Limb Lengthening and Reconstruction Society
Association for the Study and Application of the Methods of Ilizarov—North America

Agenda

Friday – July 16, 2021

7:15 a.m. Registration Opens

7:15–8:00 a.m. Continental Breakfast – Visit Corporate Partners

8:00–8:05 a.m. Welcome/Introduction/Disclosure

Session I: Internal Lengthening Nails I
Moderator: Kevin Louie, MD

8:05–8:11 a.m. Radiographs of 366 Removed Limb Lengthening Nails Reveal Differences in Bone Abnormalities Between Different Nail Types
Christopher A. Iobst, MD

8:12–8:18 a.m. Radiographic Changes following Lengthening with Nail
Aaron Huser, DO

8:19–8:25 a.m. Biopsy Confirmed Focal Osteolysis in a Stainless–Steel Lengthening Device* – Philip K. McClure, MD

8:26–8:32 a.m. Clinical Compatibility of Magnetic Resonance Imaging with Magnetic Intramedullary Nails* – Lee Zuckerman, MD

8:33–8:41 a.m. Discussion

Session II: Internal Lengthening Nails II
Moderator: J. Spence Reid, MD

8:42–8:48 a.m. Complications in Elective Removal of 271 Bone Lengthening Nails
Christopher A. Iobst, MD

8:49–8:55 a.m. Intramedullary Distraction Osteogenesis followed by Osseointegration for Amputees with Short Residual Femurs
Jason Shih Hoellwarth, MD

8:56–9:02 a.m. The Incidence and Management of Deep Vein Thrombosis and Pulmonary Embolism following Cosmetic Stature Lengthening with Steel Weightbearing Intramedullary Nails
Jason Shih Hoellwarth, MD

9:03–9:09 a.m. Implantable Nail Lengthening in Patients with Enchondromastosis
Aaron Huser, DO

9:10–9:18 a.m. Discussion

*indicates remote presentation
Session III: Osseointegration
Moderator: S. Robert Rozbruch, MD

9:19–9:25 a.m. Osseointegration following Lower Limb Amputation due to Malignant Cancer – Jason Shih Hoellwarth, MD

9:26–9:32 a.m. Transtibial Osseointegration Confers Mobility Benefits with Limited Complications* – Munjed Al Muderis, MB, ChB

9:33–9:39 a.m. Osseointegration for Transfemoral Amputees with prior Total Knee Arthroplasty Complications* – Kevin Tetsworth, MD

9:40–9:47 a.m. Discussion

9:48–10:14 a.m. Refreshment Break – Visit Corporate Partners

Session IV: Pediatrics I
Moderator: David Frumberg, MD

10:15–10:21 a.m. Burosumab Improves Lower Limb Alignment in Children with X–Linked Hypophosphatemia – David Frumberg, MD


10:29–10:35 a.m. What are the Risk Factors for Rebound Deformity after Correction of Lower Extremity Valgus deformities using Tension Band Plates in Skeletal Dysplasia? – Armagan Can Ulusaloglu

10:36–10:42 a.m. Prediction Matrix for Radial Head Subluxation/Dislocation in Patients with Multiple Hereditary Exostosis – Aaron Huser, DO

10:43–10:51 a.m. Discussion

Session V: Basic Science
Moderator: Jessica C. Rivera, MD, PhD

10:52–10:58 a.m. An Ovine Study of Locked Intramedullary Implants Across the Distal Femoral Growth Plate – Kouami Amakoutou, MD

10:59–11:05 a.m. Can Manipulation of the Mechanical Environment Improve Regenerate Bone Healing During the Consolidation Phase of Distraction Osteogenesis? – Christopher A. Iobst, MD

11:06–11:12 a.m. To Minimize Biological (Thermal) Damage during Cortical Bone Drilling – an Experimental Parameters for Optimal Bone Drilling – Hla Moe Thaya, MD

11:13–11:19 a.m. Can the Expression of Interleukin–6 by the Local Lymphocytes be Used as a Biomarker for Fracture Healing? – A Pilot Study and Ongoing Practice* – Androniki Drakou, MD

*indicates remote presentation
11:20–11:28 a.m. Discussion

Special Session: Limb Deformity Care in Low and Middle Income Countries
Moderator: Raymond W. Liu, MD

11:29–11:35 a.m. Building a Limb Deformity Practice in Nigeria*
Emeka Izuagba, MD

11:36–11:42 a.m. LLRS Efforts to Improve International Care – Raymond W. Liu, MD

11:43–11:49 a.m. Pediatric Orthopaedic Observerships in North America for International Surgeons: Perceived Barriers and Opportunities for Visitors and Hosts
Sanjeev Sabharwal, MD

11:50 a.m.–12:00 p.m. Fostering Limb Deformity Care with the SIGN Network*
Richard Gellman, MD

12:01–12:10 p.m. Discussion

12:10–1:05 p.m. Lunch

Session VI: Patient Reported Outcomes
Moderator: Harold van Bosse, MD

1:06–1:12 p.m. Concurrent Validity of DASH and PROMIS Scores in Transhumeral Amputees – Samir Sabharwal, MD

1:13–1:19 p.m. Concurrent Validity of Q–TFA with PROMIS & Prosthetic Wear Time in Transfemoral Amputees – Samir Sabharwal, MD

1:20–1:26 p.m. Functional Outcomes in the Treatment of Tibulal Hemimelia – The 5–year Experience of a Regional Children’s Hospital*
Njalalle Baraza, MD

1:27–1:33 p.m. Establishing the Content Validity of LIMB–Q Kids – A New Patient–Reported Outcome Measure for Children with Lower Limb Deformities*
Harpreet Chhina, PhD

1:34–1:40 p.m. Prospective Multi–Center Comparison of Modified Scoliosis Instruments and PODCI in Pediatric Limb Deformity Patients: A Preliminary Study
Raymond W. Liu, MD

1:41–1:50 p.m. Discussion

1:51–2:40 p.m. Difficult Case Presentation
Moderator: L. Reid Nichols, MD

2:41–3:05 p.m. Refreshment Break – Visit Corporate Partners

*indicates remote presentation
Session VII: Pediatrics II
Moderator: David Podeszwa, MD

3:06–3:12 p.m. 3D–Printed Cutting Guides for Lower Limb Deformity Correction in the Young Population – Roy Gigi, MD

3:13–3:19 p.m. Magnetic Internal Plate Lengthening of the Femur and Tibia in Children: A Preliminary Report – Mark T. Dahl, MD

3:20–3:26 p.m. Systematic Isolation of Key Parameters for Estimating Skeletal Maturity on AP Hip Radiographs – Ryan J. Furdock, MD

3:27–3:33 p.m. The Utility of the Modified Fels Knee Skeletal Maturity System in Limb Length Prediction – Ryan J. Furdock, MD

3:34–3:40 p.m. Clinical Outcomes Following Surgical Hip Dislocation for Paediatric Hip Pathologies: A Prospective Cohort Study* – Shane Ahern, MD

3:41–3:51 p.m. Discussion

3:52–4:02 p.m. Traveling Fellowship Presentation
Introduction by Austin T. Fragomen, MD
Dr. Omolade Lasebikan
Sarah Nossov, MD
Daniel Stinner, MD

4:03–4:45 p.m. Business Meeting – LLRS Members only

5:30 p.m. Buses depart for President’s Reception

6:30–9:30 p.m. President’s Reception aboard Atlantis

9:45 p.m. Buses depart for Hotel

*indicates remote presentation
Saturday – July 17, 2021

7:30 a.m. Registration Opens

7:30–8:00 a.m. Continental Breakfast – **Visit Corporate Partners**

8:00–8:05 a.m. Announcements

**Session VIII: Adult Deformity**
**Moderator: Stephen M. Quinnan, MD**

8:06–8:12 a.m. Hexapod Circular External Fixators may Produce Superior Regenerate Bone, A Lower BHI, and Less Post Residual Deformity when Compared with Classic Circular Fixators When Used for Bone Transport or Lengthening Through Malunions
*Austin T. Fragomen, MD*

8:13–8:19 a.m. Indications and Outcomes of One Staged Two–Level Femur Osteotomies – *Joshua Buksbaum*

8:20–8:26 a.m. Correction of Extra–articular Limb Deformity Before Total Knee Arthroplasty – *Stephen Wallace, MD*

8:27–8:33 a.m. Dual Femoral and Tibial Osteotomies for Large Lower Extremity Deformities – *Stephen Wallace, MD*

8:34–8:42 a.m. Discussion

8:43–9:45 a.m. Presidential Guest Speaker*
**Horses for Courses: Choosing the Right Osteotomy for OA Knee**
*Milind M. Chardhary, MD*

9:45–10:00 a.m. Refreshment Break – **Visit Corporate Partners**

10:01–10:30 a.m. Poster Session – please visit each poster

**Session IX: Foot/Ankle and Trauma**
**Moderator: Douglas Beaman, MD**

10:31–10:37 a.m. Augmentation of Internal Fixation with Multiplanar External Fixator in High–Risk Hind Foot Fusion Patients – *Meghan Kelly, MD*

10:38–10:44 a.m. Reconstruction of Severe Tibia Pilon Fractures Using Distraction Histiogenesis – *Roberto Hernandez–Irizarry, MD*

10:45–10:51 a.m. Unconstrained External Fixation Hinges in Joint Repair: Initial Clinical Experience – *Alexander Cherkashin, MD*

10:52–10:58 a.m. Long–Term Self–Reported Functional Outcomes following Unilateral Major Lower Extremity Combat Injury: Preliminary Results from the METALS II Study Group – *Jessica C. Rivera, MD, PhD*

*indicates remote presentation
10:59–11:07 a.m. Discussion

Session X: Miscellaneous
Moderator: Jill C. Flanagan, MD

11:08–11:14 a.m. Prophylaxis and Treatment of Infection in Complex Extremity Reconstruction using Antibiotic Loaded Ceramic Coated Interlocking Intramedullary Nails – Emilie–Ann Downey, MD

11:15–11:21 a.m. Preventative Multimodal Analgesia for Patients Undergoing Lower Limb Reconstruction with External Fixators; A Prospective Study of Postoperative Pain* – Alice Wang, MD

11:22–11:28 a.m. A Novel Formula to Accurately Predict the Change in Tibial–Tuberosity to Trochlear–Groove (TTTG) Distance Following Supratuberele Osteotomy of the Tibia* – Isabella Bozzo, MDCM (c), M. Eng

11:29–11:35 a.m. Applications and Error Ratios of Calibration Techniques in EOS and Teleoroentgenogram for Length Measurement: A Comparative Study Ali Asma, MD

11:36–11:44 a.m. Discussion

11:45 a.m.–12:10 p.m. President’s Remarks and Introduction of 2021–2022 President

12:10 p.m. Adjourn

*indicates remote presentation