

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

24th Annual Scientific Meeting

Agenda

Friday – July 25, 2014

- 7:00–8:00 a.m.            Registration
- 7:15–8:00 a.m.            Continental Breakfast – **Visit Corporate Partners**
- 8:00–8:05 a.m.            In Memoriam: Doreen DiPasquale, MD – *John K. Sontich, MD*
- 8:05–8:14 a.m.            Welcome, Disclosure – *Sanjeev Sabharwal, MD, MPH*
- Bone Healing** – Moderator: *Reggie C. Hamdy, MD*
- 8:15–8:20 a.m.            The Accordion Maneuver and the Effects of Compression Loading on Delayed Regenerate Bone Formation in Cases of Limb Lengthening  
*Asim Makhdom, MD*
- 8:21–8:26 a.m.            Distraction Osteogenesis for Post–Traumatic Bone Defects of the Leg: Comparison of Classic versus Integrated Technique  
*Mitchell Bernstein, MD*
- 8:27–8:32 a.m.            Treatment of Long Bone Atrophic Pseudarthrosis with Platelet Rich Plasma and Distraction–Compression with Ilizarov External Fixator  
*Mustafa Gokhan Bilgili*
- 8:33–8:38 a.m.            Treatment of Aseptic Diaphyseal Nonunion of the Lower Extremities with Intramedullary Nailing and Blocking Screws without Open Bone Graft – *Mustafa Gokhan Bilgili*
- 8:39–8:49 a.m.            Discussion
- 8:50–8:55 a.m.            Reamed Intramedullary Nailing Has Adverse Effect in Bone Regeneration during Distraction Phase in Distraction Osteogenesis of Tibia–A Cohort Study – *Dong Hoon Lee, MD, PhD*
- 8:56–9:01 a.m.            The Potential use of RNA Interference to Down–Regulate the BMP–Antagonist Noggin and Increase Bone Formation during Distraction Osteogenesis – *Ana Cristina Ferreira Bassit, MD*
- 9:02–9:07 a.m.            Acceleration of Bone Regeneration in a Mouse Model of Distraction Osteogenesis with Systemic Administration of Sclerostin Antibodies  
*Asim Makhdom, MD*
- 9:07–9:15 a.m.            Discussion

**Deformity** – Moderator: *Joseph R. Hsu, MD*

- 9:15–9:20 a.m. Predicting Knee Joint Contact Pressure and Shear Stress for Different Alignments – *Franziska Reisse, PhD*
- 9:21–9:26 a.m. Femoral Derotation Osteotomies in Adults – *Robert L. Buly, MD, MS*
- 9:27–9:32 a.m. Knee Arthrodesis with Ilizarov Method as a Salvage Procedure after Septic Failure of TKA – *Alexander Kirienko, MD*
- 9:33–9:38 a.m. Wound and Scar Management in Lengthening and Deformity Correction: Collaboration between Orthopedic and Plastic Surgery  
*Serdar Tuncer, MD*
- 9:39–9:44 a.m. Utility of a Limb Lengthening and Complex Reconstruction Service in an Academic Department of Orthopedic Surgery  
*Elizabeth S. Rozbruch*
- 9:45–9:55 a.m. Discussion
- 9:56–10:15 a.m. Refreshment Break – **Visit Corporate Partners**

**Lengthening Nails** – Moderator: *John G. Birch, MD*

- 10:16–10:21 a.m. An Anatomical Study of the Greater Trochanter Starting Point for Intramedullary Nailing – *Raymond W. Liu, MD*
- 10:22–10:27 a.m. The Importance of Reaming of Posterior Femoral Cortex before Insertion of the Lengthening Nails – *Metin Kucukkaya, MD*
- 10:28–10:33 a.m. Lengthening For Congenital Limb Length Discrepancy  
*Dror Paley, MD*
- 10:34–10:39 a.m. Stature Lengthening Using a New Implantable Lengthening Device  
*Dror Paley, MD*
- 10:40–10:45 a.m. Accuracy and Safety in Bilateral Lengthening of Lower Extremity using a Magnet Activated Intramedullary Lengthening Device—A Preliminary Report  
*Keun Jung Ryu, MD*
- 10:46–10:51 a.m. Feedback Control for Patient-Specific Lengthening of an Implantable Limb Lengthening Device – *Daniel Farley, MD*
- 10:56–11:16 a.m. Discussion
- 11:17 a.m.–12:02 p.m. Presidential Memorial Lecture  
**Diffusion of Innovation in Global Surgery**  
*David A. Spiegel, MD*

**Emerging Technologies, Session 1** – Moderator: *S. Robert Rozbruch, MD*

- 12:03–12:08 p.m.      Plating Following Gradual Realignment with the Taylor Spatial Frame for Refractory Congenital Pseudoarthrosis of the Tibia: A Novel Technique – *Yasuhisa Yoshida, MD*
- 12:09–12:12 p.m.      Fixator Assisted Technique enables Minimal Invasive Plate Osteosynthesis in Open Wedge High Tibial Osteotomy  
*Dong Hoon Lee, MD, PhD*
- 12:13–12:18 p.m.      Toward a Novel, Implantable Limb Lengthening Device  
*Daniel Farley, MD*
- 12:19–12:24 p.m.      Correction of Multilevel Deformities of the Lower Limb – A New Technique Using a Motorized Intramedullary Lengthening Nail and a Locking Plate – *Ulrich Lenze, MD*
- 12:25–12:30 p.m.      Reconstruction Using the Tumor Prosthesis for Severe Deformities of the Lower Limbs in Five Cases – *Yasuhisa Yoshida, MD*
- 12:31–12:41 p.m.      Discussion
- 12:45–2:15 p.m.      Luncheon
- 1:15–2:00 p.m.      Special Luncheon Presentation: The Kon–Tiki Expedition  
*John G. Birch, MD and Harald Steen, MD*
- 2:00–2:15 p.m.      ILLRS Congress – November 4–7, 2015, Miami, Florida  
*Reggie C. Hamdy, MD and Dror Paley, MD*

**Emerging Technologies, Session 2** – Moderator: *J. Spence Reid, MD*

- 2:20–2:25 p.m.      The Induced Membrane Technique of Masquelet: Unanswered Questions Remain – *Panagiotis (Peter) Glavas, MD*
- 2:26–2:31 p.m.      Early Clinical Experience with a New Calcium Sulphate Bead alongside Vancomycin and Tobramycin for Management of Infections and Dead Space: Bead Resorption and No Wound Drainage  
*Daniel Schlatterer, DO*
- 2:32–2:37 p.m.      Liposome Encapsulated Quantum Dots for Imaging of a Rat Model of Distraction Osteogenesis – *Lamees Nayef, MD*
- 2:38–2:47 p.m.      Discussion

**External Fixation** – Moderator: *Stuart A. Green, MD*

- 2:48–2:53 p.m.      Mechanical Rigidity of the Ortho–SUV Frame Compared to the Ilizarov Frame in the Correction of Femoral Deformity  
*Matt D. A. Fletcher, MBBS*

- 2:54–2:59 p.m. Rigidity of Spanning External Fixation Constructs Under Uniform Loading Conditions – *Alexander Cherkashin, MD*
- 3:00–3:05 p.m. Avoidance of External Fixation Pin Induced Rotational Stiffness in the Forearm: A Cadaver Study of Soft Tissue Displacement Relative to the Varying Position of Radius and Ulna Fixation  
*Matt D. A. Fletcher, MBBS*
- 3:06–3:11 p.m. Determination of the Maximal Corrective Ability and Optimal Placement of the Ortho–SUV Frame for Femoral Deformity With Respect to the Soft Tissue Envelope: A Biomechanical Modeling Study  
*Matt D. A. Fletcher, MBBS*
- 3:12–3:17 p.m. Quantitative Analysis of Valgus Deformity during Lengthening over Nail of Tibia: A Case Control Study – *Keun Jung Ryu, MD*
- 3:18–3:30 p.m. Discussion
- 3:31–3:57 p.m. Refreshment Break – **Visit Corporate Partners**
- 3:58–4:03 p.m. Pin Track Infections: Somewhere between 0 and 100%  
*Christopher Iobst, MD*
- 4:04–4:09 p.m. Should Taylor Spatial Frame Mounting Parameters be Measured during or after Surgery? – *Sami Sokucu, MD*
- 4:10–4:15 p.m. Treatment for Pathological Fractures Due To Primary Bone Tumors Using an External Fixator – *Hidenori Matsubara, MD*
- 4:16–4:21 p.m. The Use of 6–Axis External Fixation Is Overall More Cost–Effective than Ilizarov for Canadian Health Care Centers – *Marie Gdalevitch, MD*
- 4:22–4:32 p.m. Discussion
- 4:33–4:53 p.m. Invited Lecture  
**Management of Deformities in Osteogenesis Imperfecta: An Update**  
*Francios Fassier, MD*
- 4:54–5:00 p.m. Announcements
- 5:00 p.m. Adjourn
- 6:00–8:00 p.m. President’s Reception – Saint Gabriel L’Auberge

Saturday – July 26, 2014

- 7:15–7:45 a.m. Member Continental Breakfast – **Visit Corporate Partners**
- 7:45–8:30 a.m. LLRS Business Meeting – *all members please attend*
- 7:45–8:30 a.m. Nonmember Continental Breakfast – **Visit Corporate Partners**
- 8:30–8:35 a.m. Welcome, Disclosure
- 8:35–8:45 a.m. President’s Report  
Introduction of Reggie C. Hamdy, MD, Incoming LLRS President  
*Sanjeev Sabharwal, MD, MPH*
- 8:46–9:05 a.m. Reimagining Medical Education  
*Rishi Desai, MD, MPH*

**Pediatrics: Growth Plate** – Moderator: *Karl E. Rathjen, MD*

- 9:06–9:11 a.m. Ipsilateral Healthy Leg Segment Response to Physeal Trauma causing Limb Length Discrepancy – *Marina Makarov, MD*
- 9:12–9:17 a.m. Correction of Developmental Deformities in Lower Extremities after Epiphyseal Plate Injuries using External Fixators – *Takao Aikawa, MD*
- 9:18–9:23 a.m. Is there a Correlation between the Interscrew Angle and the Joint Orientation Angles after Hemiepiphysiodesis with Eight-Plate? *Salih Marangoz, MD*
- 9:24–9:29 a.m. Complications associated with Epiphysiodesis for Management of Leg Length Inequality – *Karl E. Rathjen, MD*
- 9:30–9:35 a.m. Epiphyseal Preservation and Biological Reconstruction for Metaphyseal Osteosarcoma – *Hiroyuki Tsuchiya, MD, PhD*
- 9:36–9:46 a.m. Discussion
- 9:47–10:07 a.m. Special Guest Lecture  
**Quality and Value in Orthopedics: An Update**  
*James O. Sanders, MD*  
AAOS Committee on Evidence-Based Quality and Value

**Pediatrics: Deformity** – Moderator: *Christopher Iobst, MD*

- 10:08–10:13 a.m. Review of Classification of Congenital Tibial Deficiency and Treatment at One Institution – *John G. Birch, MD*
- 10:14–10:19 a.m. The Nature of Foot Ray Deficiency in Congenital Fibular Deficiency  
*John G. Birch, MD*

- 10:20–10:25 a.m. Pediatric Limb Lengthening and Reconstruction: Risk Factors Impacting Surgical Outcome – *Heather M. Richard, PsyD*
- 10:26–10:31 a.m. Adolescent's Tibia Vara Initial Deformity Correlates with Body Mass Index (BMI) and the Amount of Pressure on the Tibial Physis (P.T.P)  
*Dr. Ronen Sever*
- 10:32–10:41 a.m. Discussion
- 10:42–10:47 a.m. Percutaneous Subtrochanteric Valgus Osteotomy for Painful Dislocated Hips in Patients with Cerebral Palsy – *Maximillian Martinez*
- 10:48–10:53 a.m. Validity and Deformity Consequences of a Rotational Mechanism for Stable Slipped Capital Femoral Epiphysis – *Raymond W. Liu, MD*
- 10:54–10:59 a.m. Bilateral Pubic Rami Lengthening for Pelvic Reconstruction in Bladder Exstrophy – *David A. Podeszwa, MD*
- 11:00–11:09 a.m. Discussion
- 11:10–11:30 a.m. Refreshment Break – **Visit Corporate Partners**
- 11:31–11:40 a.m. Clinical Scholar Development Program Presentation  
*Michael Beltran, MD*

**Foot and Ankle** – Moderator: *John K. Sontich, MD*

- 11:41–11:46 a.m. Classification of Distal Tibia and Fibula Deformity  
*Douglas N. Beaman, MD*
- 11:47–11:52 a.m. Secondary Hindfoot Nailing after Circular Fixation Limb Salvage  
*Joseph R. Hsu, MD*
- 11:53–11:58 a.m. Internal Fixation Following Thin–Wire External Fixation Removal or Modification for Foot and Ankle Pathology – *Todd A. Irwin, MD*
- 11:59 a.m.–12:04 p.m. Characterization of Subtalar Joint Motion with Taylor Spatial Frame–based Deformity Correction – *Douglas N. Beaman, MD*
- 12:05–12:10 p.m. Short Term Results of Magnetic Resonance Imaging after Ankle Distraction Arthroplasty – *S. Robert Rozbruch, MD*
- 12:11–12:16 p.m. Distraction Osteogenesis for Brachymetatarsia; Clinical Results and Implications on the Metatarsophalangeal Joint  
*S. Robert Rozbruch, MD*

12:17–12:29 p.m.

Discussion

12:30–1:15 p.m.

**Past Presidents Symposium**

James A. Binski, MD

John G. Birch, MD

Richard S. Davidson, MD

Stuart A. Green, MD

Dror Paley, MD

S. Robert Rozbruch, MD

John K. Sontich, MD

1:15–1:30 p.m.

Closing Comments, Adjourn