







# No BONES About It

A Newsletter for the Calgary Orthopaedic Community

2025 January

#### Words of Wisdom by Werle!

Dear Orthopaedic Surgeons, Residents, and Staff,

Happy New Year! I hope this newsletter finds you rested and recharged from the holiday season and that you were able to celebrate and relax with family and friends.

As we enter 2025, I would like to reflect on the previous year for the Section of Orthopaedic Surgery.

Congratulations to Drs. Abelseth, Bowen, Cho, and MacKenzie who retired in 2024. Your contributions to orthopaedic surgical care and academic pursuits as Section members has left an indelible mark on patients and your fellow providers. Thank you for your contributions and best wishes in your future endeavours.

The Section welcomed new recruits including Dr. Randa Berdusco (PLC), Dr. Denise Mackey (SHC), Dr. Jennifer Purnell (PLC), and Dr. Devin Lemmex (SHC). We welcome our new orthopaedic colleagues to Calgary!

Re-focusing of the healthcare system in our province continues with the announcement that Acute Care Alberta (ACA) will be established in Spring 2025. The Surgery Program Improvement and Integration Network (PIN) has been established in place of the Surgery and Bone and Joint Health Strategic Clinical Networks. The priorities of the Surgery PIN will include Connect Care optimization, Rapid Access Clinics (RAC's), and wait time management. The Fracture Liaison Service (FLS) is now under the Medicine PIN priorities. The Facilitated Access to Specialist Treatment (FAST) program now falls under the newly announced Primary Care Alberta (PCA).

Many questions remain as to future support for established and new quality improvement programs in Orthopaedic Surgery. The Section continues to advocate on your behalf. A unique provincial partnership between the AOS and ABJHI called the Orthopaedic Advisory Council is being explored. Orthopaedic surgeons and team members are uniquely positioned to inform and lead changes in the system that can benefit all Albertans. I encourage all of you to actively participate and ensure your voice is heard.

On a positive note, the COA has just announced that Calgary will be hosting the 2027 COA Annual Meeting in no small part due to the success of the 2023 event.

In closing, thank you for all you do day in and day out to help patients with bone and joint conditions. I look forward to 2025 with hope and optimism. On behalf of the Section of Orthopaedics, I wish each of you a healthy, happy, and prosperous year ahead!

Sincerely,

Jason Werle

Head, Section of Orthopaedic Surgery

## **Education – Making the Grade!**

CBD – The Competency-by-Design evaluation platform has now been swapped to the MedSIS platform. This PGME-wide change has been a challenge to implement, but resident information is now transferred and more easily visible to residents and their academic advisors. We are actively recruiting academic advisors, which is a compensated position.

Social events - The annual Resident Holiday Event took place on Thursday December 19, 2024. The Geoff Cragg Ski Day will be on Friday January 31, 2025, at Lake Louise Ski Resort. We invite faculty to join the residents for ski day. Please contact Judy Crawford to sign up, or to sponsor the cost of the day for a resident.

CaRMS – We have received our CaRMS files and thank those surgeons who have volunteered their time for file review (which is ongoing). The CaRMS interview date will be on Wednesday February 5, 2025. We will be hosting a virtual (Zoom-based) CaRMS social on the evening of February 4 to introduce our applicants to the program. Details will be sent out shortly, but please consider attending to showcase our program and our community.

Retreat - The annual Resident Retreat is scheduled for May 8-9, 2025 in Canmore.

Congratulations – Brodie Ritchie as a recipient of the Diversity in Leadership Award from the Canadian Orthopaedic Association.

Research – CORRG continues to generate high quality research publications and presentations. Congratulations to all of the residents and Dr. Schneider for their work.

# Research – Skeletal Mentions!

Congratulations to our Research Awardees from our 2024-2025 grant competitions: COREF (7 – CORRG, Tim Lasswell, Mallika Makkar, Kaja Matovinovic, Gareth Ryan, Ethan Sanders, and Meredith Stadnyk), Catalyst Grant (2 – Herman Johal and Team; Prism Schneider and Team). FOE Awardee will be announced in January.

A huge thank you to all involved in the review process of these competitions with special thanks to Dr. Paul Salo who chaired the review process for the COREF and Catalyst Grant competitions — we could not hold these competitions without you!

We are in the planning stages for a special The Frank Talks session, which will take place on March 5, 2025, to commemorate the 10<sup>th</sup> anniversary of the passing of Dr. Cy Frank. Faculty invitations will be distributed early in the new year (this is a faculty and invitated guests only event).

Orthopaedic Resident Research Day will be held on Thursday, April 3, 2025 and our visiting professor/guest adjudicator will be Dr. Ted Miclau from University of California – San Francisco.

Upcoming Grant Competitions for the 2025-2026 Fiscal Year: Fraternal Order of Eagles and Catalyst Grant Call for LOIs will be distributed in early February 2025, with a March 1, 2025 deadline for applications. Full Applications for those invited based on the LOI adjudication, will be due on March 31, 2025; COREF call for Applications will go out in July, 2025 with a deadline at the end of September, 2025. Watch your emails for these exciting Call for Applications!

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

Changes within the McCaig Institute Operations Office: Yvonne Durnin has taken on the role as Programs and Engagements Specialist; a new Administrative Coordinator will start soon; and Sandra Gollnick is no longer with the Institute.

In Winter/Spring 2025 the McCaig Institute will be hosting the SPARC Speed Dating Event and Research Competition – watch for announcements.

#### 2025 Orthopaedic Surgery Important Dates - Mark Your Calendar

- January 31 Geoff Cragg Ski Day
  February 27 Annual Spencer McLean Memorial Faculty vs Residents Hockey Game
  - March 5 The Frank Talks (faculty and invited guests only)
    April 3 Orthopaedic Resident Research Day
    - <u>April 11</u> 2<sup>nd</sup> Annual Arthroplasty Symposium <u>November 30</u> Orthopaedic Family Holiday Brunch Contact Judy at acortho@ucalgary.ca if you wish to receive more information about any of these events.

#### Medical Mission:

Led by Paul Duffy along with Robert Korley, Prism Schneider, Ethan Sanders and Laurel Collins, Team Broken Earth travelled to Antigua, Guatemala for a medical mission led, to perform much needed orthopaedic surgical procedures and support efforts surrounding local domestic violence initiatives.

#### Course Organization/Participation:

Marlis Sabo "Have Question, Will Research and Tips for Poster Presentation" and Carmen Brauer "Health Economics" were presenters at the UofC Principles of Research Course offered by the Department of Surgery Office of Surgical Fellowship on October 3.

Fred Nicholls "The Shape of Things to Come: The UCalgary Normative Alignment Database" and Ganesh Swamy "Spine Issues: Current Knowledge and Future Research" were presenters at the McCaig Institute's Annual Wood Forum which took place on November 2.

David Hart presented his research at the Hope for Hypermobility Patient Research Education Day on November 16.

# Awards/Honours:

Nick Mohtadi received the Lifetime Achievement Award from the Canadian Orthopaedics Association.

Logan Mahoney (trainee with Mike Monument) is the recipient of the 2024 Linda Marchuk Award.

Nick Mohtadi is the first Orthopaedic Surgeon in Canada to be granted the designation: Diplomate of the Royal College of Physicians and Surgeons Canada (DRCPSC) with the Area of Focussed Competence in Sport and Exercise Medicine.

Brodie Ritchie ranked number one in the most recent COA Diversity in Leadership Scholarship competition.

David Hart along with Ranita Manocha, Koren Roach, Richard Walker and Donald Golden, through the Better Mobility Lab, received a significant donation from the Canerector Foundation to support the team's collaborative work exploring the impact of the menstrual cycle on knee joint structure and function.

#### Grants:

Ranita Manocha, along with her collaborators Nick Mohtadi, Victor Lun, Larry Katz, Krista Best, Mill Miller and Francois Routhier received a grant from WCB-Alberta for their research project "Pragmatic implementation of a walking aid skills training program to prevent secondary harms"

Ganesh Swamy has received award funding from the Alberta Spine Foundation to support two projects: "Creation of a lumbar spine imaging hub", and "Surveillance of patients with the M6-C prosthesis for osteolysis – correlating osteolysis with high-resolution kinematic imaging".

#### Presentations

June 2024 Canadian Academy of Sport and Exercise Medicine Conference in Niagara Falls - the following individuals had presentations: *Podium Presentations* – (a) Dana Hunter (research coordinator with Nick Mohtadi) "Randomized clinical feasibility trial: Comparing a restrictive and protective range-of-motion brace for non-surgical management of the medial collateral ligament of the knee"; (b) Nick Mohtadi "Long-term quality of life and clinical outcomes of a randomized clinical trial comparing patellar tendon, hamstring tendon and double-bundle hamstring ACL reconstructions at 10-year post-operatively". *Poster Presentations* – (a) Dana Hunter (research coordinator with Nick Mohtadi) "Predicting adherence to brace-wearing for non-surgical management of the medial collateral ligament of the knee".

Donald Golden (trainee with David Hart and Ranita Manocha) presented "Tips, tricks and use of the KT-2000 arthrometer for measuring joint laxity of the knee" at the McCaig Institute weekly seminar on October 24.

Annual Connective Tissue Oncology Society Meeting, November 13-16, 2024, San Diego: (a) Karys Hildebrand, Kurt Hildebrand, Kiran Narta, Ted Verhey, Carolina Salazar Arcila, Sorana Morrissy, Michael Monument: "Interferon stimulated gene scores are elevated in the myeloid compartment of murine KP undifferentiated pleomorphic sarcoma tumors treated with translational STING agonists" (\*Winner of best poster in the immunology and immunotherapy section); (b) Kurt Hildebrand, Karys Hildebrand, Carolina Salazar Arcila, Franz Zemp, Danyel Evseev, Hyojin Song, Kiran Narta, Ted Verhey, Dragana Ponjevic, Roman Krawetz, John Matyas, Sorana Morrissy, Douglas Mahoney, Michael Monument: "Investigating how tumour associated macrophages influence the efficacy of cart therapy in a murine model of soft tissue sarcoma"; (c) Kurt Hildebrand, Karys Hildebrand, Carolina Salazar Arcila, Franz Zemp, Arvind Singla, Kiran Narta, Ted Verhey, Dragana Ponjevic, Roman Krawetz, John Matyas, Sorana Morissy, Douglas Mahoney, Michael Monument: "Characterization of two novel immune competent, murine models of soft tissue sarcoma".

Canadian Arthroplasty Society Meeting, November 29-30, 2024 in Toronto – Presenters: (a) Kelly Johnston "Greater kinematic alignment following unicompartmental compared to total knee arthroplasty: A randomized clinical trail"; (c) Jason Werle "Comparing Alberta hip and knee arthroplasty revision rates and reasons for revision to the Canadian Joint Replacement Registry (CJRR)"; (d) within the Acetabular Bone Loss Symposium: (i) Jason Werle was the Moderator; (ii) Kelly Johnston "Substantial acetabular bone loss, radiological interpretation and clinical significance – How big is the problem in Canada?"; (iii) Case Discussions by Jason Werle, Jim Powell and Kelly Johnston.

Laura Morrison represented Orthopaedics and the Department of Surgery at Canadian Conference for the Advancement of Surgical Education (C-CASE) 2024 Conference October 17-18 in Toronto, where she presented on "Robotic assessment of post-call sensorimotor and cognitive function in Orthopaedic Surgery Residents" at the C-CASE Golden Scalpel Competition.

#### Other:

Raj Sharma has been appointed the Medical Director for Chartered Surgical Facilities, effective September 1st.

Lisa Yamaura, trainee with Prism Schneider, on Oct 10 she successfully defended her PhD thesis "Multi-modal evaluation of perioperative hypercoagulability in orthopaedic surgery patients with metastatic bone disease".

Jason Werle has been appointed as the Executive Director of the Alberta Bone and Joint Health Institute (ABJHI) effective October 1.

Emily Bangsboll, trainee with Ganesh Swamy and Janet Ronsky successfully defended her MSc thesis "In vivo kinematic outcomes of cervical total disc arthroplasty using dual fluoroscopy: A longitudinal collective case study"

#### Publications:

- Fortuna R, Wang W, Mayengbam S, Tuplin EWN, Sampsell K, Sharkey KA, Hart DA, Reimar RA (2024) Effect of prebiotic fiber on physical function and gut microbiota in adults, mostly women, with knee osteoarthritis and obesity: A randomized controlled trial. European Journal of Nutrition, 10.1007/s00394-024-03415.2. Advance online publication https://doi.org/10.1007s/003-024-03415-w.
- Clark M, Kerslake S, Bøe B, Hiemstra L (2024). Being a woman and an orthopaedic surgeons A primer on the challenges we face. Journal of ISAKOS https://doi.org/10.1016/j.jiasko.2024.05.008.
- Phelps J, Hart DA, Mitha AP, Duncan NA, Sen A (2024). Extracellular vesicles generated by mesenchymal stem cells in stirred suspension bioreactors promote angiogenesis in human-brain-derived endothelial cells. International Journal of Molecular Sciences, 25(10), 5219. https://doi.org/10.3390/ijms25105219.
- Alexander CJ, Manske SL, Edwards WB, Gabel L (2024). Adapting the intensity gradient for use with count-based accelerometry data in children and adolescents. Sensors (Basel, Switzerland), 24(10), 3019. https://doi.org/10.3390/s24103019.
- Otoo BS, Moo EK, Komeili A, Hart DA, Herzog H (2024) Chondrocyte deformation during the unloading phase of cyclic compression loading, Journal of Biomechanics, Volume 171, 112179, ISSN 0021-9290, https://doig.org/10.1015/j.jbiomech.2024.112179.
- Shimomura K, Ando W, Hart DA, Nakamura, N (2024). A novel scaffold-free mesenchymal stem cell-derived tissue engineered construct for articular cartilage restoration From basic to clinic. Regenerative therapy, 26, 124–131. https://doi.org/10.1016/j.reth.2024.05.007.
- Kania-Richmond A, Beaupre LA, Jessiman-Perreault G, Tribo D, Martyn J, Hart DA, Robert J, Slomp M, Jones CA (2024) Participants' perceived benefits from the GLA:D™ program for individuals living with hip and knee osteoarthritis: a qualitative study. Journal of patient-reported outcomes, 8(1), 62 https://doi.org/10.1186/s41687-024-00740-w.
- Kuczynski MT, Tse JJ, Dhaliwal G, Hiscox C, Vergouwen M, White NJ, Manske SL. Investigating the utility of HR-pQCT for the assessment of joint space and bone mineral density in hand osteoarthritis. Osteoarthritis Imaging. In Press. https://doi.org/10.1016/j.ostima.2024.100233.
- Leech S, Khaira A, Epp S, Schneider G, Werle J, Ng R, Harris AD, Manske SL. Demographic, pain and quality of life factors in unilateral and bilateral total knee arthroplasty: a population-based retrospective cohort study of 23,033 patients. Journal of Science and Medicine. 2024; 5(1). DOI: 10.37714/JOSAM.V4I1.114.
- Hart DA. Lithium ions as modulators of complex biological processes: The conundrum of multiple targets, responsiveness and non-responsiveness, and the potential to prevent or correct dysregulation of systems during aging and in disease. Biomolecules. 2024; 14(8):905. https://doi.org/10.3390/biom14080905.
- Sharma R, Group CART CART; Calgary Arthroplasty Research Trust (C.A.R.T.) Group: Skin temperature following total knee arthroplasty: A longitudinal observational study. J Arthroplasty. Published online June 7, 2024. doi:10.1016/j.arth.2024.06.001.
- CORRG. Quantification of radiation exposure in Canadian orthopaedic surgery residents. JBJS Open Access 9(3):e23.00170, July-September 2024. | DOI: 10.2106/JBJS.OA.23.00170.
- Abughazaleh N, Seerattan RA, Hart DA, Reimer RA, Herzog W: A novel Osteoarthritis scoring system to separate typical OA joint degeneration from non-typical lesions in male Sprague Dawley rats. Osteoarthr Cartil Open. 2024;6(4):100521. Published 2024 Sep 7. doi:10.1016/j.ocarto.2024.100521.
- Abughazaleh N, Smith H, Seerattan RA, Hart D, Reimer R, Herzog W: Development of shoulder osteoarthritis and bone lesions in female and male rats subjected to a high fat/sucrose diet. Sci Rep 14, 25871 (2024). https://doi.org/10.1038/s41598-024-76703-4.
- Thanh N, Eubank B, Waye A, Werle J, Walker R, Hart D, Sheps D, Schneider G, Takahashi, T, Wasylak T, Slomp M: Costs of physician and diagnostic imaging services for shoulder, knee, and low back pain conditions: A population-based study in Alberta, Canada. British Journal of Pain. (2024) DOI: 10.1177/20494637241298246...
- Rooke G, Sharplin P, Buckley R: Healed ORIF in a fibula fracture hardware removal or hardware retention for the fibula in a patient with minor symptoms? Injury 55 2024 111190.
- Kendall J, Andrew Caines, Richard Buckley. Do we fix front and back of every APC pelvic injury? Injury 55 2024 111322 https://doi.org/10.1016/j.injury.2024.111322.
- Ryan G, Poon J, Buckley R: ORIF or ORIF with Primary Subtalar Arthrodesis (PSTA) for a Sanders IV fracture? Injury 55 2024. 111454 https://doi.org/10.1016/j.injury.2024.111454.
- Rosa R, Buckley R: Leash-related injuries associated with dog walking: An understudied risk for dog owners? Journal of American Veterinary Medical Association 2024 doi.org/10.2460/javma.23.11.0608.
- Rizos J, Hebert-Seropian S, Buckley R: Do we try to salvage too many traumatic limb injuries with reconstruction and flaps when we should be doing more amputations? Injury 55 2024 111489 https://doi.org/10.1016/j.injury.2024.111489.
- Stadnyk M, Gibbon S, Buckley R: Are dual, lateral and medial plates, better than a single lateral locking plates for osteoporotic intra-articular distal femur fractures? Injury 55 2024 111592 https://doi.org/10.1016/j.injury.2024.111592.
- Ryan G, Birk M, Buckley R. What is the best pre-surgical scrub for skin antisepsis in fracture surgery? Injury 55 2024 111649 https://doi.org/10/1016/j.injury.2024.111649.
- Kitzen J, Jacobs E, Buckley R: Should a spinal orthosis be used for Thoracolumbar fractures that are minimally displaced and stable? Injury 55 2024 111752.
- Buckley R: Patient education in today's fracture clinic The happy fracture clinic. Injury 55 2025 111811.
- Willms S, Caines A, Buckley R. Is it true that most intr-articular glenoid fractures should have surgery? Injury 55 2025 111880.
- Ryan G, Birk M, Buckley R. What is the best surgical treatment for the geriatric patient with a severe ankle or pilon fracture TTC nail or ORIF? Injury 55 2024 111978.
- Matovinovic K, Leslie M, Buckley R: Do scoring scales work for determining salvage of extremities with severe trauma? Injury 55 2024 112015.
- The danger of distracted driving: A substudy of patient perception data from the DRIVESAFE Observational study (A Canadina multicenter study) JOT July 2024 DOI: 10.1097/BOT.0000000000002875.
- Is Aspirin an effective thromboprophylasis agent in high-risk patients: A Comprehensive Subpopulation Analysis of the PREVENT CLOT study. A METRC study with METRC coauthors 2024.
- The DrivSafe Team (A COTS study) The Dangers of Distracted Driving: A Substudy of Patient Perception Data from the DRIVSAFE Observational Study. JOT Vol 38, Number 10, page e347-e354, 2024 DOI:10.1097/BOT.000000000002875.