



Thursday, June 15  
Hip Symposium, COA/CORS Opening Ceremonies  
President's Welcome Reception

**8:00-9:00 Hip Symposium Session 1: Introduction to the Pre-Arthritic Hip**

●Governor General 1, Westin

Moderator: Paul E. Beaulé, ON

Objectives:

1. Describe history and physical examination of the pre-arthritic hip.
2. Identify key plain radiographic findings as well as normal variants.
3. Summarize role of 3-dimensional imaging.
4. Discuss natural history of FAI & Dysplasia.

Speakers:

- History/Physical Examination: A Comprehensive Approach - Ernest Sink, US
- Plain Radiographs and Normal Variants - Etienne Belzile, QC
- Is 3D Useful or too Much Radiation? - Justin Cobb, United Kingdom
- Understanding the Anatomy/The Patient: The Key to Reconstructing the Joint - Richard Santore, US

**9:00-9:50Hip Symposium Session 2: Evolution in Techniques and Protocols in FAI Surgery**

●Governor General 1, Westin

Moderator: Richard Field, UK

Objectives:

1. Organize the treatment of torsional deformities of the femur.
2. Present key technical steps for acetabular retroversion correction.
3. Outline key technical aspects for CAM correction.
4. Define techniques for labral reconstruction.

Speakers:

- PAO for Retroversion: When and How - Klaus Siebenrock, Switzerland
- The CAM Deformity: Avoiding Under/Over Correction - Thomas Byrd, US
- Are We Anchoring too Many Labrums? - Christopher Larson, US
- Do Femoral Torsion and Acetabular Version Matter in FAI surgery? - Michael Millis, US

**9:50-10:50Hip Symposium Session 3: The Young Athletic Hip**

●Governor General 1, Westin

Moderator: Richard Santore, US

Objectives:

1. Review current understanding of impact of sporting activities on the developing skeleton in teenage years.
2. Review indications for hip arthroscopy and/or open hip surgery to correct bony abnormalities.
3. Discuss patient indications and expectations after hip preserving surgery of the hip.

Speakers:

- Are our Kids Doing too Many Sports? - Klaus Siebenrock, Switzerland
- Hip Arthroscopy in the Very Young - Sasha Carsen, ON
- Indications for Open Surgery (PAO/SD) - Etienne Belzile, QC
- Should there be an Age Limit for Hip Arthroscopy? - Thomas Byrd, US



10:50-11:10 Coffee Break in Exhibits

**11:10-12:00 Hip Symposium Session 4: Revision Hip Preservation**

● **Governor General 1, Westin**

Moderator: Michael Millis, US

Objectives:

1. Review current failure mechanisms associated with hip preservation surgery.
2. Review indications for re-interventions either arthroscopically or by open surgery.
3. Discuss outcomes of revision hip preserving surgery.

Speakers:

- Evaluating the Failed Hip Arthroscopy - Martin Beck, Switzerland
- When to or not to Re-intervene? Open Surgery - Richard Santore, US
- When to or not to Re-intervene? Arthroscopy - Christopher Larson, US
- Defining Modes of Failure - Paul E. Beaulé, ON

11:30-13:00 Lunch in Exhibits

12:00-16:00 Canadian Orthopaedic Trauma Society (COTS) Meeting

● **201, Shaw Centre**

**13:00-16:30 Hip Symposium Workshop: Arthroscopy and Joint Preserving**

(reg required) ● 13:00 Shuttle to **Sim Centre**

Objectives:

1. Apply hip arthroscopy portal placements.
2. Apply labral anchor/repair.
3. Apply technique of examination of the peripheral compartment: Moving from central to peripheral, visualization of medial fold, retinacular vessels.
4. Apply capsular repair; Illustrate technique of peri-acetabular osteotomy.
5. Illustrate technique of surgical dislocation.

Instructors:

- Paul E. Beaulé, ON
- Femi Ayeni, ON
- Martin Beck, Switzerland
- Etienne Belzile, QC
- Thomas Byrd, US
- Sasha Carsen, ON
- Wade Gofton, ON
- Klaus Siebenrock, Switzerland
- Ivan Wong, NS
- Christopher Larson, US
- Michael Millis, US
- Richard Santore, US
- Earnest Sink, US

13:00- 16:00 Canadian Paediatric Orthopaedic Group (CPOG) Research Meeting ● **Manitoba, Westin**

**17:30-19:00 Opening Ceremonies ● Governor General 2/3, Westin**

**Guest Speaker: Milt Stegall, US**

*The Off-field Work that Fueled my Body of Work*

**19:00-21:00 President's Welcome Reception in the Exhibit Hall**



Friday, June 16  
COA/CORS/Hip Symposium

**7:30-12:30 Hip Symposium Workshop: Surgical Approaches for Rapid Recovery Laboratory**  
(reg required) • 7:30 Shuttle to **Sim Centre**  
Moderator: Wade Gofton, ON

Objectives:

1. Demonstrate the anterior approach with and without a positioning table.
2. Demonstrate direct superior and minimally invasive posterior approaches.
3. Demonstrate implantation of hip resurfacing.
4. Illustrate revision surgery through anterior approach.

Instructors:

- Paul E. Beaulé, ON
- Etienne Belzile, QC
- Keith Berend, US
- Joel Matta, US
- Richard Field, United Kingdom
- Wade Gofton, ON
- Glen Richardson, NS
- Paul Kim, ON
- Douglas Naudie, ON
- Michael Tanzer, QC

**7:50-9:20 COA Paper Session: Hand/Upper Extremity • 201, Shaw Centre**  
Moderators: Danny Goel, BC; Gurpreet Dhaliwal, AB

**1 – 07:50**

**Dynamic CT Scan of the Normal Scapholunate Joint in a Clenched Fist and Radial and Ulnar Deviation**  
Paul Kelly, NL; John Hopkins, NL; Andrew Furey, NL; Daniel Squire, NL

**2 - 07:56**

**The Daily Motion of Anatomic and Reverse Total Shoulder Arthroplasty Reconstructed Shoulders**  
G Daniel G Langohr, ON; John Haverstock, ON; James A Johnson, ON; George S Athwal, ON

**3 - 08:02**

**Characterization of the Walch B3 Glenoid in Primary Osteoarthritis**

Kevin Chan, US; Nikolas K Knowles, ON; Gilles Walch, France; Jean Chaoui, France; Louis Ferreira, ON; George S Athwal, ON

Discussion 08:08

**4 - 08:17**

**Development of a Haptic Glenoid Reaming Simulator for Shoulder Arthroplasty**

Jonathan K Kusins, ON; Jason A Strelzow, Scotland; Marie-Eve LeBel, ON; Louis Ferreira, ON

**5 - 08:23**

**Biomechanical Evaluation of the Scapholunate Ligament and Secondary Stabilizers on Scaphoid and Lunate Kinematics**

Clare Padmore, ON; Helen L Stoesser, ON; G Daniel G Langohr, ON; Nina Suh, ON; James A Johnson, ON; Graham J W King, ON



**6 – 08:29**

**The Effect of Associated Fractures/Dislocations on Outcomes of Unreconstructable Radial Head Fractures Managed with Radial Head Arthroplasty: A Cohort Comparison**

**Jason A Strelzow, Scotland;** George Athwal, ON; Joy MacDermid, ON; Ruby Grewal, ON; Kenneth Faber, ON; Darren Drosdowech, ON; Graham King, ON

Discussion 08:35

**7 – 08:44**

**Biceps Tenodesis Versus Tenotomy in Treatment of Lesions of Long Head of Biceps Brachii in Patients Undergoing Arthroscopic Shoulder Surgery**

**Peter B MacDonald, MB;** Sheila M McRae, MB; Gregory Stranges, MB; Jason Old, MB; Jamie Dubberley, MB; Randhir Mascarenhas, US; Jeff S Leiter, MB; Mark Nassar, MB; Peter Lapner, ON

**8 – 08:50**

**Arthroscopic Debridement for Primary Elbow Osteoarthritis with and without Capsulectomy: A Comparative Cohort Study**

**Ahaoiza Diana Isa, ON;** Graham JW King, ON; George Athwal, ON; Kenneth J Faber, ON

**9 – 08:56**

**Isolated Capitate Fractures: Case Report and Systematic Literature Review**

**Mina Aziz, MB;** Jeff Leiter, MB; Jennifer Guiffre, MB

**J.A. Nutter Award Winner, 2016 - 09:02**

**Characterization of Posterior Glenoid Bone Loss in Posterior Shoulder Instability**

**Jason J. Shin, University of Saskatchewan**

Adam B Yanke, US; Rachel M Frank, US; Nikhil N Verma, US; Brian J Cole, US; Anthony A Romeo, US; Matthew T Provencher, US

Discussion 09:18

**7:50-9:20 COA Paper Session: Paediatrics • 212, Shaw Centre**

Moderator: G. Brian Black, MB; Presider: Luke Gauthier, NS

**10 – 07:50**

**Non-traumatic Paediatric Orthopaedic Referrals in Manitoba (A Retrospective Review of 680 Consecutive Consultations, Their Appropriateness, and Implications for Future Canadian Guidelines)**

**G Brian Black, MB;** Ashleigh Sprange, MB; MalathiRaghavan, MB

**11 – 07:56**

**The Impact of a Web-based Clinical Practice Pathway for Supracondylar Fractures on Resource Utilization**

**AnshikaGangwar, ON;** Joseph Menna, ON; Mark W Camp, ON

**12 – 08:02**

**Toddlers' Fracture of the Tibia: An Unnecessary Fracture Clinic Referral**

**John Adamich, ON;** Mark W Camp, ON

Discussion 08:08



**13 – 08:17**

**Development of the First Province/State-wide Hip Surveillance Program for Children with Cerebral Palsy in North America: Evidence, Consensus and Implementation**

**Stacey Miller, BC;** Kishore Mulpuri, BC; Maureen O'Donnell, BC

**14 – 08:23**

**The Need for Further Corrective Surgery in Developmental Dysplasia of the Hip: Surgical Decision-making and Practice Variability**

**Emily K Schaeffer, BC;** Kishore Mulpuri, BC; Wudbhav N Sankar, PA; Nicholas MP Clarke, UK; Alaric Aroojis, India; Charles T Price, FL; IHDI Study Group, FL

**15 – 08:29**

**Femoral Nerve Palsy in Brace Treatment for Developmental Dysplasia of the Hip: Incidence and Outcomes in a Prospective International Cohort**

**Emily Schaeffer, BC;** Nicholas MP Clarke, UK; Simon P Kelley, ON; Nicole Williams, Australia; Kishore Mulpuri, BC; IHDI Study Group

Discussion 08:35

**16 – 08:44**

**Open Reduction for Developmental Dysplasia of the Hip: Early Outcomes from a Multicentre, International Prospective Cohort Study**

**Travis Matheney, US;** Emily K Schaeffer, BC; Kishore Mulpuri, BC; Wudbhav N Sankar, US; VidyadharSalilUpasani, US; Nicholas MP Clarke, United Kingdom; Jose A Herrera-Soto, US; Young-Jo Kim, US; Bruce Foster, Australia; IHDI Study Group

**17 – 08:50**

**Predictors of Osteonecrosis in Paediatric Femoral Neck Fractures: Experiences from a Tertiary Paediatric Academic Centre**

**Tara Baxter, ON;** Jared W Daniel, US; Jennifer Stimec, ON; Mark Camp, ON; Andrew Howard, ON

**18 – 08:56**

**Early Deep Surgical Site Infection Following 740 Primary Single-stage Paediatric Scoliosis Surgery: A Multivariate Analysis of Risk Factors**

**Jerry Du, US;** Connie Poe-Kochert, US; George Thompson, US; Jochen Son-Hing, US; Christina Hardesty, US; Ronald Justin Mistovich, US

**19 – 09:02**

**Surgical Site Infection Prevention Protocol for Paediatric Spinal Deformity Surgery: Does it Make a Difference?**

**Jochen P Son-Hing, US;** Connie Poe-Kochert, US; R Justin Mistovich, US; Christina Hardesty, US; George H Thompson, US

Discussion 09:08



**7:50-9:20 CORS Paper Session: Arthroplasty • Governor General 1, Westin**

Moderators: Alberto Carli, ON; Rizhi Wang, BC

**20 – 07:50**

**Evolution of Corrosion Particles at the Head-neck Interface in Hip Implants - How Metals are Released *in vivo*?**

**Qiong Wang, BC; Rizhi Wang, BC**

**21 – 07:56**

**Subject and Implant Factors Affecting Tibial Component Migration in Total Knee Arthroplasty**

**Elise Laende, NS; Joanna Flemming, NS; Janie Astephen Wilson, NS; Glen Richardson, NS; Michael Dunbar, NS**

**22 – 08:02**

**Kinematic Analysis of Dual-mobility vs Single-bearing Hip Prosthesis During Squatting Task Using Statistical Parametric Mapping**

**Mario Lamontagne, ON; Danilo S Catelli, ON; Erik Kowalski, ON; Paul E Beaulé, ON**

Discussion 08:08

**23 – 08:20**

**Humeral Lateralization Optimizes Tendon Transfer Strength After Reverse Shoulder Arthroplasty**

**G Daniel G Langohr, ON; Kevin Chan, ON; Matthew Mahaffy, ON; James A Johnson, ON; George S Athwal, ON**

**24 – 08:26**

**The Effect of Arm Loading and Plane of Elevation on Acromial Stress After Reverse Shoulder Arthroplasty**

**Jason S Lockhart, ON; Murray T Wong, ON; G Daniel G Langohr, ON; George S Athwal, ON; James A Johnson, ON**

**25 – 08:32**

**Differentially Represented Proteins in the Synovial Fluid of Hip Arthroplasty Patients with a Pseudotumor vs. Periprosthetic Osteolysis**

**Isabelle Catelas, ON; Eric Lehoux, ON; Zhibin Ning, ON; Daniel Figeys, ON; Stephen J Baskey, ON; Paul E Beaulé, ON**

Discussion 08:38

**26 – 08:50**

**Contact Kinematics Correlate to Tibial Component Migration Following Single Radius Posterior Stabilized Knee Replacement**

**Matthew Teeter, ON; Kevin I Perry, US; Xunhua Yuan, ON; James Howard, ON; Brent A Lanting, ON**

**27 – 08:56**

**The Effects of Humeral Lateralisation on Rotator Cuff Strength After Reverse Shoulder Arthroplasty**

**Kevin Chan, ON; G Daniel G Langohr, ON; Matthew Mahaffy, ON; James A Johnson, ON; George S Athwal, ON**



**28 – 09:02**

**Inferior Glenosphere Tilt Improves Reverse Shoulder Arthroplasty Contact Mechanics**

**Michael Griffiths, ON;** G Daniel G Langohr, ON; George S Athwal, ON; James A Johnson, ON

Discussion 09:08

**7:50-9:20 COA/CORS Paper Session: Spine • NS/NFLD, Westin**

Moderators: Fackson Mwale, QC; Albert Yee, ON

**29 – 07:50**

**A Simplified Clinical Prediction Rule for Prognosticating Independent Walking After Spinal Cord Injury: A Prospective Study from a Canadian Multicentre Spinal Cord Injury Registry**

**Katie Emily Hicks, ON;** Yichen Zhao, BC; Nader Fallah, BC; Carly Rivers, BC; Vanessa Noonan, BC; TovaPlashkes, BC; Eugene Wai, ON; Darren Roffey, BC; Eve Tsai, ON; Jerome Paquet, QC; NajmeddenAttabib, NB; Travis Marion, BC; Henry Ahn, ON; Philippe Phan, ON

**30 – 07:56**

**Predictors of Blood Transfusion in Posterior Lumbar Spinal Fusion: A Canadian Spine Outcome and Research Network (CSORN) Study**

**Mina Morcos, QC;** Fan Jiang, QC; Greg McIntosh, ON; Michael Weber, QC

**31 – 08:02**

**Predictors of Discharge to Home After Posterior Lumbar Spinal Fusion. An Analysis of Canadian Spine Outcomes and Research Network Database**

**Mina Morcos, QC;** Fan Jiang, QC; Alex Munteau, QC; Greg McIntosh, ON; Michael Weber, QC

Discussion 08:08

**32 – 08:17**

**Differences and Similarities of Spinopelvic Balance Parameters and Acetabular Morphology in Skeletally Mature Patients Diagnosed with Femoroacetabular Impingement and Hip Dysplasia**

**Graeme P Whyte, US;** Aaron Buckland, US; Douglas Mintz, US; Struan Coleman, US; Ernest Sink, US; Robert Buly, US

**33 – 08:23**

**Assessment of Vertebral Rotational Orientation Using EOS Imaging Technology in Instrumented Spines of Patients with Adolescent Idiopathic Scoliosis**

**Fan Jiang, QC;** Leonardo Simoes, Brazil; Jean Ouellet, QC; Neil Saran, QC

**34 – 08:29**

**Treatment of Thoracolumbar Burst Fractures: Extended Follow-up of a Randomized Clinical Trial Comparing Orthosis Versus no Orthosis**

**Christopher Bailey, ON;** Jennifer Urquhart, ON; Osama Alrehaili, ON; Charles Fisher, BC; Alyssa Fleming, ON; Parham Rasoulinejad, ON; Kevin Gurr, ON; Stewart Bailey, ON; Fawaz Siddiqi, ON

Discussion 08:35

**35 – 08:44**

**Repeat Discectomy vs Discectomy and Fusion for Recurrent Lumbar Disc Herniations: A CSORN Study**





**Christopher Bailey, ON;** Jennifer Urquhart, ON; Parham Rasoulinejad, ON; Alyssa Fleming, ON

**36 – 08:50**

**Metastatic Involvement in Vertebral Bone Modifies Features of the Bone Tissue Matrix Impacting its Material Characteristics and Behaviour**

**Mikhail Viktor Burke, ON;** Ayelet Atkins, ON; Ahmad Golaraei, ON; Virginijus Barzda, ON; Maragrete Akens, ON; Cari Whyne, ON

**37 – 08:56**

**Short Link N Stimulates Intervertebral Disc Repair in a Novel Long-term Organ Culture Model that Includes the Bony Vertebrae**

**Michael P Grant, QC;** Nizar AlGarni, QC; Laura M Epure, QC; Omar Salem, QC; John Antoniou, QC; Fackson Mwale, QC

**38 – 09:02**

**The Effect of Tungsten in the IVD**

**Michael P Grant, QC;** Elias Elahie, QC; Alicia Bolt, QC; Laura M Epure, QC; Alexa Papanastasiou, QC; John Antoniou, QC; Koren K Mann, QC; Fackson Mwale, QC

Discussion 09:08

**7:50-9:20 COA ICL: Foot & Ankle - Hallux Valgus • 203, Shaw Centre**

Moderators: Monika Volesky, QC; Mark Steeves, ON

Objectives:

1. Optimally appraise and evaluate candidates for Hallux valgus surgery.
2. Become familiar with multiple operative techniques of hallux valgus correction and apply them in their clinical practice
3. Formulate strategies to address typical complications after hallux valgus surgery.
4. Improve patient satisfaction and increase the efficiency of running an Orthopaedic bunion practice.

Speakers:

Demystifying the Bunion: Managing the Patient and Expectations -Roger Haene, NB

Technique Tips and Tricks:

- Distal Osteotomies - Philippe-Hugo Champagne, QC
- Proximal Osteotomies - Stéphane Leduc, QC
- Lapidus - Heather Barske, MB

Complications in Hallux Valgus Surgery: What Went Wrong and how to make it Right - Ian Winson, *BOA President*

**7:50-9:50 COA Paper Session: Critical Issues and Education • Ontario, Westin**

Moderators: Ted Tufescu, MB; Marcia Clark, AB

**39 – 07:50**

**Comparison of the Ottawa Surgical Competency Operating Room Evaluation (O-SCORE) to a Single-item Performance Score**





David J Saliken, AB; Timothy Wood, ON; Isabelle Raiche, ON; Wade Gofton, ON

**40 – 07:56**

**Designing a Simulation Curriculum for Orthopaedics**

Marie-Eve LeBel, ON

**41 – 08:02**

**Designing and Piloting Intraoperative Videos for Orthopaedic Surgical Training**

Colm McCarthy, ON; Andrew McGuire, ON; Portia Kalun, ON; Jacqueline Wilcox, ON; Anita Acai, ON; Natalie Wagner, ON; Bradley Petrisor, ON; RanilSonnadara, ON

Discussion 08:08

**42 – 08:17**

**Learning New Skills in Practice: How Surgeons Make a Risk Assessment and Know When and How to Implement New Procedures**

Akshay Seth, ON; Carol-Anne Moulton, ON; Timothy Wood, ON; Wade Gofton, ON

**43 – 08:23**

**Specificity of 30 and 90-Day Readmission After Primary Joint Arthroplasty Using an Institutional Automated System**

Brian P Chen, ON; Johanna Dobransky, ON; Stephane Poitras, ON; Alan Forster, ON; Paul E Beaulé, ON

**44 – 08:29**

**"Can You Feel It?": An Early Experience with Simulated Vibration to Recreate Glenoid Reaming**

Jason Strelzow, Scotland; Jonathan Kusins, ON; Louis Ferreira, ON; Marie-Eve LeBel, ON

Discussion 08:35

**45 – 08:44**

**Informal Regionalization of Uncomplicated Paediatric Fracture Care in the Greater Toronto Area**

Daniel Pincus, ON; Steven A Morrison, ON; Martin Gargan, ON; Mark Camp, ON

**46 – 08:50**

**A Process for Centralizing Assessments in Competency-based Education**

PolinkaMironova, ON; Oleg Safir, ON; David Burns, ON; Jesse Wolfstadt, ON; William Kraemer, ON; Markku Nousiainen, ON; Jeremy Hall, ON; Peter Ferguson, ON; Gurudattsingh Sisodia, ON; Jack Williams, ON; CBC Ortho Group, ON; Veronica Wadey, ON

**47 – 08:56**

**Lost Wages Secondary to Ankle Arthritis in British Columbia in Patients Undergoing Ankle Fusion or Replacement**

Alastair SE Younger, BC; Oliver Gagne, BC; Andrea Veljkovic, BC; Murray Penner, BC; Kevin Wing, BC

Discussion 09:02

**48 – 09:11**

**Changes in Health State in Patients Awaiting Orthopaedic Foot & Ankle Care: A Prospective Human Behavioural Study**

Lauren Roberts, BC; Kevin Wing, BC; Murray Penner, BC; Andrea Veljkovic, BC; Jason Sutherland, BC; Jeffrey Nacht, BC



**49 – 09:17**

**The Utility and Cost-effectiveness of Using High-fidelity, Soft-embalmed Specimens for Teaching and Assessment of Orthopaedic Surgical Procedures**

**Michelle L Zec, ON; Gabriel Venne, QC; Ryan Eveleigh, ON; Randy E Ellis, ON; David R Pichora, ON**

**50 – 09:23**

**Development and Implementation of a Physician Assistant Shoulder Expert Role within a Multi-provider Regional Hub**

**Farah Nabi, ON; Stephen Gallay, ON; Joel Lobo, ON; Jesse Slade Shantz, ON**

**51 – 09:29**

**Minimizing Opioid Exposure in Orthopaedic Surgery: A Prospective, Randomized Controlled Trial**

**Supriya Singh, ON; Collin Clarke, ON; Abdel Rahman Lawendy, ON; David Sanders, ON; Mark Macleod, ON**

Discussion 09:35

**9:30-11:00 COA/Hip Symposium ICL: Paediatrics - Management of Hip Dysplasia in the Older Child/Adolescent • 212, Shaw Centre**

Moderator: Baxter Willis, ON

Objectives:

This session will review the indications for surgical management of hip dysplasia and its sequelae in older children and adolescents. The spectrum of management options currently available will be discussed and guidelines will be provided for matching a given patient with the most appropriate surgical option and for optimizing their long-term outcomes.

Speakers:

- Interventions in the Pre-adolescent - Kishore Mulpuri, BC
- Avoiding Pitfalls when Treating DDH - Michael Millis, US
- Indications for Combined Procedures in the Older Adolescent - Ernest Sink, US
- Avoiding Reoperations for Dysplasia: The FEAR Index - Martin Beck, Switzerland

**9:30-11:00 COA ICL: Foot & Ankle/Trauma - Modern Trends in Foot and Ankle Surgery • 203, Shaw Centre**

Moderator: Richard E. Buckley, AB

Objectives:

1. Understand the latest techniques for reducing Lis-Franc injuries.
2. Understand surgical indications and approaches for displaced intra-articular calcaneal fractures.
3. Understand the latest evidence-based approach to treatment of the syndesmotic injury.
4. Understand the recent changes in treatment approaches for the posterior malleolus fracture.

Speakers:

- Fusion or Fixation Lis Franc Fractures - Matthew RG Menon, AB
- Full ORIF vs. Limited Approach for Calcaneal Fractures - Jeremy LaMothe, AB
- Tightrope vs. Screws for Syndesmosis - Herman Johal, ON
- Posterior Malleolus - ORIF or Observe - Ted Tufescu, MB



**9:30-11:00 COA/Hip Symposium ICL: Sports Medicine - Hip Arthroscopy**

• **Governor General 1, Westin**

Moderator: Femi Ayeni, ON

Objectives:

1. Review the basics of hip arthroscopy.
2. Discuss the evidence published in hip arthroscopy.
3. Describe labral reconstruction and cartilage reconstruction techniques.
4. List predictive factors for good clinical results in hip arthroscopy.

Speakers:

- Hip Arthroscopy 101 - Thomas Byrd, US
- What Are the Published Results on Hip Arthroscopy? - Femi Ayeni, ON
- Labrum Reconstruction and Cartilage Repair Techniques - Ivan Wong, NS
- What Factors Predict Good Clinical Results in Hip Arthroscopy: Patient Selection or Surgical Expertise? - Christopher Larson, US

**9:30-11:00 CORS Paper Session: Joints and Arthritis • NS/NFLD, Westin**

Moderators: Janie Wilson, NS; Margarete Akens, ON

**52 – 09:30**

**Delayed Endothelial Progenitor Cell Therapy Promotes Bone Defect Repair in a Pre-clinical Rat Model**  
**Brent D Bates, ON;** Charles Godbout, ON; David J Ramnarain, ON; Emil H Schemitsch, ON; Aaron Nauth, ON

**53 – 09:36**

**Biomechanical and Radiographic Evaluation of Supraspinatus Anchor Repair and the Effect of Pre-repair Channeling: A Prospective Randomized Controlled Animal Study**  
**Hakim Louati, ON;** Kathryn Culliton, ON; Hans K Uhthoff, ON; Greg O Cron, ON; Gerd Melkus, ON; Adnan Sheikh, ON; Odette Laneuville, ON; Peter Lapner, ON; Guy Trudel, ON

**54 – 9:42**

**The Effect of Distal Radius Dorsal Angulation on Capitulum Contact Mechanics**

**Clare E Padmore, ON;** Helen L Stoesser, ON; G Daniel G Langohr, ON; Emily A Lalone, ON; James A Johnson, ON; Graham JW King, ON

Discussion 09:48

**55 – 10:00**

**Articular Cartilage Repair with Mesenchymal Stromal Stem Cells Following Chondrogenic Priming in Normoxic and Hypoxic Conditions: A Preclinical Pilot Study**  
**Troy D Bornes, AB;** Adetola B Adesida, AB; Nadr M Jomha, AB

**56 – 10:06**

**Hip Mechanics and Muscle Activation Levels During Gait in CAM-Induced Femoroacetabular Impingement Compared to Asymptomatic Individuals: A Role for Gait Analysis?**

**Ivan Wong, NS;** Janice Moreside, NS; Derek Rutherford, NS



**57 – 10:12**

**Biological Repair of Osteoarthritic Cartilage Using Short Link N**

**Michael Grant, QC;** Muhammad Albeshar, QC; Laura M Epure, QC; John Antoniou, QC; Fackson Mwale, QC

Discussion 10:18

**58 – 10:30**

**Effect of Link N On the Synthesis and Degradation of Matrix Proteins in Human Articular Osteoarthritic Cartilage**

**Motaz AlAqeel, QC;** Michael Grant, QC; Laura Epure, QC; Omar Salem, QC; Olga Huk, QC; John Antoniou, QC; Fackson Mwale, QC

**59 – 10:36**

**Aprepitant Inhibits Myofibroblast-mediated Collagen Gel Contraction**

**Kevin Hildebrand, AB;** Mei Zhang, AB; Prism S Schneider, AB; Paul T Salo, AB; A Dean Befus, AB; Morley D Hollenberg, AB; David A Hart, AB

**60 – 10:42**

**Cytokine Profiles as Potential Biomarkers for "Pre-osteoarthritis"**

**Guomin Ren, AB;** Jackie Whittaker, AB; Pam Railton, AB; James N Powell, AB; Carolyn A Emery, AB; Roman J Krawetz, AB

Discussion 10:48

**10:00-11:00 COA Symposium: Publishing, Navigating the Literature, and Applying for Research Grants - *Maximizing your COA membership and Affiliate Benefits***

**• Governor General 2/3, Westin**

Moderator: Veronica Wadey, ON

Objectives

1. Participants will have a greater understanding of the various educational resources offered through COA membership and our affiliate partners.
2. Speakers will provide tips on how to more effectively use these resources and services to benefit your practice, education and research efforts.

Speakers:

Publishing Your Research: Optimizing Your Chances

*Speaker: Professor Fares Haddad, Editor-in-Chief, The British Editorial Society of Bone & Joint Surgery*

Learn the best ways to ensure that your research has the optimal chance at being published, how to get it through the peer review process most efficiently, and how the literature should guide decision-making will be also be highlighted from the Editor-in-Chief of the Bone & Joint Journal (*formerly known as JBJSBr*)

OrthoEvidence: It's More than Just a Database!

*Speaker: Brad Petrisor, ON*

OrthoEvidence is a presumed to be simply a database of the best evidence in orthopaedics. True. However, it's much more than that. Learn how to use the various tools and resources offered through this site to gain valuable CME credits and navigate through summaries of the highest quality MSK research relevant to your field, practice and peers.



Got a Research Idea? Grow it with the COF

*Speaker: Erin Boynton, COF Research Committee Member*

The Canadian Orthopaedic Foundation is expanding its research program, awarding more grants than ever before and aiming to put Canadians at the forefront of the world's orthopaedic research community. Hear about funding opportunities and learn tips to help you to submit a successful grant application.

10:45-11:30 Coffee Break in Exhibits

11:15-12:15 Canadian Orthopaedic Residents' Association (CORA) Board Meeting (by invitation)

● **Alberta, Westin**

**11:30-11:45 Founders Update • Governor General 2/3, Westin**

*Biocompatibility of Bone Allograft Toughened with a Novel Irradiation-driven Sterilization Method for Large Segmental Defects: An in vivo Rabbit Study - Sam Park, ON*

**11:45-12:30 COA Business Meeting • Governor General 2/3, Westin**

12:30-14:00 Lunch in Exhibits

**13:00-14:00**

COA Focus Group (by invitation) ● **Quebec, Westin**

Canadian Orthopaedic Research Society (CORS) Business Meeting ● **Nova Scotia/ NFLD, Westin**

Canadian Orthopaedic Foot & Ankle Society (COFAS) Business Meeting ● **Ontario, Westin**

Canadian Shoulder and Elbow Society (CSES) Business Meeting ● **Alberta, Westin**

**14:00-15:30 COA/Hip Symposium: Paediatrics - Update on Management of SCFE in Paediatrics • 201, Shaw Centre**

Moderator: Ron El-Hawary, NS

Objectives:

1. Identify techniques for management of SCFE in paediatrics.
2. Discuss key technical steps for acute SCFE correction.
3. Review clinical results and complications with acute SCFE correction.

Speakers:

- Avoiding Disaster in SCFE: Is it Possible? Technique Tips for Fixation *In Situ* Pinning vs. Open Reduction: When, How, Who? - Neil Saran, QC
- Boston's Experience - Michael Millis, US
- Bernese's Experience - Klaus Siebenrock, Switzerland
- Managing the Complications of SCFE & SCFE Surgery - Ernest Sink, US
- Now that I've heard the Experts, what am I Going To Do With My Next SCFE Patient? A Critical Analysis of the Evidence from The View of a Community Orthopaedic Surgeon - David Nelson, BC



**14:00-15:30 COA Symposium: Hand - Carpal Instability and Arthritis Current Concepts**

**• NS/NFLD, Westin**

Moderator: Thomas Goetz, BC

Objectives:

1. Understand treatment algorithms for S-L tear.
2. Understand current surgical options for S-L reconstruction.
3. Understand causes of mid carpal instability.
4. Understand treatment options and outcomes for MCI.
5. Update current treatment of established wrist arthritis - salvage options.

Speakers:

- SL Topic - Acute vs. Chronic - When to Save, When to Salvage - Ruby Grewal, ON
- Midcarpal Instability and Hypermobility of the Wrist - Herb Von Schroeder, ON
- Salvage Procedures for Chronic Carpal Instability and Arthritis - Geoffrey Johnston, SK

**14:00-15:30 COA Symposium: Education - Using Data to Improve Orthopaedic Care • Ontario, Westin**

Moderator: Eric Bohm, MB

Objectives

1. Be familiar with past, present and future outcome measures in orthopaedics (including PROMs and PREMs).
2. Understand how they can be used to improve quality of care.
3. Understand how they can be used to demonstrate value in orthopaedic care.
4. Understand their limitations.

Speakers:

- Introduction - Eric Bohm, MB
- Types of Data that can be Collected- Michael Dunbar, NS
- What is the Value in Healthcare? Thomas Ferguson, MB
- Using Data in Ontario to Improve Quality and Value - James P. Waddell, ON
- Using Data to Improve Care Delivery in Orthopaedic Trauma - Hans Kreder, ON

14:00-15:30 Canadian Orthopaedic Foot & Ankle Society (COFAS) Research Meeting • PEI, Westin

**14:00-14:45 CORS Symposium: 3D Printing • Governor General 2/3, Westin**

Moderator: Fackson Mwale, QC

Summary: Additive manufacturing, also known as 3D printing, has emerged over the past 3 decades as a technology for rapid prototyping and manufacturing. The constantly improving quality of 3D-printing applications has contributed to their increased use on patients. This symposium will highlight developments in 3D printing technology that has occurred in recent years and its potential role in the treatment of osteoarthritis. We will summarize for the clinician, the enormous benefits of 3D printing in the medical care of patients.

Objectives:

1. What is 3D printing and how are 3D printed models or implants generated?
2. To understand the present state of 3D printing in orthopaedic applications.



3. What are the advantages and limitations of 3D printing?
4. Future directions and challenges for clinical translation.

Speaker:

**Principles and Applications of Medical 3D Printing** - Frank Rybicki, ON

**14:45-15:30 CORS Macnab Lecture: Musculoskeletal Tissue Engineering**

• **Governor General 2/3, Westin**

Moderator: Fackson Mwale, QC

Objectives:

1. Understanding tissue engineering of load-bearing connective tissues.
2. Clinical problems and translational solutions.
3. Models of musculoskeletal injury.

Speaker:

**From Allografts to Scaffolds: Applications of 3D printing in Bone Tissue Engineering** - Hani Awad, US

**14:00-16:30 Hip Symposium Session 5: Minimizing Adverse Events in Primary THA • Governor General 1, Westin**

Moderator: Fares Haddad, United Kingdom

Objectives:

1. Name the biomechanical factors influencing hip function; Summarize economic impact of a shortened hospital stay.
2. Explain what factors can influence patient recovery.
3. Summarize risks and complications with a shortened length of stay.
4. Discuss the role of Large Head Ceramic Bearings.
5. Summarize how to minimize complications in patients with elevated BMI.
6. Discuss current literature on peri-prosthetic joint infections and organisms.

Speakers:

- Biomechanics of the Hip for the Orthopaedic Surgeon - Mario Lamontagne, QC
- How do I get it Right? (version, leg length...) - Joel Matta, US
- When do I use Ceramic Heads? ALWAYS - Donald Garbuz, BC
- When do I use Ceramic Heads? NEVER- Steven MacDonald, ON
- Outpatient THA - CON - Michael Tanzer, QC
- Outpatient THA - PRO - Keith Berend, US
- How to Investigate a Painful MoM THA? - Douglas Padgett, US
- High BMI: Surgery or No Surgery - Paul Kim, ON
- What To Do With Resistant Organisms in the Treatment of PJI- Henri Migaud, France

**15:30-16:00 RI Harris Lecture, Richard Hawkins, US**

*The Journey, Orthopaedics and Life* • Governor General 2/3, Westin





**16:00-17:30 COA ICL: Paediatrics - Challenging Upper Limb Injuries in the Paediatric Patient - Fix it Now or Fix it Later? Comparing Adult and Paediatric Solutions via a Case-based Discussion • 212, Shaw Centre**  
Moderator: Susan Thompson, MB

Objectives:

In this session, the challenges and options for management of children and adolescents with acute upper limb injuries including medial epicondyle fractures, radial neck fractures, chronic Monteggia injuries and forearm fractures with DRUJ injuries will be discussed. Panelists will discuss these issues from the contrasting views of the paediatric vs. adult orthopaedic surgeon and will provide expert tips for managing these injuries and avoiding or minimizing complications and maximizing patient satisfaction.

Panelists:

- Carmen Brauer, AB
- Graham King, ON
- Mathilde Hupin, QC
- Robert Chan, AB

**16:00 - 17:30 COA Symposium: Education - Lessons from the Visiting Presidents. How do You Measure Health Outcomes in your Country?**

• Governor General 2/3, Westin

Moderator: Kevin Orrell, *COA President Elect*, NS

Objectives:

1. International discussion of evaluation of Health Outcomes.
2. Are there better ways to do this domestically?
3. Is it possible to collaborate internationally to create a more efficient method to perform this outcome measure?

Speakers:

- Canada: Peter B. MacDonald, *COA President*
- US: Gerald Williams jr, *AAOS President* / Sanford E Emory, *AOA President*
- United Kingdom: Ian Winson, *BOA President*
- New Zealand: Richard Keddell, *NZOA President*
- South Africa: Adriaan van Zyl, *SAOA President*
- Australia: Ian Incoll, *AuOA President*

**16:00-17:30 COA Symposium: Canadians Contributing to Global Surgery Efforts in the World Today (COAGS) • 201, Shaw Centre**

Moderator: Paul Moroz, US

Objectives:

1. To inform COA members of work currently being done by other COA members in Global Health (orthopaedic surgery in vulnerable populations, including in Canada).
2. To learn more about the challenges and barriers in addressing the burden of musculoskeletal health in the world today.



3. To offer COA members opportunities for learning more about Global Surgery, and/or opportunities for them to participate in Global Health Efforts around the World.
4. The terms Global Health and Global Surgery are used interchangeably to denote the concept that surgery is an indisputable component of basic health-care for all.

Speakers:

- Introduction - Paul Moroz, US
- Making Global Surgery Work as a Community Orthopaedic Surgeon - Steve Croft, NL
- Report on Global Surgery from Canadian Academic Orthopaedic Programs - David Stockton, BC
- The Ethics of Global Surgery: “What Could Go Wrong with Intentions Like Ours?” (Interactive panel) - Neil J. White, AB
- Announcement of the Norman Bethune Orthopaedic Travel Scholarship to Wenzhou, China - Alan Giachino, ON; Paul Moroz, US
- Global Health Announcements and Opportunities - Paul Moroz, US
  - Paediatric Orthopaedic Training Program, Muhimbili Orthopaedic Institute, Dar es Salaam, Tanzania
  - Canadian Red Cross Orthopaedic Needs for Disaster Team
  - INORMUS Worldwide Fracture Study Reaches Halfway Point in Recruitment of 40,000 Subjects
  - The Lancet Commission on Global Surgery
  - Health Volunteers Overseas

**16:00-17:30 COA Paper Session: Adult Reconstruction Hip 1 • 203, Shaw Centre**

Moderators: Gavin Wood, ON; Brent A Lanting, ON

**61 – 16:00**

**Low Dose Intra-articular Tranexamic Acid Reduces Hemoglobin Drop and D-Dimer Formation After Total Hip and Knee Replacements: Double Blinded RCT**

**Eric Bohm, MB;** Thomas Turgeon, MB; David Hedden, MB; Colin Burnell, MB; Sanjay Aragola, MB

**62 – 16:06**

**A Trial of Fracture Fixation in the Operative Management of Hip Fractures**

**Emil H Schemitsch, ON;** FAITH Investigators, ON

**63 – 16:12**

**Simultaneous vs Staged Bilateral Total Joint Arthroplasty: A Matched Cohort Study**

**Raghav Saini, AB;** Hoang, AB; Christopher Smith, AB; Saboura Mahdavi, AB; Shannon Puloski, AB; James Powell, AB; Rajrishi Sharma, AB; Kelly Johnston, AB

Discussion 16:18

**64 – 16:27**

**Is Orthopaedic Department Teaching Status Associated with Adverse Outcomes of Primary Total Hip Arthroplasty?**

**Emmanuel Illical, US;** Dean Perfetti, US; Matthew Ryan Boylan, US; Qais Naziri, US; Frank Segreto, US; Randa Kamal Elmallah, US; Carl B Paulino, US; Michael A Mont, US

**65 – 16:33**

**Comparison of Cobalt and Chromium Results from Two Canadian Laboratories**

**Raghav Saini, AB;** Jessica Boyd, AB; Pam Railton, AB; Peter Faris, AB; Hossein Sadrzadeh, AB; James N Powell, AB



**66 – 16:39**

**The Association Between Hospital Arthroplasty Surgical Volume and Patient Outcomes**

**Jason Werle, AB; HoaKhong, AB; Chris Smith, AB**

Discussion 16:45

**67 – 16:54**

**Risk Factors for Infection, Revision, Mortality, Blood Transfusion and Longer Hospital Stay After Primary Total Hip or Knee Arthroplasty at Three Months and One Year Postoperatively**

**Chanseok Rhee, NS; Lynn Lethbridge, NS; Glen Richardson, NS; Michael Dunbar, NS**

**68 – 17:00**

**Revision Risk Curves for Hip and Knee Replacements from the Canadian Joint Replacement Registry**

**Carolyn Sandoval, ON; Katy Molodianovitch, ON; Eric de Sa, ON; Nicole de Guia, ON; Greg Webster, ON; Michael Dunbar, NS; Eric Bohm (on behalf of the Scientific Advisory Committee of the CJRR), MB**

**69 – 17:06**

**A Retrieval Analysis to Determine the Viability of Hip Resurfacing Conversion to Dual-mobility Prostheses**

**Brent A Lanting, ON; Trevor C Gascoyne, MB; Thomas Turgeon, MB; Matthew Teeter, ON**

**70 – 17:12**

**Intravenous and Topical Tranexamic Acid in Primary Total Hip Arthroplasty: The Tranexamic Acid Comparison in Hip Replacement (TeACH-R) Randomized Controlled Trial**

**Richard Nadeau, BC; James Howard, ON; Fiona Ralley, ON; Lyndsay Somerville, ON; Douglas Naudie, ON**

Discussion 17:18

16:30-17:30 CORS Executive Meeting • **PEI, Westin**

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**16:30-17:30 Fireside Chats:  
Bring your Tough Cases!  
Case-based Discussions**

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*Note: In advance of these sessions, attendees will be offered the opportunity to bring forward cases to the panelists for discussion during this session.*

**Knee • NS/NFLD, Westin**

*Moderator: Rajiv Gandhi, ON*

**Sports • Ontario, Westin**

*Moderators: Laurie Hiemstra, AB; Robert Litchfield, ON; Nicholas Mohtadi, AB*

**Foot & Ankle • Quebec, Westin**

*Moderators: Karl-André Lalonde, ON; Marc Bouchard, QC*

**17:30-19:00 Poster Pub • Exhibit Hall**

Network with colleagues and industry partners over a drink and peruse this year's posters in the Exhibit Hall *Cash Bar (cash, Visa and MasterCard accepted).*



## Saturday, June 17 COA/Hip Symposium

**7:50-9:20 COA Update Session: Upper Extremity Trauma - Complications and How to Avoid Them • Governor General 2/3, Westin**  
Moderator: Michael D. McKee, ON

- Shoulder Fractures Complications - Michael D. McKee, ON

Objectives:

1. Identify surgical indications for proximal humeral fractures.
2. Innovative plating strategies to minimize hardware failure and intra-articular screw penetration following open reduction and internal fixation of proximal humeral fractures.
3. Recognize indications for arthroplasty following proximal humeral fracture, including tuberosity management.

- Elbow Fractures Complications - J Pollock, ON

Objectives:

1. Identify indications for total elbow arthroplasty following distal humeral fracture.
2. Learn plating strategies that minimize hardware failure following open reduction and internal fixation of intra-articular distal humeral fractures.
3. Learn indications for, and correct sizing of, radial head replacement for radial head fracture.

- Distal Radius Fractures Complications - Ruby Grewal, ON

Objectives:

1. Technical considerations to avoid "escape" of the volar-ulnar fragment following volar plating of distal radial fractures.
2. How to minimize tendon injury or disruption following open reduction and internal fixation of distal radius fractures.
3. Strategies to maximize finger and hand motion following distal radial fracture.

**7:50-9:20 COA Workshop: Paediatric Femur Fracture Fixation: Tips and Tricks for Techniques in Skeletally Immature Patients • Les Saisons, Westin**  
Moderator: Sasha Carsen, ON

Objectives:

1. To review contemporary strategies for the treatment of paediatric femur fractures.
2. To define clinical treatment algorithms for femur fractures of different types and in different skeletal ages and contexts.
3. To discuss details of surgical techniques, clinical pearls, tips, and tricks for the successful treatment of femur fractures in the skeletally immature.
4. To provide an opportunity to try surgical techniques and implants in a sawbone workshop setting.

Instructors:

- Maxime Côté, QC
- Megan Cashin, ON
- Peter Glavas, QC
- Kevin Smit, ON



**7:50-9:20 COA ICL: Spine - Clearing and Managing Spinal Injury in the Orthopaedic Trauma Patient • NS/NFLD, Westin**

Moderator: Albert Yee, ON

Objectives:

1. To learn about the process of spine clearance in the orthopaedic trauma patient.
2. To understand the present state of management for cervical spine trauma, including spinal cord injury.
3. To understand the present state of management for thoracolumbar fractures of the spine.

Speakers:

- Clearing the Spine in the Orthopaedic Trauma Patient - Albert Yee, ON
- Diagnosis and Management of Cervical Trauma, Including Spinal Cord Injury - Jeremie Larouche, US
- Diagnosis and Management of Thoracolumbar Spine Trauma - Ilyas Aleem, US

**7:50-9:20 COA Paper Session: Tumour • Ontario, Westin**

Moderators: Robert Turcotte, QC; Joel Werier, ON

**71 – 07:50**

**Investigating the Oncolytic Effect of Maraba Virus [MG1] Against Sarcoma: *in vitro*, *ex vivo* and *in vivo***  
Hesham Abdelbary, ON; Fabrice Le Boeuf, ON; Jean-Simon Diallo, ON; Joel Werier, ON; Derek Butterwick, ON

**72 – 07:56**

**IDH1 and IDH2 Mutational Analysis Can Help Distinguish between Chondroblastic Osteosarcoma and Dedifferentiated Chondrosarcoma in Histologically Ambiguous Cases**

Eyal Mordechai Ramu, ON; Qingxia Wei, ON; Kenneth R Gundle, OR; Anthony M Griffin, ON; Brendan C Dickson, ON; Rita A Kandel, ON; Peter C Ferguson, ON; Benjamin A Alman, NC; Jay S Wunder, ON

**73 – 08:02**

**Barriers and Facilitators Experienced in Collaborative Prospective Research in Orthopaedic Oncology**

Michelle Ghert, ON; Marilyn Swinton, ON; Sebastian Rendon, ON; Nicholas Bernthal, US; Nathan Evaniew, ON; Peter Ferguson, ON; Paula McKay, ON; Benjamin Miller, US; Patricia Schneider, ON; Roberto Velez, Spain; Kurt Weiss, US; Juan Pablo Zumarraga, Brazil; Timothy Damron, ON; Marcos Galli Serra, Argentina; Michele Boffano, Italy; Werner Hettwer, Denmark; Lukas Nystrom, US; Walter Parizzia, Argentina; Andre Spiguel, US

Discussion 08:08

**74 – 08:17**

**A Comparison of Outcome of Two Treatment Paradigms for Sacral Chordoma: Does Preoperative Radiation Improve Prognosis?**

Matthew Thomas Houdek, ON; Peter S Rose, US; Jay S Wunder, ON; Franklin H Sim, US; Peter C Ferguson, ON

**75 – 08:23**

**Complications and Outcomes Following Free Fibula Reconstruction for Spinal Pelvic Defects Following Resection of a Malignant Tumor in the Axial Skeleton**

Matthew Thomas Houdek, ON; Karim Bakri, US; Franklin H Sim, US; Peter S Rose, US; Steven L Moran, US



**76 – 08:29**

**The Oncologic and Functional Outcomes of Iliosacral Resection for Primary Bone Tumours**

**Anthony M Griffin, ON;** Sanjay Gupta, Scotland; Kenneth Gundle, US; Lisa A Kafchinski, US; Jay S Wunder, ON; Peter C Ferguson, ON

Discussion 08:35

**77 – 08:44**

**Outcomes Following Surgical Management of Metastatic Long Bone Disease**

**Anas Nooh, QC;** Krista Goulding, QC; Marc Isler, QC; Sophie Mottard, QC; Annie Arteau, QC; Norbert Dion, QC; Robert Turcotte, QC

**78 – 08:50**

**Assessing the Need for Multidisciplinary Metastatic Bone Disease Clinic at a Tertiary Cancer Centre**

**James Lee, ON;** Hesham Abdelbary, ON; Mohammed Al Sobeai, ON; Vinay N Kansal, ON; Joel Werier, ON

**79 – 08:56**

**Venous Thromboembolic Events in Sarcoma Patients: Retrospective Analysis of an Institutional Database**

**Krista Goulding, QC;** Ali Al Fakeeh, QC; Robert Turcotte, QC; Thierry Alcindor, QC

**80 – 09:02**

**The Impact of 3D Printed Bone Neoplasm Models on Surgical Excision Planning**

**Leonid Chepelev, ON;** Hesham Abdelbary, ON; Taryn Hodgdon, ON; Joel Werier, ON; Adnan Sheikh, ON; Frank Rybicki, ON

Discussion 09:08

**7:50- 9:20 COA Paper Session: Foot and Ankle • 201, Shaw Centre**

Moderators: Andrea Veljkovic, BC; Gordon Goplen, AB

**81 – 07:50**

**Ankle Arthroscopy for Diagnosis and Treatment of Full Thickness Cartilage Lesions in the Setting of Ankle Fracture**

**Rachael Da Cunha, US;** Mark Drakos, US; William Schairer, US; Sydney Karnovsky, US

**82 – 07:56**

**3D Printing of Calcaneal Fractures: An Analysis of Interobserver Reliability in Using the Sanders Classification System**

**Chris Small, NL;** Andrew Furey, NL; Michael Bartellas, NL

**83 – 08:02**

**Simulated Arthroscopic Hallux MT arthrodesis Utilizing Full Thread Compression Screws Shows Similar Stiffness and Load to Failure Compared to Locking Plate, with Less Plantar Gapping**

**Alastair SE Younger, BC;** Ken Hunt, US; Judas Kelly, US; Richie Fuld, US; Nicholas Anderson, US; Todd Baldini, US

Discussion 08:08



**84 – 08:20**

**A Prospective Cohort Study on the Return to Work and Function Two Years After Surgical Treatment of Tibiotalar Arthritis**

**Olivier Gagne, BC;** Andrea Veljkovic, BC; Mark Glazebrook, NS; Timothy R Daniels, ON; Murray J Penner, BC; Kevin J Wing, BC; Peter Dryden, BC; Alastair SE Younger, BC

**85 – 08:26**

**Rates of Acute and Delayed Achilles Tendon Rupture in British Columbia and the Relationship to the Willits Publication**

**Sam Park, BC;** Alastair SE Younger, BC; Andrea Veljkovic, BC; Murray J Penner, BC; Kevin J Wing, BC

Discussion 08:32

**Guest Speaker:** Masato Takao, Japan

*Clinical Outcomes of Minimally Invasive Arthroscopic Assisted Ankle Stabilization*

**7:50-9:20 SunLife Financial Practice Management: It Doesn't Matter What You Make, It Only Matters What You Keep! • 203, Shaw Centre**

A discussion focusing on essential financial concepts and practices for professional corporations and specifically orthopaedic surgeons in Canada. Interactive session to feature case studies, general discussion, and time for Q and A. Take away materials for all attendees.

Speakers:

- Adam O'Neill, ON
- Andrew Sheppard, ON

**8:00-9:30 COA/Canadian Arthroplasty Society/Hip Symposium ICL: Solutions in Complex THA Revision • Governor General 1, Westin**

Moderator: Etienne Belzile, QC

Objectives:

1. Understand what are the best patients for direct exchange in the treatment of peri-prosthetic infections.
2. Understand the different treatment options for recurrent hip instability.
3. Development of an algorithm for implant and surgical approach choice in revision surgery.

Speakers:

- Burden of Revision Surgery - Eric Bohm, MB
- Direct Exchange for PJI - Fares Haddad, United Kingdom
- Constrained Liners, When do I use It? NEVER - Douglas Padgett, US
- Constrained Liners, When do I use It? ALWAYS - Wade Gofton, ON
- Direct Anterior Approach for Revision THA: ALWAYS - Keith Berend, US
- Direct Anterior Approach for Revision THA: NEVER - Douglas Naudie, ON
- Modular vs. Non Modular Femoral Stems - Donald Garbuz, BC





**9:30-11:00 COA Update Session: Lower Extremity Trauma - Complications and how to Avoid Them • Governor General 2/3, Westin**

Moderator: David Sanders, ON

Objectives:

The participant will consider diagnosis, prevention, and treatment options for a variety of lower extremity complications.

Speakers:

- Arthrofibrosis, Extra-articular Malunion - Geoff Wilkin, ON
- Bone Defect Management, Intra-articular Malunion - David Stephen, ON
- Infection, Nonunion - David Sanders, ON

**9:30-11:00 COA Paper Session: Upper Extremity • 203, Shaw Centre**

Moderators: Darren Drosdowech, ON; Diane Nam, ON

**86 – 09:30**

**Latissimus Dorsi Transfer Augmentation - Superior Outcome in Patients with Subscapularis Tear**

**Jennifer Anne Mutch, QC;** Claudia Christine Sidler-Maier, ON; Martin Sidler, ON; Dimitra Leivadiotou, ON; Jubin B Payandeh, ON; Diane Nam, ON

**87 – 09:36**

**Temporal and Regional Trends in the Management of Proximal Humerus Fractures Across a 13 Million Patient Database**

**Lauren L Nowak, ON;** Marissa Bonyun, ON; Aaron Nauth, ON; Michael Mckee, ON; Emil H Schemitsch, ON

**88 – 9:42**

**Thirty and Ninety-day Readmission Following Total Shoulder Arthroplasty: A Population-based Analysis of Rate, Risk and Reason for Readmission**

**Timothy Leroux, ON;** Justin Griffin, US; Bryce Basques, US; Rachel Frank, US; Robert Thorsness, US; Nikhil Verma, US; Anthony Romeo, US

Discussion 09:48

**89 – 09:57**

**Subscapularis Repair is unnecessary after Lateralized Reverse Shoulder Arthroplasty**

**Richard J Hawkins, US;** Michael J Kissenberth, US; Ellen Shanley, US; Stefan J Tolan, US; Keith T Lonergan, US; Troy A Roberson, US; James T Griscom, SC; Quinn Hunt, SUS; Charles M Granade, US; Kyle J Adams, US; John M Tokish, US

**90 – 10:03**

**Outpatient Total Shoulder Arthroplasty: A Population-based Study Comparing Adverse Event and Readmission Rates to Inpatient Total Shoulder Arthroplasty**

**Timothy Leroux, ON;** Bryce Basques, US; Rachel Frank, US; Justin Griffin, US; Gregory Nicholson, US; Brian Cole, US; Anthony Romeo, US; Nikhil Verma, US



**91 – 10:09**

**Comparison of Subscapularis Tenotomy to Subscapularis Peel in Shoulder Arthroplasty: A Prospective, Randomized, Controlled Trial**

**Peter Lapner, ON; Adnan Sheikh, ON; Tinghua Zhang, ON; George S Athwal, ON**

Discussion 10:15

**92 – 10:24**

**Comparing Surgical Repair to Conservative Treatment and Subacromial Decompression Alone for the Treatment of Rotator Cuff Tears: A Meta-analysis of Randomized Trials**

**Christine Schemitsch, ON; Jaskarndip Chahal, ON; Milena Vicente, ON; Pierre-Henri Flurin, France; Frederik Lambers Heerspink, Netherlands; Patrick Henry, ON; Aaron Nauth, ON**

**93 – 10:30**

**Preoperative Narcotic Use Among Patients Undergoing Total Shoulder Arthroplasty: An Analysis of Trends and Influence on Post-Operative Length of Stay, Complications, and Readmission**

**Timothy Leroux, ON; Bryce Basques, US; Justin Griffin, US; Rachel Frank, US; Nikhil Verma, US; Anthony Romeo, US**

Discussion 10:36

**9:30-11:00 COA ICL: Tumour/Trauma - Updated Concepts in the Management of Metastatic Bone Disease • Ontario, Westin**

Moderators: Jeff Yach, ON; Michelle Ghert, ON

Objectives:

1. To develop an approach to the management of metastatic lesions in the proximal femur and pelvis.
2. To develop an approach and understanding of metastatic lesions requiring surgical reconstruction and when it is appropriate to refer.
3. To recognize some of the pitfalls in the management of pathologic lesions in the femur and pelvis.

Speakers:

- Management of Proximal Femoral Lesions - Steven Papp, ON
- Reconstruction of Pelvic and Acetabular Lesions - Richard Jenkinson, ON
- Management of Bone Mets to the Humerus - Benjamin Dehesi, ON
- When to Refer to Orthopaedic Oncology - Krista Goulding, QC
- 

**9:30-11:00 COA Symposium: Foot and Ankle - Ankle Arthritis and Treatments**

**• 201, Shaw Centre**

Moderator: Timothy R Daniels, ON

Objective:

To better understand the etiology of ankle arthritis, the various pathophysiology's and surgical options of how to manage each.

Speakers:

- Understanding the Etiology of Ankle Arthritis - Nicholas Smith, NL
- When is Total Ankle Replacement the Standard of Care? - Alastair SE Younger, BC



- What is the Role of Joint Salvage Procedures for Ankle Arthritis?-John TC Lau, ON
- Arthroscopic Hindfoot Fusions - Ankle, Subtalar and Talonavicular Joints - Mark Glazebrook, NS

**9:30-11:00 COA Symposium: Post-Fracture Education Program: Evolution of Anabolic Therapy to Bone Formation Therapy: New Era in Post-Fracture Care? • NS/NFLD, Westin**

Moderator: Emil H Schemitsch, ON

Objectives:

1. Review gaps and needs of current care models and strategies for post-fracture care treatment.
2. Evaluate current and new evidence for bone formation therapies.
3. Identify the patient at imminent risk of fracture that would benefit from bone formation therapy in the post-fracture setting.

Speakers:

- Introduction and Summary - Emil Schemitsch, ON
- Post-fracture Care Treatment and Care Models - Earl Bogoch, ON
- Current and Emerging Evidence for Bone Therapies - Aliya Khan, ON
- Identifying the Patient Who Would Benefit from Bone Formation Therapy - Julio Fernandes, QC

**9:45-10:45Hip Symposium Session 6: Emerging Total Hip Designs/Techniques**

• **Governor General 1, Westin**

Moderator: Michael Tanzer, QC

Objectives:

1. Explain the role of new stem designs.
2. Explain the role of computer-assisted surgery.
3. Summarize the role dual mobility.
4. Discuss the role of large head ceramic bearings.

Speakers:

- New Stem Designs - Are they Needed? - Richard Field, United Kingdom
- Big Head Ceramics - Martin Lavigne, QC
- Computer Assisted is the Future - Douglas Padgett, US
- Ceramic on Ceramic Hip Resurfacing - Justin Cobb, United Kingdom

10:45-11:30 Coffee Break in Exhibits

11:30-12:30 • **Governor General 2/3, Westin**

Grad Ceremony

President Elect Address

Transfer of Office

12:30-13:30 Canadian Orthopaedic Oncology Society (CANOOS)Business Meeting • **Ontario, Westin**

12:30-14:00 Lunch in Exhibits



**12:00-16:00 COA/COFAS Workshop: Complex & Innovative Foot & Ankle Surgery - Tips from Experience** (reg required) 11:30 shuttle to **Sim Centre**  
Co-Chairs: Joel Morash, NS; Mark Glazebrook, NS

Speakers:

- OCD & Ankle Instability: MIS Subchondroplasty & Ankle Stabilize - Masato Takao, Japan; Mark Glazebrook, NS
- TAA - Timothy Daniels, ON
- MICA - Alastair Younger, BC
- Reconstruction in the Foot with Fusions & Osteotomies - Stéphane Leduc, QC

**Station # 1: Total Ankle Arthroplasty Sponsored by Integra**

**Master Instructor – Timothy R Daniels, ON: TAA**

Faculty: Ruth Chaytor, QC  
Johnny Lau, ON  
Cai Wadden, NS

**Station # 2: Minimally Invasive Foot Surgery Sponsored by Wright Medical**

**Master Instructor – Alastair SE Younger, BC: MICA Surgery**

Faculty: Andrea Veljkovic, BC  
Mark Steeves, ON  
Philippe-Hugo Champagne, QC

**Station # 3: OCD & Ankle Instability Sponsored by Zimmer**

**Master Instructor – Masato Takao** (Visiting Professor from *Japan*) **Subchondroplasty & MIS Ankle Instability**

Faculty: Kevin J Wing, BC  
Monika Volesky, QC  
Heather Barske, MB

**Station # 4: F&A TBA Sponsored by (Stryker)**

**Master Instructor – Stéphane Leduc, QC**

Faculty: Karl Lalonde, ON  
Gordon Goplen, AB  
Peter Dryden, BC

\*Each Station will have 3 cadavers with 2 participants and one faculty instructor per cadaver. Participants will be rotated through all 4 stations (45 minutes at each station).

**13:00-14:00**

Canadian Arthroplasty Society (CAS) Research Meeting • **Governor General 1, Westin**  
Canadian Paediatric Orthopaedic Group (CPOG) AGM • **Les Saisons, Westin**  
Arthroscopy Assoc. of Canada (AAC) Research Meeting • **NS/NFLD, Westin** Canadian Shoulder and Elbow Society (CSES) Research Mtg • **Quebec, Westin**

**14:00-14:30 Presidential Guest Speaker, James Wright, United Kingdom**

*It's no Longer Okay to say I Practice Differently than Everyone Else* • **Governor General 2/3, Westin**



**14:30-14:50 CAS Guest Speaker, Klaus Siebenrock, Switzerland**  
*The Bern School of Hip Preservation* • **Governor General 2/3, Westin**

**14:50-16:00 COA Symposium: Looking Ahead of the Curve - Value-based Orthopaedic Care Comes to Canada • Governor General 2/3, Westin**  
Moderator: Stephen Gallay, ON

Objectives:

1. Become familiar with the terminology being used in US and Canadian Health care regarding the advent of new value-based payment and delivery models.
2. Understand the implications of these new models for orthopaedic care in Canada.
3. Realize the importance of integrating evidence, data and clinical insight to succeed in the new value-based health care economic environment.
4. Learn how orthopaedic surgeons help lead the value-based health care charge, instead of being left behind.

Speakers:

- A Primer for the Orthopaedic Surgeon on Emerging Value-Based Payment and Delivery Models - Stephen Gallay, ON
- Integrating Funding: Connecting the Silos for the Healthcare We Need - Erik Hellsten, BC
- Scaling Up: The Next Generation of Integrated, Cross-Sectorial Funding Approaches in Canada from the Ministry of Health and Long Term Care (MOHLTC) of Ontario - Melissa Farrell, ON
- Bringing Accountable Musculoskeletal Care to Ontario: Outcome-based Funding for a Regional Shared-Care Model for Shoulder Conditions. A Provider-Led Business Case for The Shoulder Centre at Ajax and Pickering Hospital, Lakeridge Health System, CE-LHIN - Jesse Slade Shantz, ON

**14:50-16:30 COA Paper Session: Adult Reconstruction Hip 2**  
• **Governor General 1, Westin**  
Moderators: James Powell, AB; Kelly Johnston, AB

**Anica Bitenc Fellow - 14:50**

**Modified Lateral Approach in Patients with Severe Hip Dysplasia Undergoing THA**

Ivan Bohacek, Croatia

**94 – 14:56**

**Hospital Mortality After Hip Fracture Surgery in Relation to Length of Stay by Care Delivery Factors**

**Boris Sobolev, BC; Pierre Guy, BC; Katie Sheehan, BC; The Canadian Collaborative Study on Hip Fractures, BC**

**95 – 15:02**

**Is Vitamin D Associated with Improved Physical Function and Reduced Re-Operation Rates in Elderly Patients with Femoral Neck Fracture Treated with Internal Fixation?**

**Nathan O'Hara, BC; Sheila Sprague, ON; Gerard Slobogean, MD; Earl Bogoch, ON; Brad A Petrisor, ON; Alisha Garibaldi, ON; Mohit Bhandari, ON; FAITH Investigators, ON**



**96 – 15:08**

**Outcome of Revision Hip Arthroplasty for Instability: Risk Factors for Failure and Reoperation**

**Donald S Garbuz, BC;** Amir Herman, Israel; Bas A Masri, BC; Nelson V Greidanus, BC; Clive P Duncan, BC

Discussion 15:14

**97 – 15:26**

**High Periprosthetic Fracture Rate Associated with use of Uncemented Tapered Wedge Stems in Femoral Neck Fractures**

**Jin Soo Andy Song, NS;** Daryl Dillman, NS; David Wilson, NS; Michael J Dunbar, NS; Glen Richardson, NS

**98 – 15:32**

**An Early Report of the Use of a Modular Dual Mobility Articulation System in Revision Acetabular Reconstruction**

**Owen Diamond, BC;** Sujith Konan, United Kingdom; Nelson Greidanus, BC; Donald S Garbuz, BC; Bas Masri, BC; Clive P Duncan, BC

**99 – 15:38**

**Long-term Follow-up of a Second Generation Metal-on-Metal Total Hip Arthroplasty**

**Muhammad Albeshar, QC;** Nikolaos Stavopoulos, QC; Olga Huk, QC; Laura M Epure, QC; Stéphane Bergeron, QC; David Zukor, QC; John Antoniou, QC

Discussion 15:44

**100 – 15:53**

**Surgical Correction of Hip Deformities and its Impact on the Degenerative Process within the Hip Joint**

**Paul E Beaulé, ON;** Andrew D Speirs, ON; Helen Anwander, Switzerland; Gerd Melkus, ON; Kawan S Rakhra, ON; Hanspeter Frei, ON; Mario Lamontagne, ON

**101 – 15:59**

**Quantitative Analysis of Material Loss at the Head-Neck Junction in Total Hip Arthroplasty: The Effect of Head Size, Stem Material and Stem Offset**

**Giuseppe Valente, ON;** Brent Lanting, ON; Matthew Teeter, ON; Douglas Van Citters, ON; Steven MacDonald, ON; James Howard, ON

**102 – 16:05**

**Comparing the Direct Anterior Approach with the Posterior Approach to the Hip: Early Stem Migration and Complications**

**Kathryn Culliton, ON;** Hakim Louati, ON; Georges Gharib, ON; Johanna Dobransky, ON; Alexandre Pagé, ON; Wade Gofton, ON; Paul-Edgar Beaulé, ON

**103 – 16:11**

**Increasing BMI in Primary and Revision Total Hip Arthroplasty; Influencing Length of Stay, Complications and Adverse Events - A Retrospective Review**

**Irfan Abdulla, AB;** Hoa Khong, AB; Saboura Mahdavi, AB; Richdeep Gill, AB; James Powell, AB; Kelly Johnston, AB; Rajrishi Sharma, AB

Discussion 16:17



15:00-16:00 Hand & Wrist Study Group Inaugural Meeting • **NS/NFLD, Westin**

16:00-16:45 Coffee Break in Exhibits

16:00-17:00 Arthroscopy Association of Canada (AAC) Business Meeting • **201, Shaw Centre**

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**16:30-17:30 Fireside Chats:  
Bring your Tough Cases!  
Case-based Discussions**

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*Note: In advance of these sessions, attendees will be offered the opportunity to bring forward cases to the panelists for discussion during this session.*

**Hip • Governor General 1**

*Moderator:* Wade Gofton, ON

**Paediatrics: Common Therapeutic Challenges in Paediatric Orthopaedics - How to Stay out of Trouble  
• Ontario, Westin**

*Moderator:* Christopher Reilly, BC

*Panelists:* John Dormans, US, Thierry Benaroch, QC

**Trauma • 203, Shaw Centre**

*Moderators:* Ted Tufescu, MB; Chad Coles, NS, Christopher Graham, MB;  
Brad Petrisor, ON

**Upper Extremity • NS/NFLD, Westin**

*Moderator:* Graham King, ON

**19:00-23:00 Gala: Hangar Dinner 'n Dance Party**

*(Ticketed event. Tickets are sold at registration- check shuttle schedule carefully)*

**Canada Aviation and Space Museum, 11 Aviation Pkwy, Ottawa, ON, K1K 2X5**

Departure from Westin Hotel: **18:15 & 19:00 ONLY**

Return from Museum to Westin: **22:00, 22:45, 23:30 ONLY**





Sunday, June 18  
Subspecialty Focus Half Day

**8:00-12:30 COA Knee Sessions**

**8:00-9:30 COA Paper Session: Adult Reconstruction Knee**

• **Governor General 1, Westin**

Moderators: Richard Keddell, *NZOA President*; Glen Richardson, NS

**104 – 08:00**

**A Comparison of Fixed and Mobile Bearing Unicompartmental Knee Arthroplasty at Minimum 10-year Follow-up**

**Michael Neufeld, BC**; Anthony Albers, QC; Nelson V Greidanus, BC; Donald S Garbuz, BC; Bas A Masri, BC

**105 – 08:06**

**A Prospective Comparative Study Between Synovial Joint Biomarkers IL-1Beta, TNF-Alfa Versus Diagnostic X-ray Finding Usefulness in Diagnostic & Therapeutic Assessment Follow-up of Knee Joint OA Grade II, III, a Clinical Study for Two years**

**Ahmed Alkhuzai, Iraq**

**106 – 08:12**

**Arterial Calcification on Preoperative Knee Radiographs as a Predictor of Postoperative Cardiovascular Events Following Primary Total Knee Arthroplasty**

**Justin De Beer, ON**; David Cantu-Morales, ON; Danielle Petruccelli, ON; Conrad Kabali, ON; Mitch Winemaker, ON

Discussion 08:18

**107 – 08:27**

**Evaluation of Conventional and Patient-specific Instrumentation in Total Knee Arthroplasty Using Radiostereometric Analysis**

**Douglas Naudie, ON**; Matthew Teeter, ON; James Howard, ON; Edward Vasarhelyi, ON; Xunhua Yuan, ON; Jacquelyn Marsh, ON; Richard McCalden, ON

**108 – 08:33**

**Poor Outcome of Arthrolysis, Synovectomy and Liner Change for Stiffness After Primary Total Knee Arthroplasty**

**Nelson V Greidanus, BC**; Bas A Masri, BC; Donald S Garbuz, BC; Amir Herman, Israel

**109 – 08:39**

**Does Surgeon Arthroplasty Volume Really Affect Patient Outcomes?**

**Jason Werle, AB**; HoaKhong, AB; Chris Smith, AB

Discussion 08:45

**110 – 08:54**

**Tibial Post Fatigue Fracture in Posterior Stabilized Total Knee Arthroplasty Using Highly Cross-linked Polyethylene**

**Owen Diamond, BC**; Bas A Masri, BC



**111 – 09:00**

**Medium-term Outcomes**

**of Cartilage Repair Using Hyaluronic Acid-based Scaffold with Multipotent Stem Cells in Patients Over 45 Years of Age**

**Graeme P Whyte, US;** Alberto Gobbi, Italy; Marc Castro, Philippines; Boguslaw Sadlik, Poland

**112 – 09:06**

**Contribution of Non Orthopaedic Surgeon Ordered MRI to the Diagnosis and Management of Knee Pain in Patients Older Than 55 Years**

**Thomas M Hupel, ON;** Samuel Yoon, ON; Paul M Grosso, ON; Rick L Lau, ON; Matthew G Snider, ON

Discussion 09:12

**9:45-11:00 COA ICL: Knee - Changing concepts in TKA • Governor General 1, Westin**  
Moderator: David Backstein, ON

Objectives:

The purpose of this session is to stimulate discussion and present data regarding new ways of performing TKA surgery and treating infection.

1. To discuss and review techniques and strategies for early recovery after TKA surgery including peri-operative modalities and new surgical techniques.
2. To compare and contrast traditional thinking related to TKA kinematics with newer alternatives.
3. To review the available literature regarding methods of treating TKA infection which may reduce morbidity and cost.

Speakers:

- Same Day Discharge for TKA: The Ottawa Experience - Geoffrey Dervin, ON
- Modern TKA Kinematics Should Mimic the Normal Knee - David Backstein, ON
- Infected TKA: One Stage Revision May be an Option - Michael Zywiell, ON
- Patient Specific Guides for TKA: Is there a Role? - Douglas Naudie, ON

**11:00-12:30 COA Symposium: Knee - New Technologies in TKA • Governor General 1, Westin**  
Moderator: Michael Dunbar, NS

Objectives:

The purpose of this symposium is to explore a wide range of new technologies introduced for total knee arthroplasty. More specifically, the objectives are as follows:

1. To have a better understanding of the rationale behind the introduction of specific new technologies.
2. To discuss and review the best available data regarding outcomes of newly introduced technology.
3. To have a better understanding of how new technologies may or may not be incorporated into the participants current or future practice.

Speakers:

- Pre-operative Imaging for TKA - Is a Short Leg Film Still Adequate? - James Howard, ON
- Cross Linked Polyethylene in TKA - Should I be Using this in Everyone? - Eric Bohm, MB
- Advances in Wound Management After TKR: Worth the Cost?"- Glen Richardson, NS
- Robotics in TKA - Are These Things Really Going to Replace me? - Michael Dunbar, NS



## **8:00-11:30 COA Trauma Sessions**

**8:00-9:30 COA Paper Session: Trauma • 205, Shaw Centre**

Moderators: Henry Broekhuysen, BC; Michael D. McKee, ON

**113 – 08:00**

**Predicting Loss to Follow-up Risk in Adult Trauma Patients in Randomized Controlled Trials: An Example from the FLOW Trial**

**Kim Madden, ON;** Taryn Scott, ON; Paula McKay, ON; Brad A Petrisor, ON; Kyle Jeray, US; Stephanie Tanner, US; Mohit Bhandari, ON; Sheila Sprague, ON; FLOW Investigators, ON

**114 – 08:06**

**Patient Coping and Expectations About Recovery Predict Development of Chronic Post-surgical Pain, Pain Interference, and Reduced Quality of Life After Traumatic Open Extremity Fracture Repair**

**Jason Busse, ON;** Sun Makosso-Kallyth, ON; Brad A Petrisor, ON; Kyle Jeray, US; Ted Tufescu, MB; Yves Laflamme, QC; Paula McKay, ON; Randi McCabe, ON; Yannick Le Manach, ON; Mohit Bhandari, ON; FLOW Investigators, ON

**115 – 08:12**

**Failure Patterns of Young Femoral Neck Fractures: Which Complications Should we Choose?**

**David J Stockton, BC;** Karan Dua, US; Peter J O'Brien, BC; Max Hoshino, US; Andrew N Pollak, US; Gerard P Slobogean, US

Discussion 08:18

**116 – 08:27**

**Simple Decompression vs. Anterior Transposition of the Ulnar Nerve for Distal Humerus Fractures Treated with Plate Fixation - A Multicentre Randomized Controlled Trial**

**Emil H Schemitsch, ON;** Niloofar Dehghan, ON; Milena Vicente, ON; Aaron Nauth, ON; Jeremy Hall, ON; Michael McKee, ON; Canadian Orthopaedic Trauma Society

**117 – 08:33**

**Does the Immediate Postoperative Radiograph Change Patient Management After Surgical Fracture Fixation? A Systematic Review**

**Tammie Teo, BC;** Emily K Schaeffer, BC; Anthony Cooper, BC; Kishore Mulpuri, BC

**118 – 08:39**

**The Trajectory of Short and Long-term Recovery of Tibial Shaft Fractures Following Intramedullary Nail Fixation**

**Sebastian Ko, BC;** Peter J O'Brien, BC; Pierre Guy, BC; Henry M Broekhuysen, BC; Piotr A Blachut, BC; Kelly A Lefavre, BC

Discussion 08:45

**119 – 08:54**

**Operative Treatment of Displaced Midshaft Clavicle Fractures: Have Evidence-based Recommendations Changed Practice Patterns?**

**Prism Schneider, AB;** Julie Agel, US; Richard J Bransford, US; Edward J Harvey, QC



**120 – 09:00**

**A Cost-analysis of Treatment Strategies for Comminuted Three and Four Part Proximal Humerus Fractures in Elderly Individuals: A Comparison of Conservative and Operative Management Approaches**

Herman Johal, ON; Bill Ristevski, ON; KrishanRajaratnam, ON; Matthew Denkers, ON; Mohit Bhandari, ON

**121 – 09:06**

**Fixation Failure and Time to Reoperation After Internal Fixation of Young Femoral Neck Fractures: A Population-based Study in British Columbia, Canada**

David J Stockton, BC; Lyndsay M O'Hara, US; Nathan O'Hara, US; Kelly A Lefavre, BC; Peter J O'Brien, BC; Gerard P Slobogean, US

Discussion 09:12

**10:00-11:30 COA Symposium: Trauma - Bone Health in 2017 Through Thick and Thin**

• **205, Shaw Centre**

Moderator: Prism Schneider, AB

**Guest Speaker:** William Ricci, *OTA President*, US

Objectives:

1. To learn technical tricks for surgical management of fragility fractures.
2. To learn important facts about atypical femur fracture management.
3. To understand the latest approach to treatment of elderly acetabular fractures.
4. To learn the role for advanced imaging in determining bone health.
5. To learn strategies for setting up a fragility fracture liaison service.

Speakers:

- The Extreme Fragility Fracture, What I do Differently - Aaron Nauth, ON
- Atypical Femur Fractures - Five Important Facts and Surgical Management Pearls - Ross Leighton, NS
- Elderly Acetabular Fractures - When to Fix, Replace, or Leave - Paul Duffy, AB
- Advanced Bone Imaging for Determining Bone Health, What's New in 2017 - Prism Schneider, AB
- How to Set up a Fragility Fracture Liaison Service - William Ricci, *OTA President*

***8:00-12:00 COA Sports Paper Session and  
Arthroscopy Association of Canada (AAC) Symposium***

**8:00-9:30 COA Paper Session: Sports • 201 Shaw Centre**

Moderators: Ian K Lo, AB; Tracey Wentzell, NL

**122 – 08:00**

**Anatomic Anterior Cruciate Ligament Reconstruction - A Prospective Evaluation Using Three-Dimensional Magnetic Resonance Imaging**

Adam Hart, QC; ThiruSivakumaran, QC; Mark Burman, QC; Thomas Powell, QC; Paul A Martineau, QC



**123 – 08:06**

**A Randomized Clinical Trial Comparing Patellar Tendon, Hamstring Tendon and Double-Bundle ACL Reconstructions: Patient-Reported Clinical Outcomes at Five-year Follow-up**

**Nicholas GH Mohtadi, AB; Denise Chan, AB; Rhamona Barber, AB**

**124 – 08:12**

**Medial Patellofemoral Ligament Reconstruction Reduces Radiographic Measures of Patella Alta in Adult Patients**

**Jarret M Woodmass, US; Nick R Johnson, US; Robert C Cates, US; Aaron J Krych, US; Michael J Start, US; Diane L Dahm, US**

Discussion 08:18

**125 – 08:27**

**A Prospective Cohort Study Assessing the Development of Cam Femoro-acetabular Impingement Morphology**

**Paul Jamieson, ON; Sasha Carsen, ON; KawanRakhra, ON; Kerri Highmore, ON; Leanne M Ward, ON; R Baxter Willis, ON; Paul E Beaulé, ON**

**126 – 08:33**

**One-stage Cartilage Repair Using a Hyaluronic Acid-based Scaffold with Activated Bone Marrow-derived Mesenchymal Stem Cells Compared to Microfracture: Five-year Follow-up**

**Graeme P Whyte, US; Alberto Gobbi, Italy**

**127 - 08:39**

**Protective and Adverse Muscle Activation Strategies After ACL-injury during a Weight-bearing Force Control Task**

**Daniel L Benoit, ON; Teresa E Flaxman, ON; Tine Alkjaer, Denmark; Kenneth B Smale, ON; Erik B Simonsen, Denmark; Michael R Krogsgaard, Denmark**

Discussion 08:45

**128 – 08:54**

**Hip Arthroscopy Post Operative Neuropathy**

**Bashar Reda, NS; Ivan Wong, NS**

**129 – 09:00**

**Complication, Reoperation, and Readmission Rates Following Rotator Cuff Repair: A Comparative Study of Open Versus Arthroscopic Rotator Cuff Repair**

**Timothy Leroux, ON; Bryce Basques, US; Rachel Frank, US; Justin Griffin, US; Nikhil Verma, US; Anthony Romeo, US**

**130 – 09:06**

**Timed and Triple Hop Tests Accurately Indicate Functional Performance and Disease-specific Quality of Life Two years after ACL Reconstruction**

**Laurie A Hiemstra, AB; S Mark Heard, AB; Gregory M Buchko, AB; Mark R Lafave, AB; Sarah Kerlake, AB**



**131 – 09:12**

**A Traffic Light Grading System of Hip Dysplasia to Predict the Success of Arthroscopic Hip Surgery**  
**George Grammatopoulos, ON;** Owain Davies, United Kingdom; Ahmed El-Bakoury, United Kingdom; Richie Gill, United Kingdom; Tom Pollard, United Kingdom; Tony Andrade, United Kingdom

Discussion 09:18

**10:00-12:00 Arthroscopy Association of Canada Symposium:  
Tips and Tricks in Arthroscopic Reconstruction of Shoulder and Knee • 201, Shaw Centre**

Knee Moderators: Peter B MacDonald, *COA President*; Daniel Whelan, ON

Shoulder Moderators: Robert McCormack, BC; Ross Outerbridge, BC

**10:00-11:00 Hot And Helpful Topics in Sports Knee**

Objectives:

1. To review specific complications of some common knee procedures and strategies to improve outcomes via a case based presentation followed by a question and answer period.
2. To discuss alternative autograft options - namely the quadriceps tendon - for ACL reconstruction.
3. To present the burden of disease for anterior knee pain and discuss potential operative procedures for same.

Speakers:

- Quads Tendon Graft - Revisiting an Old Friend – Peter B MacDonald, MB
- Complications in MPFL Reconstruction - Not as Easy as you Thought!  
- Laurie Hiemstra, AB
- Graft - Tunnel Mismatch in ACL Reconstruction via the AM Technique - Staying out of Trouble - Jas Chahal, ON
- Anterior Knee Pain - An Ongoing Menace - Tom Smallman, US

**11:00-12:00 Shoulder**

**Part 1: Rotator Cuff Surgery at the Margins**

Partial Thickness Cuff Tears - John Randle, ON

Objectives:

At completion, participants will have a treatment algorithm to manage partial thickness tears for varying clinical presentations and be aware of technical tricks to optimize results.

Large to Massive Cuff Tears - Ian K Lo, AB

Objectives:

At completion, participants will understand the indications to operate on large cuff tears and know how, and when, to apply specific techniques.

**Part 2: Managing the Stiff Shoulder: Debate on the Optimal Treatment of Idiopathic Adhesive Capsulitis in a Middle-aged Patient**

Non-Operative Measures - Ryan Bicknell, ON

MUA/Surgical Intervention - Peter B MacDonald, MB

Objectives:

At completion, participants will be able to counsel patients on the best treatment options for Adhesive Capsulitis.



## **8:00-12:00 Canadian Shoulder and Elbow Society (CSES) Half Day Featuring Best Paper Award**

**8:00-9:30 COA/CSES ICL: Uncommon Causes of Shoulder and Upper Limb Pain: “The Masqueraders” - The Diagnoses You Don't Want to Miss and How to Manage Them**

• **203, Shaw Centre**

Moderator: Stephen Kingwell, ON

### Objectives:

1. To describe the differential diagnoses of upper extremity pain including neurological and myo-fascial etiologies.
2. To describe the diagnostic approach and criteria for myofascial, cervical spine, and brachial plexus pain etiologies.
3. To describe a rational treatment approach to myofascial, cervical spine, and brachial plexus pain syndromes.

### Speakers:

- Myofascial Pain - Integrating the Big Picture with the Painful Signs and Symptoms - Hillel Finestone, ON
- C-Spine Causes of Upper Limb Pain - Stephen Kingwell, ON
- Plexus Causes of Upper Limb Pain - Kirsty Boyd, ON

9:00-9:15 CSES Best Paper Award Presentation, sponsored by the Canadian Orthopaedic Foundation

**9:45-10:45 CSES Upper Extremity Debates •203, Shaw Centre**

Moderator: Meaghan Rollins, MB

### **How I Deal with the Large Hill Sachs Lesion in Anterior Shoulder Instability:**

#### Objectives:

1. To describe the diagnostic criteria for significant bone loss in shoulder instability.
2. To describe the treatment options to manage bone loss in shoulder instability.
3. To describe the basic science and clinical evidence in treatment outcomes in the management of bone loss in shoulder instability.

#### Speakers:

- Remplissage is the Only way to Treat This - Peter Lapner, ON
- Bone Grafting is the Best Option - Ivan Wong, NS

### **How I Treat Peri-Prosthetic Infection:**

#### Objectives:

1. To describe the work-up and treatment options for patients with suspected or known peri-prosthetic shoulder infection.
2. To describe outcomes with different treatment options in the management of peri-prosthetic shoulder infection.

#### Speakers:

- Single Stage Revision is Best for the Patient - Ryan Bicknell, ON
- Two-Stage Revision Yields Better Results - Darren Drosdowech, ON





**11:00-12:00 CSESSymposium: Sports Injuries in the Elbow • 203 Shaw Centre**

Moderator: Kevin Hildebrand, AB

Objectives:

1. To elicit pertinent history and injury mechanisms.
2. To describe physical assessment of the elbow in relation to sport injuries.
3. To recognize the role of ancillary tests in refining the diagnoses.
4. To understand treatment principles.

Speakers:

- Medial Collateral Ligament Injuries and Valgus Extension Overload - J Pollock, ON
- Osteoarthritis in Athletes - Graham King, ON
- Biceps Tendon Injury - Kevin Hildebrand, AB