



## Words of Wisdom by Werle!

Dear Orthopaedic Faculty, Residents, and Staff,

Hopefully as you read this, the province is truly “Open for Summer”. It will be great to be able to socialize with family, friends, and colleagues with fewer restrictions. The pandemic has been extremely challenging for all of us as we provide orthopaedic care to Calgarians and Albertans. I would like to thank each and every one of you for your collective efforts in providing this care and adapting to new methods of communicating with patients, each other, and the Section.

Since the last update in April there have been several developments within Calgary Orthopaedics:

1. Recruitment at PLC and RGH for Arthroplasty/Trauma Surgeons has been completed. Congratulations to Drs. Jeremy Kubik (PLC) and Denis Joly (RGH)!
2. Recruitment at SHC for a Sports Medicine Knee Surgeon is ongoing.
3. The Connect Care Clinical Information System implementation is progressing with PLC and ACH going live in November. Training for the system will begin in earnest later this summer. Thank you to all Section members who have stepped up to be Super Users/Trainers.
4. The Senior Surgeon Policy is being adapted to our Section and has provided us with an opportunity to revisit late stage practice transitions. Further information will be forthcoming.
5. The Section developed a brief Innovation Strategy document that has been shared with the Calgary Health Foundation and other partners. The Section will continue to explore philanthropic opportunities to support our academic and clinical programs.
6. The 50<sup>th</sup> Anniversary of the U of C Orthopaedic Residency Program has been postponed until July 2022. Stay tuned for further information.
7. Congratulations to all finishing Residents and Fellows! I hope you take fond memories with you as you embark on the next stage of your careers. Welcome to the new R1's!

Finally, I hope that all of you have the opportunity to take a well-deserved vacation this summer. It is critical for our well-being as healthcare providers to take time for ourselves and our families.

Best wishes,  
Jason Werle  
Head, Section of Orthopaedic Surgery

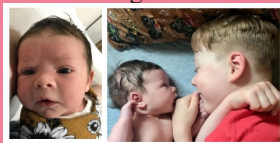
### Education – Making the Grade!

Welcome to our new Residents who started on July 1<sup>st</sup>: Manjot Birk (University of British Columbia); Anna-Lee Policicchio (Northern Ontario School of Medicine); Brodie Ritchie (University of Alberta) Gareth Ryan and Ethan Sanders (both from the University of Toronto)

Kudos to our 2020-2021 R5s Lee Fruson, Joe Kendal, Madison Litowski, and Sarup Sridharan on successfully passing their Royal College exams – Congratulations!

Congratulations to Jennifer Purnell and Murray Wong on being nominated as the Chief Residents for the upcoming 2021–2022 academic year.

Congratulations to Bryan Heard (R3) and Erin on the arrival of their new daughter, Remy Shannon, who was born on June 4<sup>th</sup> and weighed 7 lbs 3 oz – Remy is a little sister to big brother Rowan!



### Research – Skeletal Mentions!

Congratulations to all participants of the April 22, 2021 Orthopaedic Resident Research Day – Awardees are: Proposal 1<sup>st</sup> Place - **Dr. Laura Morrison** “Assessment of post-call motor function in Orthopaedic Surgery Residents: A comparison of the night float model and the standard call model” (Supervisors: Drs. Fred Nicholls and Prism Schneider) – Dr. Morrison also received the Proposal People’s Choice Award for the same project; Podium 1<sup>st</sup> Place - **Dr. Annalise Abbott** “Effectiveness of immune checkpoint inhibitors on bone metastases in non-small-cell lung cancer” (Supervisor: Dr. Michael Monument); Podium Runner-up - **Dr. Daniel You** “Patients with hip fractures treated with arthroplasty demonstrate prolonged hypercoagulability and increased venous thromboembolism risk” (Supervisor: Dr. Prism Schneider); and Podium People’s Choice Award - **Dr. Murray Wong** “Topical vancomycin for the prevention of periprosthetic joint infection in hip and knee arthroplasty” (Supervisors: Dr. Richard Ng and Dr. Nicholas Desy)

Faculty Seed Grant Applications are currently in the review process with expected decisions to take place in early summer.

Request for COREF Applications will be distributed to Residents/Faculty in July with a deadline date of September 12<sup>th</sup>.

### News from the McCaig Institute for Bone and Joint Health

Please mark your Calendars for the following on-line events: (1) 6<sup>th</sup> Annual McCaig Institute Summer Student Symposium, Thursday, August 19<sup>th</sup> from 9:00 am to 12:00 pm - event will showcase summer research projects and celebrate the successes of the McCaig Institute summer students; and (2) Cy Frank Legacy Lecture, Monday September 13<sup>th</sup> from 4:00-5:30 pm - Dr. William Ghali, Vice-President (Research) at the University of Calgary is the guest lecturer. More details (i.e. registration, etc.) will be provided closer to the date or by contacting the McCaig Institute at [mccaig@ucalgary.ca](mailto:mccaig@ucalgary.ca).

### Course Organization/Participation:

Mike Monument and Ganesh Swamy were adjudicators at the 6<sup>th</sup> Annual Surgical Fellows and Extended Residents Research Symposium which took place on May 14<sup>th</sup>.

### Awards/Honours:

Congratulations to Nick Mohtadi and his coauthors who recently received the “Best Original Article Award” in the JISAKOS Best Article competition which was announced by the Journal of ISAKOS (JISAKOS) Editorial Board and the ISAKOS Board of Directors (the Best Article competition was conducted as part of the celebration of our ISAKOS 25<sup>th</sup> Anniversary and the JISAKOS 5<sup>th</sup> Anniversary). The award will be acknowledged at the 13<sup>th</sup> Biennial Congress in Cape Town on November 29, 2021. With regards to the financial part of this award, the authorship team donated it back to the ISAKOS Annual Fund. The award was for the following article: CL Ardem, G Ekas, H Grindem, H Moksnes, AF Anderson, F Chotel, M Cohen, M Forssblad, TJ Ganley, JA Feller, J Karlsson, MS Kocher, RF LaPrade, M McNamee, B Mandelbaum, L Micheli, N Mohtadi, B Reider, J Roe, R Seil, R Siebold, HJ Silvers-Graneli, T Soligard, E Witvrouw, L Engebretsen: 2018 International Olympic Committee consensus statement on prevention, diagnosis and management of paediatric anterior cruciate ligament (ACL) injuries. JISAKOS 2018;3:66–82. doi:10.1136/jisakos-2018-000200.

On May 14<sup>th</sup> the Department of Surgery’s 6<sup>th</sup> Annual Surgical Fellows and Extended Residents Research Symposium took place and the Research Awardees for Room 2 (Orthopaedics) were: 1<sup>st</sup> Place - Osama Elsewaisy “Evidence for tibial stem extension use in high BMI total knee arthroplasty patients: A system review and meta-analysis”, and 2<sup>nd</sup> Place – Joep Kitzen “Biomechanical evaluation of optimal plate configuration for mid-shaft clavicle fracture fixation: Single plating compared to dual plating”

### Grants:

Brent Edwards and Prism Schneider were awarded a Canadian Orthopaedic Research Legacy (CORL) Grant for their project: “Effects of high-dose bisphosphonate treatment on fatigue properties and fracture patterns in ovariectomized rabbits”

### Presentations:

Anand Masson, a trainee with Roman Krawetz, presented “Structure-function relationship in murine articular cartilage” at the April 7<sup>th</sup> McCaig Institute weekly seminar

The following Orthopaedic Fellows were presenters at the 6<sup>th</sup> Annual Surgical Fellows and Extended Residents Research Symposium which took place on May 14<sup>th</sup>: R. Bansal, T. Coromina, O. Elsewaisy, M.R. Filezio, J. Kitzen, M. Mastel, R. Sidhu, J. Smith, S. Tarrant, and T. Thangarajah Nathan Evaniew presented “Evidence-based medicine: Principles and innovations” at the May 19<sup>th</sup> McCaig Institute weekly seminar.

### Other:

Academic Promotions effective July 1st: Jeremy LaMothe – Clinical Assistant Professor; Ian Lo – Clinical Associate Professor; and Shannon Puloski – Clinical Associate Professor

Brent Edwards and his team (including Prism Schneider) were highlighted in the University’s a monthly newsletter of discovery and innovation “May 2021 Explore UCalgary” for their research on rare fractures in post-menopausal women

### Some recent publications:

KI Barton, BJ Heard, A Kroker, JL Sevic, DA Raymond, M Chung, Y Achari, CR Martin, CB Frank, SK Boyd, NG Shrive and DA Hart: Structural consequences of a partial anterior cruciate ligament injury on remaining joint integrity: Evidence for ligament and bone changes over time in an ovine model. Am J Sports Med. 2021 Mar;49(3):637-648. doi: 10.1177/0363546520985279.

D Hart and N Shrive are featured in the April 2021 Edition of Open Access Government (ISSN 2516-3817) for their article: Osteoarthritis: Innovation in biomechanics, biology and imaging. Pages 110-113.

DA Hart, J Werle, J Robert, and A Kania-Richmond: Long wait times for knee and hip total joint replacement in Canada: An isolated health system problem, or a symptom of a larger problem?, Osteoarthritis and Cartilage Open 2021 3(2): 2665-2691, 100141, ISSN doi.org/10.1016/j.ocarto.2021.100141

Aoude A, Litowski M, Aldebeyan S, Fisher C, Hall H, Manson N, Bailey CS, Ahn H, Abraham E, Nataraj A, Paquet J, Stratton A, Christie S, Cadotte D, Nicholls F, Soroceanu A, Rampersaud YR, and Thomas K C: A comparison of patient and surgeon expectations of spine surgical outcomes. Global Spine Journal, 2021, 11(3), 331-337. <https://doi.org/10.1177/2192568220907603>

Hawker G, Connor-Sprady B, Bohm E, Dunbar MJ, CA Jones, Ravi B, Noseworthy T, Dick D, Powell J, Paulose P, and Marshall DA: Patients’ preoperative expectations of total knee arthroplasty and satisfaction with outcomes at one year: A prospective cohort study. Arthritis and Rheumatology, Feb 2021;73(2):223-231. DOI: 10.1002/art.41510

Axelrod D, Trask K, Buckley RE, and Johal H: The Canadian Orthopaedic Trauma Society lessons learned from 30 years of collaborative high-impact research in fracture care. The Bone & Joint Journal 103-B(5):722-725. Online May 1, 2021 <https://online.boneandjoint.org.uk/doi/full/10.1302/0301-620X.103B5.BJJ-2020-2245>

Rossiter ND, Chesser TJS and Costa ML: The Canadian Orthopaedic Trauma Society (COTS): 30 years of randomized controlled trials. The Bone & Joint Journal 103-B(5):807-808, May 2021. Online May 1, 2021. Many of our Calgary Orthopaedic Trauma Surgeons are part of COTS and their success. <https://online.boneandjoint.org.uk/doi/fpi/10.1302/0301-620X.103B5.BJJ-2021-0231>

Ludwig TE, Samuel TL, Vergouwen M and White NJ: COVID-19 orthopaedic trauma volumes: A Canadian experience during lockdown and staged reopening. OTA International: June 2021 4(2):pe134 doi: 10.1097/OI9.000000000000134

Abusara Z, Haider I, Moo EK, Miller S, Timmermann S and Herzog W: Chondrocyte morphology as an indicators of collagen network integrity. Connective Tissue Research (2021) Published online on May 18, 2021, DOI: 10.1080/03008207.2021.1922398

Kooner S, Kubik J, Mahdavi S, Piroozfar SG, Khong H, MNoohan K, Batuyong E and Sharma R: Do psychiatric disorders affect patient reported outcomes and clinical outcomes post total hip and knee arthroplasty? SAGE Open Med. 2021 April 29, 9 DOI: 10.1177/20503121211012254.



Calgary Orthopaedic Group cycling club” (COGcc), hosted an Orthopaedic Faculty vs Resident virtual bike race on May 6<sup>th</sup> at 5:00 pm. A total of 4 Faculty and 2 Residents participated in this fun event. COGcc would like to thank Resident Daniel You and medical student Michael Leslie for creating and digitizing its logo



Orthopaedic Website:  
Orthopaedic Surgeons if you go under the Physician Resources Tab there are links provided to get you to your UofC and AHS website log-ins

For our faculty and past and current residents, the celebration of **50 Years of Calgary Orthopaedic Surgery has been postponed and will now take place on July 8-9, 2022!** On-line registration will be available in Spring 2022 – watch for future emails. If you have any questions, contact Judy at [acortho@ucalgary.ca](mailto:acortho@ucalgary.ca).

**The Calgary Section of Orthopaedic Community was well represented at the 2021 COA, CORS, CORA Meetings which took virtually in June – Congratulations to all of you:**

### **COA MODERATORS**

June 17: Andrew Dodd - Foot and Ankle; Shannon Puloski - Trauma; Prism Schneider – Trauma // June 18: James Powell - Arthroplasty

### **COA SYMPOSIUM PRESENTATIONS**

Aaron Bois: Management of Chronic Pectoralis Major Muscle Tears

Nicholas Mohtadi: Bone-Patellar Tendon-Bone (BTB)

Prism Schneider: Bisphosphonate Fractures - Best Treatment

Gurpreet Dhaliwal: Tips and Pearls for the Comminuted Dorsal Barton's with Instability

**COA PRESIDENTS' PANEL – LOOKING BACK, LOOKING FORWARD:** Robert Hollinshead was one of twelve panel members

### **COA PODIUM PRESENTATIONS**

Ahmed El-Bakoury, Peter Salat, Kelly Johnston, Saboura Mahdavi, Sophie Piroozfar, Andrea Veljkovic, Richard Walker, Rajrishi Sharma: Short External Rotator Tendon Integrity During Anterior Approach Total Hip Arthroplasty – A Prospective Cohort MRI Study

Marlis Sabo, Lisa Murphy, Andrew Walker, Melissa Jack: Beginning, Middle, and End: Understanding the Recovery Trajectories of Rotator Cuff Surgical Patients

Richard Buckley, Paul Duffy, Robert Korley, Ryan Martin, Samara Schneider, Stephanie Yee, Kimberly Rondeau, Prism Schneider: Utility of Fibular Fixation in Same-Level Tibia and Fibula Fractures: A Randomized Controlled Trial

Aresh Sepehr, Daniel You, Akshay Lobo, Prism Schneider, Kelly Lefavre, Pierre Guy: Comparison of Patient Reported Outcomes Following Suprapatellar Versus Infrapatellar Nailing Techniques for Tibial Shaft Fractures: A Systematic Review and Meta-Analysis

Annalise Abbott, Daniel Meyers, Igor Stukalin, Prism Schneider, Don Morris, Winson Cheung, Shannon Puloski, Michael Monument: Comparing the Efficacy of Immunotherapies on Bone and Visceral Metastases in Non-Small-Cell Lung Cancer

Daniel You, Halli Krzyzaniak, Benjamin Viner, Michael Monument, Prism Schneider: Rate of Venous Thromboembolism in Patients With Metastatic Bone Disease Requiring Orthopaedic Surgery: A Systematic Review

Daniel You, Yan Xu, Halli Krzyzaniak, Robert Korley, Marc Carrier, Prism Schneider: Safety of Expedited Surgical Protocols in Anticoagulated Patients With Hip Fracture: A Systematic Review and Meta-Analysis

Daniel You, Robert Korley, Richard Buckley, Paul Duffy, Ryan Martin, Andrea Soo, Prism Schneider: Treatment With Arthroplasty Following Hip Fracture Is Associated With Hypercoagulability and Increased Venous Thromboembolism Risk

Taryn Ludwig, Jonathan Bourget-Murray, Sarup Sridharan, Ariana Frederick, Kelly Johnston, Brent Edwards, Fred Nicholls: Establishing Normative Relationship of Spinopelvic Alignment to Femoroacetabular Orientation

### **COA POSTER PRESENTATIONS**

Jonathan Bourget-Murray, Rohit Bansal, Sophie Piroozfar, Andrew Johnson, Kelly Johnston, Alexandra Soroceanu, James N. Powell: Assessment of Risk Factors for Early-Onset Deep Surgical Site Infection following Primary Total Hip Arthroplasty

Jason Werle, James MacKenzie, Hoa Khong, Lindsay Pittman, Christopher Smith: Ten-year functional outcomes and revision rates for Birmingham Hip Resurfacing

Daniel You, Yan Xu, Brett Ponich, Paul Ronksley, Leslie Skeith, Robert Korley, Marc Carrier, Prism Schneider: Effect of Oral Anticoagulant Use on Surgical Delay and Mortality in Hip Fracture: A Systematic Review and Meta-analysis

Daniel You, Halli Krzyzaniak, Joseph Kendal, Ryan Martin, Prism Schneider: Outcomes and Complications after Dual Plate vs. Single Plate Fixation of Displaced Mid-Shaft Clavicle Fractures: A Systematic Review and Meta-Analysis

Michael James, Cory Kwong, Saho Tsuchiya, Kristie More, Justin LeBlanc, Ian Lo, Aaron Bois: The Bony Apprehension Test for Identifying Critical and Sub-Critical Bone Loss in Patients with Traumatic Anterior Shoulder Instability

Annick den Daas, Murray Wong, Mansur Halai, Fred Nicholls, Brent Edwards, Prism Schneider, Kimberly Rondeau: Validation of the Calgary Femorotibial Ratio using EOS imaging

Martina Vergouwen, Tina Samuel, Eric Sayre, Neil White: FROST: Factors Predicting Orthopaedic Trauma Volumes

David MacDonald, David Neilly, Prism Schneider, Sofia Bzovsky, Sheila Sprague, Daniel Axelrod, Rudolf Poolman, Frede Frihagen, Mohit Bhandari, Marc Swiontkowski, Emil Schemitsch, Iain Stevenson, FAITH Investigators, HEALTH Investigators: Venous Thromboembolism in Hip Fracture Patients: A Subanalysis of the FAITH and HEALTH Trials

Taryn Ludwig, Martina Vergouwen, Tina Samuel, Neil White: COVID-19 Orthopaedic Trauma Volumes: A Canadian Experience During Lockdown and Staged Re-Opening

Murray Wong, Charmaine Wiens, Richard Buckley, Andrew Dodd, Paul Duffy, Robert Korley, Ryan Martin, Brent Edwards, Prism Schneider: 4DCT Shows Improved Syndesmotic Motion after Flexible Fixation Compared to Rigid Fixation

Daniel You, Robert Korley, Paul Duffy, Ryan Martin, Andrea Soo, Prism Schneider: Individual Hypercoagulable and Inflammatory Response Following Surgical Fixation of Femur Fractures

### **CORA PODIUM PRESENTATIONS**

Daniel You, Robert Korley, Richard Buckley, Paul Duffy, Ryan Martin, Andrea Soo, Prism Schneider: Treatment With Arthroplasty Following Hip Fracture Is Associated With Hypercoagulability and Increased Venous Thromboembolism Risk

Ryan Lohre, Aaron Bois, J Whitcomb Pollock, Peter Lapner, Katie McIlquham, George Athwal, Danny Goel: Effectiveness of Immersive Virtual Reality for Orthopaedic Skill and Knowledge Acquisition: A Randomized Controlled Trial

### **CORA POSTER PRESENTATIONS**

Joseph Kendal, Halli Krzyzaniak, Daniel You, Ryan Martin, Prism Schneider: Outcomes and Complications after Dual Plate vs. Single Plate Fixation of Displaced Mid-Shaft Clavicle Fractures: A Systematic Review and Meta-Analysis

### **CORS POSTER PRESENTATIONS**

Phillip Spanswick, Mohammad Salem, Danielle Whittier, Robert Korley, Steven Boyd, Prism Schneider: Development of Micro Numerical Model of Distal Radius Fractures

Chantal de Bakker, Bryce Besler, Richard Walker, Justin Tse, Sarah Manske, Ryan Martin, Stephen French, Andrew Dodd, Steven Boyd: Using Dual-Energy CT to Image ACL Injury-Related Bone Marrow Edema