigoni\textsuperscript{2} (\textsuperscript{1}USA, \textsuperscript{2}Italy)

09:35  Discussion

09:50  The utility of the modified fels knee skeletal maturity system in limb length prediction
       Ryan Furdock, Elizabeth Cho, Alex Benedick, Jiao Yu, Abdus Sattar, Raymond Liu (USA)

09:55  Congenital pseudarthrosis of the tibia: rate and time to bone union following contralateral vascularized tibial periosteal graft transplantation in 29 cases
       Francisco Soldado, Paula Diaz-Gallardo, Jorge Giménez Knorr (Spain)

10:00  Congenital posteromedial bowing of the tibia: comparison of early and late lengthening
       Bhushan Sagade, Naeem Jagani, Ishani Chaudhary, Milind Chaudhary (India)

10:05  Discussion

10:20  Coffee break
10:50 DEVELOPMENTAL DYSPLASIA OF THE HIP

The frequency of formation of acetabular retroversion after reorienting pelvic osteotomies in children with hip dysplasia

Pavel Bortulev (Russian Federation)

10:55 Outcomes following the management of infant immature hips in a selective screening pathway

Belal Darwich, Ripak Purbe, Ben Marson, Prithviraj Hallikeri, Kathryn Price (UK)

11:00 Infants with clinical instability of hip should be seen by 2 weeks of age

Hean Wu Kang, Aidan Cosgrove (Ireland)

11:05 Children's Hip Predictive Score (CHiP): a triage tool for predicting dislocations in children referred with hip dysplasia

Evelyn Murphy, Catherine Howell, Olga Gallagher, Paula Kelly, Patrick O’Kelly, Jacques Noel, David Moore, Patrick O’Toole, Jim Kennedy (Ireland)

11:10 Discussion

11:25 Outcomes of treatment for developmental dislocation of the hip when the Pavlik method has failed

Carlos Pargas, Karim Masrouha, Cordelia Carter, Pablo Castaneda (USA)

11:30 Bilaterality: what influence on the prognosis of developmental hip dysplasia?

Cristina Alves, André Carvalho, Ines Balacó, Pedro Sá Cardoso, João CABRAL, Oliana Madeira Tarquini, Marcos Carvalho, Tah Ling (Portugal)

11:35 The clinical significance of infolded limbus on post-reduction arthrogram in developmental dysplasia of the hip

William Morris, Sai Chilakapati, Sean Hinds, John Anthony Herring, Harry K.W. Kim (USA)

11:40 Brace treatment does not improve acetabular coverage or reduce the rate of secondary surgery following closed reduction of developmental dysplasia of the hip

Arnav Kak, William Morris, Laura Mayfield, Harry K.W. Kim (USA)

11:45 Discussion
12:00 MEET THE MENTOR
12:50 Chairs: Dan Cosma (Romania), Blazej Prusczynski (Poland)
E-Moderator: Salih Marangoz (Turkey)

Mentor: Alain Dimeglio (France)

12:50 Lunch break
13:50 INDUSTRY SYMPOSIA
14:50
**TIVOLI CONGRESS HALL**

**14:50** HIP 1  
**15:40** Chairs: Bjarne Moller-Madsen *(Denmark)*, Bettina Westhoff *(Germany)*  
E-Moderator: Jiri Chomiak *(Czech Republic)*

14:50 Treatment of hip instability in children with Down syndrome: keys to managing a challenging problem  
Jessica Hughes, James Bomar, Dennis Wenger, Vidyadhar Upasani *(USA)*

14:55 Publication bias in orthopedics: a study on the reporting of positive outcomes in Legg-Calvé-Perthes disease  
Peter Filtes, Timothy Roberts, Keenan Sobol, Pablo Castaneda *(USA)*

15:00 Acetabular retroversion in juveniles - Mostly caused by a reduced lumbo-pelvic angulation  
Heimkes Bernhard, Frimberger Vincent, Berger Nina, Hiener Ursula *(Germany)*

15:05 Discussion

15:15 Two surgical alternatives for perthes disease: Intertrochanteric osteotomy vs. trochanteric tethering  
Peter Stevens, Olivia Grothaus *(USA)*

15:20 The first North American hip surveillance program: Enrollment after five years  
Stacey Miller, Jennifer Farr, Kit Johnson, Kishore Mulpuri *(Canada)*

15:25 Effectiveness of triple pelvic osteotomy in patients with Legg-Calve-Perthes disease. Results of minimum 10 years follow up  
Cemalettin Aksoy, Elchin Orujov, Vugar Nabi, Guney Yilmaz, Aykut Kocyigit *(Turkey)*

15:30 Discussion
15:40  HIP 2
16:30  Chairs: Andrei Gregorowski (Poland), Nicolas Nicolau (UK)
      E-Moderator: Stefan Huhnstock (Norway)

15:40  Femoroacetabular impingement in the unpinned contralateral hip in
       patients with primary unilateral slipped capital femoral epiphysis -
       preliminary radiographic outcomes
       Magdalena Kwiatkowska, Marcin Kwiatkowski, Maria Czubak-Wrzosek,
       Jaroslav Czubak, Marcin Tyrakowski (Poland)

15:45  Incidence and risk factors of heterotopic ossification in a matched cohort
       adolescent population undergoing hip arthroscopy
       Aliya Feroe, Mahad Hassan, Rachel Flaugh, Stephen Maier, Danielle Cook,
       Yi-Meng Yen, Mininder Kocher (USA)

15:50  Cementless ceramic-on-ceramic total hip replacement in children and
       adolescents
       Stefano Stallone, Giovanni Trisolino, Paola Zarantonello, Stefano Lucchini,
       Giovanni Gallone, Barbara Bordini, Dante Dallari, Francesco Traina (Italy)

15:55  Discussion

16:10  What is the AVN rate of SCFE patients with complete epi-metaphyseal
       discontinuity treated with the modified Dunn procedure?
       Kai Ziebarth, Thoralf Liebs, Nadine Kaiser, Klaus-Arno Siebenrock, Till
       Lerch (Switzerland)

16:15  Is hip dysplasia associated with trochlear dysplasia in skeletally mature
       patients?
       Andrew Fithian, Ann Richey, Seth Sherman, Kevin Shea, Stephanie Pun
       (USA)

16:20  Discussion

16:30  Coffee break
17:00  SPINE 1  
18:00  Chairs: Carol Hasler (Switzerland), Dror Ovadia (Israel)  
E-Moderator: Brice Illharreborde (France)  

17:00  The effect of idiopathic scoliosis on epidural use and natural delivery during childbirth - A matched cohort study  
Jeff Kessler, Adam Kessler (USA)  

17:05  Younger age at spinal cord detethering is potentially associated with a reduced risk of curve progression in children with early onset scoliosis  
Rajiv Iyer, Adam Fano, Hiroko Matsumoto, Rishi Sinha, Benjamin Roye, Michael Vitale, Richard Anderson (USA)  

17:10  Pre-operative carbohydrate drink for early recovery in pediatric spine fusion: Randomized control study  
Jennifer Bauer, Kathryn Anderson, Eliot B. Grigg (USA)  

17:15  Elastic lumbar support versus rigid thoracolumbar orthosis for acute pediatric spondylolysis. A prospective controlled study  
Ella Virkki, Milja Holstila, Terhi Kolari, Markus Lastikka, Kimmo Mattila, Sari Malmi, Olli Pajulo, Ilkka Helenius (Finland)  

17:20  Discussion  

17:35  Closed suction wound drain reduces postoperative opioid consumption in adolescents undergoing pedicle screw instrumentation for idiopathic scoliosis. A randomized, clinical trial  
Linda Helenius¹, Paul Gerdhem², Matti Ahonen¹, Jenni Jalkanen¹, Johanna Syvänen¹, Ilkka Helenius¹ (¹Finland, ²Sweden)  

17:40  Upper instrumented vertebrae (UIV) selection matters: Increased risk of proximal junctional kyphosis when UIV is below T2 in Scheuermann's kyphosis  
Adam Fano, Hiroko Matsumoto, Lisa Bonsignore-Opp, Benjamin Roye, Lawrence Lenke, Elizabeth Herman, Afrain Boby, Andrew Luzzi, Peter Newton, Baron Lonner, Michael Vitale, Harms Study Group (USA)  

17:45  Association of the LBX1 gene promoter methylation in deep paraspinal muscles of patients with idiopathic scoliosis with disease severity  
Piotr Janusz, Małgorzata Tokłowicz, Miroslaw Andrusiewicz, Małgorzata Kotwicka, Tomasz Kotwicki (Poland)  

17:50  Discussion
SPINE 2
18:00

OP-041
Mid- and long-term outcomes of lateral thoracotomy: Does the amount of lung parenchyma resection increase the risk of scoliosis? A retrospective review of 129 pediatric patients

Riccardo Sacco¹, Damien Fron², Dyuti Sharma², Michel Bonnevalle², Federico Canavese² (¹Italy, ²France)

18:05

OP-042
Complication risks and costs associated with Ponte osteotomies in surgical treatment of adolescent idiopathic scoliosis: Insights from a national database

Mohammed Shaheen, Jayme Koltsov, Samuel A. Cohen, Joanna Langner, Japsimran Kaur, Nicole A. Segovia, John S. Vorhies (USA)

18:10

OP-43
Curve characteristics and clinical outcomes in post-sternotomy/thoracotomy scoliosis undergoing definitive spinal fusion

Joanna Langner, Teeto Ezeonu, Abdul-Lateef Shafau, Japsimran Kaur, Kiley Poppino, Claire Shivers, Sai Chilakapati, Kimberly Hall, Meghan Imrie, Lawrence A. Rinsky, Anthony Riccio, John S. Vorhies (USA)

18:15 Discussion

18:30

OP-044
Pediatric cervical spine fusions: Opportunity for improvement

Edward Compton, Stephen Stephan, Kenneth Illingworth, David Skaggs, Lindsay Andras (USA)

18:35

OP-045
Do rib or spinal proximal anchors in growing rod constructs yield more length gain over time?

Vivian Chen¹, David Skaggs¹, Edward Compton¹, Kenneth Illingworth¹, John Smith¹, Francisco J. Sanchez Perez-Grueso², Scott Luhmann¹, Michael Vitale¹, Mark Erickson¹, Pediatric Spine Study Group¹, Lindsay Andras¹ (¹USA, ²Spain)

18:40

OP-046
A comparison of SRS and PROMIS questionnaires in patients presenting with adolescent idiopathic scoliosis

Yousi Oquendo, Nadine Javier, Xochitl Bryson, Joanna Langner, Clayton Maschhoff, Christian Calderon, Ann Richey, John S. Vorhies (USA)

18:45 Discussion
19:00  WOW MEETING
20:00

19:00  Welcome and Introduction
       Daniela Dibello (Italy), Elke Viehweger (Switzerland),
       Antonio Andreacchio (Italy)

19:05  Film WOW
       Camila Bedeschi (Brazil)

19:10  Supporting and encouraging female orthopedic surgeons: Experience in UK
       Deborah Eastwood (UK)

19:20  Experience of WOW Italy
       Daniela Dibello (Italy)

19:30  A survey of family and changing gender roles of European pediatric
       orthopedists
       Elke Viehweger (Switzerland)

19:40  Roundtable - The next generation: Need for new models incl.
       Virginie Pollet (UK)

19:55  Inauguration WOW Europe
14:50  SPORTS 1

15:40  Chairs: Nick Sekouris (Greece), Marco Turati (Italy)
      E-Moderator: Jaakko Sinikumpu (Finland)

14:50  OP-047  Long-term minimum 15-year follow-up after lateral discoid meniscal保存 surgery in children and adolescents
        Laura Lins, Aliya Feroe, Brian Yang, Kathryn Williams, Sophia Kocher, Lyle Micheli, Mininder Kocher (USA)

14:55  OP-048  Meniscus tears in pediatric patients with ACL injury: Incidence, management, and outcome
        Luca Rigamonti¹², Nathaniel A. Bates¹, Nathan D. Schilaty¹, Bruce Levy¹, Michael Stuart¹, Marco Bigoni², Todd Milbrandt¹, Aaron Krych¹ (¹USA, ²Italy)

15:00  OP-049  Delays in anterior cruciate ligament reconstruction are associated with higher rates of meniscus and chondral pathology in skeletally immature patients
        Andrew Pennock, Matthew Milewski, Lauren Hutchinson, Patricia Miller, Mininder Kocher (USA)

15:05  OP-050  Quadriceps tendon anterior cruciate ligament reconstruction in skeletally immature patients: Clinical and patient reported outcomes
        Sofia Hidalgo Perea, Danielle E. Chipman, Frank Cordasco, Daniel Green (USA)

15:10  Discussion

15:20  OP-051  Does harvesting of the semi tendinosus tendon really spare the gracilis tendon in pediatric ACL reconstruction?
        Testory Maxime, Cavaignac Etienne, Jérôme Sales de Gauzy, Franck Accadbled (France)

15:25  OP-052  Decrease in lateral femoral notch sign depth following ACL reconstruction in pediatric patients
        Nicolas Pascual-Leone, Danielle E. Chipman, Daniel Green (USA)

15:30  OP-053  Pediatric partial ACL tears: Outcomes and management practices
        Megan Hannon, Nicholas Sullivan, Emily Chang, Patricia Miller, Melissa Christino, William Meehan (USA)

15:35  Discussion
15:40  SPORTS 2

16:30  Chairs: Catharina Chiari (Austria), Franck Accadbled (France)
       E-Moderator: Virginie Pollet (UK)

15:40  Return to preinjury level of sports and the quality of life after tibial spine
       avulsion fracture with at least 2 years of follow-up
       Maija Jääskelä, Marco Turati\textsuperscript{2,3}, Lasse Lempainen\textsuperscript{1}, Antoine Henri\textsuperscript{2}, Aurelien Courvoisier\textsuperscript{2,3}, Nicolas Bremond\textsuperscript{2,3}, Franck Accadbled\textsuperscript{1}, Jaakko Sinikumpu\textsuperscript{1}
       (\textsuperscript{1}Finland, \textsuperscript{2}France, \textsuperscript{3}Italy)

15:45  Growth physis sparing medial patellofemoral ligament reconstruction in
       children with open physes
       Thomas Kappe, Janina Leiprecht, Thomas Caffard, Heiko Reichel (Germany)

15:50  Incidence of 2\textsuperscript{nd} surgery after medial patellofemoral ligament
       reconstruction with osteochondral fracture fixation in pediatric patients
       after patella dislocation
       Alexandra Aitchison, Sofia Hidalgo Perea, Lindsay Schlichte, Daniel Green
       (USA)

15:55  Technique variation for MPFL reconstruction in skeletally immature
       patients: Data from the JUPITER cohort
       Benton Heyworth, Sofia Hidalgo Perea, Daniel Green, Matthew Veerkamp,
       Eric Wall, Philip Wilson, Beth Shubin Stein, Shital Parikh (USA)

16:00  Discussion

16:10  Arthroscopic deepening trochleoplasty combined with MPFL
       reconstruction; A novel solution to patellofemoral instability with trochlear
       dysplasia in the adolescent population
       Neeraj Mishra, Chloe Chan, Kevin Lim, Ashik Mohammad (Singapore)

16:15  Cartilage repair in the skeletally immature knee: A comparative study of
       different surgical techniques
       Ioannes Melas, Dimitrios Metaxiotis, Michael Iosifidis (Greece)

16:20  Infrapatellar realignment for patellar subluxation in the skeletally
       immature child
       John Handelsman, William Facibene (USA)

16:25  Discussion

16:30  Coffee break

17:00
17:00  CLUBFOOT

18:00  Chairs: Alain Dimeglio (France), Adhiambo Witlox (The Netherlands)
       E-Moderator: Julia Funk (UK)

17:00  Gait analysis characteristics in clubfoot relapse
       OP-061 Rachel Goldstein, Melissa Bent, Maia Hauschild, Adriana Conrad-Forrest,
       Susan Rethlefsen, Tishya Wren, Bob Kay (USA)

17:05  Weight-bearing computed tomography of the foot and ankle in the
       pediatric population
       OP-062 Derek Kelly, Hayden Holbrook, Alexander Bowers, Karim Mahmoud,
       Benjamin Sheffer (USA)

17:10  The outcomes of congenital talipes equinovarus: A core outcome
       set for research and treatment
       OP-063 Yael Gelfer, Donato Giuseppe Leo, Aisling Russell, Daniel Perry, Anna
       Bridgens, Deborah Eastwood (UK)

17:15  Obesity increases risk for surgical site infections and wound dehiscence
       after pediatric foot surgery: A retrospective cohort review using the NSQIP-
       pediatric database
       OP-064 Farzam Farahani, Joel Rodriguez, Dane Wukich, Jacob Zide, Anthony Riccio
       (USA)

17:20  Discussion

17:30  Incidence and outcomes of leg length discrepancy in patients with
       idiopathic clubfoot deformity
       OP-065 Maryse Bouchard¹, Abdullah Addar¹² (¹Canada, ²Saudi Arabia)

17:35  Sport ability during walking age in children with clubfeet treated with
       ponseti method: A case series
       OP-066 Gianluca Testa, Andrea Vescio, Alessia Caldaci, Marco Sapienza, Annalisa
       Culmone, Vito Pavone (Italy)

17:40  The impact of socio-economic factors on drop-out, relapse and non-
       compliance during Ponseti treatment in low- and middle-income
       countries: A scoping review
       OP-067 Manon Pigeolet¹², Anchelo Vital¹, Hassan Ali Daoud¹, Carol Mita¹, Blake
       Alkire¹, Daniel Corlew¹ (¹USA, ²Belgium)
17:00  CLUBFOOT (cont.)
18:00

17:45  Anterior distal epiphysiodesis as treatment of recurrent equinus deformity in Ponseti treated clubfoot patients
OP-068  Arnold Besselaar¹, Isabelle van Tilburg¹, Tessa van de Kerkhof¹, Benedicte Vanwanseele⁲, Lianne Grin¹,², Saskia Wijnands¹,², Marieke van der Steen¹ (¹The Netherlands, ²Belgium)

17:50  Discussion

18:00  FOOT & CONGENITAL
19:00 Chairs: Camilla Bettuzzi (Italy), Ismat Ghanem (Lebanon)
E-Moderator: Vladimir Kenis (Russian Federation)

18:00  Resection of calcaneo navicular coalition: Arthroscopy or open approach?
OP-069  Corin Boris, Jérôme Sales de Gauzy, Franck Accadbled (France)

18:05  Functional results of surgical treatment of tarsal coalitions: Arthroscopic resection versus open resection
OP-070  João Cabral, André Carvalho, Ines Balacó, Marcos Carvalho, Oliana Madeira Tarquini, Pedro Sá Cardoso, Tah Ling, Cristina Alves (Portugal)

18:10  Discussion

18:25  Health related quality of life in achondroplastic patients after global limb lengthening surgery
OP-071  Ignacio Ginebreda-Martí¹, Maximiliano Ibañez¹, Nicole Canu¹, Carolina Echavarria¹, Jordi Tapiolas-Badiella¹, Gianni Amato² (¹Spain, ²USA)

18:30  The fate of bent telescopic rods in children with osteogenesis imperfecta: Do all bent rods need to be revised?
OP-072  David Fralinger, Denver Burton, Kenneth Rogers, Richard Kruse, Jeanne Franzone (USA)

18:35  What are the factors predisposing to failure of Fassier-Duval rodding in children with osteogenesis imperfecta?
OP-073  Bartosz Musielak, Łukasz Woźniak, Jerzy Sułko, Artur Oberc, Marek Jozwiak (Poland)

18:40  Discussion
14:50 NEUROMUSCOLAR 1
15:40 Chairs: Thomas Dreher (Germany), Ana Presedo (France)
E-Moderator: Christian Wong (Denmark)

14:50 Development of hip displacement in children with cerebral palsy:
OP-074 A longitudinal register study of 1045 children
Philippe Wagner, Gunnar Hägglund (Sweden)

14:55 Patients GMFCS III are more susceptible to gait deterioration after single-
OP-075 event multilevel surgery in cerebral palsy
Mauro César de Morais Filho, Marcelo Fujino, Francesco Blumetti, Cátia
Kawamura, José Augusto Lopes (Brazil)

15:00 Practice variation and factors influencing indications for interventions for
OP-076 hip displacement in non-ambulant children with cerebral palsy
Max Mifsud, Unni G. Narayanan, U. Givon, K. Graham, Marek Jozwiak,
Kishore Mulpuri, Benjamin Shore, T. Theologis, W. Schrader, The CHOP
Research Group (Canada)

15:05 Patients and parents' satisfaction and self-reported evaluation after
OP-077 single-event multilevel surgery in cerebral palsy
Mauro César de Morais Filho, Francesco Blumetti, Marcelo Fujino, Daniela
Maury Benavides, Cátia Kawamura, José Augusto Lopes (Brazil)

15:10 Discussion

15:20 Progression of hip displacement after triradiate cartilage closure in
OP-078 non-ambulatory cerebral palsy (CP): Who needs continued radiographic
surveillance?
Ali Asma, Armagan Can Ulusaloglu, Michael W. Shrader, Kenneth Rogers,
Freeman Miller, Jason Howard (USA)

15:25 Femoral head deformity associated with hip displacement in cerebral
OP-079 palsy: Results at skeletal maturity
Armagan Can Ulusaloglu, Ali Asma, Michael W. Shrader, Kenneth Rogers,
Freeman Miller, Jason Howard (USA)

15:30 Early versus late scoliosis correction in duchenne muscular dystrophy
OP-080 (DMD): Comparison of post-operative outcomes in the steroid era
Ali Asma, Armagan Can Ulusaloglu, Michael W. Shrader, William Mackenzie,
Robert Heinle, Mena Scavina, Jason Howard (USA)

15:35 Discussion
HARLEKIN & COLUMBINE

15:40  NEUROMUSCOLAR 2
16:30  Chairs: Ignacio Martinez-Caballero (Spain), Elke Viehweger (Switzerland)
       E-Moderator: Uri Givon (Israel)

15:40  Relation of the sural nerve and medial neurovascular bundle with the Achilles tendon in children with cerebral palsy treated by percutaneous Achilles lengthening
       Ozan Ali Erdal, Baris Gorgun, Necip Selcuk Yontar, Ali Ege Terzibasioglu, Ilker Abdullah Sarikaya, Muharrem Inan (Turkey)

15:45  Hip development after surgery to prevent hip dislocation in children with cerebral palsy: A longitudinal register study of 252 children
       Philippe Wagner, Gunnar Hägglund (Sweden)

15:50  Long-term results equinus deformity treatment of the feet by Ulzibat and Strayer surgery methods in children with CP
       Paviel Rakhman, Oleksandr Korolkov (Ukraine)

15:55  Prediction model for contralateral hip displacement in cerebral palsy patients with unilateral hip dislocation: A scoring system to guide decision making
       Pasin Tangadulrat, Nath Adulkasem, Jidapa Wongcharoenwatan, Perajit Eamsobhana, Kamolporn Kaewpornsawan, Thanet Ariyawatanakul, Chatupon Chotigavanichaya (Thailand)

16:00  Discussion

16:10  Anterior distal femoral hemiepiphysiodesis in children with fixed knee flexion deformities: Where should the screws go?
       Akshay Seth¹, Patricia Miller², Colyn Watkins², Benjamin Shore² (Canada, USA)

16:15  The incidence of AVN after hip containment surgery in children with cerebral palsy
       Jeremy Bauer, Ellen Raney, Dennis Roy (USA)

16:20  Observational gait analysis in children with cerebral palsy using the Edinburgh Visual Gait Score (EVGS) and smartphone-based slow-motion video technology: A pilot study
       Bhushan Sagade, Alaric Aroojis, Suresh Chand (India)

16:25  Discussion

16:30  Coffee break
17:00
17:00  **TRAUMA 1**
18:00  Chairs: Pierre Journeau (*France*), Thomas Wirth (*Germany*)
E-Moderator: Luis Moraleda (*Spain*)

**17:00 Development of a core outcome set for childhood limb fractures**
**OP-088**
Ben Marson, Joseph Manning, Marilyn James, Simon Craxford, Sandeep Deshmukh, Daniel Perry, Benjamin Ollivere (*UK*)

**17:05 Casting, elastic intramedullary nailing, or external fixation for pediatric tibia shaft fracture: Which is the most appropriate treatment?**
**A multicenter study**
Lorenza Marengo, Enrietti Emilio, Melissa Piccinino, Luca Ceroni, Silvio Boero, Daniela Dibello (*Italy*)

**17:10 Virtual fracture clinic pathway for paediatric fractures: A prospective evaluation of 10,000 patients**
**OP-090**
Flavia Alberghina, Paula Kelly, Jacques Noel, Carol Blackburn, Turlough Bolger, Patrick Kiely, Jim Kennedy, David Moore, Patrick O'Toole (*Ireland*)

**17:15 Discussion**

**17:30 Medial epicondyle fractures in children: Operative versus non-operative treatment**
**OP-091**
Emily Chang, Patricia Miller, Evan Stieler, Benjamin Shore, Carley Vuillermin, Collin May (*USA*)

**17:35 Operative treatment of supracondylar humerus fractures - do we practice what we preach?**
**OP-092**
Morten Jon Andersen (*Denmark*)

**17:40 What percent of pediatric femur fractures result from non-accidental trauma?**
**OP-093**
Hanna Omar, Natalya Sarkisova, Christopher Lee, Rachel Goldstein (*USA*)

**17:45 Discussion**
18:00  TRAUMA 2
19:00  Chairs: Manuel Cassiano (Portugal), Pierre Lascombes (Switzerland)
E-Moderator: Vito Pavone (Italy)

18:00  Pediatric phalanx fractures: A retrospective study and review of the literature
OP-094  Stéphanie Schizas, Nicolas Lutz, Elif Vardar, Sophie Mercakert, Pierre-Yves Zambelli, Eri Samara (Switzerland)

18:05  Anesthesia and secondary interventions can be avoided by casting
OP-095  overriding distal metaphyseal radius fractures in children under 11 without
reduction in emergency department
Topi Laaksonen¹, Nicolas Nietosvaara¹, Jani Puhakka², Antti Stenroos¹,
Yrjänä Nietosvaara¹, Jussi Kosola¹ (¹Finland, ²Switzerland)

18:10  Seymour fractures. Better do not underestimate it
OP-096  Laura M. Perez-Lopez, Isabel Parada-Avendaño, Melisa Stitzman, Maria Luisa Cabrera, Cesar Galo Garcia Fontecha (Spain)

18:15  Epidemiology of pediatric pelvic fractures registered in the Swedish
OP-097  Fracture Register
Yasmin Hailer, Lisa Larsson, Olof Wolf (Sweden)

18:20  Discussion

18:35  Predictors of healing in paediatric tibial fractures using the RUST score:
OP-098  A 12 year retrospective review
Antony Roy, Pranai Buddhdev (UK)

18:40  Comparison between two protocols of procedural sedation and analgesia
OP-099  in the treatment of pediatric both-bone forearm fractures
Joaquín Núñez De Armas, Luis Moraleda Novo, Gaspar González Morán,
Enrique Gil Garay (Spain)

18:45  Displaced tibial shaft fractures in children: Method of treatment in
OP-100  children weighing 50 kg or more
Dorota Hanf-Osetek, Paweł Bilski, Dawid Łabądź, Sławomir Snela (Poland)

18:50  Discussion
08:30 BEST OF TRAUMA

09:00 Diaphyseal forearm fractures treated by bioabsorbable intramedullary nailing. Challenges to use the nailing technique

08:35 Intramedullary fixation for pediatric femoral nonunion in low- and middle-income countries

09:05 Is the X-ray control 4 weeks after ESIN osteosynthesis of forearm fractures an indispensable standard or can it be spared?

08:40 Outcomes of suture-button versus screw fixation for pediatric and adolescent syndesmosis injuries

09:10 Complications in elective removal of bone lengthening nails: A report of 225 patients

08:45 Discussion

09:15 Discussion
Friday, April 8, 2022

**TIVOLI CONGRESS HALL**

<table>
<thead>
<tr>
<th>Time</th>
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<th>Authors/Institutions</th>
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<tbody>
<tr>
<td>09:30</td>
<td>BEST OF HIP &amp; NEUROMUSCULAR</td>
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<tr>
<td>10:30</td>
<td>Chairs: Deborah Eastwood (UK), Hakan Omeroglu (Turkey) E-Moderator: Cristina Alves (Portugal)</td>
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<tr>
<td>09:30</td>
<td>How much remodelling can we expect after fixation in situ of SCFE? A multicentric study of the German Speaking Paediatric Orthopaedic Society Fritz Hefti¹, Danimir Cerkez², Katharina Burger³, Bjoern Vogt¹, Bernd Bittersohl¹, Kiril Mladenov¹, Kerstin Remmel¹ (¹Switzerland, ²Germany, ³Austria)</td>
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<td>09:35</td>
<td>Comparison of acetabular morphology changes after pediatric pelvic osteotomies using patient-specific 3-D models Samuel Baird, Jason Caffrey, James Bomar, Christine Farnsworth, Vidyadhar Upasani (USA)</td>
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<tr>
<td>09:40</td>
<td>Proximal femoral screw hemiepiphysiodesis can alter the growth of the proximal femur in children with cerebral palsy James McCarthy, Allyson Zakrzewski, Jacob Carl (USA)</td>
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<td>09:45</td>
<td>Discussion</td>
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<tr>
<td>10:00</td>
<td>Prospective evaluation of in situ screw fixation for slipped capital femoral epiphysis Clarabelle DeVries, Raghav Badrinath, Samuel Baird, James Bomar, Vidyadhar Upasani (USA)</td>
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<td>10:05</td>
<td>Clinical and kinematic outcomes after femoral rotational osteotomy Jeremy Bauer¹, Patrick Do¹, Jehan Hamid² (USA)</td>
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<td>10:45</td>
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<td>11:00</td>
<td>GENERAL ASSEMBLY</td>
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<td>13:00</td>
<td>Lunch break</td>
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<td>14:00</td>
<td>INDUSTRY SYMPOSIA</td>
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### TIVOLI CONGRESS HALL

#### LOWER LIMB DEFORMITY

**15:00**

Radiographs of 366 removed internal lengthening nails reveal differences in bone abnormalities between different nail types: Fitbone, Precice and Stryde

*OP-113*

,** Christopher Iobst**, **Markus Winther Frost**, **Søren Kold**, **Ole Rahbek**, **Anirejuoritse Bafor**, **Molly Duncan**, **Jan Duedal Rölfing**  

*USA*, *Denmark*

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**15:05**

Two-stage lengthening with reuse of a single intramedullary telescopic nail in patients with achondroplasia

*OP-114*

,** Javier Alonso**, **María Galán-Olleros**, **Carlos Miranda**, **Rosa M. Egea-Gámez**, **Ignacio Martínez-Caballero**, **Angel Palazon Quevedo**  

*Spain*

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**15:10**

3D printed cutting guides for lower limb deformity correction in the young population

*OP-115*


*Israel*

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**15:15**

Discussion

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**15:30**

Lower limb lengthenings for congenital and acquired deficiencies using external fixation combined with flexible intramedullary nailing: A multicenter EPOS study

*OP-116*

,** Dmitry Popkov**, **Szymon Pietrzak**, **Alexandre Antonov**, **Tomasz Parol**, **Mikan Lazovic**, **David Podeszwa**, **Arnold Popkov**  

*Russian Federation*, *Poland*, *Serbia*, *USA*
TIVOLI CONGRESS HALL

15:00 LOWER LIMB DEFORMITY (cont.)

16:00

15:35 Comparative evaluation of the radiographic parameters for screening early Blount’s disease
OP-117 Jidapa Wongcharoenwattana, Apakorn Chotivichit, Perajit Eamsobhana, Thanase Ariyawatkul, Chatupon Chotigavanichaya (Thailand)

15:40 Longterm follow up of retrograde femoral approach in lengthening: Is there an impact for the knee?
OP-118 Andreas Krieg, Chao Dong, Schmid Marc, Harder Dorothee, Donners Ricardo (Switzerland)

15:45 Discussion

TIVOLI CONGRESS HALL

16:00 STUDY GROUP NEUROMUSCULAR
FREE PAPERS

16:00 Concurrent hip dysplasia and scoliosis in children with cerebral palsy: Should we fix the hip or spine first?
SG-01 Michael W. Shrader, Ali Asma, Armagan Can Ulusaloglu, Kenneth Rogers, Freeman Miller, Jason Howard, Mutlu Cobanoglu, Suken Shah (USA)

16:05 Kinematic parameters may differentiate between idiopathic and neurologic toe-walking
SG-02 Martin Svehlik, Andreas Habersack, Tanja Kraus, Stefan Fischerauer (Austria)

16:10 Somatosensory profiles in children and adolescents with cerebral palsy
SG-03 Johanne Villars Jørgensen, Mads U. Werner, Josephine S. Michelsen, Christian Wong (Denmark)

16:15 The importance of restoring a heel-toe gait pattern in patients with unilateral spastic cerebral palsy: The correlation between femoral anteversion and asymmetrical hip internal rotation
SG-04 Michèle Kläusler, Enrico De Pieri, Rosa Visscher, Elke Viehweger, Reinald Brunner (Switzerland)

16:20 Discussion
### TIVOLI CONGRESS HALL

**17:00**  STUDY GROUP TRAUMA

**18:00**  CURRENT CHALLENGES IN THE MANAGEMENT OF DIAPHYSEAL FOREARM FRACTURES

Chairs: Nicolas Lutz (*Switzerland*), Melinda Witbreuk (*The Netherlands*)

- **17:00**  Avoiding the complications of orthopedic treatment or nailing
  - SG-05  Virginie Rampal (*France*)

- **17:10**  Management of refractures
  - SG-06  Dirk Sommerfeldt (*Germany*)

- **17:20**  Current trends in the choice of material and bones to nails
  - SG-07  Morten Jon Andersen (*Denmark*)

- **17:30**  Clinical experience with resorbable nails
  - SG-08  Louise Klingenberg (*Denmark*)

**17:40**  Discussion

### AUDITORIUM CARSTENSEN

**15:00**  UPPER LIMB

**16:00**  Chairs: Nunzio Catena (*Italy*), Sebastian Farr (*Austria*)
E-Moderator: Sergio Martinez (*Spain*)

- **15:00**  Vascularized palmar intermetacarpal flap for skin graftless syndactyly release: Anatomical study and report of 41 cases
  - OP-119  Francisco Soldado, Paula Diaz-Gallardo, Jorge Giménez Knorr (*Spain*)

- **15:05**  Evaluation of 3D printing options in posttraumatic complex elbow reconstruction in children and adolescents
  - OP-120  Tobias Dust¹, Julian Elias Henneberg¹, Milad Farkhondeh Fal¹, Kristofer Wintges², Till Orla Klatte¹, S. John Ham², Konrad Mader¹ (*Germany, The Netherlands*)

- **15:10**  Does older age and glenoid dysplasia affect outcome of soft tissue release and tendon transfer in shoulders with brachial plexus birth palsy?
  - OP-121  Gholamhossain Shahcheraghi, Mahzad Javid (*Iran*)

- **15:15**  Estimating skeletal maturity using wrist radiographs during pre-adolescence: The epiphyseal:metaphyseal ratio
  - OP-122  Lauren Huang, Raymond Liu, Ryan Furdock, Naveen Uli (*USA*)

**15:20**  Discussion
15:00  UPPER LIMP  (cont.)
16:00

15:35  Carpal tunnel syndrome and finger deformities in children with mucopolysaccharidoses and mucolipidoses: A retrospective review of 52 cases
OP-123  Clément Thirache, Mathilde Gaume, Cyril Gitiaux, Arielle Salon, Caroline Dana, Stéphanie Pannier (France)

15:40  Transposition of distal part of pectoralis major to biceps brachii in children with arthrogryposis
OP-124  Olga Agranovich, Petrova Ekaterina, Sergey Batkin (Russian Federation)

15:45  Radial club hand treated by ulnarization generation 3: The new centralization
OP-125  Jaroslaw Deszczynski, Tomasz Albrechwzynski, Claire Shannon, Dror Paley (USA)

15:50  Discussion

AUDITORIUM CARSTENSEN

16:00  STUDY GROUP UPPER LIMP
17:00  WHICH HAND PATHOLOGIES SHOULD A PEDIATRIC ORTHOPEDIC SURGEON KNOW?
   Chairs: Nunzio Catena (Italy), Sebastian Farr (Austria)

16:00  Trigger thumb
SG-09  Marcos Carvalho (Portugal)

16:09  Ganglion cysts
SG-10  Sebastian Farr (Austria)

16:18  Polydactyly
SG-11  Sergio Martínez (Spain)

16:27  Thumb hypoplasia/absence
SG-12  Nunzio Catena (Italy)

17:36  Syndactyly
SG-13  Andrea Jester (UK)

17:45  Discussion
17:00  STUDY GROUP SPINE
18:00  LATE COMPLICATIONS IN PEDIATRIC SPINAL DEFORMITY SURGERY

Chairs: Moyo Kruyt (The Netherlands), Jorge Mineiro (Portugal)

17:00  Introduction
SG-14  Brice Ilharreborde (France)

17:05  Delayed infection
SG-15  Brice Ilharreborde (France), Sebastian Pesenti (France)

17:15  Neurological
SG-16  René Castelein (The Netherlands)

17:25  Implant related
SG-17  Ilkka Heleniu (Finland), Muharrem Yazici (Turkey)

17:35  Deformity related
SG-18  Dror Ovadia (Israel)

17:45  Conclusion and take away messages
SG-19  Brice Ilharreborde (France)

15:00  TUMOURS & MISCELLANEOUS
16:00  Chairs: Marta Salom (Spain), Bartu Sarisoezen (Turkey)
E-Moderator: Bartek Kowalczyk (Poland)

15:00  Treatment of aneurysmal bone cysts in the proximal femur in 85 children and adolescents: Retrospective multi-center analysis
OP-126  Lizz van der Heijden¹, Thom van Geloven¹, Dietmar Dammerer², Masood Umer³, Kevin Doering³, C. Soto-Montaya⁴, Mohamed Mesregah⁵, Philipp Scheider², Valentino Coppa⁶, Tanja Kraus⁷, M. Haara⁷, Giovanni Beltrami⁷, Minna Laitinen⁷, Domenico Campanacci⁷, Pieter-Bas de Witte¹, Michiel van de Sande¹ (¹The Netherlands, ²Austria, ³Pakistan, ⁴Colombia, ⁵Egypt, ⁶Italy, ⁷Finland)

15:05  Efficacy and safety of tranexamic acid in resection and endoprosthetic reconstruction of distal femoral osteosarcomas in children: A retrospective cohort study
OP-127  Bulent Erol, Omer Sofulu, Ozer Ozturk, Murat Polat, Omer Buyuktopcu, Mehmet Deniz Kesimer (Turkey)
15:00  TUMOURS & MISCELLANEOUS (cont.)

16:00

15:10  Treatment of unicameral bone cysts in the proximal femur in 89 children and adolescents: Retrospective multi-center study
OP-128  Thom van Geloven¹, Lizz van der Heijden¹, Dietmar Dammerer², Masood Umer³, Kevin Doering², C Soto-Montaya⁴, I. Badr⁵, Philipp Scheider², Tanja Kraus², M. Haara⁶, Giovanni Beltrami⁷, Minna Laitinen⁶, Domenico Campanacci⁷, Pieter-Bas de Witte¹, Michiel van de Sande¹ (¹The Netherlands, ²Austria, ³Pakistan, ⁴Colombia, ⁵Egypt, ⁶Finland, ⁷Italy)

15:15  Treatment outcomes of monostotic fibrous dysplasia in the proximal femur in 47 children and adolescents: Retrospective multi-center cohort study
OP-129  Thom van Geloven¹, Maartje Meier¹, Dietmar Dammerer², Masood Umer³, Kevin Doering², C. Soto-Montaya⁴, I. Badr⁵, Philipp Scheider², Tanja Kraus², M. Haara⁶, Giovanni Beltrami⁷, Minna Laitinen⁶, Domenico Campanacci⁷, Pieter-Bas de Witte¹, Michiel van de Sande¹ (¹The Netherlands, ²Austria, ³Pakistan, ⁴Colombia, ⁵Egypt, ⁶Finland, ⁷Italy)

15:20  Discussion

15:35  Can Virtual reality headsets be used safely as a distraction method for paediatric orthopaedic patients? A feasibility study
OP-130  Karen Shepherd, Yogita Shanmugharaj, Obada Kattan, Michail Kokkinakis (UK)

15:40  Asymmetric growth after percutaneous epiphysiodesis
OP-131  Hannah Weinmayer, Anne Breen, Harald Steen, Joachim Horn (Norway)

15:45  Use of resorbable magnesium screws in children: Systematic review of the literature and short-term follow-up from our series
OP-132  Danya Falcioni, Valentina Maestri, Valentino Coppa, Antonio Pompilio Gigante (Italy)

15:50  Discussion
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<tr>
<td>16:00</td>
<td>STUDY GROUP TUMOUR</td>
<td>Chairs: Bartu Sarisozen (Turkey), Michiel Van De Sande (The Netherlands)</td>
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<tr>
<td>16:00</td>
<td>Pyomyositis</td>
<td>Marta Salom (Spain)</td>
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<td>16:09</td>
<td>Chronic recurrent multifocal osteomyelitis</td>
<td>Bartek Kowalczyk (Poland)</td>
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<td>16:18</td>
<td>Vertebral infections</td>
<td>Ilkka Helenius (Finland)</td>
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<td>16:27</td>
<td>Treatment of postoperative and implant related infections</td>
<td>Deborah Eastwood (UK)</td>
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<td>16:36</td>
<td>Septic arthritis 2022</td>
<td>Dimitri Ceroni (Switzerland)</td>
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<td>17:00</td>
<td>STUDY GROUP METABOLICS</td>
<td>Chairs: Deborah Eastwood (UK), Joachim Horn (Norway)</td>
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<td>17:00</td>
<td>X-linked hypophosphatemic rickets: My best case &amp; my worst case</td>
<td>Gabriel Mindler (Austria)</td>
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<td>17:15</td>
<td>Osteogenesis imperfecta: My best case &amp; my worst case</td>
<td>Muharrem Inan (Turkey)</td>
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<td>17:30</td>
<td>Spondyloepiphysseal dysplasia: My best case &amp; my worst case</td>
<td>Darko Anticevic (Croatia)</td>
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<td>17:45</td>
<td>Larsen syndrome: My best case &amp; my worst case</td>
<td>Valdimir Kenis (Russian Federation)</td>
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# 40th EPOS Annual Meeting

**European Paediatric Orthopaedic Society**  
Copenhagen (Denmark) - April 6 – 9, 2022

## TIVOLI CONGRESS HALL

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<th>Time</th>
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<td>08:00</td>
<td>BEST OF THE BEST</td>
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| 09:00 | Chairs: **Antonio Andreacchio** *(Italy)*, **Mininder Kocher** *(USA)*  
E-Moderator: **David M. Farrington** *(Spain)* |

08:00 Development of the LIMB-Q Kids: A new patient reported outcome measure for children with lower limb deformities  
**Harpreet Chhina, Anne Klassen, Jacek Kopec, Anthony Cooper** *(Canada)*

08:05 Persistently raised titanium levels in children after spinal instrumentation  
**Peter John Cundy, Brian Freeman, Georgia Antoniou, William Cundy** *(Australia)*

08:10 The effect of knee height asymmetry on gait biomechanics  
**Haluk Altiok, Jeremy Bauer, Jacqueline C. Simon, Abdal Kawaiah, Robert Burnham, Cathleen Buckon, Susan Sienko, Ann Flanagan, Karen Kruger, Joseph Krzak** *(USA)*

08:15 Discussion

08:30 Patient-reported outcomes of over 900 adults who had childhood Legg-Calve-Perthes disease (LCPD)  
**Harry K.W. Kim, Molly McGuire, Roi Armakias, Michael Millis, Bella Vakulenko-Lagun** *(USA)*

08:35 Operative treatment of distal tibial epiphyseal fractures with bioabsorbable screws - nine years of experience  
**Marcell Varga, Tamás Kassai, Gergő Józsa** *(Hungary)*

08:40 Short bioreabsorbable intramedullary nailing of severely displaced distal forearm fractures in children - an alternative to K-wires  
**Marcell Varga, Gergő Józsa, Zsófia Krupa, Tamás Kassai** *(Hungary)*

08:45 Discussion
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<td>09:00</td>
<td>BEST E-POSTERS</td>
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<td>10:00</td>
<td>Chairs: Ignacio Sanpera (Spain), Jeff Sawyer (USA) E-Moderator: Martin Gottliebsen (Denmark)</td>
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<td>09:00</td>
<td>Appropriate surgical timing of Salter innominate osteotomy for acetabular dysplasia in children</td>
<td>Kenta Sawamura, Hiroshi Kitoh, Hiroshi Kaneko, Akiko Kitamura, Saori Matsuyama, Kenichi Mishima, Masaki Matsushita, Yasunari Kamiya, Tadashi Hattori (Japan)</td>
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<td>09:03</td>
<td>Participation and motor abilities in children with idiopathic clubfeet after treatment with the Ponseti method</td>
<td>Arnold Besselaar¹, Lianne van Dijk¹, Lianne Grin¹², Saskia Wijnands¹², van der Marieke Steen¹, Benedicte Vanwanseele¹² (Russia)</td>
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<td>09:06</td>
<td>Objectively measured sleep metrics in infants and toddlers undergoing night-time boots and bar brace treatment for clubfoot compared to age matched controls</td>
<td>Charlotte Sununu, Natalie Barnett, Clare Kehoe, David Scher (USA)</td>
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<td>09:09</td>
<td>Demographic and clinical characteristics of patellar instability patients from prospective JUPITER (Justifying Patellar Instability Treatment by Early Results) cohort</td>
<td>Meghan Bishop, Jacqueline Brady, Simone Gruber, Matthew Veerkamp, Joseph Nguyen, Benton Heyworth, Marc Tompkins, Daniel Green, Eric Wall, JUPITER Study Group, Beth Shubin Stein, Shital Parikh (USA)</td>
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<td>09:12</td>
<td>Electromyography role in children with split cord malformation diagnosis</td>
<td>Margarita Savina, Vissarionov Sergey, Vahtang Torja, Alina Khodorovskaya</td>
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<td>09:15</td>
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<td>09:30</td>
<td>Treatment of recurrent patellar dislocation in children and adolescents with medial patellofemoral ligament reconstruction - pediatric technique</td>
<td>João Cabral, Ines Balacô, Marcos Carvalho, Oliana Madeira Tarquini, Pedro Sá Cardoso, Tah Ling, Cristina Alves (Portugal)</td>
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<td>09:33</td>
<td>Firearm-associated orthopedic injuries in the pediatric population of New York State (2016-2020)</td>
<td>Cordelia Carter, Charles Lin, Utkarsh Anil (USA)</td>
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<td>09:36</td>
<td>Corrective procedure for flexion</td>
<td>Corrective procedure for flexion contracture of the elbow in neonatal</td>
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<td>contracture of the elbow in</td>
<td>palsy sequelae: long term follow up</td>
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<td>neonatal palsy sequelae: long</td>
<td>Filippo M. Senes, Anna Maria Nucci, Annalisa Valore, Nunzio Catena</td>
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<td>term follow up</td>
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<td>09:39</td>
<td>Displaced midshaft clavicle</td>
<td>Displaced midshaft clavicle fractures treated with ORIF vs non-op:</td>
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<td>fractures treated with ORIF vs</td>
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<td>non-op:</td>
<td>Clare Kehoe, Roger Widmann, Nicolas Pascual-Leone, David Scher, Emily</td>
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<td>Dodwell (USA)</td>
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<td>09:42</td>
<td>Sprengel deformity - clinical and</td>
<td>Sprengel deformity - clinical and radiographic outcome following</td>
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<td>radiographic outcome following</td>
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<td>Antfang Carina, Andrea Laufer, Georg Gosheger, Anna Maria Rachbauer,</td>
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<td>Gregor Toporowski, Adrien Frommer, Henning Tretow, Robert Rödl, Bjoern</td>
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<td>Vogt (Germany)</td>
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<td>TRAVELLING FELLOWSHIPS</td>
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<td>CLOSING REMARKS</td>
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E-POSTERS

EP-01 Prolonged bisphosphonate therapy in children with severe osteogenesis imperfecta could create intramedullary canal obliteration or sclerosis
Darko Anticevic, Željko Jeleč (Croatia)

EP-02 Progress and recurrence of the disease in dysplasia epiphesealis hemimelica: A systematic review of literature
Alina Khodorovskaya, Vladimir Kenis, Eugeni Melchenko (Russia)

EP-03 Allografting is an effective biological method of fixation and increases bone trophicity in osteogenesis imperfecta
Sarah El Yahiaouni, Marine De Tienda, Georges Finidori, Valérie Dumaine, Alina Badina, Stéphanie Pannier, Mathilde Gaume, Zagorka Péjin (France)

EP-04 Role of fibular shortness in genu valgum deformity in multiple hereditary exostosis patients
Ravot Chloé, Adrien Roy, Launay Franck, Antoine Couvreur, Jean-Luc Jouve, Sebastien Pesenti (France)

EP-05 An evidence-based clinical practice guideline for developmental dysplasia of the hip under the age of 1 year. Part 1: Centered hips
Christiaan van Bergen, Pieter-Bas de Witte, Willeboordse Floor, Babette L. de Geest, Margret Foreman - van Drongelen, Bart J. Burger, Yvon Den Hartog, J.H. van Linge, Renske M. Pereboom, Simon Robben, Adhiambo Witlox, Melinda M.E.H. Witbreuk (The Netherlands)

EP-06 Gestational week and sonographic acetabular roof a-angle. A prospective, pilot, cohort of Caucasian - Greek population
Vasiliki Chatziravdeli, Christos Kazas, Ilias Chatziioannidis, George Mitsiakos, Elissavet Diamanti, Dimitrios Metaxiotis (Greece)

EP-07 Appropriate surgical timing of Salter innominate osteotomy for acetabular dysplasia in children
Kenta Sawamura, Hiroshi Kitoh, Hiroshi Kaneko, Akiko Kitamura, Saori Matsuyama, Kenichi Mishima, Masaki Matsushita, Yasunari Kamiya, Tadashi Hattori (Japan)

EP-08 What is the interobserver reliability of an Ultrasound enhanced physical examination of the hip in infants? A prospective study on the ease of acquisition of skills to diagnose hip dysplasia
Neha Jejurikar, Leon Moscona Mishy, Monica Rubio, Romina Cavallaro, Pablo Castaneda (USA)
EP-09 Development and validation of a diagnostic aid for DDH in early infancy: building on the results of a multinational EPOS study
Andreas Roposch, Annie Hurley, Rachel Buckingham, Claudia Maizen, Pranai Buddhdev, Aresh Hashemi-Nejad (UK)

EP-10 Does age at start of treatment have an influence of follow-up development of unstable hips?
Bettina Westhoff, Hannes Kubo, Hakan Pilge, Jan-Philipp Holthoff, Martin Hufeland, Ruediger Krauspe (Germany)

EP-11 AVN: how to minimize it? The effectiveness of Morel progressive traction in DDH (III-IV grade IHDI)
Federica De Rosa, Daniele Sini, Chiara Arrigoni, Carlo Origo (Italy)

EP-12 Comparison of pubo femoral distances in lateral versus supine positioning of the child
Hans-Christen Husum, Christian Klitt Jensen, Michel Bach-Hellfritzsch, Mads Henriksen, Ole Rahbek (Denmark)

EP-13 Residual dysplasia in left-sided and right-sided hip dislocation in children with developmental dysplasia of the hip
Hsin-Ying Lin, Suzanne de Vos-Jakobs, Stijn Westerbos, Max Reijman (The Netherlands)

EP-14 Parental experiences of children with developmental dysplasia of the hip: A qualitative study
Wesley Theunissen, Marieke van der Steen, Florens van Douveren, Adhiambo Witlox, Jaap Tolk (The Netherlands)

EP-15 Traction assisted reduction compared with surgical reduction for treatment of walking age developmental dysplasia of the hip
Jason Chinnappa1,2, Anne-Laure Simon1, Alexandre Gounot1, Philippe Souchet1, Brice Ilharreborde1 (France, 2Australia)

EP-16 Short term outcome of our new screening system on developmental dysplasia of the hip
Yuko Segawa, Reiko Yamaguchi, Kazumasa Miyatake, Atsushi Okawa (Japan)
EP-17 Whether to combine acetabular osteotomy with femoral osteotomy for residual dysplasia in patients with developmental dysplasia of the hip
Tae-Joon Cho, Yoon Joo Cho, Ihn Seok Chae, Chang Ho Shin, Won Joon Yoo, Chin Youb Chung, In Ho Choi (South Korea)

EP-18 The importance of monitoring and factors that may influence leg length difference in developmental dysplasia of the hip
Rajiv Merchant, Jaap Tolk, Anouska Ayub, Deborah Eastwood, Aresh Hashemi-Nejad (UK)

EP-19 A delayed imaging protocol for risk-factor based screening for developmental dysplasia of the hip reduces treatment rates: A COVID induced study
Anish Sanghrajka, Rajiv Merchant, Rachael Fisher, Helen Chase (UK)

EP-20 Total hip arthroplasty followed by intramedullary femoral lengthening for staged reconstruction of unilateral neglected hip dislocation
Bjoern Vogt, Robert Roedl, Georg Gosheger, Adrien Frommer, Christoph Theil, Gregor Toporowski, Andrea Laufer (Germany)

EP-21 Is the lateral cuneiform large enough to support interference screw fixation for tibialis anterior tendon transfer in children aged 3 to 6 years?
Jordan Polk, Zachary Meyer, Jacob Zide, Yassine Kanaan, Anthony Riccio (USA)

EP-22 The Ponseti method for the treatment of clubfeet associated with Down syndrome
Edwin Portalatin-Perez¹, Sarah Parenti², Jordan Polk², Chan-Hee Jo², Anthony Riccio² (¹Portorico, ²USA)

EP-23 Interrelations between the too-long anterior calcaneal process, hind and mid-tarsal bone volumes, angles and osteochondral lesion of the dome of the talus. Analysis by software slicer of 69 CT scan of feet
Giovanni Lucchesi¹, François Bonnel², Alain Dimeglio², Giovanni Beltrami¹, Federico Canavese² (¹Italy, ²France)

EP-24 Participation and motor abilities in children with idiopathic clubfeet after treatment with the Ponseti method
Arnold Besselaar¹, Lianne van Dijk¹, Lianne Grin¹², Saskia Wijnands¹², Marieke van der Steen¹, Benedicte Vanwanseele¹² (Russia)
EP-25  Atypical triplane fractures in adolescents: How much displacement is acceptable for conservative treatment?  
Chaemoon Lim (South Korea)

EP-26  Location of sustentaculum tali on foot AP radiographs reduces the risk of subtalar joint articular facets damage in calcaneal lightening osteotomy  
Sapogovskiy Andrey, Vladimir Kenis (Russia)

EP-27  Objectively measured sleep metrics in infants and toddlers undergoing night-time boots and bar brace treatment for clubfoot compared to age matched controls  
Charlotte Sununu, Natalie Barnett, Clare Kehoe, David Scher (USA)

EP-28  Efficacy of various treatment strategies in severe Legg-Calve-Perthes Disease: A network meta-analysis  
Nath Adulkasem, Pasin Tangadulrat, Jidapa Wongcharoenwatana, Thanase Ariyawatkul, Chatupon Chotigavanichaya, Kamolporn Kaewpornsawan, Perajit Eamsobhana (Thailand)

EP-29  Cost-effectiveness of intertrochanteric osteotomy versus total hip arthroplasty in children with severe slipped capital femoral epiphysis  
Olivia de Araujo, Anna Vergun, Daniel Bracey, Chinmay Paranjape (USA)

EP-30  The optimized Oxford hip skeletal maturity system proves resilient to rotational variation  
Julio Castillo Tafur, Ryan Furdock, Abdus Sattar, Raymond Liu (USA)

EP-31  Long term follow-up (35 years) of untreated patients with idiopathic increased femoral anteversion  
Anders Grønseth, Suki Liyanarachi, Joachim Horn, Terje Terjesen (Norway)

EP-32  Hip morphology in periacetabular osteotomy patients treated for developmental dysplasia of the hip as infants compared to those without infant treatment  
Bridget Ellsworth, Joshua Bram, Ernest Sink (USA)

EP-33  Minimum 2-year outcomes following arthroscopic hip labral reconstruction in adolescents with a sub-analysis against a propensity-matched labral repair control benchmark group in the primary and revision scenarios  
David Maldonado, Rachel Glein, Benjamin Saks, Andrew Jimenez, Payam Sabetian, Ajay Lall, Benjamin Domb (USA)
EP-34 The mini open approach for the correction of femoralacetabular impingement after a slipped upper femoral epiphysis is effective and reproducible
Karim Masrouha, Pablo Castaneda, Leon Moscona Mishy, Salim Habib (USA)

EP-35 Testing a new surgical principle of guided growth for correction of rotational deformity of long bones in children
Andreas Peter Balslev-Clausen, Klaus Hindsø, Peter Buxbom, Christian Wong (Denmark)

EP-36 How are pre-operative surgeon and patient expectations related to patient-reported outcomes after periacetabular osteotomy?
Samantha Ferraro, Patricia Miller, Michael Millis (USA)

EP-37 Hip instability in children with trisomy 21
Milud Shadi, Pawel Glowka, Marek Jóźwiak, Tomasz Kotwicki (Poland)

EP-38 An anatomic study of the proximal tibial epiphysis with relevance to percutaneous epiphysiodesis using transphyseal screws
Michael Do, Conor McCarthy, Daniel Cooperman, Raymond Liu (USA)

EP-39 Femur lengthening over nail in adolescents: Is the lateral shift of the mechanical axis inevitable?
Kyeong-Hyeon Park¹, Chang-Wug Oh² (*South Korea, ²USA)

EP-40 Drop landing analysis of rotational osteotomies
Peter Stevens, Bruce Macwilliams (USA)

EP-41 Tension band plating for correction of leg length difference
Jaap Tolk, Rajiv Merchant, Aresh Hashemi-Nejād, Deborah Eastwood (UK)

EP-42 Morphology of the knee joint after tension-band plating
Emma Julie Hvidberg, Maria Kirstine Møller-Madsen, Jan Duedal Rölfing, Bjarne Moeller-Madsen, Ahmed A. Abood (Denmark)

EP-43 Our experience of treatment of congenital pseudoarthrosis of tibia using X-union protocol
Petr Vvedenskiy, Maxim Vlasov (Russia)
Anne Breen, Joachim Horn, Harald Steen, Are Pripp, Ragnhild Gunderson, Else Merckoll, Ivan Hvid, Wajeeha Zaidi, Hilde Kristine Sandberg Mentzoni (Norway)

EP-45  Non-elongating rod placement after osteosynthesis in congenital pseudarthrosis of the tibia: Should an elongating rod have been installed?
Hanbual Yang, Yoon Joo Cho, Chang Ho Shin, Won Joon Yoo, In Ho Choi, Tae-Joon Cho (South Korea)

EP-46  MPLF reconstruction and hemi-epiphysiodesis for patellar instability with genu valgum
Dayna Philips, Matthew Veerkamp, Eric Wall, Matthew Ellington, Nicole Friel, John Schlechter, Daniel Green, Javier Masquijo, Shital Parikh (USA, Argentina)

EP-47  Lengthening of the femur in adolescents with congenital diseases. Comparison of three different techniques
Szymon Pietrzak, Dariusz Grzelecki, Tomasz Parol, Jaroslav Czubak (Poland)

EP-48  Many radiologic indices for patellofemoral instability are unreliable
Peter Fabricant, Madison Heath, Douglas Mintz, Kathleen Emery, Matthew Veerkamp, Simone Gruber, Daniel Green, Eric Wall, Marc Tompkins, Benton Heyworth, JUPITER Study Group, Beth Shubin Stein, Shital Parikh (USA)

EP-49  Management of first-time patellar dislocation: a survey of PRISM members
Shital Parikh, Matthew Veerkamp, PRISM Patellofemoral RIG (USA)

EP-50  Demographic and clinical characteristics of patellar instability patients from prospective JUPITER (Justifying Patellar Instability Treatment by Early Results) cohort
Meghan Bishop, Jacqueline Brady, Simone Gruber, Matthew Veerkamp, Joseph Nguyen, Benton Heyworth, Marc Tompkins, Daniel Green, Eric Wall, JUPITER Study Group, Beth Shubin Stein, Shital Parikh (USA)

EP-51  Suicidal ideation in pediatric orthopedic patients
Whitney Herge, Farzam Farahani, Aaron Hurd, Claire Shivers, Shelby Cerza, Sarah Parenti, Anthony Riccio (USA)
EP-52 Electromyography role in children with split cord malformation diagnosis
Margarita Savina, Vissarionov Sergey, Vahtang Torja, Alina Khodorovskaya (Russia)

EP-53 Validity of the patient reported outcome information system (PROMIS) in children and adolescents with lower extremity conditions
Nicholas Sullivan, Patricia Miller, Susan Mahan, Samantha Spencer, James Kasser, Matthew Milewski, Dennis Kramer, Collin May (USA)

EP-54 Using a digital inclinometer significantly improves the accuracy of derotation osteotomy: A simulation study
Anish Sanghrajka, Daniel Watts, Helen Chase, Daniel Bye (UK)

Ahmad Saeed Aly, Shady Abdelghaffar (Egypt)

EP-56 Hip displacement in spinal muscular atrophy: The influence of genetic severity and functional level
Armagan Can Ulusaloglu, Ali Asma, Michael W. Shrader, Mena Scavina, William Mackenzie, Amanda Erb, Jason Howard (USA)

EP-57 The influence of baseline gait velocity on treatment results after single-event multilevel surgery in patients with cerebral palsy
Mauro César de Morais Filho, Marcelo Fujino, Francesco Blumetti, Cátia Kawamura, José Augusto Lopes (Brazil)

EP-58 Predictors of postoperative urinary retention after posterior spinal fusion for adolescent idiopathic scoliosis
Tommi Yrjälä, Linda Helenius, Markku Taittonen, Hanna Oksanen, Heli Keskinen, Terhi Kolari, Ilkka Helenius (Finland)

EP-59 Treatment of recurrent patellar dislocation in children and adolescents with medial patellofemoral ligament reconstruction - pediatric technique
João Cabral, Ines Balacó, Marcos Carvalho, Oliana Madeira Tarquini, Pedro Sá Cardoso, Tah Ling, Cristina Alves (Portugal)
EP-60  First report and analysis of anterior inferior iliac spine avulsion re-fracture of the hip  
Javier Besomi, Jose Tomas Bravo, Cristian Olmedo, Jorge Joannon, Daniela Landea, Pedro Salgado (Chile)

EP-61  Walking hip spicas for paediatric femoral shaft fractures: improving outcomes & reducing caregiver burden
Ben Steward, Helen Gille, Pranai Buddhdev (UK)

EP-62  Fully displaced pediatric supracondylar humerus fractures: Which ones need to go at night?
Susan Mahan, Patricia Miller, Jiwoo Park, Nicholas Sullivan, Carley Vuillermin (USA)

Cordelia Carter, Charles Lin, Utkarsh Anil (USA)

EP-64  Global variations in the management of diaphyseal forearm fractures in children: A survey of EPOS and POSNA members
Ludger Tüshaus¹, Christoph Roeder², Annelie Martina Weinberg², Louise Klingenberg³, Sven-Oliver Dietz¹, Nicolas Lutz⁴, Federico Canavesè⁵, Cristina Alves⁶ (¹Germany, ²Austria, ³Denmark, ⁴Switzerland, ⁵France, ⁶Portugal)

EP-65  Construct validity of a novel simulator for pinning of supracondylar humeral fractures
Jan Duedal Rölfing¹, Steven Long², Ahmed A. Abood¹, Emily Connor¹, Emily Wagstrom¹, Geb Thomas¹, Don Anderson¹, Heather Kowalski¹ (¹Denmark, ²USA)

EP-66  Two-fold risk of fractures among children whose mother smoked during the pregnancy
Roope Parviainen, Juha-Jaakko Sinikumpu (Finland)

EP-67  Clinical outcome of supracondylar humerus fractures in patients younger than 30 months
Ahmet Hamdi Akgüle, Bulent Erol, Yavuz Şahbat, Hayati Kart, Özgür Baysal (Turkey)

EP-68  Do all femoral shaft fractures need a CT scan of the ipsilateral femoral neck? Incidence of ipsilateral femoral neck and shaft fractures
Tracy Townsend, Danielle Cook, Lanna Feldman, Maria Canizares, Colyn Watkins, Benjamin Shore (USA)
EP-69  Surgical exploration of the pink pulseless supracondylar fracture
Philip McKeag, Hean Wu Kang, Richard Napier (UK)

EP-70  Treatment of unicameral bone cysts: A comparative study during 8-year period
Bojan Bukva, Sinisa Ducic, Mikan Lazovic, Filip Milanovic (Serbia)

EP-71  Percutaneous alcohol-based sclerotherapy in aneurysmal bone cyst in children and adolescents. A retrospective study of 41 patients
Maria Tirta, Georgia Antoniou, Anastasia Pilichou, Panagiotis Krallis, Maria Stefanou1 John Anastasopoulos (Greece)

EP-72  The proximal congenital radioulnar synostosis: Quality of life of paediatric patients. A multicentre study
Paola Zarantonello, Giovanni Luigi Di Gennaro, Sebastian Farr, Giovanni Trisolino, Diego Antonioli, Giovanni Gallone, Stefano Stallone (Austria)

EP-73  Corrective procedure for flexion contracture of the elbow in neonatal palsy sequelae: Long term follow-up
Filippo M. Senes, Anna Maria Nucci, Annalisa Valore, Nunzio Catena (Italy)

EP-74  The treatment outcome of pediatric trigger thumb: Open surgery versus nonoperative management according to age
Jung Yun Bae, Ju Mi Hwang (South Korea)

EP-75  Temporary epiphysiodesis in adolescent patients with ulnocarpal impaction syndrome
Philipp Scheider, Rudolf Ganger, Sebastian Farr (Austria)

EP-76  Age-related outcomes and complications of osteodistraction in the pediatric upper extremity: A large retrospective single-center study of 61 cases
Philipp Scheider, Rudolf Ganger, Sebastian Farr (Austria)

EP-77  Testing a new method of osteosynthesis of antebrachium fractures in children; A prospective randomized controlled longitudinal study
Lærke Gyllenborg, Christian Wong, Ture Karbo (Denmark)

EP-78  Flexor tendon injuries in the pediatric age: What results can be expected?
Marcos Carvalho, Ricardo Marques, Pedro Sá Cardoso, Tah Ling, Ines Balacó, Oliana Madeira Tarquini, João Cabral, Cristina Alves (Portugal)
EP-79  Peripheral nerve injuries of the upper extremity in paediatric population: long-term outcomes and prognostic factors  
Justine Fleurette, Mathilde Gaume, Marine De Tienda, Caroline Dana, Stéphanie Pannier (France)

EP-80  Signaling overuse sports injuries in the pediatric elbow: Physicians’ item collection  
Brinne Roorda, Christiaan van Bergen, Denise Eygendaal, Bertram The, Iris van Oost (The Netherlands)

EP-81  Innovation of COVID-19 pandemic; A prospective study on paediatric forearm fractures manipulations in A&E department of a District General Hospital  
Hafiz Umer, Hafiz-Javaid Iqbal, Matthew Nixon, Mark Webb, Peter Kenyon, Sophie Dodd (UK)

EP-82  Displaced midshaft clavicle fractures treated with ORIF vs non-op: Equivalent strength, endurance, and kinematics  
Clare Kehoe, Roger Widmann, Nicolas Pascual-Leone, David Scher, Emily Dodwell (USA)

EP-83  Problems during and after lengthening of forearm with radial longitudinal deficiency  
Daisuke Tamura, Hidehiko Kawabata (Japan)

EP-84  Sprengel deformity - clinical and radiographic outcome following surgical intervention  
Antfang Carina, Andrea Laufer, Georg Gosheger, Anna Maria Rachbauer, Gregor Toporowski, Adrien Frommer, Henning Tretow, Robert Rödl, Bjoern Vogt (Germany)

EP-85  Measurement for objective diagnosis of multidirectional instability of shoulder in adolescent patients  
Mason Yoder, Matthew Veerkamp, Colin McDonald, Shital Parikh (USA)
EPOS Future Annual Meetings

Join EPOS 41st Annual Meeting from 29 March - 1 April 2023, in Krakow, Poland

EPOSNA Meeting on May 2024 in Washington DC, USA