

**SCIENTIFIC PROGRAM  
FRIDAY, JUNE 18<sup>th</sup>**

0630 - 0800      **ICL1 Hip and Knee: Maximizing Efficiency  
in the OR • Salon 2**

Moderator(s): Bas A Masri, BC

Objectives:

1. Participants will learn about efficiency initiatives in joint replacement from across Canada.
2. Participants will be able to have a discussion with their administrators about improving efficiency in the OR.
3. Participants will be able to potentially increase their joint replacement throughput without increasing resource utilization.

**The Bone and Joint Decade Tool Kit**

James P Waddell, ON;

**Improving Efficiency: The Manitoba Approach**

Eric Bohm, MB;

**Improving Efficiency in the OR: The Swing Room Model**

Bas A Masri, BC;

**A Hospital Administrator's Perspective on Improving Efficiency to Reduce  
Waitlists**

Laurie Leith, BC;

**Improving Efficiency: The Alberta Approach**

Cy B Frank, AB;

0630 - 0800      **ICL2 Sports: The Athlete's Knee • Salon 9**

Moderator(s): David Otto, AB

Objectives:

After attending this ICL, the learner will be able to develop and understand an approach to managing (the continuum from initial injury until return to sport) the athlete with the following knee conditions:

1. ACL Rupture
2. Patellofemoral Dislocation
3. Osteochondral Lesion

**PANEL:**

Robert Litchfield, ON;  
Catherine M Coady, NS;  
Robert G McCormack, BC;

**The Basic Science of the Surgical Treatment of Osteochondral Lesions**

Nadr M Jomha, AB;

0630 – 0800      **ICL3 Hand: Evidence-based Treatment of Peripheral  
Compression Neuropathies • Salon 15/16**

Moderator(s): Vaughan A Bowen, AB

**Objectives:**

The objective of the course is to look at the evidence on which decisions are made in the management of patients with carpal tunnel syndrome and cubital tunnel syndrome.

The various stages of management will be reviewed and the emphasis will be on specific areas, some of which are controversial:

- What is the best way to diagnose the conditions?
- What is the appropriate time to intervene surgically in both the chronic and acute situations?
- What is the best technique to use?
- What is the appropriate postoperative management?
- What accounts for recurrence and/or failure to recover?

At the end of the course, the registrant should have a better understanding of the issues involved in the management of carpal tunnel syndrome and cubital tunnel syndrome, the areas of controversy, and the current best evidence for decision-making when managing the conditions.

**Evidence-based Treatment of Carpal Tunnel Syndrome**

Vaughan A Bowen, AB;

**Evidence-based Treatment of Cubital Tunnel Syndrome**

Gurpreet Dhaliwal, US;

0630 - 0800      **ICL4 Spine: The Future of Spine Care • Salon 17/18**

Moderator(s): John Street, BC

**Objectives:**

After attending this Instructional Course Session the learner should understand many of the unique aspects of training for, delivery of and access to spine care in Canada. Attendees will be made familiar with:

1. The current and future requirements, opportunities and directions of spine training in Canada.
2. The regional differences in access to and delivery of spine care in Canada.
3. Assessment of Quality of Care Delivery.
4. Present and future directions in the management of back pain.

### **Delivery of Spine Care in Canada: The Present and the Future**

Jacques A Bouchard, AB;

### **Training for Spine Practice in Canada**

Scott Paquette, BC;

### **Management of Back Pain - Are We getting Any Better?**

Brendan D Lewis, NL;

0630 - 0800      **ICL5 Trauma/ COFAS: Participant Case-based Foot & Ankle Fractures • Salon 10**

Moderator(s): John T.C. Lau, ON

Objectives:

1. To understand the importance of select fractures of the Foot & Ankle.
2. To understand the principals of management of select Fractures of the Foot and Ankle.
3. To learn new surgical techniques for the treatment of select fractures of the Foot & Ankle.

### **Multiple Metatarsal Fractures**

Karl-André R Lalonde, ON;

### **Lis Franc Fracture Dislocation**

Alastair SE Younger, BC;

### **Talar Neck Fracture Dislocation**

Gordon R Goplen, AB;

### **Calcaneal Fracture**

Matthew Menon, AB;

### **Pilon Fracture**

Darius Viskontas, BC;

0815 - 1015      **CORA Symposium: Surviving R5: The Law, U.S. Fellowships and the New Exam Format • Salon 2**

**The Orthopaedic Resident and the Law**

Rose M Carter, Q.C.  
Partner, Litigation - Bennett Jones LLP  
Edmonton, AB

**Jumping the Final Hurdle: How to Avoid Falling Flat on Your Face in the Royal College Exam**

Paul Clarkson MBChB, FRACS, FRCSC  
Vancouver General Hospital and BC Cancer Agency  
Vancouver, BC

**What's Next: Knowing Your Fellowship Options**

Jesse Shantz, MD MBA  
University of Manitoba

0830 - 1000      **COA Symposium 1: Joint Replacement Registries – An International Perspective • Hall A**

Moderator(s): Eric Bohm, MB, and Michael J Dunbar, NS

**Objectives:**

After attending this symposium, participants will:

1. Have an understanding of the structure and function of different arthroplasty registries around the world.
2. Have an understanding of the benefits that registries impart with respect to patient outcomes, prosthesis surveillance and cost benefits.
3. Have an understanding of the challenges facing the Canadian Joint Replacement Registry and how these challenges may be addressed with future initiatives.

**Swedish Knee Registry**

Otto Robertsson, SE;

**National Joint Registry in England and Wales**

Paul Gregg, UK;

**Canadian Joint Replacement Registry**

Cassandra R Linton, ON; Claire Marie Fortin, ON;

0830 - 1000 **Paper Session #1: CORS Bone, Ligament and Tendon • Salon 9**  
Moderator(s): Nadr M. Jomha, AB, and Mark Hurtig, ON

**1 - 0830**

**Endothelial Progenitor Cells for Healing of Segmental Bone Defects: A Radiographic, MicroCT, and Biomechanical Study in Rats**

Ru Li, ON; Kivanc Atesok, ON; David Wright, ON; Aaron Nauth, ON; Cari M Whyne, ON; Emil H Schemitsch, ON;

**2 - 0836**

**Human Mast Cell Effects on Collagen Gel Contraction by Human Elbow Capsule Cells**

Kevin A Hildebrand, AB; Mei Zhang, AB; Paul T Salo, AB; David A Hart, AB;

**3 - 0842**

**Anterior vs Posterior Triceps Repair Following Olecranon Excision: Effects on Stability and Strength on an *in vitro* Model**

Louis M Ferreira, ON; Timothy H Bell, ON; James Andrew Johnson, ON; Graham J King, ON;

0848 Discussion

**4 - 0858**

**Synergistic Effect of rhBMP-7 and Osteogenic Differentiation Medium on Human Bone Marrow-derived Primary Mesenchymal Stem Cells *in vitro***

Chao Chen, AB; Lianteng Zhi, AB; Xiaoli Pang, AB; Hasan Uludag, AB; Hongxing Jiang, AB;

**5- 0904**

**Endothelial Progenitor Cells for Healing and Angiogenesis in a Segmental Bone Defect Model: A Comparison with Mesenchymal Stem Cells**

Aaron Nauth, ON; Emil H Schemitsch, ON; Ru Li, ON;

**6 - 0910**

**Dynamic MR Imaging with Concurrent Physical Examination in Evaluation of Knee MCL Injuries**

Christopher R Geddes, ON; Ulrich Studler, ON; Melanie Deslandes, ON; Lawrence White, ON; Marshall Sussman, ON; John Theodoropoulos, ON;

0916 Discussion

**7 - 0926**

**Suppressed Osteogenic Effect of BMP2 to Human Mesenchymal Stem Cells by Macrophages**

**Chao Chen**, AB; Hasan Uludag, AB; Alex Rezansoff, AB; Hongxing Jiang, AB;

**8 - 0932**

**The Measurement of Tension in the Medial Collateral Ligament of the Elbow**

**Katherine E Fay**, ON; Emily A Lalone, ON; Louis M Ferreira, ON; James A Johnson, ON; Graham J King, ON;

**9 - 0938**

**Rodent Model of Adult Stem Cell Transplantation for Bone Repair**

**Chan Gao**, QC; Oliver Nguyen, QC; Vahid Serpooshan, QC; Bilal Eichaarani, QC; Showan N Nazhat, QC; Edward J Harvey, QC; Janet E Henderson, QC;

**10 - 0944**

**Anti-biofilm Activity of Subinhibitory Povidone-iodine Concentrations Against Staphylococcus Epidermidis and Staphylococcus Aureus**

**Kayode Olajide Oduwole**, IE; Aaron A Glynn, IE; Funso O Onayemi, IE; Diamuird Molony, IE; Jim P O Gara, IE; Damien McCormack, IE;

0950 Discussion

0830 - 1000 **Paper Session #2 COA/CORS Combined Arthroplasty • Salon 10**

Moderator(s): Bas A Masri, BC and John Antoniou, QC

**11 - 0830**

**The Effect of Tobramycin on Femoral Stem Migration: A Two-Year RSA Study**

**Thomas R Turgeon**, MB; Eric Bohm, MB; Nathan Kesler, MB; Martin Petrak, MB; Colin Burnell, MB; David Hedden, MB;

**12 - 0836**

**A Comparison of Functional Outcomes Between Elective Coronary Artery Bypass Graft Surgery and Elective Lower Extremity Joint Replacement Surgery**

**Ili Slobodian**, MB; Eric Bohm, MB; Jo-Anne V Sawatzky, MB; Carolyn De Coster, AB; Martin J Petrak, MB;

**13 - 0842**

**Interface Distraction and Loosening of the Polyethylene Glenoid Implant for Various Joint Loading Modalities: Implications for Failure in Total Shoulder Arthroplasty**

**Joshua W Giles**, ON; Andrew Glennie, ON; Louis M Ferreira, ON; George Athwal, ON; Kenneth J Faber, ON; James A Johnson, ON;

0848 Discussion

**14 - 0858**

**Mechanical Stimuli Distributions in the Hip Joint Due to Cam Impingement and its Relation with the Progression of Osteoarthritis**

**Kwan-Ching Geoffrey Ng**, ON; Gholamreza Rouhi, ON; Mario Lamontagne, ON; Paul E Beaulé, ON;

**15 - 0904**

**Femoral Head Penetration in X3 Cross-linked Acetabular Liners: A Two-Year RSA Study**

**Thomas R Turgeon**, MB; Eric Bohm, MB; Nathan Kesler, MB; Martin Petrak, MB; Colin Burnell, MB; David Hedden, MB;

**16 - 0910**

**Predicting Functional Outcome of Femoral Neck Fractures Treated with Hemiarthroplasty**

**G. Yves Laflamme**, QC; Mathieu Carrier, QC; Louis Roy\*, QC; Paul Kim, ON; Stephane Leduc, QC;

0916 Discussion

**17 - 0926**

**Acetabular Component Migration Analysis of a Metal-on-Metal Hip Resurfacing**

**Craig White**, UK; Jamie Lopez Castellaro, ON; Paul E Beaulé, ON; Paul Kim, ON;

**18 - 0932**

**Metal Ion Release: Comparison of Four Large Diameter Metal-on-Metal Bearing Articulations**

**Sanket Diwanji**, QC; Martin Lavigne, QC; Étienne Belzile, QC; François Morin, QC; Alain Roy, QC; Pascal-André Vendittoli, QC;

**19 - 0938**

**One-year Results of an RCT using RSA to Compare Minimally Invasive Surgery (MIS) to Standard Exposure in Primary Uncemented Modular THA**

**Michael Gross**, NS; David Amirault, NS; Allan Hennigar, NS; Michael J Dunbar, NS

**20 - 0944**

**The Effect of THA Surgical Approaches on Lower-limb Joint Mechanics During Stair Ascent**

**Daniel Varin**, ON; Mario Lamontagne, ON; Melanie Beaulieu, ON; Paul E Beaulé, ON;

0950 Discussion

0830 – 1000

**Workshop: New Devices for the Care of Common Foot & Ankle Pathologies • Salon 11**

Master Instructor: Mark Glazebrook, NS;

Objectives:

After attending this Foot & Ankle Sawbones Workshop the participant will be able to:

1. Identify common indications for some pathology specific foot and ankle orthopaedic surgical devices.
2. Apply surgical techniques for some pathology specific foot and ankle orthopaedic surgical devices.
3. Acquire tips and tricks that may be applied when using some pathology specific foot and ankle orthopaedic surgical devices.

**Station 1 Instructors**

Murray Penner, BC;

John T.C. Lau, ON;

Peter J Dryden, BC;

**Station 2 Instructors**

Timothy R Daniels, ON;

Ian Le, AB;

Stephane Leduc, QC;

1000-1045 Break • Hall BC

1045-1115 **RI Harris Lecture:** The Practicality of Doing Research • Hall A  
Dr. Nicholas GH Mohtadi

1115-1125 **JA Nutter Award:** Generalized Ligamentous Laxity as a Predisposing Factor for Primary Anterior Shoulder Dislocation • Hall A  
Dr. Jaskarnidip Chahal

1125-1150 **Samson Award:** Post-traumatic Joint Contractures: Correlation Between the Human Condition and an Animal Model, and Identification of a Potential Preventative Intervention • Hall A  
Dr. Kevin A Hildebrand

1150-1200 **Founders Medal:** An *In-vivo* Evaluation of the Effect of a Hydroxyapatite Coating With and Without the Use of BMP-7 on Extracortical Bone Bridging Using a Canine Segmental Defect Model • Hall A  
Dr. Neil Saran

1200-1230      CORS Poster Question and Answer Session • Hall BC

1200-1300      Lunch • Hall BC

1300 – 1430      **COA Symposium 2: The Biggest Issues in International Orthopaedics: Presented by the Carousel Presidents**  
• Hall A

Moderator(s): Cy B Frank, AB and Ross K Leighton, NS

Objectives:

1. Participants will be made aware of some current international issues and important trends in orthopaedics.
2. The Carousel Presidents' perspectives on these key issues in their country will be hi-lighted.
3. Impacts on orthopaedics and actions being taken by the Orthopaedic Associations to address key issues in each country will be discussed.

**Industry Relations With the Orthopaedic Profession and the Public Trust**

Vincent Pellegrini, US;

**An Attack On the Professions: Seduction, Guile & Duplicity**

Ian Dickinson, AU;

**Introduction of a National Health Insurance System in South Africa**

John Shipley, ZA;

**Professionalism and Ethics Re-engineered: An Orthopaedic Perspective**

John Calder, NZ;

**Changes in Work Force: How to Deliver Orthopaedic Services in the Future**

Michael Bell, UK;

1300 – 1430      **Paper Session #3 CORS Extremities • Salon 9**

Moderator(s): David R Wilson, BC and James A Johnson, ON

**21 - 1300**

**Human Male Elbow Joint Capsule Molecular Profiles in Primary Osteoarthritis and Post-traumatic Contractures**

Kevin A Hildebrand, AB; David A Hart, AB;

**22 - 1306**

**Determination of the Centre of the Capitellum for Elbow Reconstructive Procedures: The Effect of Digitization Protocols**

Jennifer Ng, ON; Emily A Lalone, ON; Colin P McDonald, ON; Louis M Ferreira, ON; Graham J King, ON; James A Johnson, ON;

**23 - 1312**

**Predictive Anthropometric Measurements for Humeral Head Curvature;**

Anthony Miniaci, US; Stephen D Fening, US

1318 Discussion

**24 - 1328**

**Distal Ulnar Load with Simulated Colles Fractures**

Graham JW King, ON; Gillian S Greeley, ON; Brendon JB Beaton, ON; Louis M Ferreira, ON; James A Johnson, ON;

**25 - 1334**

**Computer-generated Instrument Guides for Distal Radius Osteotomy: A Preliminary Clinical Trial**

David Pichora, ON; Manuela Kunz, ON; Burton Ma, ON; John F Rudan, ON; Randy E Ellis, ON; Hisham Alsanawi, ON;

**26 - 1340**

**Visualization of 3D Elbow Kinematics Using Reconstructed Surfaces**

Emily A Lalone, ON; Colin P McDonald, ON; Louis M Ferreira, ON; Graham King, ON; James Johnson, ON;

1346 Discussion

**27 - 1356**

**Tourniquet-induced Skeletal Muscle Oxidative Injury during Lower Limb Orthopaedic Trauma Surgery**

Luke W Harris, BC; Babak Shadgan, BC; Darlene Reid, BC; Scott K Powers\*, US; Peter J O'Brien, BC;

**28 - 1402**

**Leg Muscle Oxygenation and Hemodynamics during Tourniquet-induced Ischemia Monitored by Near-infrared Spectroscopy**

Babak Shadgan, BC; Darlene Reid, BC; Peter J O'Brien, BC;

**29 - 1408**

**The Role of Hemarthrosis in Joint Contractures**

Kevin A Hildebrand, AB; Michael J Monument, AB;

**30 - 1414**

**Polyethylene Wear in Total Knee Replacements is Sensitive to the Thermal Stability of Test Lubricants**

**Steven JM MacDonald**, ON; Jan-Mels Brandt, MB; Kory Charron, ON; Lee-Ann Briere, MB; Lin Zhao, ON; John B Medley, ON;

1420 Discussion

**1300 – 1430 Paper Session #4 COA/CORS Combined Knee Arthroplasty  
• Salon 10**

Moderator(s): Michael J Dunbar, NS and Mark Glazebrook, NS

**31 - 1300**

**Preoperative Muscle Activation Patterns Affect Implant Migration**

**David AJ Wilson**, NS; Cheryl Hubley-Kozey, NS; Michael J Dunbar, NS; Janie L Astephen Wilson, NS;

**32 - 1306**

**Randomised Clinical Evaluation of Bone Mineral Density Variation Using Cemented Titanium versus Non-cemented Trabecular Metal Tibial Base Plates in Primary Total Knee Arthroplasty**

**Michèle Angers**, QC; Étienne L Belzile, QC; Michel Malo, QC; Pascal-André Vendittoli, QC; Marc Bouchard, QC;

**33- 1312**

**Validation of Polyethylene Tibial Insert Wear Analysis Using Micro-computed Tomography**

**Matthew G Teeter**, ON; Douglas D Naudie, ON; David D McErlain, ON; Jan-Mels Brandt, MB; Xunhua Yuan, ON; Steven JM MacDonald, ON; David W Holdsworth, ON;

1318 Discussion

**34 - 1328**

**Revision Total Knee Arthroplasty for Component Malrotation is Highly Beneficial**

**David J Backstein**, ON; Dror Lakstein, IL; Mohammad Zarrabian\*, MB; Yona Kosashvili, IL; Yona Kosashvili, IL; Oleg Safir, ON; Allan E Gross, ON;

**35 - 1334**

**The Role of Genetic Variants in Predicting Response to Steroid Injections for Knee Osteoarthritis**

**Mark Gatha**, NL; Frank Nofthall, NL; Roderick D Martin, NL; Peter Rockwood, NL; Proton Rahman, NL;

**36 - 1340****The Synovial Fluid Adiponectin - Leptin Ratio Predicts Pain with Knee Osteoarthritis**

**Rajiv Gandhi**, ON; Mark Takahashi, PE; Holly Smith, ON; Randy Rizek, ON; Nizar N Mahomed, ON;

1346 Discussion

**37 - 1356****The Role of Polyethylene Design on Post-op TKR Flexion: An Analysis of 1534 Cases**

**Richard W McCalden**, ON; Steven JM MacDonald, ON; Kory D Charron, ON; Robert B Bourne, ON; Douglas D Naudie, ON;

**38 - 1402****Evaluation of Reconstructive Surgery Using Artificial Ligaments in 56 Acute Knee Dislocations**

**Pierre Ranger**, QC; Alexandre Renaud, QC; Philippe Dahan\*, QC; Josee Delisle, QC; Eros De Oliveira Jr, BR; Philippe Phan, QC;

**39 - 1408****Mean 20 Years Follow Up for Distal Femur Fresh Osteochondral Allografted Patients - Prospective Study**

**Guy Raz**, ON; Oleg Safir, ON; Paul Lee, ON; Oren Ben Lulu, ON; David J Backstein, ON; Allan Gross, ON;

**40 - 1414****Total Knee Arthroplasty Alignment - Estimating the Mechanical from the Anatomic Axis**

**Theodore D Cooke**, ON; Lisa Sheehy, ON; David Felson, MA;

1420 Discussion

**1300 – 1430 Paper Session #5 COA Critical Issues • Salon 3**

Moderator(s): Emil H Schemitsch, ON and Tracy L Wilson, ON

**41 - 1300****(Sample) Size Matters! The Risk of Stopping Orthopaedic Trials Too Early**

**Emil H Schemitsch**, ON; Mohit Bhandari, ON; SPRINT Investigators, ON;

**42 - 1306****The Influence of Hip Motion on the Functional Centre of Rotation**

**Daniel Varin**, ON; Andrew Speirs, ON; Daniel Benoit, ON; Melanie Beaulieu,

ON; Mario Lamontagne, ON; Paul E Beaulé, ON;

**43 - 1312**

**Clinical Outcome Following Knee Disarticulation**

**John J Murnaghan, ON; Karen Fairley, ON; Ramez Hanna, ON;**

1318 Discussion

**44 - 1328**

**Increasing the Response Rate to Surveys: How Important is Academic Prestige to Orthopaedic Surgeons?**

**Brad Petrisor, ON; Mohit Bhandari, ON; Bauke W Kooistra, ON; Bernadette G Dijkman, ON; Sheila Sprague, ON;**

**45 - 1334**

**The Effect of Surgeon Fatigue on Hip and Knee Arthroplasty**

**David W Walmsley, ON; Christopher Peskun, ON; James P Waddell, ON; Emil H Schemitsch, ON;**

**46 - 1340**

**Validity of the Quality of Recovery-40 Questionnaire (QoR-40) in Patients Undergoing Total Knee or Hip Arthroplasty**

**Paul E Beaulé, ON; Stephane Poitras, ON; Geoffrey F Dervin, ON;**

1346 Discussion

**47 - 1356**

**Estimating Patient Recruitment in Orthopaedic Randomised Controlled Trials**

**Nicole Simunovic, ON; Mohit Bhandari, ON; Bauke W Kooistra, ON; Bernadette Dijkman, ON;**

**48 - 1402**

**Patient Concerns About Undergoing Elective Musculoskeletal Surgery**

**Rajiv Gandhi, ON; Yoga R Rampersaud, ON; Nizar N Mahomed, ON; Pamela Hudak, ON; Christian Veillette, ON; Khalid Syed, ON; Steve Lewis, ON;**

**J Roderick Davey, ON;**

**49 - 1408**

**Forecasting and Persuading in Orthopaedic Surgery: Delivering Non-surgical Treatment Recommendations**

**Pamela Hudak, ON; Shannon Clark, ON; Geoffrey Raymond, US;**

**50 - 1414**

**Knowledge and Attitudes in the Clinical Identification of Violence Against Women: A Survey of Surgeon Members of the Orthopaedic Trauma**

**Association**

**Sheila Sprague**, ON; Gregory Della Rocca, US; Sonia Dosanjh, ON; Emil H Schemitsch, ON; Mohit Bhandari, ON;

1420 Discussion

**1300-1500 CORA Paper Session • Salon 2**

Moderator(s): Sukhdeep Dulai, Matthew Menon, Angela Scharfenberger, AB

**1300-1302 CORA Opening Remarks**

Roxanne Chow, Julian Sernik, Co-chairs

**CORA 1 - 1302****Osteolysis and Complications Following the Use of the Interference Bioabsorbable Screw For Distal Biceps Tendon Repair**

**Anna Potapov**, Université de Montréal, D. Rouleau, S. Gagnon, Y. Laflamme, F. Canet

**CORA 2 – 1311****Graft Choice in Medial Opening Wedge High Tibial Osteotomy: Auto vs. Allograft**

**Bashar Alolabi**, University of Western Ontario, D. Bryant, K. Willits, P. J. Fowler, J. R. Giffin

**CORA 3 – 1320****Biomechanical Analysis of Chlorhexidine Power Irrigation to Disinfect Contaminated Anterior Cruciate Ligament Grafts**

**Yung Han**, McGill University, D. Giannitsios, A. Alomar, T. Steffen, M. Burman

**CORA 4 – 1329****Iliac Crest Allograft for Glenoid Deficiency in Recurrent Anterior Shoulder Instability in Athletes**

**Randy Mascarenhas**, University of Manitoba, E. Raleigh, S. McRae, J. Lieter, P. MacDonald

**CORA 5 – 1338****Incidence of Lateral Femoral Cutaneous Nerve Neuropraxia after Anterior-Hueter Approach Total Hip Arthroplasty**

**Krista Goulding**, University of Ottawa, P.E. Beaulé, P.R. Kim

**CORA 6 – 1347****Fatigue Testing of a New Locking Plate for Hip Fractures**

**Stephen Hunt**, Memorial University, R.D. Martin

1356 – 1406 Coffee Break

**CORA 7 - 1406**

**Prospective Mid-term Results for the Scandinavian Total Ankle Replacement: The Canadian Experience**

**D. Joshua Mayich**, Queen's University, T.R. Daniels, M.J. Penner, M. Bridge

**CORA 8 – 1415**

**Acquired Pes Planus After Ankle Fracture: Is There a Spring Ligament Complex Injury?**

**Mark Steeves**, University of Ottawa, A. Giachino, M.A. Sheik, K. Rakhra, G. DiPrimio, K.-A. Lalonde

**CORA 9 – 1424**

**The Reliability of Differentiating Neurogenic Claudication From Vascular Claudication Based on Symptomatic Presentation**

**Melissa Nadeau**, University of Western Ontario, P. Rosas Arellan, K. Gurr, S. Bailey, B. Taylor, R. Grewal, K. Lawlor, C. Bailey

**CORA 10 - 1433**

**Subspecialty Fellowship Training in Spine Surgery: An Evaluation of Cognitive and Technical Competencies**

**Harsha Malempati**, University of Toronto

**CORA 11 – 1442**

**Quality of Life and Educational Benefit Among Orthopaedic Surgery Residents: A Prospective, Multi-centre Comparison of the Night Float and the Standard Call Systems**

**Ali Zahrai**, University of Toronto, J. Chahal, D. Stojimirovic, E. Schemitsch, A. Yee, W. Kraemer

**CORA 12 – 1451**

**The Effect of Elective Surgery Scheduling on Ward Bed Shortages**

**Barry Cayen**, University of Toronto

1500 **Closing Remarks**, R. Chow, J. Sernik

1430-1500 Break • Hall BC

1500 – 1630 **COA Symposium 3: Assuring Quality of Orthopaedic Care and Patient Safety in Your Hospital • Hall A**

Moderator(s): Steven Papp, ON, and Geoffrey Dervin, ON

Objectives:

At the conclusion of the symposium, the learner will be able to:

1. Explain the importance of a just culture of patient safety.
2. Describe two different review processes to learn from adverse events in health care institutions.
3. Identify three common medico-legal difficulties associated with adverse events.

### **How Can We Measure and Monitor Quality of Care to Ensure Patient Safety? A Local Audit of an Orthopaedic Ward**

Steven Papp, ON;

### **Standard of Care in 2010 - Meeting Expectations**

Geoffrey Dervin, ON;

### **The Medical Legal Implications of Medical Errors – Hot Button Care Issues for Orthopaedic Surgeons**

Claude Martin jr., ON;

### **Standard of Care in 2010 – The Hospital's Role**

Alan Forster, ON;

1500 – 1630 **Paper Session #6 CORS Spine & Biology of Arthritis • Salon 9**

Moderator(s): Cari M Whyne, ON and Paul T Salo, AB

#### **51 - 1500**

### **Automated Quantitative Analysis of Metastatic Disease in Rat Spine: The Effects of Stereological Model and Spatial Resolution**

Seyed-Parsa Hojjat, ON; Cari M Whyne, ON;

#### **52 - 1506**

### **Increased Phosphorylation of ERK and p38 Signal Transduction Proteins in Mesenchymal Stem Cells From Osteoarthritic Patients**

Fackson Mwale, QC; Guoying Yao, QC; Alain Petit, QC; John Antoniou, QC;

#### **53 - 1512**

### **Assessment of Hepatic Inflammation After Spinal Cord Injury Using Intravital Microscopy**

Hans Hundt, ON; Jennifer Fleming, ON; Abdel Lawendy, ON; Kevin Gurr, ON; Stewart I Bailey, ON; David Sanders, ON; Greg McGarr, ON; Relka Bihari, ON; Christopher S Bailey, ON;

1518 Discussion

**54 - 1530**

**Outcome of Photodynamic Therapy on Breast Cancer Metastases in Vertebrae of Rats Pre-treated with Bisphosphonates**

**Margarete K Akens**, ON; Emily Won, ON; Lisa Wise-Milestone, ON; Brian C Wilson, ON; Albert JM Yee, ON; Cari M Whyne, ON;

**55 - 1536**

**Characterization of Novel Culture Conditions which Prevent Articular Chondrocyte Dedifferentiation**

**Randy DC Barley**, AB; Keith M Bagnall, AB; Nadr M Jomha, AB;

**56 - 1542**

**Effect of Link-N on Disc Repair in a Rabbit Model of Intervertebral Disc Degeneration**

**Fackson Mwale**, QC; Laura M Epure, QC; Tomoaki Yoshikawa, US; Aseem Hemmad, US; Megan Bokar, US; Koichi Masuda, US; Peter J Roughley, QC; John Antoniou, QC;

1348 Discussion

**57 - 1600**

**Differentiation of Mesenchymal Stem Cells from Osteoarthritic Patients on Nitrogen-rich Cell Culture Coatings**

**Sonia Rampersad**, QC; Alain Petit, QC; Guoying Yao, QC; Amélie St-Georges-Robillard, QC; Juan-Carlos Ruiz\*, QC; Michel R Wertheimer, QC; John Antoniou, QC; Fackson Mwale, QC;

**58 - 1606**

**A Biomechanical Model of Degenerative Spondylolisthesis: Results of Pure Shear Testing**

**Angela Melnyk**, BC; Stephen P Kingwell, ON; Qingan Zhu, Guangdong; Jason Chak, BC; Marcel F Dvorak, BC; Thomas R Oxland, BC;

**59 - 1612**

**Effect of PTH on Type X Collagen Expression in Mesenchymal Stem Cells from Osteoarthritic Patients**

**Fackson Mwale**, QC; Alain Petit, QC; Guoying Yao, QC; John Antoniou, QC;

1618 Discussion

1500 - 1630 **Paper Session #7 COA Knee Reconstruction • Salon 10**

Moderator(s): J David Amirault, NS, and Colin Burnell, MB

**60 - 1500**

**Relationships Among BMI, Self Reported Complications, Functional Outcomes and Satisfaction Following Elective, Primary Hip and Knee Replacement: Results from a Canadian Regional Joint Replacement Registry**

Lynda Loucks, MB; Eric Bohm, MB;

**61 - 1506**

**Hypoxemia as an Indicator for Pulmonary Embolism in the Acute Post-arthroplasty Patient**

Frank N Schnell, AB; Stephen D Miller, AB;

**62 - 1512**

**Mid to Long-term Survivorship of the AMK Total Knee Arthroplasty System. A Comparison of Methods of Fixation**

James P McAuley, ON; Kory D Charron, ON; Cecil H Rorabeck, ON; Robert B Bourne, ON; Steven JM MacDonald, ON;

1518 Discussion

**63 - 1528**

**A Randomised Clinical Trial Comparing Patellar Resurfacing Versus Patellar Retention in Total Knee Arthroplasty**

Charles C Secretan, AB; Lauren Beaupre, AB; D. William C Johnston, AB; Guy Lavoie, AB;

**64 - 1534**

**Hypoesthesia After Total Knee Arthroplasty: A Randomised, Controlled Trial Comparing Lateral Parapatellar to Mini Medial Incision in Total Knee Arthroplasty**

Anna Potapov, QC; Pascal-André Vendittoli, QC; Jean-Michel Laffosse, QC; Martin Lavigne, QC; Michel Fallaha, QC; Michel Malo, QC;

**65 - 1540**

**Effectiveness of a Medically Supervised Weight Loss Program in Improving Symptoms of Knee Osteoarthritis in Morbidly Obese Middle Aged Women**

Mark Harrison, ON; Alice Aiken, ON; Brenda Brouwer, ON; Caroline Pukall, ON; Dianne Groll, ON;

1546 Discussion

**66 - 1556**

**Posterior Cruciate Preserving Versus Sacrificing TKRs: Is There a Difference Greater than 10 Years Follow-up?**

**Robert Wallace**, ON; Robert B Bourne, ON; Richard W McCalden, ON; Steven JM MacDonald, ON; Kory D Charron, ON;

**67 - 1602**

**A Randomised, Blinded Trial Comparing One HA Injection to Corticosteroid for Knee Osteoarthritis Pain**

**Ross K Leighton**, NS; Kelly Trask, NS; Durolane Study Group, NS;

**68 - 1608**

**A Greater than 10-Year Follow-up Study Comparing Fixed Versus Mobile Bearing Total Knee Replacement Outcomes - Are They the Same?**

**Philip A O'Connor**, ON; Robert B Bourne, ON; Steven JM MacDonald, ON; Richard W McCalden, ON; Cecil H Rorabeck, ON; Kory D Charron, ON;

**69 - 1614**

**A Comparison of Computer Navigation to Extramedullary Guide Techniques Used to Produce Posterior Tibial Slope for Total Knee Arthroplasty**

**Paul RT Kuzyk**, ON; Gordon Higgins, ON; James Tunggal, ON; Emil H Schemitsch, ON; James P Waddell, ON;

1620 Discussion

1630 - 1800

**COA/CORS Symposium 4: Evidence-based Medicine for Treatment of Tendon and Sports Medicine Injuries • Hall A**

Moderator(s): Nicholas GH Mohtadi, AB

Objectives:

1. To understand the importance of evidence-based treatment recommendations.
2. To understand the pathology and clinical implications of tendonopathy.
3. To understand the treatment options based on the current evidence available for select tendonopathies.
4. To learn surgical treatment techniques for select tendonopathies.

**EBM Achilles Tendon Rupture**

Mark Glazebrook, NS;

**EBM Patellar Tendon Rupture**

Daniel B Whelan, ON;

### **EBM Rotator Cuff Rupture**

Robert Litchfield, ON;

### **Biology of Tendon Pathology**

Cy B Frank, AB;

### **Macnab Lecture: Evidence Medicine in Orthopaedics: Are We There Yet?**

James G Wright, ON;

### **1630 - 1800 Special Symposium: Venous Thromboembolism • Salon 9**

Moderator(s): Bas A Masri, BC

#### **Objectives**

1. Participants will learn the up to date guidelines for prevention of DVT in joint replacement.
2. Participants will identify the differences between the AAOS guidelines and the CHEST guidelines for prevention of DVT after joint replacement.
3. Participants will learn about the medico-legal consequences of inadequate DVT prophylaxis.
4. Participants will learn about DVT prophylaxis in non-arthroplasty procedures.
5. Participants will learn about the new oral anti-coagulants.

### **The Burden of VTE Disease in Orthopaedic Surgery – The Place for Guidelines**

Graham Pineo, AB;

### **DVT Prophylaxis for Other Orthopaedic Procedures**

Ross K Leighton, NS;

### **New Oral Anticoagulants**

William D Fisher, QC;

### **Early Implementation of Oral Anticoagulants - My Experience**

Nizar N Mahomed, ON;

### **Early Implementation of Oral Anticoagulants - A Personal Perspective**

Jeffrey D Gollish, ON;

### **Medico-legal Implications of Thromboembolic Disease**

Claude Martin jr., ON;

1630 – 1800 **Paper Session #8 COA Hip Reconstruction • Salon 10**

Moderator(s): C. Glen Richardson, NS, Olga Huk, QC

**70 - 1630**

**A Randomised Trial to Evaluate the Clinical Effectiveness and Outcomes of the "Abductor Sparing" MIS Anterolateral Approach in Primary Total Hip Arthroplasty**

**Nelson V Greidanus**, BC; Donald Garbuz, BC; Bas A Masri, BC; Allan Gross, ON; Michael Tanzer, QC; Clive P Duncan, BC;

**71 - 1636**

**RCT Comparison of Early Migration of Two Collarless Polished Cemented Stems Using RSA**

**Richard W McCalden**, ON; Kory D Charron, ON; Xunhua Yuan, ON; Robert B Bourne, ON; Douglas D Naudie, ON; Steven JM MacDonald, ON; Abigail E Thompson, ON;

**72 - 1642**

**A Survey on the Incidence of Pseudotumours with MOM Hip Resurfacings in Canadian Academic Centres**

**Paul E Beaulé**, ON; Frank Smith\*, ON; James N Powell, ON; John Antoniou, QC; Robert B Bourne, ON; Martin Lavigne, QC; Etienne Belzile, QC; Emil H Schemitsch, ON; Donald Garbuz, BC;

1648 Discussion

**73 - 1658**

**Cobalt and Chromium Ions Have No Detrimental Effect on Semen Parameters in Young Patients with Metal-on-Metal Total Hip Replacement**

**John Antoniou**, QC; Alain Petit, QC; Vassilios S Nikolaou, ON; Constantin Papanastasiou\*, QC; Fackson Mwale, QC; David J Zukor, QC; Olga L Huk, QC;

**74 - 1704**

**RSA Wear Analysis of Oxinium & CoCr Heads Against XLPE and Conventional Polyethylene in THR: A Randomised Controlled Trial**

**Richard W McCalden**, ON; Douglas D Naudie, ON; Robert B Bourne, ON; Steven JM MacDonald, ON; David W Holdsworth, ON; Xunhua Yuan, ON; Kory D Charron, ON;

**75 - 1710**

**The Migration Pattern of a Cementless, Tapered, Plasma Sprayed Femoral Stem Using EBRA-FCA**

**Craig White**, UK; Sasha Carsen, ON; Kevin Rasuli, ON; Steve Doucette, ON; Paul E Beaulé, ON;

1716 Discussion

**76 - 1726**

**Greater than 20-year Follow-up Study of the Cementless Porous Coated Anatomic (PCA) Total Hip Arthroplasty**

**Jonathan Loughead**, ON; Philip A O'Connor, ON; Kory D Charron, ON; Cecil H Rorabeck, ON; Robert B Bourne, ON;

**77 - 1732**

**Ceramic-on-Metal versus Metal-on-Metal – Clinical and Metal Ion Results of a Prospective Multicentre IDE RCT**

**Steven JM MacDonald**, ON; Charles A Engh Jr., US; Douglas D Naudie, ON; Charles A Engh Sr., ON; Richard W McCalden, ON; Abigail E Thompson, ON; Supatra Sritulanondha, ON;

**78 - 1738**

**Lateral Femoral Cutaneous Nerve (LFCN) Neuropraxia After Anterior Approach Total Hip Arthroplasty**

**Krista Goulding**, ON; Paul E Beaulé, ON;

**79 - 1744**

**Long-term Outcome in Modern Hip Resurfacing Arthroplasty; A Minimum of 10 Years Follow-up**

**Kemi Alo**, UK; Peter M Lewis, UK; Jagannath Chakravarthy, UK; Eric S Isbister\*, UK;

1750 Discussion

1630 - 1800 **Workshop: Distal Radius • Salon 12**

Moderator(s): Bert H Perey, BC

Objectives:

Participants will be exposed to four different wrist fracture fixation systems. This workshop will involve use of saw bones and demonstration of surgical techniques with the help of numerous wrist fracture experts. The systems used will be supplied by Synthes, Stryker, Trimed, and Accumed.

**Review of Techniques for Plate Fixation of the Distal Radius Using the Most Commonly Inserted Implants**

Instructors:

Thomas J Goetz, BC;  
Steven Papp, ON;

Michael D McKee, ON;  
Vaughan A. Bowen, AB;  
Edward J Harvey, QC;

1630 - 1800      **Workshop: Sports: Double Row Rotator Cuff Repair**  
                         **● Salon 8**

Moderator(s): Mark Lewis Burman, QC

Objectives:

1. Explain the rationale behind Double Row repairs.
2. Demonstrate and practice the technical skills required for arthroscopic anchor placement, suture passage & suture management needed to perform an Arthroscopic Double Row Repair.

**Instructors**

Robert A Balyk\*, AB;  
Jaydeep K. Moro, ON;