

**MONDAY, JULY 6**

07/00-0830 Instructional Course Lectures

07/00-0830 **ICL 13: Paediatrics: Challenging Hip Diagnoses** • Spearhead A/B

Moderator: K. Kellie Leitch, ON

**Objectives:**

This case-based session will highlight difficult paediatric hip conditions exposing the challenges faced in diagnosing, treating and following patients with these conditions.

**Panel:**

Debra Bartley, ON

Sukhrdeep Dulai, AB

Timothy P. Carey, ON (Tentative)

07/00-0830 **ICL 14: Acute Compartment Syndrome of Leg** • Rainbow Theatre

**First Annual Canadian Journal of Surgery Lecture**

Moderators David J.G. Stephen, ON, and Peter J. O'Brien, BC

**Objectives:**

At the end of this ICL, the participant will be able to:

1. Identify the clinical risk factors for acute compartment syndrome.
2. Discuss the current concepts of diagnosis of acute compartment syndrome.
3. Apply an appropriate treatment plan.
4. Understand the Canadian medical legal environment in regard to compartment syndrome.

**Who Is At Risk of Acute Compartment Syndrome of Leg? An Epidemiological****Review of Risk Factors**

Matthew R.G. Menon, AB

**Clinical Diagnosis of ACS of Leg**

David W. Sanders, ON

**Recent Advancements in Diagnosis of Acute Compartment Syndrome**

Babak Shadgan, BC

**Lower Limb Fasciotomy: Techniques**

Gregory K. Berry, QC

**What Are The Complications and Outcomes of Lower Limb Acute Compartment Syndrome, Muscle Ischemia or Reperfusion Injury?**

Paul Duffy, AB

**Medical-legal Aspects of Acute Compartment Syndrome**

Claude Martin, ON, The Canadian Medical Protective Association

**Panel / Discussion and Case Presentations**

0700-0830 **ICL 15: Shoulder Rotator Cuff and Biceps** ● Harmony A/B  
 Moderator Robert Litchfield, ON

Objectives:

1. Participants will understand the treatment strategies for acute and chronic cuff tears.
2. Participants will understand the pros and cons of biceps release or tenodesis and the surgical techniques.
3. The participant will have a greater understanding of the role of arthroplasty and tendon transfers in assisting the cuff insufficient patient and will be able to better manage complications when they arise.

**Partial Thickness Cuff Disease, the Role of Subacromial Decompression**  
 Richard Boorman

**Single vs Double Row Rotator Cuff Repair, Biceps Tenodesis or Release?**  
 Peter Lapner

**The Role of Arthroplasty, Tendon Transfers and Managing Complications**  
 Darren S. Drosdowech

Acknowledgement is given for the unrestricted educational grant from DePuy Canada, Johnson & Johnson Medical Products, a Division of Johnson & Johnson Inc. to help make the session above possible.

0700-0830 **ICL 16: Forefoot Reconstruction Case Studies** ● Garibaldi B  
 Moderator Terence Saxby, Australia, Speaker of the Royal College of Physicians and Surgeons of Canada

**Hallux Valgus not Bunions**  
 Karl-André Lalonde, ON

**Hallux Rigidus**  
 John T. C. Lau, ON

**Cross Over Toes**  
 Stéphane Leduc, QC

**Rheumatoid Foot**  
 Terence Saxby, Australia

**Windswept Forefoot**  
 Pradeep Alexander, ON

**Discussion**  
 Terence Saxby, Australia

The Royal College of Physicians and Surgeons of Canada has provided a National Specialty Society Annual Meeting Grant in support of our meeting.

0700-0830 **ICL 17: Combined Spine and Oncology - Surgical Management of Spine Tumours** ● Garibaldi A  
 Moderators Raja Y. Rampersaud, ON, and Peter Ferguson, ON

Objectives:

1. Discuss unique presenting features of primary spinal tumours.
2. Compare and contrast surgical management of primary and metastatic spine tumours.
3. Report oncologic and functional outcomes of surgical treatment of primary spinal tumours.
4. Present current treatment paradigm using evidence-based decision making in the surgical management of spinal metastases.
5. Define the ideal surgical candidate for management of spinal metastases.
6. Discuss the multidisciplinary approach to primary sacral tumours.
7. Present oncologic and functional outcomes of treatment of sacral tumours with a specific focus on morbidity and complications.

**Primary Spine Tumours**  
 John Street, BC

**Metastatic Spine Tumours**  
 Raja Y. Rampersaud, ON

**Sacral Tumours**  
 Paul Clarkson, BC

0700-0830 **ICL 18: MANUS: Distal Radius Malunion** ● Fitzsimmons  
 Moderator Robert Richards, ON

Objectives:

1. Discuss and describe the clinical characteristics and complications that define Distal Radius Malunion.
2. Contrast and differentiate the treatments for Distal Radius Malunion

Tom Tumble, WA, Speaker of the Royal College of Physicians and Surgeons of Canada

0830-0845 Break

0845-1015 **COA Paper Session 16: Hip Reconstruction 2** ● Rainbow Theatre  
 Moderators Martin Lavigne, QC, and Carolyn R. Hutchison, AB

**146 – 0845**

**A Large Diameter Head Metal-Metal THA Releases a Significantly Greater Amount of Metal Ion Compared to Hip Resurfacing**  
 Martin Lavigne, Université de Montréal; Pascal-André Venditoli, Université de Montréal

147 – 0851

**A Prospective Randomised Clinical Trial - Does Head Size Effect Metal Ion Levels in Metal-on-Metal THAs**

**Steven J.M. MacDonald**, University Hospital, University of Western Ontario; C. Anderson Engh, Anderson Orthopaedic Research Institute; Abigail E. Thompson, University Hospital, University of Western Ontario; Supatra Sritulanonhda, Anderson Orthopaedic Research Institute; Douglas Naudie, University Hospital, University of Western Ontario; Charles A. Engh, Anderson Orthopaedic Research Institute

148 – 0857

**Randomised Controlled Trial Comparing Metal-on-Metal versus Metal-on-Polyethylene Articulation in THA**

**NO DISCLOSURE PROVIDED**

**Rajeshkumar Kakwani**, Gateshead Healthcare; Chris Wainwright, Gateshead Healthcare; Gautam Tawari, Gateshead Healthcare; Shankar Kashyap, Gateshead Healthcare; A. Roysam, Gateshead Healthcare; A. Nanu, Gateshead Healthcare

0903 Discussion

149 – 0912

**Reconstruction of Acetabular Hip Biomechanics with Surface Replacement Arthroplasty**

**Kristoff Corten**, University Hospital Leuven; Ward Bartels, Catholic University Leuven; Guy Molenaers, University Hospital Leuven; Jos Vander Sloten, Catholic University Leuven; Paul Broos, University Hospital Leuven; Johan Bellemans, University Hospital Leuven; Jean-Pierre Simon, University Hospital Leuven

150 – 0918

**A Surgical Treatment Algorithm Using the Lateral Plate and Cable System for Periprosthetic Fractures of the Femur Around a Well-fixed Stem**

**Kristoff Corten**, University Hospital Leuven; Filip Van Rykel, University Hospital Leuven; An Sermon, University Hospital Leuven; Paul Vanderschoot, University Hospital Leuven; Stéfiaan Nijs, University Hospital Leuven; Johan Bellemans, University Hospital Leuven; Peter Reynders, University Hospital Leuven; Jean-Pierre Simon, University Hospital Leuven; Paul Broos, University Hospital Leuven

151 – 0924

**Results of Two Methods of Femoral Shortening Osteotomy in Hip Arthroplasty for High Riding Developmental Dysplasia of the Hip**

**Mohammad T. Ghazavi**, Iran University of Medical Sciences; Zahra Farahani, Iran University of Medical Sciences; Mansour Abolghasemian, Iran University of Medical Sciences

0930 Discussion

152 – 0936

**Results of In-cement Revision of Infected Total Hip Arthroplasty**

**Stephen M. Blake**, Torbay Hospital; Graham A. Gle, Princess Elizabeth Orthopaedic Centre; Matthew Hubble, Princess Elizabeth Orthopaedic Centre; Andrew J. Timperley, Princess Elizabeth Orthopaedic Centre

153 – 0942

**Acetabular Revisions Using Anti Protrusion (Iliotibial) Cage and Trabecular Metal Cup Constructs for Severe Acetabular Bone Loss Associated with Pelvic Discontinuity - Preliminary Results with 1 to 6 Years Follow Up**

**David Backstein**, Arthroplasty Division, University of Toronto; Yona Kosashvili, Arthroplasty Division, University of Toronto; Oleg Safir, Arthroplasty Division, University of Toronto; Dror Lakstein, Arthroplasty Division, University of Toronto; Matthew MacDonald, Arthroplasty Division, University of Toronto; Allan E. Gross, Arthroplasty Division, University of Toronto

154 – 0948

**Trabecular Metal Cups for Large Acetabular Defects with Up to 50% Host Bone Contact in Revision Total Hip Arthroplasty: Preliminary Results with 2 to 6 Years Follow Up**

**David Backstein**, Mount Sinai Hospital, Toronto; Dror Lakstein, Mount Sinai Hospital, Toronto; Oleg Safir, Mount Sinai Hospital, Toronto; Yona Kosashvili, Mount Sinai Hospital, Toronto; Allan E. Gross, Mount Sinai Hospital, Toronto

155 – 0954

**Cost Effectiveness Analysis of Revision Total Hip Arthroplasty and Revision Total Knee Arthroplasty**

**Elie Ghanem**, Rothman Institute; Ian Pawasarat, Rothman Institute; Carnil Restrepo, Rothman Institute; Khalid Azzam, Rothman Institute; Lauren May, Rothman Institute; Matthew S. Austin, Rothman Institute; Javad Parvizi, Rothman Institute

1000 Discussion

0845-1015

**COA Paper Session 17: Knee Reconstruction 2 ● Harmony A/B**  
Moderators Bas A. Masri, BC, and Clare Marx, President of the British Orthopaedic Association

156 – 0845

**The Effect of Prophylactic Preoperative IV Antibiotics on Intra-operative Cultures in Infected TKA - A Prospective Clinical Trial**

**R. Stephen J. Burnett**, Division of Orthopaedic Surgery, Victoria; Ayay Aggarwal, University of Missouri; Stephanie A. Givens, Washington University - Department of Orthopaedic Surgery; J. Thomas McClure, Nashville Orthopaedic Specialists; Robert L. Barrack, Washington University Department of Orthopaedic Surgery

157 – 0851

**Antibiotic Bone Cement and the Incidence of Deep Infection Following Total Knee Arthroplasty**

**Rajiv Gandhi**, University of Toronto; Fahad Razak, University of Toronto; J. Roderick Davey, University of Toronto; Khalid Syed, University of Toronto; Rubini Pathy, University of Toronto; Nizar N. Mahomed, University of Toronto

158 – 0857

**Metabolic Syndrome and the Incidence of Deep Vein Thrombosis Following Total Knee Arthroplasty**

**Rajiv Gandhi**, University of Toronto; Fahad Razak, University of Toronto; Peggy Tso, University of Toronto; J Roderick Davey, University of Toronto; Nizar N. Mahomed, University of Toronto

0903 Discussion

159 – 0914

**The RECORD4 Study: Oral, Once-daily Rivaroxaban Compared to Subcutaneous, Twice-daily Enoxaparin for Prevention of Venous Thromboembolism After Total Knee Replacement**

**William D. Fisher**, McGill University Health Centre; Michael Gent, McMaster University; Bruce L. Davidson, Weill Cornell Medical College; Michael R. Lassen, Hoersholm Hospital; Louis M. Kwong, Harbor-UCLA Medical Centre; Fred D. Cushman, Insall Scott Kelly Centre for Orthopaedics and Sports Medicine; Paul A. Lotke, University of Pennsylvania Medical Centre; Frank Misselwitz, Bayer Health Care AG; Tiemo J. Bandel, Bayer Health Care AG; Alexander G. G. Turpie, McMaster University

160 – 0920

**Alignment to ACCP Prophylaxis Guidelines and VTE Outcomes in THR and TKR Patients**

Rita Selby, Division of Hematology, University of Toronto; Bijan Borah, i3innovus, Eden Prairie, USA; **Heather McDonald**, Bayer Inc.; Canada; Joe Henk, i3innovus, Eden Prairie, USA; Mark Crowther, Department of Hematology, St. Joseph's Healthcare, Hamilton, Canada; Phil Wells, Division of Hematology and Clinical Epidemiology, Ottawa Health Research Institute/ University of Ottawa, Ottawa

161 – 0926

**Introduction of a User-friendly Dose of Tranexamic Acid in Primary Arthroplasty Patients**

Fiona Ralley, London Health Sciences Centre, University Hospital; James J. Howard, London Health Sciences Centre, University Hospital; Donna Berta, London Health Sciences Centre, University Hospital; Valerie Binns, London Health Sciences Centre, University Hospital; **Douglas Naudie**, London Health Sciences Centre, University Hospital

0932 Discussion

162 – 0940

**Stiffness Complicating Total Knee Arthroplasty: Computerized Tomography Evaluation of Component Rotational Position and Outcomes of Complete Revision for Restoration of Adequate Rotational Alignment**

**Martin Bedard**, Laval University; Kelly G. Vince, University of Auckland; John Redfern, University of Southern California

163 – 0946

**Minimally-Invasive Total Knee Arthroplasty: Potential Complications Based on a Large Single-surgeon Cohort Review**

**Michael G. Zywiel**, Rubin Institute for Advanced Orthopaedics; Peter M. Bonutti, Bonutti Clinic; Sif D. Ulrich, Rubin Institute for Advanced Orthopaedics; Mike S. McGrath, Rubin Institute for Advanced Orthopaedics; Michael A. Mont, Rubin Institute for Advanced Orthopaedics

164 – 0952

**Incidence of Spinal Epimorph Related Complications in Total Joint Arthroplasty**  
**Aaron Bigham**, University of Western Ontario; James J. Howard, UWQ; Sugantha Ganapathy, UWQ

0958 Discussion

0945-1015

**COA Paper Session 18: Sports Lower Extremity** • Fitzsimmons Moderators **Michael Gilbert**, BC, and **Denis Atkinson**, President of the New Zealand Orthopaedic Association

165 – 0845

**Return to Sport Following Single-Bundle ACL Reconstruction: Patellar Tendon Autograft versus Hamstring Autograft**

**Randy Mascarenhas**, University of Manitoba; Michael Tranovich, Lake Erie College of Osteopathic Medicine; Eric J. Kropp, University of Pittsburgh; James Irrgang, University of Pittsburgh; Freddie H. Fu, University of Pittsburgh; Christopher D. Harner, University of Pittsburgh

166 – 0851

**The 2-5 Year Results of Primary ACL Reconstruction Using Doubled Tibialis Anterior Allograft**

Martyn Snow, Royal Orthopaedic Hospital; **Jay B. Adlington**, Dalhousie University; William D. Stanish, Dalhousie University

167 – 0857

**Patellar Tendon ACL Reconstruction in the High-Demand Patient: Allograft versus Autograft Reconstruction**

**Randy Mascarenhas**, University of Manitoba; Michael Tranovich, Lake Erie College of Oste.; John Karpie, University of Pittsburgh; James Irrgang, University of Pittsburgh; Freddie H. Fu, University of Pittsburgh; Christopher D. Harner, University of Pittsburgh

0903 Discussion

168 – 0912

**Soccer and ACL Reconstruction in Teenage Girls**  
**Krish Maragh**, University of Alberta; Lauren Beaupré, University of Alberta; Allyson Jones, University of Alberta; David Otto, University of Alberta

**169 – 0918**  
**Reliability of Tunnel Angle in ACL Reconstruction: Free Hand versus Mechanical Guide Technique**  
 Jeff Letier, Pan Am Clinic; Nevin de Korompay, Pan Am Clinic; Lindsey MacDonald, Pan Am Clinic; Carling MacDonald, Pan Am Clinic; Warren G. Froese, Pan Am Clinic; Peter B MacDonald, Pan Am Clinic

**170 – 0924**  
**The Ottawa Treatment Protocol for Septic Arthritis Following ACL Reconstruction**  
 Emilio Lopez-Vidriero, University of Ottawa; Olufemi R. Ayeni, University of Ottawa; Tracy Rupke, University of Ottawa; Ahmad Bin Nasser, University of Ottawa; Donald Johnson, University of Ottawa

0930 Discussion

**171 – 0939**  
**Automatic Classification of 3D Kinetic Data of Healthy and ACL Deficient Participants**  
 Alexandre Fuentes, Université de Montréal; Neila Mezghani, École de Technologie Supérieure; Nicola Hagemaster, École de Technologie Supérieure; Jacques A. de Guise, École de Technologie Supérieure

**172 – 0945**  
**A Survey Study Regarding the Natural History and Treatment of Anterior Cruciate Ligament Injury Among Members of the Canadian Orthopaedic Association**  
 Sheila McRae, Pan Am Clinic; Jaskarnip Chahal, Pan Am Clinic; Jeff Letier, Pan Am Clinic; Peter B. MacDonald, Pan Am Clinic; Robert Marx, Hospital for Special Surgery

**173 – 0951**  
**Management of Multiple Ligament Injured Knee: A Survey of Current Practice in Canada**  
 Robert G. McCormack, UBC; Rafael Martinez, UBC; Tom Herschmiller, University of Sidney; Kian Chung, University of Singapore

**174 – 0957**  
**Postero-medial Corner Injury Patterns in Traumatic Knee Dislocations**  
 Jaskarnip Chahal, University of Toronto; Dawn Pearce, St. Michael's Hospital, University of Toronto; Tom McCarthy, University of Toronto; Jeff Dawson, University of Toronto; Anthea Liebenberg, St. Michael's Hospital, University of Toronto; Daniel B. Whelan, St. Michael's Hospital, University of Toronto

1003 Discussion

0845-1015 **COA Paper Session 19: Trauma Upper Extremity and Trauma General**  
 ● Garbaldi B  
 Moderator Christopher Graham, MB

**175 – 0845**  
**Evaluation of Primary Care Management for Isolated Limb Injury: Study on 166 Consecutive Patients Referred to Orthopaedic Surgery in a Level 1 Trauma Centre**  
 Dominique Rouleau, Hôpital Sacré-Coeur de Montréal; Stefan Parent, Hôpital Sacré-Coeur de Montréal; Debbie Feldman, Université de Montréal; Valérie Deslauniers, Université de Montréal

**176 – 0851**  
**Patient Satisfaction Following Clavicle Fracture Fixation: Horizontal versus Vertical Incision**  
**WITHDRAWN June 15**  
 John Choi, The Alfred Hospital; Elton Edwards, The Alfred Hospital

**177 – 0857**  
**Locked Plate Fixation versus Non-operative Treatment for Displaced, Extra-articular Proximal Humerus Fractures: Are Functional and Quality of Life Outcomes Better?**  
 Gerard Slobogean, UBC; Mohit Bhandari, McMaster University; Peter J. O'Brien, UBC

0903 Discussion

**178 – 0912**  
**Type 2D Monteggia Elbow Fracture-dislocations: Pattern of Injury, Surgical Technique of Fixation and Outcome**  
 Darius Viskontas, UBC; Daphne M. Beingsesser, University of Washington; Sean Nork, University of Washington; Julie Agel, University of Washington

**179 – 0918**  
**Elbow Hemiarthroplasty for Distal Humeral Fractures**  
 Alex Malone, University of Otago, Christchurch; Peter Zarkadas, Lions Gate Hospital; Stuart Jansen, Royal North Shore, Sydney;

**180 – 0924**  
**Compartment Syndrome Causes a Systemic Inflammatory Response and Remote Organ Injury**  
 Abdel-Rahman Lawandy, University of Western Ontario; Gregory McGarr, UWO; David W. Sanders, UWO; Aurelia Bhari, UWO; Amit Badhwar, UWO

0930 Discussion

**181 – 0939**  
**Hypothermia in Compartment Syndrome**  
 David W. Sanders, University of Western Ontario; Gladys Chan, University of Western Ontario; Amit Badhwar, University of Western Ontario

**182 – 0945**  
**A Comparison of Complication Rates and Outcomes Following Limb-lengthening for Post-traumatic versus Congenital/ Developmental Deformity**  
**Jeffrey M. Potter**, Queen's University, Department of Medicine; Peter O'Brien, UBC; Piotr Blachut, UBC; Emil H. Schemitsch, St. Michael's Hospital, University of Toronto; Michael McKee, St. Michael's Hospital, University of Toronto

**183 – 0951**  
**Locked Plating of Open Distal Femur Fractures**  
**David Barrei**, Harborview Medical Centre; Craig Greene, Baton Rouge Orthopaedic Clinic; Daphne M. Beingsessner, Harborview Medical Centre

**184 – 0957**  
**Pattern of Physical Injury Associated with Intimate Partner Violence in Women Presenting to the Emergency Department: A Systematic Review and Meta-analysis**  
**Victor Wu**, McMaster University; Harold Huff, McMaster University; **Mohit Bhandari**, McMaster University

1003 Discussion  
 0845-1015 **COA Paper Session 20: Spine 2 • Garibaldi A**

Moderator **Raja Y. Rampersaud**, ON, and **John Street**, BC

**185 – 0845**  
**Risk Factors for Major Complication Following Surgery for Neuromuscular Scoliosis**  
**Daniel Master**, Rainbow Babies and Children's Hospital; **Connie Poe-Kochert**, Rainbow Babies and Children's Hospital; **Jochen P. Son-Hing**, Rainbow Babies and Children's Hospital; **Douglas G. Armstrong**, Rainbow Babies and Children's Hospital; **George H. Thompson**, Rainbow Babies and Children's Hospital

**186 – 0851**  
**Factors Predictive of Curve Progression and Timing of Definitive Fusion in Early Onset Scoliosis (EOS) Treated by Growing Rod (GR) Construct**  
**Ujjwal K. Debnath**, Queen's Medical Centre, Nottingham University Hospitals NHS Trust; **Nanjudappa S. Harshavardhana**, Queen's Medical Centre; **Hossein S.M. Mehdian**, Queen's Medical Centre; **Geoffrey R. Burwell**, University of Nottingham; **Michael P. Grevitt**, Queen's Medical Centre; **John K. Webb**, Queen's Medical Centre

**187 – 0857**  
**Retrospective Assessment of Distal Foundations in the Correction of Adolescent Idiopathic Scoliosis (AIS)**  
**George H. Thompson**, Case Western Reserve University; **Douglas Dickson**, Rainbow Babies and Children's Hospital; **Connie Poe-Kochert**, Rainbow Babies and Children's Hospital; **Jochen P. Son-Hing**, Rainbow Babies and Children's Hospital; **Douglas G. Armstrong**, Rainbow Babies and Children's Hospital

**188 – 0903**  
**Thoracoscopic Anterior Instrumentation and Fusion as Treatment for Adolescent Idiopathic Scoliosis: A Systematic Review of the Literature**  
**Ron El-Hawary**, Dalhousie University; **David Russell**, Dalhousie University; **Alexandra M. Soroceanu**, Dalhousie University; **Colleen O'Connell**, Dalhousie University  
 0909 Discussion

**189 – 0920**  
**Prospective Cohort Analysis of Primary Pyogenic Infection of the Spine in Intravenous Drug Users**  
**John Street**, UBC; **Brian Lenahan**, UBC; **Michael Boyd**, UBC; **Marcel Dvorak**, UBC; **Brian K. Kwon**, UBC; **Scott Paquette**, UBC; **Charles G. Fisher**, UBC

**190 – 0926**  
**Comparative Stability of Two C1-C2 Transarticular Screw Salvaging Fixation Techniques**  
**Hossein K. Elgaty**, University of Toledo; **Tejasw Potluri**, University of Toledo; **Ahmad Faizan**, University of Toledo; **Scott Foster**, University of Toledo; **Nikhil Kulkarni**, University of Toledo; **Amanesh Goyal**, University of Toledo; **Vijay Goel**, University of Toledo

**191 – 0932**  
**A Prospective Analysis Comparing Preoperative MRI to Diagnose Disruption of the Posterior Ligamentous Complex in Cervical Spine Injury and Intraoperative Findings**  
**Davor D. Saravanja**, CNOSP; **Charles G. Fisher**, CNOSP; **Scott Paquette**, CNOSP; **John Street**, CNOSP; **Brian Kwon**, CNOSP

0938 Discussion  
**192 – 0944**  
**The Prevalence of Spinal Magnetic Resonance Imaging Changes in Surgical versus Non-surgical Patients - A Retrospective Study**  
**Frederick Cheng**, University of Toronto, Toronto; **Orna Persaud**, University of Toronto, University Health Network, Krembil Neuroscience Program, Toronto; **Raja Y. Rampersaud**, University of Toronto, University Health Network, Krembil Neuroscience Program, Toronto

**193 – 0952**  
**Motor Recovery and Health-related Quality of Life in Patients with a Thoracolumbar Spine Injury: Relationship to Neural Axis Level of Injury - Spinal Cord (SCI), Conus Medullaris (CMI), and Cauda Equina (CE)**  
**Stephen Kingwell**, CNOSP, UBC; **Vanessa Noonan**, CNOSP, UBC; **Doug Graeb**, UBC; **Charles G. Fisher**, CNOSP, UBC; **Ory Keynan**, CNOSP, UBC; **Marcel Dvorak**, CNOSP, UBC

**194 – 0958**  
**Demographics of Traumatic Spinal Cord Injury in British Columbia. A Prospective Cohort Analysis of 10 Years**  
**Brian Lenahan**, UBC; **John Street**, UBC; **Hongbin Zhang**, UBC; **Vanessa Noonan**, UBC; **Michael Boyd**, UBC; **Charles Fisher**, UBC; **Brian K. Kwon**, UBC; **Scott Paquette**, UBC; **Peter C. Wing**, UBC; **Marcel Dvorak**, UBC

1004 Discussion

0845-1015 **COA Paper Session 21 : Paediatrics ● Spearhead A/B**  
 Moderators Kishore Mulpuri, BC, and Ron El-Hawary, NS

**195 – 0845**

**Minimizing Touriquet Pressure in Paediatric Anterior Cruciate Ligament  
 Reconstructive Surgery: A Blinded, Prospective Randomised Controlled Trial**  
 Christopher W. Reilly, UBC; James A. McEwen, UBC; Lise Leveille, UBC; Angeliki Perdios,  
 UBC; Kishore Mulpuri, UBC

**196 – 0851**

**Gait Analysis After Initial Non-operative Treatment for Clubfeet: Intermediate  
 Follow-up at Age 5 Years**  
 Ron El-Hawary, IMK Health Centre; Kelly A. Jeans, Texas Scottish Rite Hospital for  
 Children; Lori A. Karol, Texas Scottish Rite Hospital for Children

**197 – 0857**

**Long Term Results of Ilizarov Treatment in Relapsed Club Feet - A Comparison  
 of Scoring Systems with a Patient's Perspective of Outcome**  
 Amit Datta, Royal Orthopaedic Hospital Birmingham, U.K.; Shakir Syed, Royal Orthopaedic  
 Hospital Birmingham, U.K.; Curtis Robb, Royal Orthopaedic Hospital Birmingham, U.K.;  
 Chris Bradish, Royal Orthopaedic Hospital Birmingham, U.K.

0903 Discussion

**198 – 0912**

**Supracondylar Humerus Fractures in Older Children: Treatment Modalities and  
 Outcomes**

Brent G. Molton, Schulich School of Medicine & Dentistry, The University of Western Ontario,  
 London, ON; W. S. McGuffin, Schulich School of Medicine & Dentistry, The University of  
 Western Ontario, London, ON; Jamie A. Seabrook, Department of Paediatrics, Children's  
 Health Research Institute; Department of Sociology, London Health Sciences Centre; London,  
 ON; **K. Kellie Leitch**, Schulich School of Medicine & Dentistry, The University of Western  
 Ontario, London, ON

**199 – 0918**

**Reproducibility of Herring's Classification Using Two Different Techniques  
 and its Alteration During the Evolution of the Disease**

**Renjit Varghese**, UBC; Kishore Mulpuri, UBC

**200 – 0924**

**Psychiatric Disorders Associated with Scoliosis: A Prevalence Study**  
 Christopher W. Reilly, UBC; Darin Davidson, UBC; Angeliki Perdios, UBC; Simon Davidson,  
 University of Ottawa

0930- Discussion

**201 – 0936**

**US and European Risser Grading Systems: Which One Best Predicts the Curve  
 Acceleration Phase in Adolescent Idiopathic Scoliosis?**  
 Marie-Lyne Nault, Université de Montréal; Stefan Parent, Université de Montréal;  
 Marjolaine Roy-Beaudry, Hôpital Sainte-Justine; Michele Rivard, Université de Montréal;  
 Hubert Labelle, Université de Montréal

**202 – 0942**

**Intrathecal Morphine Analgesia in Idiopathic Scoliosis Surgery: Does Gender  
 or Racial Group Affect Optimal Dosing?**  
 Jochen P. Son-Hing, Rainbow Babies & Children; Connie Poe-Kochert, Rainbow Babies  
 & Children; Paul A. Tripi, Rainbow Babies & Children; Jennifer Potzman, Rainbow Babies  
 & Children; George H. Thompson, Rainbow Babies & Children

**203 – 0948**

**Apical Vertebra Pedicle Morphology in Scoliosis**  
 Denise Mackey, UBC; Firoz Milyani, UBC; Renjit Varghese, UBC; Davor Saravanja, UBC;  
 Christopher W. Reilly, UBC

**204 – 0954**

**Continuous Intravenous Morphine Infusion for Postoperative Analgesia Following  
 Posterior Spinal Fusion for Idiopathic Scoliosis**  
 Connie Poe-Kochert, Rainbow Babies & Children; Paul A. Tripi, Rainbow Babies & Children;  
 Jennifer Potzman, Rainbow Babies & Children; **Jochen P. Son-Hing**, Rainbow Babies &  
 Children; George H. Thompson, Rainbow Babies & Children

1000 Discussion

1015-1045

Break

1045-1115

**COA Business Meeting ● Sea to Sky Ballroom A**

1115-1245

**Symposium 6: Non-surgical Alternatives in The Arthritic Knee**

● Sea to Sky Ballroom A

Moderator Robert Litchfield, ON

Objectives: Management of mild to moderate osteoarthritis of the knee is a common problem  
 for orthopaedic surgeons. With the knowledge gained in this symposium the surgeon will  
 understand the evidence behind the most common modalities employed in this patient  
 population. In addition through didactic and case based presentation the participant will  
 have a greater understanding as to where surgery should fit into the treatment algorithm.  
 The faculty will discuss the role of exercise and weight loss, physiotherapy, injections,  
 braces, orthotics and nutrition supplements and thus gain a better understanding of the  
 optimal timing and recommendation of surgical options.

**Introductions**

Robert Litchfield, ON

### Case presentations Highlights from NEJM Sept 2008 article

**Bracing, Orthotics, Injections**  
Michael Gilbert

**The Role of Physiotherapy, Strengthen Training and Exercise: Exercise Prescription and Weight Loss**  
Angelo Bouliougouris, ON

**What Role is There For Arthroscopy in the Arthritic Knee? How Do I Utilize Imaging in Decision Making**  
Geoffrey Dervin, ON

### Case Presentations, Discussion

1245-1315      Boxed Lunch

1315-1645      **Sub-specialty Half-day Activities**

\*\* Break times are at the discretion of moderators.

1315-1645      **TRAUMA** • Rainbow Theatre

### Introduction

Ross K. Leighton, NS, President of the Canadian Orthopaedic Trauma Society

### Scientific Session 1: Fractures about the Hip in the Elderly Patient

Moderator Hans J. Kreder, ON

### Percutaneous Reduction and Fixation of Acetabulum Fractures in Elderly Patients

Joshua Gary, UTSW; **Kelly Lafaire**, UBC; Frank Gerold, UTSW; Michael Hay, UTS; Charles W. Reinert, UTSW; Adam J. Starr, UTSW

### Modified Stopppa Approach for Acetabular Fractures of the Elderly Patient

G. Yves Lafamme, Hôpital du Sacré-Coeur; Benoit Benoit, Hôpital du Sacré-Coeur; Stéphane Leduc, Hôpital du Sacré-Coeur; **Jonah Hébert-Davies**, Université de Montréal

### Even Undisplaced Fracture Neck of Femur Can Result into Poor Outcome Depending on Associated Co-morbidities: A Study of AO Cannulated Screws Done in 315 Patients

**Vishal Upadhyay**, Poole General Hospital, U.K.; Alay Sahu, Stepping Hill Hospital, U.K.; Charalambos P. Charalambous, Poole General Hospital, U.K.; N. Harshwardena, Poole General Hospital, U.K.; Heath P. Taylor, Poole General Hospital, U.K.; Mark Farrar, Poole General Hospital, U.K.

### Tips and Tricks Around the Ankle: Common Problems- How Does the Expert Do it?

Moderator Emil H. Schemitsch, ON

### Objectives:

The audience will realize options for fixation of commonly seen fractures. The expert panel will discuss surgical treatment plans that allow different approaches to these fractures. The audience will be able to relate these to their practice for assimilation of desired techniques.

### Syndesmotic Injury:

#### Soft tissue Repair

David J.G. Stephen, ON

#### Internal Fixation

Ross K. Leighton, NS

### Calcaneal Fracture:

#### Open Reduction

Pierre Guy, BC

#### Percutaneous Fixation

Richard E. Buckley, AB

### Distal Third Tibia Fractures:

#### Plate Fixation

Brad Petrisor, ON

#### Nail Fixation

Paul Duffy, AB

### Bimalleolar Ankle Fractures - Simple Pilon Fractures

#### Posterior Approach

Christopher Graham, MB

#### Combined/ Percutaneous Approach

Stéphane Leduc, QC

### What's New in Orthopedic Trauma in 2009: Review of Salient Publications Potentially

#### Influencing Practice

Moderator Mohit Bhandari, ON

Presenters: Mohit Bhandari and Panel of Experts

1315-1600

**ARTHROPLASTY SUBSPECIALTY HALF DAY** • Harmony A/B

1315-1500 **Arthroplasty Tips and Tricks** • Harmony A/B  
Moderator James P. McAuley, ON

Objectives:

1. To identify the key points of the surgical techniques presented.
2. Assess the merits and potential disadvantages of the techniques presented.
3. Integrate these techniques in their clinical practice when appropriate.

**How to Use Image Guidance to Take the Guesswork Out of Hip Resurfacing**  
Douglas Naudie, ON

**Tips For Using TM in THA**  
James L. Howard, ON

**Keys For Success Using TM in TKA**  
Bas A. Masri, BC

**Dealing With Obesity in TKA**  
David Backstein, ON

**Tips For Successful Locking Plate Fixation of PP Fractures**  
Ross K. Leighton, NS

1500 Break

1515-1600 **Case Presentations**  
Moderator James P. McAuley, ON

We encourage attendees to bring cases. Faculty to be announced.

1315-1645 **SPORTS MEDICINE TIPS AND TRICKS** • Fitzsimmons  
Moderator David Otto, AB

**Single vs Double Bundle ACL Reconstruction - Where Are We Going?**  
Mark S. Heard, AB

**Tunnel Placement in Anatomic ACL reconstruction**  
J. Robert Griffin, ON

**Arthroscopic Osteochondral Autograft**  
R. Cole Beavis, SK

**How I Do a Bankart Repair**  
Alexandra Brooks-Hill, BC

**The Latarjet procedure**  
Martin Bouliane, AB

**How to Get Started in Hip Arthroscopy**  
Nicholas G.H. Mohitadi, AB

**Advanced Hip Arthroscopic Techniques For the Treatment of Labral Tears and Femoral Acetabular Impingement**  
Michael Gilbert, BC

1315-1445 **FOOT AND ANKLE TIPS AND TRICKS WITH VIDEO HIGHLIGHTS**  
• Garibaldi B  
Moderator Alastair S.E. Younger, BC

**Subtalar Fusion (Min Invasive)**  
Jean-Pascal Allard, QC

**Triple Arthrodesis**  
Timothy R. Daniels, ON

**Ankle Arthroscopy Technique & Indications**  
Monika Volesky, QC

**Ankle Fusion (Point Counterpoint):  
Arthroscopic**

Kevin J. Wing, BC  
**Open**

Terence Saxby, Australia, Speaker of the Royal College of Physicians and Surgeons of Canada  
The Royal College of Physicians and Surgeons of Canada has provided a National Specialty Society Annual Meeting Grant in support of the above meeting.

1315-1645 **MANUS SUBSPECIALTY HALF DAY** • Garibaldi A  
Moderator Robert Richards

Objectives:  
1. Learn and describe treatment options for the above upper extremity conditions.  
2. Evaluate treatment options for upper extremity conditions and discuss their pros and cons.

**Tendon Transfers For Nerve Palsy**  
Tom Turnbly, WA, Speaker of the Royal College of Physicians and Surgeons of Canada  
Discussion

**Operative versus Non-operative Treatment of Paediatric Medial Epicondyle Fractures:  
A Systematic Review**  
Free Paper: Heather Hurdle, AB

1430-1500 Break

**Ulnar Abutment Syndrome**  
C. Vaughan A. Bowen, AB

1530-1610 **MANUS TIPS AND TRICKS • Garibaldi A****Percutaneous Aponeurotomy For Dupuytren's**  
Peter T. Gropper, BC**Pyrodisic Insertion For CMC OA**  
Bertrand H. Perey**Discussion**

1630-1645 Business Meeting

The Royal College of Physicians and Surgeons of Canada has provided a National Specialty Society Annual Meeting Grant in support of the above meeting.

**POSTERS****COA Top Scoring Posters****Adult Reconstruction Hip****1 - Residual Groin Pain and Discomfort 2 Years After Metal-on-Metal 28mm THA, Large Diameter Head THA and Hip Resurfacing**  
Martin Lavigne, Université de Montréal; Muthu Ganapathi, Université de Montréal; Pascal-André Venditoli, Université de Montréal**2 - Reliability and Usefulness of the Signs of Bony Integration in Assessment of Uncemented Acetabular Components in the Short Term Follow-up Period**  
Pascal-André Venditoli, Maisonneuve-Rosemont Hospital; Mathieu Carrier, Maisonneuve-Rosemont Hospital; Muthu Ganapathi, Maisonneuve-Rosemont Hospital; Martin Lavigne, Maisonneuve-Rosemont Hospital**3 - Predicting Patient Dissatisfaction Following Joint Replacement Surgery**  
Rajiv Gandhi, University of Toronto; J Roderick Davey, University of Toronto; Nizar N. Mahomed, University of Toronto**4 - The Development and Reliability of a Quality of Life Hip Outcome Measure for Young Active Patients**  
Elizabeth Pedersen, University of Calgary; Denise Chan, University of Calgary; Jocelyn Fredine, University of Calgary; Nicholas G.H. Mortadi, University of Calgary**5 - Surgical Variables Affect Metal Ion Levels in the Blood of Patients with Hip Surface Arthroplasty**  
John Antoniou, McGill University; Alain Pettit, Lady Davis Institute; Fackson Mwale, McGill University; David J. Zukor, McGill University; Olga L. Huk, McGill University**6 - Total Hip Arthroplasty with Delta Ceramic-on-Ceramic**  
James P. McAuley, University of Western Ontario; William G. Hamilton, Anderson Orthopaedic Research Institute; Joel Politi, Cardinal Orthopedic Institute; Johnathan Garino, Hospital for the University of Pennsylvania; Doug Dennis, Colorado Joint Replacement Institute**7 - Modified Trochanteric Slide for Complex Hip Arthroplasty: Clinical Outcomes and Complication Rates**  
Dror Lakstein, Mount Sinai Hospital, Toronto; Yona Kosashvili, Mount Sinai Hospital, Toronto; David Backstein, Mount Sinai Hospital, Toronto; Oleg Satir, Mount Sinai Hospital, Toronto; Allan E. Gross, Mount Sinai Hospital, Toronto**8 - Is There a Correlation Between INR and Intraoperative Bleeding?**  
Benjamin Bender, Rothman Institute; Chelsea Delsey, Rothman Institute; Javad Parvizi, Rothman Institute; Richard H. Rothman, Rothman Institute