38th EPOS Annual Meeting
European Paediatric Orthopaedic Society

3rd - 6th April, 2019
Tel Aviv – Israel

Scientific Programme
## Program at a Glance

### Wednesday April 3rd

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>12:00 - 14:20</td>
<td>Precourse CLUBFOOT</td>
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<tr>
<td>14:20 - 15:00</td>
<td>Coffee break</td>
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<tr>
<td>15:00 - 17:00</td>
<td>Precourse CLUBFOOT</td>
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<tr>
<td>19:00 - 20:00</td>
<td>Welcome Ceremony</td>
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<tr>
<td>20:00</td>
<td>Welcome Reception at the Congress Venue</td>
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### Thursday April 4th

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<thead>
<tr>
<th>Time</th>
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<tr>
<td>08:00 - 08:20</td>
<td>Opening Ceremony</td>
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<tr>
<td>08:20 - 09:26</td>
<td>Basic Science</td>
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<tr>
<td>09:26 - 10:15</td>
<td>Sports Medicine</td>
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<tr>
<td>10:16 - 10:45</td>
<td>Coffee break</td>
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<tr>
<td>10:46 - 12:01</td>
<td>DDH</td>
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<tr>
<td>12:01 - 12:57</td>
<td>Tumours</td>
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<tr>
<td>12:57 - 14:00</td>
<td>Lunch</td>
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<tr>
<td>14:00 - 15:00</td>
<td>K2M Industry Symposium</td>
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<tr>
<td>15:00 - 16:15</td>
<td>Trauma</td>
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<tr>
<td>16:15 - 16:47</td>
<td>Foot</td>
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<tr>
<td>16:47 - 17:10</td>
<td>Coffee break</td>
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<tr>
<td>17:10 - 18:15</td>
<td>Hip</td>
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<tr>
<td>17:10 - 17:59</td>
<td>Club Foot</td>
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<tr>
<td>17:59 - 18:59</td>
<td>Meet the Mentor</td>
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<tr>
<td>19:30</td>
<td>Welcome reception offered by Tel Aviv Municipality</td>
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### PROGRAM AT A GLANCE

#### FRIDAY APRIL 5TH

<table>
<thead>
<tr>
<th>Time</th>
<th>Grand Ballroom AB</th>
<th>King Salomon AB</th>
<th>King Salomon C</th>
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<tbody>
<tr>
<td>07:30 - 08:19</td>
<td>SPINE 2</td>
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<tr>
<td>08:20 - 09:09</td>
<td>SPINE 3</td>
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<tr>
<td>09:10 - 09:35</td>
<td>INFECTION</td>
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<td>09:35 - 10:24</td>
<td>BEST OF THE BEST</td>
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<tr>
<td>10:25 - 11:00</td>
<td>Coffee break</td>
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<tr>
<td>11:00 - 12:00</td>
<td>General Assembly I</td>
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<td>12:00 - 13:00</td>
<td>General Assembly II</td>
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<tr>
<th>Time</th>
<th>Grand Ballroom A</th>
<th>Grand Ballroom B</th>
<th>King Salomon AB</th>
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<tbody>
<tr>
<td>13:30 - 14:30</td>
<td>Orthopediatrics Industry Symposium</td>
<td>NuVasive Industry Symposium</td>
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<tr>
<td>14:30 - 16:30</td>
<td>EPOS STUDY GROUP Cerebral Palsy and Spinal Deformity</td>
<td>EPOS STUDY GROUP Hip and lower limb in skeletal dysplasia and metabolic diseases</td>
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<tr>
<td>16:30 - 17:00</td>
<td>Coffee break</td>
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<tr>
<td>17:00 - 19:00</td>
<td>EPOS STUDY GROUP Sports Medicine</td>
<td>EPOS STUDY GROUP Musculoskeletal Tumours, Infections &amp; Arthritis Group</td>
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| 20:30 | Congress Dinner |

#### SATURDAY APRIL 6TH

<table>
<thead>
<tr>
<th>Time</th>
<th>Grand Ballroom AB</th>
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<tbody>
<tr>
<td>08:00 - 08:49</td>
<td>UPPER LIMB</td>
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<tr>
<td>08:50 - 09:47</td>
<td>NEUROMUSCULAR</td>
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<tr>
<td>09:48 - 10:13</td>
<td>PRESIDENTIAL GUEST LECTURE</td>
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<tr>
<td>10:13 - 10:18</td>
<td>AWARDS 2019</td>
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<tr>
<td>10:18 - 10:28</td>
<td>PRO MAXIMIS MERITIS</td>
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<tr>
<td>10:28 - 10:53</td>
<td>PRESIDENCY TRANSFER</td>
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<tr>
<td>10:53 - 11:30</td>
<td>Coffee break</td>
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<tr>
<td>11:30 - 12:52</td>
<td>CONGENITAL</td>
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<tr>
<td>12:53 - 13:00</td>
<td>CLOSING REMARKS</td>
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</table>
12.00 **PRECOUSE: CLUBFOOT**

12.00 Introduction
**Stephanie Böhm** (Sweden)

12.10 Genetics update for clubfoot
**Matthew Dobbs** (USA)

12.20 Current research news from Iowa including tips and tricks in Clubfoot treatment
**Jose Morcuende** (USA)

12.30 The significance of foot size at the initiation of Ponseti protocol
**Yoram Hemo** (Israel)

12.40 What I learned during the years about clubfoot – to do and not to do
**Jose Morcuende** (USA)

12.50 My approach… to perform the tenotomy
**Naomi Davis** (United Kingdom)

13.00 Discussion

13.20 Bracing protocol in clubfoot especially in the first year
**Yoram Hemo** (Israel)

13.30 Bracing – 3,4 or up to 5 years of age ? – pros and cons
**Cristina Alves** (Portugal)

13.40 Discussion

13.50 Treating arthrogrypotic clubfeet – what’s different
**Harold van Bosse** (USA)

14.00 My approach … to treat complex clubfeet
**Harold van Bosse** (USA)

14.10 Discussion

14.20 Coffee break
12.00  PRECOURSE: CLUBFOOT

17.00

15.00  Treatment of severe neglected clubfoot
Mark Eidelman (Israel)

15.10  Treatment of rigid equinus in older children and adolescents
Mark Eidelman (Israel)

15.20  Adjunctive surgeries
John Herzenberg (USA)

15.30  Discussion

15.40  The PBS score
Stephanie Böhm (Sweden)

15.50  Neurodevelopmental difficulties in children with idiopathic clubfoot
Elin Lööf (Sweden)

16.00  The most challenging case I ever had…
Cristina Alves (Portugal), Matthew Dobbs (USA)

16.20  Discussion

16.30  The work of Fred Dietz
Naomi Davis (Sweden)

16.40  Worldwide spread of the Ponseti method
John Herzenberg (USA)

16.50  Closing Remarks
Stephanie Böhm (Sweden)
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Location</th>
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<tbody>
<tr>
<td>08:00</td>
<td>OPENING CEREMONY</td>
<td>GRAND BALLROOM AB</td>
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<tr>
<td>08:20</td>
<td>BASIC SCIENCE</td>
<td>GRAND BALLROOM AB</td>
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<tr>
<td>08:20</td>
<td>Chairs: Franck Accadbled (France) and Deborah Eastwood (United Kingdom) E-Moderator: Ralph J.B. Sakkers (Netherlands)</td>
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<tr>
<td>08:20</td>
<td>OP-001 Cell death mechanisms are regulated by hyperbaric oxygen therapy following experimental spinal cord injury Murat Celal Sozbilen, Huseyin Gunay, Murat Ozturk, Taner Dagci, Halit Ozyalcin, Guliz Armagan (Turkey)</td>
<td></td>
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<tr>
<td>08:25</td>
<td>OP-002 Behavior of intramedullary implants across the distal femoral growth plate: preliminary results from a sheep model Chang-Yeon Kim, Derrick Knapik, Lewis Zirkle, Raymond Liu (United States)</td>
<td></td>
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<tr>
<td>08:30</td>
<td>OP-003 The results of cartilage damage treatment using growth plate chondrocytes on the growing animal model Ryszard Tomaszewski, Łukasz Wiktor, Artur Gap (Poland)</td>
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<tr>
<td>08:35</td>
<td>OP-004 Can real time monitoring with a controlled advancement drill decrease plunge depth? Blake Wallace, Alexander Cherkashin, Mikhail Samchikov, Robert Wimberly, Anthony Riccio (United States)</td>
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<tr>
<td>08:40</td>
<td>Discussion</td>
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<tr>
<td>08:53</td>
<td>OP-005 Linkage analysis in a national series of patients affected by non syndromic severe clubfoot Daniela Dibello, Valentina Di Carlo, Flavio Faletra, Adamo Pio D’Adamo, Maurizio De Pellegrin, Costantina Racano, Ignazio D’Addetta, Sergio Monforte (Italy)</td>
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<tr>
<td>08:58</td>
<td>OP-006 The effect of relaxin on primary fibroblast-like cells isolated from clubfoot tissue Jarmila Knitlova, Martina Doubkova, Tomas Novotny, Adam Eckhardt, Martin Ostadal (Czech Republic)</td>
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<tr>
<td>09:03</td>
<td>OP-007 Safety potential of physeal biopsy in a rabbit model Peter Stevens, Tyler Epperson, Nicholas Taylor, Dustin Williams (United States)</td>
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<tr>
<td>09:08</td>
<td>OP-008 Dynamic three-dimensional reconstruction of thoracic cage and abdomen in children and adolescents with scoliosis: results of optical reflective motion analysis assessment Federico Canavese¹, Fuxing Xun², Yiqiang Li², André Kaelin³, Alain Dimeglio¹, Hongwen Xu² (¹France, ²China, ³Switzerland)</td>
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<tr>
<td>09:13</td>
<td>Discussion</td>
<td></td>
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</table>
09:26  **SPORTS MEDICINE**  GRAND BALLROOM AB
10:15  Chairs: Jorge Knörr (Spain) and Annalie Martina Weinberg (Austria)
       E-Moderator: Moshe Yaniv (Israel)

09:26  OP-009  The influence of general physical health and socioemotional status on the outcomes
       following meniscus repair procedure in patients under 18 years
       Viktorija Brogaite Martinkeniene, Andrius Šaikus, Andrius Brazaitis,
       Giedrius Bernotavičius (Lithuania)

09:31  OP-010  Prevalence of ramp meniscal lesions associated with ACL injury in children and adolescents
       Isabelle Bernardini, Camille Thévenin Lemoine, Daniel N’Dele,
       Jérôme Sales de Gauzy, Franck Accadbled (France)

09:36  OP-011  An all-inside arthroscopic posterior cruciate ligament (PCL) reconstruction technique for children
       Daniel N’Dele, Kepa Iglesias, Jérôme Sales De Gauzy, Camille Thévenin-Lemoine,
       Franck Accadbled (France)

09:41  Discussion

09:51  OP-012  Clinical outcome after arthroscopic debridement and microfracture for osteochondritis dissecans of
       the capitellum
       Rens Bexkens1, Kim van den Ende1, Paul Ogink2, Christiaan van Bergen1, Michel
       van den Bekerom1, Denise Eygendaal1 (1Netherlands, 2United States)

09:56  OP-013  Long term results of surgical treatment of juvenile osteochondritis dissecans of the knee by
       arthroscopic fixation with bioabsorbable implants
       Ioannes Melas, Dimitrios Metaxiotis, Michael Iosifidis (Greece)

10:01  OP-014  Level of sports competition is associated with increased yearly incidence of back pain in
       3,891 American children and adolescents
       Roger Widmann, Madison Heath, Jonathan Schachne, Colleen Wixted,
       Daniel Green, Shevaun Doyle, Peter Fabricant (United States)

10:05  Discussion

10:16  Coffee break
**GRAND BALLROOM AB**

10:46 **DDH**

12:01 Chairs: Hakan Omeroglu (Turkey) and Andreas Roposch (United Kingdom)
E-Moderator: Renata Pospischill (Austria)

10:46 **Comparison between the Pavlik Harness and the Tübingen splint for the treatment of developmental dysplasia of the hip in infants**

Xuemin Lyu, Min Lu (China)

10:51 **The complication rate for treatment of developmental dysplasia of the hip with the Pavlik Harness**

Pablo Castañeda¹, Carlos Vidal² (¹United States, ²Mexico)

10:56 **Predictors of avascular necrosis of the femoral head following closed or open reduction in the treatment of developmental dysplasia of the hip**

Emily Schaeffer¹, Jeffrey Bone¹, Wudbhav Sankar¹, Travis Matheney², Kishore Mulpuri¹ (¹Canada, ²United States)

11:01 **Discussion**

11:11 **Is closed reduction for DDH avoidable?**

David Milligan, Aidan Cosgrove (United Kingdom)

11:16 **Effect of age on radiographic outcomes of patients aged 6 to 24 months with developmental dysplasia of the hip treated by closed reduction**

Yiqiang Li¹, Yanhan Liu¹, Jingchun Li¹, Yuanzhong Liu¹, Bruno Pereira², Federico Canavese², Hongwen Xu¹ (¹China, ²France)

11:21 **Acetabular indices in children at risk of developmental dysplasia of the hip: time for new references?**

Sayeed Ahmed Khan, Hassaan Qaiser Sheikh, Venla Kontala, James A Fernandes, Nicolas Nicolaou³ (United Kingdom)

10:26 **Discussion**

11:36 **Factors affecting the outcome of open reduction for developmental dysplasia of the hip performed over the age of 18 months**

Avi Marks, Tom Southorn, Dror Maor, Aresh Hashemi-Nejad, Andreas Roposch (United Kingdom)

11:41 **Dega transiliac osteotomy in the developmental dislocation of the hip: long-time outcome in patients treated when older than 5 y.o.**

Łukasz Wozniak, Marek Jozwiak, Maciej Idzior (Poland)

11:46 **Significance of asymmetry of groin/thigh creases in developmental dysplasia of the hip revisited; a myth or a fact?**

Hakan Ömeroglu, Erdem Tatlici, Nusret Köse (Turkey)

10:51 **Discussion**
12:01  **TUMORS**
12:05 Chairs: **Nuno Alegrete** (Portugal) and **Bjarne Moller-Madsen** (Denmark)
E-Moderator: **Robert Elbaum** (Belgium)

12:01  Pelvic ring reconstruction with a double-barreled free vascularized fibula graft after resection of pediatric pelvic bone sarcomas
**Bulent Erol, Osman Mert Topkar, Tolga Onay, Said Erkam Baykam, Servet İğrek, Cihangir Tetik** (Turkey)

12:06  Free fibula reconstruction of distal tibial osteoarticular defects after sarcoma surgery
**Bulent Erol, Fevzi Sağlam, Ahmet Hamdi Akgülle, Said Erkam Baykam, Servet İğrek, Cihangir Tetik** (Turkey)

12:11  Intramedullary fixation of double barrel vascularised fibula grafts with subsequent femoral lengthening for reconstruction of the distal femur in osteosarcoma patients
**Ulrich Lenze**, **Mark O'Sullivan**, **Dave McCombe**, **Christopher Coombs**, **Leo Donnan** (Australia, Germany)

12:16  Discussion

12:25  Allograft-prosthetic composite after proximal femur bone tumor resection in pediatric age
**Domenico Andrea Campanacci, Alessandra Botti, Francesca Totti, Gabriele Ristori, Giovanni Beltrami** (Italy)

12:30  Granular cells tumors in pediatric patients
**Carlos Pargas, Kenneth Rogers, Mihir Thacker** (United States)

12:35  Treatment of simple bone cysts with bone marrow aspirate concentrate (BMAC) and equine derived demineralized bone matrix: a retrospective comparative study
**Raffaele Dario D'Amato, Antonio Memeo, Federico Fusini, Elena Panuccio, Giuseppe Peretti** (Italy)

12:40  Bioexpandable prosthesis after resection of malignant bone tumors in children
**Rainer Baumgart** (Germany)

10:45  Discussion

12:57  Lunch
TRAUMA

15:00
Metaphyseal fracture displacement is predictive of intra-articular diastasis in adolescent triplane ankle fractures
Surya Mundluru, Jose Romero, Dustin Greenhill, Marilyn Elliott, Robert Wimberly, Anthony Riccio (United States)

15:05
The iole (intramedullary titanium nail osteosynthesis linked external-fixator) technique in pediatric femoral shaft fractures: validity and reliability
Michele Bisaccia, Giuseppe Rollo, Auro Caraffa, Giuseppe Rinonapoli, Niki Cazzella, Paolo Pichierr, Marco Filipponi, Alessandro Stasi, Luigi Meccariello (Italy)

15:10
Paediatric pelvic fractures: a retrospective review of 2 cohorts of patients
Neil Chotai, Sulaiman Alazzawi, Syeda Zehra, Matthew Barry (United Kingdom)

15:15
Discussion

15:25
Importance of timing in elbow supracondylar fractures associated to neurovascular injury
Ignacio Sanpera, Carmen Munoz-Lopez, Sandra Villafranca (Spain)

15:30
Radial neck fractures in children: results of open reduction
Renato Maria Toniolo, Francesco Falciglia, Marco Giordano, Carlotta Giusti (Italy)

15:35
Can childhood obesity increase the risk of failure in conservative treatment of distal radius fractures?
Gianluca Testa, Andrea Vescio, Ludovico Lucenti, Emanuele Chisari, Vito Pavone (Italy)

15:40
Discussion

15:50
Clavicle fractures in adolescents – to fix or not to fix?
Richie Olandres, Merrilynn Thng, Natalie Pereira, Rui Xian Lim, Elvin Lokino, Nicole Lee, Kevin Lim (Singapore)

15:55
Development and content validation of the patient-reported outcomes of fracture healing (proof) questionnaires
Unni Narayanan, Shikha Patel, Roni Propp, Ashley Ferkul, Mark Camp, Anne Murphy (Canada)

16:00
Kids fractures quality register
Yrjänä Nietosvaara, Topi Laaksonen (Finland)

16:05
Discussion
16:15 **FOOT**

16:47 Chairs: Dan Cosma (Romania) and Vito Pavone (Italy)
E-Moderator: Amos Schindler (Israel)

16:15 Subtalar arthroereisis for the treatment of symptomatic paediatric flexible flatfoot
OP-040 Christian Smith, Razi Zaidi, Jagmeet Bhamra, Caesar Wek, Anna Bridgens, Michail Kokkinakis (United Kingdom)

16:20 Outcome after subtalar arthroereisis in children with flexible flatfoot depends on time of treatment: midterm results of 95 cases
OP-041 Ruediger Krauspe, Bettina Westhoff, Hakan Pilge, Carina Lipp, Martin Ruppert, Martin Hufeland, Hannes Kubo (Germany)

16:25 Quality of life in flexible painful flatfoot: the patient’s and family’s perspective
OP-042 Daniela Dibello, Marco Carbone, Valentina Di Carlo, Luca Odoni, Federica Pederiva (Italy)

16:30 A three-in-one procedure to treat talocalcaneal coalition in children: a case-control study
OP-043 Giovanni Luigi Di Gennaro, Giovanni Trisolino, Stefano Stallone, Stefano Stilli, Giovanni Gallone, Paola Zarantonello (Italy)

16:35 Discussion

16:47 Coffee break
17:10  **HIP**  
18:15  Chairs: Jiri Chomiak (Czech Republic) and Manoj Ramachandran (United Kingdom)  
       E-moderator: Marek Synder (Poland)

**OP-044** How reliable is the modified lateral pillar classification when a large number of raters from multiple centers are involved, and what factors affect the reliability?  
Jennifer Laine, John Tis, Susan Novotny, Andrew Ries, Chan-Hee Jo, Harry Kim, International Perthes Study Group (United States)

**OP-045** The role of Doppler ultrasound and MRI of the hip joint to select treatment strategies for children with perthes disease  
Vadim Kozhevnikov, Mikhail Lobanov, Elena Bobrysheva (Russia)

**OP-046** Minimally invasive surgical techniques in the treatment of Perthes’ disease  
Pavel Rakhman, Oleksandr Korolkov, Zlatoslava Kuzo, Yelyzaveta Katsalap (Ukraine)

**OP-047** “Abortive”, “minimal” or “occult” Perthes’ disease - does it exist in MRI?  
Ludwig Meiss, Gerald Eggers-Stroeder (Germany)

17:30  **Discussion**

17:43  **OP-048** Prophylactic fixation of the contralateral hip after unilateral slipped capital femoral epiphysis – complication rates and considerations  
Martin Sköldberg, Bengt Herngren (Sweden)

**OP-049** Outcomes after slipped capital femoral epiphysis – a population-based study with 3-year follow-up  
Bengt Herngren, Margaretha Stenmarker, Karin Enskär, Gunnar Hägglund (Sweden)

17:53  **OP-050** Severe SCFE patients treated with a modified dunn procedure have low avn rate, high survivorship and little osteoarthritis at longterm followup  
Till Lerch, Kai Ziebarth, Florian Schmaranzer, Simon Steppacher, Moritz Tannast, Klaus Siebenrock (Switzerland)

17:58  **OP-051** Slipped capital femoral epiphysis treatment avoiding femoral-acetabular impingement  
Francesco Falciglia, Angelo Gabriele Aulisa, Silvia Careri, Renato Maria Toniolo (Italy)

18:03  **Discussion**
15:00 KNEE

15:50 Chairs: Rudolf Ganger (Austria) and Ignacio Sanpera (Spain)
E-moderator: Dmitry Popkov (Russia)

15:00 Most patients are not back to normal activities one month following eight plates
OP-052 Vanessa Grégoire, David Skaaggs, Hulaimatu Jalloh, Peter Stevens,
Stephanie Holmes, Victoria Heagy, Lindsay Andras (United States)

15:05 Complications and errors during guided growth
OP-053 Rolf Burghardt¹, John Herzenberg², Kevin T.G. von der Heydt¹, Natascha Heckel¹,
Peter Bernius¹, Michael Poschmann¹, Rainer Burgkart¹, Rüdiger von Eisenhart-Rothe¹
(¹Germany, ²United States)

15:10 Rebound predictors of varus-valgus deformities around the knee corrected by guided growth
OP-054 Michael Zaidman, Alex Katsman, Mark Eidelman (Israel)

15:15 Discussion

15:25 Outcomes following ACL reconstruction using patellar tendon versus hamstring tendon
autograft in adolescent athletes: an age-, sex-, and BMI-matched cohort study
OP-055 Benton Heyworth, Elizabeth Liotta, Peter D. Fabricant, Ashley Tisosky,
Cameron Waites, Patricia Miller, Dennis Kramer, Mininder Kocher, Lyle Micheli
(United States)

15:30 Anterior cruciate ligament reconstruction in adolescents
OP-056 Francesco Falciglia, Marco Giordano, Cosma Calderaro, Renato Maria Toniolo (Italy)

15:35 Analysis of the incidence of focal per physeal edema (FOPE). A retrospective study
OP-057 Jürgen Wansch, Rainer Biedermann, Daniel Junker, Isabella Dornauer,
Balázs Sztankay, Michael Ban (Austria)

15:40 Discussion
15:50  **SPINE 1**  
16:40 Chairs: Steve Albanese (USA) and Ilkka Helenius (Finland)  
E-moderator: Julio Duart (Spain)  

15:50  OP-058 The surgical volume, more than the number of surgeons or surgeon experience, drives patient outcomes in pediatric scoliosis  
Vishal Sarwahi, Sayyida Hasan, Jesse Galina, Lori Shabtai, Terry Amaral (United States)  

15:55  OP-059 Radiographic outcome and complication rate of 34 graduates after treatment with vertical expandable prosthetic titanium rib (veptr®): a single centre report  
Daniel Studer, Philippe Büchler, Carol Hasler (Switzerland)  

16:00  OP-060 High parental anxiety is associated with increased narcotic use in adolescent patients following spinal fusion  
Natalya Sarkisova, Lindsay Andras, Joshua Yang, Vernon Tolo, David Skaggs (United States)  

16:05  Discussion  

16:15  OP-061 Correlation between spine and chest wall deformities and pulmonary function in Marfan’s syndrome  
Hila Otremski¹, Dror Ovadia¹, Mary Di Maio³, Roger Widmann²  
(¹Israel, ²United States)  

16:20  OP-062 Outcome of TLSO for idiopathic scoliosis and role of compliance: study according to SRS and SOSORT criteria  
Tomasz Kotwicki, Krzysztof Korbel, Piotr Janusz, Mateusz Kozinoga (Poland)  

16:25  OP-063 A dynamic growth friendly technique based on a spring distraction system (SDS): results of the first 20 patients  
Sebastiaan Wijdicks, Justin Lemans, René Castelein, Moyo Kruyt (Netherlands)  

16:30  Discussion
### 17:10 CLUBFOOT
**GRAND BALLROOM B**

**17:59** Chairs: Cristina Alves (Portugal) and Pasquale Farsetti (Italy)
E-moderator: Stephanie Bohm (Sweden)

**17:10** A prospective pilot study of the effect of apostherapy in mild residual clubfoot
**OP-064** Ina Ryvkin, Shirley Ackerman-Laufer, Kobi Weisberger, Ehud Lebel (Israel)

**17:15** Rapid decrease of cast-induced forces in the Ponseti method
**OP-065** Patrick Maathuis, Bob Giesberts, Edsko Hekman, Bart Verkerke (Netherlands)

**17:20** Poor evertor muscle activity is a predictor of recurrence in idiopathic clubfoot treated by the Ponseti method: a prospective longitudinal study with a 5 year follow up
**OP-066** Zoe Little, Andrea Yeo, Yael Gelfer (United Kingdom)

**17:25** Discussion

**17:35** Correlation of structural abnormalities and quality of life in children with clubfoot
**OP-067** Jennifer Mccahill\(^1\), Julie Stebbins\(^1\), Tim Theologis\(^1\), Jaap Harlaar\(^2\), Chris Lavy\(^1\)
\(^{(1) United Kingdom, (2) Netherlands}\)

**17:40** Does treatment of idiopathic clubfoot have an impact on attainment of developmental milestones? A multi-centre, international sibling case-control study
**OP-068** Katie Hughes\(^1\), Yael Gelfer\(^1\), Deborah Eastwood\(^1\), Mia Dunkley\(^1\), Evette Parnell\(^1\), Ariella Yavor\(^2\), Yoram Hemo\(^2\), Shlomo Wientroub\(^2\)
\(^{(1) United Kingdom, (2) Israel}\)

**17:45** Results at skeletal maturity of a new technique for treatment of pes cavovarus
**OP-069** Ignacio Sanpera, Laura Corominas, Guillem Frontera-Juan (Spain)

**17:50** Discussion

### 17:59 MEET THE MENTORS
**GRAND BALLROOM B**

**18:59** Chairs: Stefan Huhnstock (Norway) and Salih Marangoz (Turkey)
E-moderator: Virginie Pollet (United Kingdom)
Mentors: Terje Terjesen (Norway) - Michael Millis (USA)
07:30  **SPINE 2**  
08:19  Chair: *Federico Canavese* (France) and *Carol Hasler* (Switzerland)  
      E-moderator: *Yrjana Nietosvaara* (Finland)  

07:30  **OP-070**  
The safety and efficacy of intrathecal morphine in early onset scoliosis surgery - a 25 year single center experience  
      *Christina Hardesty, Connie Poe-Kochert, George Thompson, Jochen Son-Hing, Jason Ina, Paul Tripi* (United States)  

07:35  **OP-071**  
Treatment of early onset spinal deformities with magnetically controlled growing rods: a single centre experience of 30 cases  
      *Daniel Studer, Philippe Büchler, Carol Hasler* (Switzerland)  

07:40  **OP-072**  
Surgical and health related quality of life outcomes of growing rod graduates for severe versus moderate early-onset scoliosis  
      *Ilkka Helenius¹, Paul Sponseller², Anna McClung², Jeff Pawelek², Muharrem Yazici³, John Emans², George Thompson², Charles Johnston², Suken Shah², Behrooz Akbarnia²* (¹Finland, ²United States, ³Turkey)  

07:44  *Discussion*  

07:55  **OP-073**  
The titanium-made growth guidance technique for early-onset scoliosis at minimum 2-year follow-up: a prospective multicenter study  
      *Grzegorz Miękisiak¹, Krzysztof Kołtowski¹, Piotr Menartowicz¹, Tomasz Potaczek¹, Zygmunt Oleksik¹, Dariusz Kotulski¹, Martin Repko², Milan Filipovic², Michał Latalski¹, Anna Danielewicz¹* (¹Poland, ²Czech Republic)  

08:00  **OP-074**  
Results of surgical treatment of AIS lenke 1 using mis and standard open approaches  
      *Ayrat Syundyukov, Nikolay Nikolaev, Sergey Aleksandrov, Pavel Kornyakov* (Russia)  

08:05  **OP-075**  
Metal ion release in children having spinal fusion for scoliosis  
      *Peter Cundy, Brian Freeman, Annika Marcarenhas, William Cundy, Georgia Antoniou* (Australia)  

08:10  *Discussion*
08:20  **SPINE 3**  
Chair: **Dror Ovadia** (Israel) and **Muharrem Yazici** (Turkey)  
E-moderator: **Pierre Lascombes** (Switzerland)

08:20  **The effect of providence night-time bracing in treatment of adolescent idiopathic scoliosis**  
**OP-076**  
**Ane Simony**, **Mikkel Osterheden Andersen**, **Stig Mindedahl Jespersen** (Denmark)

08:25  **Effectiveness of bracing alone in idiopathic EOS**  
**OP-077**  
**Isabelle Bernardini**, **Franck Accadbled**, **Jérôme Sales de Gauzy** (France)

08:30  **Concomitant low-grade isthmic L5-spondylolisthesis (SP) does not affect the course of adolescent idiopathic scoliosis (AIS)**  
**OP-078**  
**Dietrich Schlenzka**, **Mauno Ylikoski**, **Mikko Poussa**, **Timo Yrjönen**, **Leena Ristolainen** (Finland)

08:35  **Discussion**

08:45  **Comparison of sublaminar bands and all-pedicle screw instrumentation for the correction of lenke 1 and 2 adolescent idiopathic scoliosis**  
**OP-079**  
**Sébastien Pesenti**¹, **Renaud Lafage**², **Brice Henry**¹, **Colleen Wixted**², **Manon Bolzinger**¹, **Han Jo Kim**², **Tejbir Pannu**², **Matthew Cunningham**², **Elie Choufani**¹, **Virginie Lafage**³, **John Blanco**², **Jean Luc Jouve**¹, **Roger Widmann**²  
¹France, ²United States

08:50  **Pelvic screw fixation maintains lumbar lordosis in growing rod constructs better than S hooks**  
**OP-080**  
**Rajan Murgai**, **Mathew Schur**, **Lindsay Andras**, **Nicholas Gonsalves**, **Paul Sponseller**, **John Emans**, **Michael G. Vitale**, **Growing Spine Study Group**, **Children’s Spine Study Group**, **David Skaggs** (United States)

08:55  **Are postoperative standing radiographs necessary before hospital discharge in adolescent idiopathic scoliosis?**  
**OP-081**  
**Simon Tournemine**, **Audrey Angelliaume**, **Anne-Laure Simon**, **Christophe Vidal**, **Keyvan Mazda**, **Brice Ilharreborde** (France)

09:00  **Discussion**
09:10 INFECTION
09:35 Chair: Manuel Cassiano Neves (Portugal) and Marta Salom (Spain)
E-moderator: Andrei Gregorewsky (Poland)

09:10 Is Kingella Kingae today’s primary cause of pediatric osteoarticular infections? A 20-year epidemiological follow-up study in Western Switzerland
OP-082 Eri Samara, Vasiliki Spyropoulou, Anne Tabard, Laura Merlini, Raimonda Valaikaite, Amira Dhouib, Sergio Manzano, Céline Juchler, Romain Dayer, Dimitri Ceroni (Switzerland)

09:15 Arthroscopic lavage for the treatment of septic arthritis of the hip in children
OP-083 Iulian Nusem (Australia)

09:20 When must we operate on septic arthritis of the hip joint?
OP-084 Noa Zur-Aviran, Amos Schindler, Nir Sherr-Lurie, Uri Givon (Israel)

09:25 Discussion
09:35  BEST OF THE BEST  
10:24  Chairs: Jaroslav Czubak (Poland) and Steve Frick (USA) 
       E-moderator: Antonio Andreacchio (Italy)  
09:35  Incidence of cancer and infertility, in ais patients treated 25 years prior 
       OP-085  Ane Simony, Mikkel Osterheden Andersen, Leah Yaccat Carreon, 
       Steen Bach Christensen (Denmark)  
09:40  Setting priorities in research for the orthopaedic management of lower limb conditions in 
       the paediatric population - a James Lind Alliance research priority setting partnership 
       OP-086  Martinique Vella-Baldacchino, Daniel C. Perry, Andreas Roposch, 
       Nicolas Nicolaou, Stephen Cooke, Tim Theologis, Paediatric Lower Limb Surgery 
       Group (United Kingdom)  
09:45  Investigation of the stress-strain state of the foot model before and after surgical treatment 
       by different methods  
       OP-087  Paviel Rakhman, Oleksandr Korolkov (Ukraine)  
09:50  Discussion  
10:00  Is acetabular dysplasia properly interpreted in congenital femoral deficiency? Three 
       dimensional analysis of pelvis computed tomography  
       OP-088  Bartosz Musielak, Anna Maria Kubicka, Michał Rychlik, Paweł Koczewski, 
       Milud Shadi, Marek Jóźwiak (Poland)  
10:05  Development of a risk prediction model for developmental dysplasia of the hip in at-risk 
       newborns  
       OP-089  Andreas Roposch¹, Evangelia Protopapa¹, Olivia Malaga-Shaw¹, Yael Gelfer¹, 
       Deborah Ridout¹, John H. Wedge² (¹United Kingdom, ²Canada)  
10:10  Clubfoot assessment of correction and recurrence: are we speaking the same language?  
       OP-090  Yael Gelfer¹, Deborah Eastwood¹, Katie Hughes¹, Shlomo Wientroub² 
       (¹United Kingdom, ²Israel)  
10:15  Discussion  
10:25  Coffee break  
11:00  GENERAL ASSEMBLY - PART. I  
12:00  GENERAL ASSEMBLY - PART. II  
12:30  Lunch
14:30  EPOS STUDY GROUP: CEREBRAL PALSY AND SPINAL DEFORMITIES
GRAND BALLROOM A

Chairs: Reinald Brunner (Switzerland) and Carol Hasler (Switzerland)

14:30  Introduction
OP-091  Reinald Brunner (Switzerland)

14:32  Natural history of spinal deformities in cerebral palsy
OP-092  Reinald Brunner (Switzerland)

14:42  Discussion

14:47  Neuromuscular scoliosis: Is there a place for conservative treatment?
OP-093  Uri Givon (Israel)

14:57  The pelvis - fundament of the spine
OP-094  Carol Hasler (Switzerland)

15:07  The pelvis - rooftop of the hips
OP-095  Reinald Brunner (Switzerland)

15:17  Discussion

15:22  The pelvis - spare it or fuse it?
OP-096  Dror Ovadia (Israel)

15:32  Discussion

15:37  Scoliosis and dislocated hip: hip first or spine first?
OP-097  Elke Viehweger (France)

15:47  Scoliosis and dislocated hip: hip first or spine first?
OP-098  René Castelein (Netherlands)

15:57  Discussion

16:02  The sagittal profile
OP-099  Brice Ilharreborde (France)

16:12  Head control in patients with cerebral palsy
OP-100  Ana Presedo, Anne-Laure Simon, Marie-France Rietz P.T. (France)

16:22  Discussion

16:27  Closure
OP-101  Carol Hasler (Switzerland)

16.30  Coffee break
**17:00**  | **EPOS STUDY GROUP: SPORTS MEDICINE**  | **GRAND BALLROOM A**
---|---|---
**19:00** | Chair: Franck Accadbled (France) |  
**17:00** | Introduction |  
**19:00** |  
**OP-102** | Franck Accadbled (France) |  
**17:03** | ACL injuries in the female athlete adolescents |  
**OP-103** | Virginie Pollet (United Kingdom) |  
**17:13** | ACL: what's new about rehabilitation, functional testing & RTP in children and adolescents? |  
**OP-104** | Stephan Tercier¹, Marco Turati²,³ (¹Switzerland, ²France, ³Italy) |  
**17:23** | Operative management of recent ACL tear: Reconstruction or repair? |  
**OP-105** | Stephan Tercier¹, Marco Turati²,³ (¹Switzerland, ²France, ³Italy) |  
**17:33** | Anterior cruciate ligament tears in children: management and growth complications. A Survey of EPOS and POSNA Membership |  
**OP-106** | Franck Accadbled (France) |  
**17:43** | Discussion |  
**17:53** | Hip arthroscopy in adolescents. Technique and results |  
**OP-107** | Manoj Ramachandran (United Kingdom) |  
**18:08** | Evaluation of a theoretical and practical pediatric arthroscopy course, using a virtual knee simulator |  
**OP-108** | Franck Accadbled (France) |  
**18:13** | Discussion |  
**FREE PAPERS** |  
**18:23** | The safe distance to the popliteal neurovascular bundle in pediatric arthroscopic knee surgery: an age-based anatomical study |  
**OP-109** | Jonathan Schachne, Madison Heath, Kevin Shea, Yi-Meng Yen, Daniel Green, Peter Fabricant (USA) |  
**18:28** | Medial patellofemoral ligament reconstruction in children - a comparative randomized short-term study of fascia lata allograft and gracilis tendon autograft reconstruction |  
**OP-110** | Lukasz Matuszewski (Poland) |  
**18:33** | Are the radiological landmarks reliable guidance for femoral tunnel positioning during medial patello - femoral ligament (MPFL) reconstruction? |  
**OP-111** | Jaroslaw Felus, Bartlomiej Kowalczyk (Poland) |
18:38 Quadriiceps tendon turndown for MPFL reconstruction: the anatomical differences between the patellar origins of the quadriiceps tendon and MPFL
OP-112
Audrey Rustad, Aleksei Dingel, Ted Ganley, Yi-Meng Yen, Peter D. Fabricant, Phil Wilson, Henry Ellis, Marc Tompkins, Kevin Shea (USA)

18:43 Current practice trends in the surgical management of patellofemoral instability: a survey of the pediatric research in sports medicine (PRiSM) society
OP-113
Curtis Vandenberg, Natalya Sarkisova, J. Lee Pace, Jason Rhodes, Daniel Green, Rachel Y. Goldstein (USA)

18:48 Discussion

18:58 Conclusion
OP-114 Franck Accadbled (France)
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Location</th>
<th>Chairs</th>
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<tr>
<td>14:30</td>
<td><strong>EPOS STUDY GROUP: HIP AND LOWER LIMB IN SKELETAL DYSPLASIA AND METABOLIC DISEASES</strong></td>
<td><strong>GRAND BALLROOM B</strong></td>
<td>Rudolf Ganger (Austria) and Ralph J.B. Sakkers (Netherlands)</td>
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<tr>
<td>14:30</td>
<td>Hip and lower limb in skeletal dysplasia and metabolic diseases - etiology and clinical features</td>
<td></td>
<td>Hakan Ömeroglu (Turkey)</td>
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<td>14:40</td>
<td>Specific hip problems in skeletal dysplasia</td>
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<td>Renata Pospischill (Austria)</td>
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<td>14:50</td>
<td>Epi-, metaphyseal dysplasia – disease specific obstacles during treatment (abnormal joint configuration, amount of lengthening, ...)</td>
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<td>Salih Marangoz (Turkey)</td>
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<td>15:00</td>
<td>Treatment of lower limb deformities in hypophosphataemic rickets</td>
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<td>Christof Radler (Austria)</td>
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<td>15:10</td>
<td>Multiple hereditary exostosis disease – treatment of malalignment and impingement (including hip impingement)</td>
<td></td>
<td>John Herzenberg (USA)</td>
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<td>15:20</td>
<td>Osteogenesis imperfecta – deformity correction and prevention of fractures</td>
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<td>Robert Rödl (Germany)</td>
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<tr>
<td>15:30</td>
<td>Congenital pseudarthrosis of the tibia (CPT) – obtaining and maintaining of fusion (resection and compression, X-union, contralateral vascularized fibula)</td>
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<td>Mark Eidelman (Israel)</td>
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<td>15:40</td>
<td>Lower limb deformities in achondroplasia</td>
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<td>Rudolf Ganger (Austria)</td>
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<tr>
<td>15:50</td>
<td>Clubfoot deformity in skeletal dysplasia</td>
<td></td>
<td>Cristina Alves (Portugal)</td>
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<tr>
<td>16:30</td>
<td>Coffee break</td>
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</table>
17:00 EPOS STUDY GROUP: MUSCULOSKELETAL TUMORS, INFECTIONS & ARTHRITIS GROUP SYMPOSIUM: WHAT IS HOT IN BONE & JOINT INFECTIONS? Chairs: Dmitri Ceroni (Switzerland) and Marta Salom (Spain)

17:00 Presentation and Introduction
OP-124 Marta Salom (Spain)

17:05 How to diagnose septic arthritis and acute osteomyelitis in 2019?
OP-125 Cristina Alves (Portugal)

17:15 Should we get oropharynx swabs for every child with a possible diagnosis of bone or joint infection?
OP-126 Dimitri Ceroni (Switzerland)

17:25 Are we getting enough MRIs in children with septic arthritis of the hip?
OP-127 Manoj Ramachandran (United Kingdom)

17:35 Biopsy in acute osteomyelitis: never, sometimes or always?
OP-128 Deborah Eastwood (United Kingdom)

17:45 Discussion

18:00 What is the best treatment for septic arthritis: aspiration, arthroscopy or arthrotomy?
OP-129 Ignacio Sanpera and Ana Fernández (Spain)

18:10 Antibiotic treatment in bone & joint infections: what, how and leaded by whom?
OP-130 Nusret Köse (Turkey)

18:20 Sequelae of bone & joint infections: what can we do?
OP-131 Mark Eidelmann (Israel)

18:30 On the horizon of technology in musculoskeletal infections in children
OP-132 Leon Moscona-Mishy and Pablo Castañeda (USA)

18:40 Discussion

18:55 Conclusions
OP-133 Marta Salom (Spain)
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<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Authors</th>
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<tbody>
<tr>
<td>08:00</td>
<td>UPPER LIMB</td>
<td>Normal glenoid ossification in pediatric and adolescent shoulders mimics Bankart lesions: an MRI-based study</td>
<td>Peter Fabricant, Harry Greditzer, Joash Suryavanshi, Sreetha Sidharthan, Madison Heath, Daniel Green (USA)</td>
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<tr>
<td>08:05</td>
<td></td>
<td>Complications after toe to hand transfers in children with pathology of the hand</td>
<td>Tatiana Tikhonenko, Sergey Golyana (Russia)</td>
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<td>08:10</td>
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<td>Triangular fibrocartilage complex repair in pediatric patients</td>
<td>Alex Balboa, Kendra Eckstein, Kevin Little (USA)</td>
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<tr>
<td>08:15</td>
<td></td>
<td>Discussion</td>
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<td>08:25</td>
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<td>Changes on computed tomography after arthroscopic debridement and microfracture for osteochondritis dissecans of the capitellum</td>
<td>Rens Bexkens, Christiaan van Bergen, Michel van den Bekerom, Gino Kerkhoffs, Denise Eygendaal (Netherlands)</td>
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<td>08:30</td>
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<td>Prediction and classification of radial head subluxation and forearm deformity in MHE</td>
<td>Jaroslaw Michal Deszczynski¹, Tomasz Albrewczyński¹, Aaron Huser², Melih Civan³, Dror Paley², David Feldman² (¹Poland, ²USA, ³Turkey)</td>
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<tr>
<td>08:35</td>
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<td>Preliminary results of physiolysis and vicker’s ligament excision of madelung deformity in Léri-Weill dyschondrosteosis</td>
<td>Sanjay Chilbule, Andrea Strogen, Binu Kurien, Timothy Nunn, James Fernandes (United Kingdom)</td>
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<td>08:40</td>
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<td>Discussion</td>
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</table>
08:50  **NEUROMUSCULAR**  
**OP-140**  
Chairs: Uri Givon (Israel) and Elke Viehweger (France)  
E-moderator: Reinald Brunner (Switzerland)  
Is the gothic arch a reliable radiographic landmark for the migration percentage in children with cerebral palsy?  
_Caesar Wek, Piyal Chowdhury, Christian Smith, Michailis Kokkinakis_ (United Kingdom)  

08:55  **OP-141**  
Impact of hip displacement on health-related quality of life in children with cerebral palsy  
_Unni Narayanan¹, Menal Huey¹, Clarissa Encisa¹, Ashley Ferkul¹, Kerr Graham², Kishore Mulpuri¹, Darcy Fehlings¹ (¹Canada, ²Australia)  

09:00  **OP-142**  
The value of tranexamic acid in children with cerebral palsy undergoing proximal femoral varus derotational osteotomies  
_Alexander Nazareth, Stephen Shymon, Lydia Andras, Rachel Goldstein, Robert Kay_ (USA)  

09:05  _Discussion_  

09:15  **OP-143**  
Comparison of the results of primary versus repeat hamstring surgical lengthening in cerebral palsy  
_Mauro César De Morais Filho, Francesco Blumetti, Cátia Kawamura, Marcelo Fujino, José Augusto Lopes, Daniella Neves, Marcelo Matias_ (Brazil)  

09:20  **OP-144**  
Monopolar latissimus dorsi transfer for restoration of elbow flexion in children with arthrogryposis  
_Olga Agranovich, Alexey Baindurashvili, Svetlana Trofimova, Evgeniya Kochenova_ (Russia)  

09:25  **OP-145**  
The effect of selective dorsal rhizotomy on hip displacement in children with cerebral palsy: a long term follow up study  
_Stacey Miller, Maria Juricic, Emily Schaeffer, Paul Steinbok, Jeffrey Bone, Kishore Mulpuri_ (Canada)  

09:30  **OP-146**  
Outcome of bilateral hip reconstruction in unilateral subluxated hip in cerebral palsy: comparison to unilateral hip reconstruction  
_Verasak Thamkunanon¹, Norazian Kamisan² (¹Thailand, ²Malaysia)  

09:35  _Discussion_  

09:48  **PRESIDENTIAL GUEST LECTURE**  
**GRAND BALLROOM AB**  
10:13  Terje Terjsen (Norway)  

10:13  **AWARDS 2019**  
**GRAND BALLROOM AB**  

10:18  **PRO MAXIMIS MERITIS**  
**GRAND BALLROOM AB**  
10:28  Dietrich Schlenzka (Finland)  

10:28  **PRESIDENCY TRANSFER**  
**GRAND BALLROOM AB**  
10:53  Coffee break
11:30  **CONGENITAL**  
12:52  Chairs: **Darko Anticevic** (Croatia) and **Roberto Schiavon** (Italy)  
E-moderator: **Robert Rödl** (Germany)

**GRAND BALLROOM AB**

11:30  **Molecular diagnostics of skeletal dysplasias by next generation sequencing - first experience of a single genetic outpatient department from Serbia in the pilot phase prior to establish of the skeletal dysplasias center**  
Marija Mijovic¹, Jelena Ruml Stojanovic¹, Aleksandra Miletic¹, Borut Peterlin², Ales Maver², Brankica Dimitrijevic¹, Hristina Janeski¹, Goran Cuturilo¹ (¹Serbia, ²Slovenia)

11:35  Gait analysis in children with proximal femoral focal deficiency  
**OP-148** Lorena Floccari, Kelly Jeans, J Anthony Herring, Charles Johnston, Lori Karol (USA)

11:40  Radiologic outcomes of containment surgery for dysplastic hips in Morquio IVA syndrome  
**OP-149** William Mackenzie, Mihir Thacker, Amit Nemade, Kenneth Rogers, Colleen Ditro (India)

11:45  Discussion

11:55  Humeral deformity correction, intramedullary stabilisation and complications in severe osteogenesis imperfect  
**OP-150** Sanjay Chilbule, Assad Qureshi, Claire Wagstaff, Nicolas Nicolaou, Stephen Giles, James Fernandes (United Kingdom)

12:00  Intramedullary nailing with supplemental plate and screw fixation of long bones of patients with osteogenesis imperfecta: short-term follow-up  
**OP-151** Jeanne M. Franzone¹, Kenneth J. Rogers, Richard W. Kruse (USA)

12:05  Prevalence of vitamin D deficiency in pediatric limb lengthening patients  
**OP-152** Jessica Rivera, Nequesha Mohamed, Iciar Davila Castrodad, John Herzenberg (USA)

12:10  Discussion

12:20  Complex treatment of CPT  
**OP-153** Sergey Khmyzov, Andrey Pashenko (Ukraine)

12:25  Combined technique with hydroxyapatite coated intramedullary nails in treatment of anterolateral bowing of congenital pseudarthrosis of tibia  
**OP-154** Arnold Popkov¹, Pierre Lascombes², Mikan Lazovic³, Sinisa Ducic³, Dmitry Popkov¹ (¹Russia, ²Switzerland, ³Serbia)

12:30  Congenital generalized ligamentus laxity increases the rate of residual instability and re-dislocation after patellar realignment in children and adolescents. Results from a retrospective study on a cohort of 78 children  
**OP-155** Giovanni Trisolino, Giovanni Luigi Di Gennaro, Giovanni Gallone, Stefano Stallone, Elenora Olivotto, Marta Favero, Stefano Stilli (Italy)

12:35  Discussion

12:53  **CLOSING REMARKS**

13:00
PO-001 Characteristic reconstitution of the spinal Langerhans cell histiocytosis in young children
Naoyuki Nakamura, Yutaka Inaba, Jiro Machida, Yoichi Aota (Japan)

PO-002 Prediction of hip displacement in CP children using the cpup hip score
Per Reidar Høiness, Ivan Hvid (Norway)

PO-003 Treatment avulsion fractures of the distal phalanx of fingers in children
Fan Wang, Andrew Bespalchuk (Belarus)

PO-004 Poorer healing after foot surgery in Charcot Marie Tooth (hereditary motor sensory neuropathy)
Kuldeep Stohr, Helen Swain (United Kingdom)

PO-005 Back to back scoliosis surgeries: is patient safety and outcomes compromised?
Vishal Sarwahi, Jesse Galina, Sayyida Hasan, Lior Shabtai, Yungtai Lo, Terry Amaral (USA)

PO-006 Rotational deformity after humeral supracondylar fractures
Ignacio Sanpera, Carmen Muñoz-Lopez, Marta Salom Taverner (Spain)

PO-007 Unstable osteochondritis dissecans in adolescents treated by arthroscopic bioabsorbable screw fixation of: clinical results and magnetic resonance imaging
Kaloyan Emilov Velev (Spain)

PO-008 Influence of varus derotation intertrochanteric osteotomy on acetabular morphology in children with cerebral palsy- is timing crucial?
Matevz Bajuk, Tanja Slokar, Borut Kovacic, Karin Schara (Slovenia)

PO-009 New histological findings in clubfoot deformity tissue - newly formed and upregulated vessel formations in the contracted side of the clubfoot
Tomas Novotny, Adam Eckhardt, Jarmila Knitlova, Martin Ostadal (Czech Republic)

PO-010 An analysis of pelvic asymmetry between different sexes and races in a cadaveric collection
Robby Goldberg, Karen Standefer, John Birch, Jason Teplensky, Joseph Drain, Conor McCarthy, Raymond Liu (USA)

PO-011 Preservation of distal femoral physis function after prolonged term temporal epiphysiodesis using plates with screws: experimental study
Viktor Rokutov, Dmytro Iershov, Sergiy Khmyzov (Ukraine)

PO-012 Prenatal diagnostics of skeletal dysplasias – case series of single genetic center from Serbia
Marija Mijovic¹, Jelena Ruml Stojanovic¹, Aleksandra Miletic¹, Borut Peterlin², Ales Maver², Brankica Dimitrijevic¹, Hristina Janeski¹, Goran Cuturilo¹ (¹Serbia, ²Slovenia)

PO-013 Sponge rubber revealed two years after penetrating injury: a case report
Sandor Roth, Aron Roth (Croatia)

PO-014 Psychological impact of lower limb fractures in children
Kuldeep Stohr, Mark Latimer, Megan Maidment (United Kingdom)
<table>
<thead>
<tr>
<th>EPO-001</th>
<th>Birth epiphyseolises: visualization of “invisible” fractures and its treatment</th>
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<tbody>
<tr>
<td></td>
<td>Nikolai Rumyantsev, Igor Kruglov, Gamzat Omarov, Natalia Rumiantceva, Nino Abdiba (Russia)</td>
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<th>EPO-002</th>
<th>Incidental musculoskeletal findings in generation R, a population-based prospective cohort study from fetal life until adulthood</th>
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<td>Johannes Bessem, Desirée Vreede de, Edwin Oei (Netherlands)</td>
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<th>EPO-003</th>
<th>Systematic isolation of key parameters for estimating skeletal maturity on knee radiographs</th>
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