



Words of Wisdom by Werle!

Dear Orthopaedic Surgeons, Residents, Fellows, and Staff,

Happy New Year and Best Wishes for 2022!

I would like to take this opportunity to express my sincere gratitude to all of you for your contributions to the ongoing success of the Section of Orthopaedics. In the areas of clinical care delivery, education, research, leadership, and quality improvement, I am so very thankful for the members of our Residency, Section, and staff for their contributions on a daily basis.

In the area of research, I would like to highlight the exceptional report generated by Judy Crawford and Dr. Paul Salo. This document reviewed the return on investment for the Value Add funds that support research within our Section. Over the past 5 years, \$1.663M of Value Add funding has been allocated to 97 research projects. This has resulted in 83 manuscripts, 77 abstracts, and 97 presentations at regional, national, and international meetings. Most remarkably, these funds have been used to leverage an additional \$4.1M from external sources meaning that for every \$1.00 invested, a return of an additional \$2.46 was realized from external sources. Congratulations to all members of our Section and Research Portfolio for this undeniable success!

On the education front, we are moving toward Royal College Accreditation for the residency program. Thank you to Dr. Nick Desy, Dr. Peter Lewkonja, and Charmaine Martens, for their work in preparing for this important event in September 2022.

With regard to the Alberta Surgical Initiative (ASI), the RFP process for Chartered Surgical Facilities (CSF) is moving forward. This should mean additional surgical capacity will be added by early 2023. In the interim, the Clearpoint contract has been extended until September 20, 2022, for shoulder, soft tissue knee, foot & ankle, and hand & wrist outpatient surgical procedures. As well, the Central Access and Triage Calgary Zone committee, co-chaired by Dr. Peter Lewkonja and Dr. Oliver David, is proceeding with the establishment of patient referral pathways as part of the ASI. Thank you to everyone who is participating on these committees.

Congratulations to Dr. Marlis Sabo who will be on a one-year sabbatical from SHC. Welcome to Dr. Joe Costa and Dr. Denise Mackey who will be covering her position together. We also welcome Dr. Marcia Clark back from her one-year sabbatical from SHC and as Surgery Site Chief for SHC. Our Section will be recruiting three positions in the near future including an Arthroplasty/Trauma position at RGH, a Shoulder position at PLC, and a Pediatric Orthopaedic position at ACH. Thank you to all Section members, residents, and administrative staff for your assistance with the upcoming Search and Selection Committees.

Until next time, look after yourself and your families, stay safe and stay well!

Jason

Education – Making the Grade!

Congratulations to Erin Davison for being selected as a resident member for the Postgraduate Surgical Training Committee (PGSTC).

Congratulations to Laura Morrison for winning the 2022 Canadian Association for Medical Education (CAME) Rising Star Certificate of Excellence Award.

The Residency CaRMS interview date will be on Wednesday March 2, 2022.

The Royal College Orthopaedic Surgery exam dates are:

- Written - Monday April 11 and Tuesday April 12, 2022;
- Applied (oral) - Wednesday May 25, 2022.

In December, the COGcc took on the Calgary Emergency Medicine cyclists for a cycling competition that consisted of which group could complete the greatest number of kilometers of cycling between December 1 and December 18. Each group comprised of faculty, residents, medical students, and nurses. Despite having significantly less competitors, the COGcc won the competition by over 1000 kms and nearly doubled their meters of elevation. Thank you to all those who were able to contribute their hard earned mileage for the orthopaedic team!

Research – Skeletal Mentions!

Mark your calendars – The Frank Talks will be on March 22, 2022 – this event is open to all Orthopaedic Faculty Members.

The 2021 Fraternal Order of Eagles (FOE) funding competition is now closed and the applications are currently in the review process – decisions should be made by mid February.

2021 COREF - Our thanks to all who assisted in the review process and congratulations to all the 2021 COREF Awardees and their supervisors, and all involved in putting the applications together: Calgary Orthopaedic Residents Research Group - CORR (P. Schneider); Annalise Abbott (P. Schneider); Brent Benavides (M. Monument/S. Puloski); Laurel Collings (P. Schneider/R. Korley/R. Martin); Jarrett Moore and Annalise Abbott (L. Phillips); Anna-Lee Policicchio (P. Schneider); Murray Wong (N. Desy); and Logan Woods (P. Schneider).

A huge thank you to all the research award recipients who have provided detailed information in your annual reporting on the outcomes of various projects funded – this information has allowed us to create an Executive Summary of the return of investment of our programs for the past 5 years, which has been shared with the orthopaedic faculty and the Department of Surgery. This will be a living document and we will continue to incorporate the information you provide in future reports!

News from the McCaig Institute for Bone and Joint Health

In February 2022 the McCaig Institute will be hosting an in-person Speed Dating event – details to be distributed soon! Following this event there will be a McCaig Clinician/Scientist Seed Grant Funding Competition, offering several awards worth \$20,000.00 each.

Welcome to Sandra Gollnick who joined the McCaig Institute's operations team in November as the new Programs and Events Coordinator – you can reach her a sandra.gollnick@ucalgary.ca.

Course Organization/Participation:

Mike Monument and Marlis Sabo were presenters at the 5th Annual Surgical and Oncology Residents and Fellows Principles of Research Course which took place virtually on October 15th.

Jason Werle was a moderator for the November 25th Paper Session of the 10th Annual Meeting of the Canadian Arthroplasty Society (this meeting was held virtually on for four consecutive Thursday evenings in November and December).

Awards/Honours:

Danielle Whittier (recently graduated trainee whose supervisors were Steven Boyd and Prism Schneider) was awarded the 2021 President's Award of Excellence in Student Leadership (which recognizes graduates for academic achievement, leadership and contributions to the community).

M. Abouassaly, S. French, S. Goldstein, E. Joughin, and L. Phillips have been chosen by the UME Class of 2021 to receive Clerkship Teaching Awards in the "Honor Roll" subdivision.

Presentations:

Taylor Bader, trainee with Ganesh Swamy and David Hart, presented "Are sex-differences in degenerative spondylolisthesis and degenerative scoliosis explainable by mechanical differences in the post-menopausal intervertebral disc?" at the McCaig Institute Weekly Seminar Series on October 27.

Conrad Mielczarek, trainee with Ganesh Swamy, presented "Seeking new connections: An investigation of astronaut bone" at the McCaig Institute Weekly Seminar Series on October 27.

Nabangshu Das, trainee with Roman Krawetz and Antoine Dufour presented "Proteolytic regulation of proteoglycan 4 in inflammatory conditions" at the McCaig Institute Weekly Seminar Series on November 3.

Kurt Hildebrand, trainee with Mike Monument, presented "Investigating the role of macrophages in soft tissue sarcoma" at the McCaig Institute Weekly Seminar Series on November 24.

Karys Hildebrand, trainee with Mike Monument, presented "STING activation in soft tissue sarcoma – investigating clinically relevant therapeutic strategies" at the McCaig Institute Weekly Seminar Series on November 24.

Other:

Nick Desy and several Ortho Residents participated in the Canadian Orthopaedic Surgery Interest Network on-line event to promote interest for Calgary Orthopaedics for CaRMS 2022.

Jim Mackenzie was quoted in the November 11th CBC News article titled "Growing wave of Albertans pay for private surgery in U.S. as pandemic delays mount" and a link to the article was shared in the November 16th COA Dispatch.

Rick Hu has accepted the role of Entrepreneur in Residence for the Department of Surgery effective November 1, 2021.

Some recent publications:

Hart DA, Martin CR, Scott M and Shrive NG: The instrumented sheep knee to elucidate insights into osteoarthritis development and progression: A sensitive and reproducible platform for integrated research efforts, *Clinical Biomechanics*, Vol. 87, 2021, <https://doi.org/10.1016/j.clinbiomech.2021.105404>

Burnham R, Smith A and Hart D: The safety and effectiveness of bone marrow aspirate concentrate injection for hip and knee osteoarthritis. *Regenerative Medicine*. DOI:16: 619-628 (2021)

Hart DA. What molecular recognition systems do Mesenchymal Stem Cells/Medicinal Signaling Cells (MSC) use to facilitate cell-cell and cell-matrix interactions? A review of evidence and options. *Int J. Mol. Sci.* 22: 8637 (2021). <https://doi.org/10.3390/ijms22168637>

Hart DA, Nakamura N and Shrive NG: Perspective: Challenges presented for regeneration of heterogeneous musculoskeletal tissues that normally develop in unique biomechanical environments. *Frontiers Bioeng. Biotechnol.* 9: 760273 (2021) doi: 10.3389/fbioe.2021.760273

Jacobs G, Shimomura K., Hart DA, Fujie H and Nakamura N: Mechanical and biologic properties of articular cartilage repair biomaterials. In: Koh J, Zaffagnini S, Kuroda R, Longo UG, and Amirouche F. (eds) *Orthopaedic Biomechanics in Sports Medicine*. Springer, Cham. 2021. https://doi.org/10.1007/978-3-030-81549-3_5

Jacobs G, Shimomura K, Hart DA, and Nakamura N: The current role of stem cell therapy and iPS cells. In: Latterman C, Madry H, Nakamura N, and Kon E (eds). *Early Osteoarthritis: State-of-the-Art Approaches to Diagnosis, Treatment and Controversies*. Springer, ISAKOS 2022, Chapter 15, pp. 207-219 (2022). ISBN: 978-3-030-79485-9

Jacobs G, Shimomura K, Hart DA, and Nakamura N: Meniscus injury and early osteoarthritis. In: Latterman C, Madry H, Nakamura N, and Kon E (eds). *Early Osteoarthritis: State-of-the-Art Approaches to Diagnosis, Treatment and Controversies*. Springer, ISAKOS, Chapter 19, pp. 259-269 (2022). ISBN: 978-3-030-79485-9

Crites S, Joumaa V, Rios JL, Sawatsky A, Hart DA, Reimer RA, and Herzog W: Moderate aerobic exercise but not dietary fibre, attenuates losses to mechanical property integrity in tail tendons associated with a rat model of obesity. *J. Biomechanics.* 129: 110798. DOI: 10.1016/j.biomch.2021.110798.

Das Nabangshu MNG., de Almeida LGN, Woods PS, Heynen ML, Jay GD, Caffery B, Jones L, Krawetz R, Schmidt TA, Dufour A: Proteomics analysis of tears and saliva from Sjogren's Syndrome patients. *Frontiers in Pharmacology*. Volume 12. *Front. Pharmacol.*, 07 December 2021. <https://doi.org/10.3389/fphar.2021.787193>

Bourget-Murray J, Bansal R, Soroceanu A, Piroozfar S, Railton P, Johnston K, Johnson A, Powell J: Assessment of risk factors for early-onset deep surgical site infection following primary total hip arthroplasty for osteoarthritis. (2021) *J Bone Joint Infect* 6:443-450. <https://doi.org/10.5194/jbji-6-443-2021>

Congratulations to Orthopaedic Trauma Research Coordinator Maria Beketskaia and her partner Victor on the birth of their daughter, Signy, who was born on October 12th.



NEW
ARRIVALS!

Congratulations to Alex Soroceanu and her partner Phil Magown on the birth of their daughter, Chloé, who was born on October 9th.



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.

Please contact Judy Crawford at acortho@ucalgary.ca if you have submissions or ideas for contents for future newsletters!