



Words of Wisdom by Werle!

Dear Orthopaedic Surgeons, Residents, and Staff,

I want to begin by acknowledging the tragic loss of our friend and colleague, Dr. Fabio Ferri-de-Barros, in July 2023. Fabio was instrumental in the delivery of efficient, safe, and novel pediatric spine care and research at Alberta Children's Hospital over the last decade. He will be sorely missed. Our thoughts are with his family and many friends. His legacy will be the many positive changes to pediatric spine care that have occurred during his time in practice.

I hope that all of you were able to find time for rest and relaxation during the summer months. Our life in Orthopaedics can be incredibly busy and keeping ourselves healthy is so important to be able to deliver care to our patients now and in the future.

For the first time since 2004, Calgary hosted the 78th Annual Canadian Orthopaedic Association Meeting on June 21-24, 2023. It was an exceptional meeting that showcased our Section and all of the high-quality research, clinical activity, and quality improvement work underway within our city and province, and country. Congratulations to Dr. Marcia Clark and the COA Organizing Committee!

The 50th Anniversary of the University of Calgary Orthopaedic Residency Program was held on the evening of Saturday, June 24th. It was a wonderful event. Thank you to Judy Crawford for all of her work organizing this special event including the excellent memory book.

The Section has completed four recruitments: Dr. Lee Fruson joined the PLC as an Arthroplasty/Trauma surgeon earlier this month. Dr. James Ardell will join the RGH as an Arthroplasty/Trauma surgeon in November 2023, Dr. Herman Johal will join the Orthopaedic Trauma group at FMC in October 2023, and Dr. Joe Kendal will fill the position of Orthopaedic Oncology surgeon at FMC also in October 2023. Thank you to all Section members who have stepped forward for the Search and Selection committees. We welcome all of our new orthopaedic colleagues to Calgary!

The Alberta Surgical Initiative (ASI) continues with the ongoing adoption of the Facilitated Access to Specialized Treatment (FAST) centralized referral system and the implementation of Rapid Access Clinics (RACs). AHS continues to focus on surgical wait times which will benefit our patients in the long run.

Thank you to all Section members, residents, and staff for your ongoing orthopaedic patient care and support of the academic mission of our Section. Your daily contributions are noticed and appreciated.

Regards,
Jason

Education – Making the Grade!

Thank you to all those who participated in the annual Orthopaedic Resident Golf Yearly tournament and to those who sponsored a resident. We had beautiful weather and the event was a great success. Congratulations Brent Benavides, Jayd Lukenchuk, Murray Wong and Daniel You for successfully passing the Royal College exam! Job well done!

Welcome to the new group of first year residents who started on July 1, 2023: Alyssa Federico, Mallika Makkar, Reva Qiu, Colin Rey, and Ben Wajda.

2023-2024 Chief Residents are Chris Hewison (R5) and Laura Morrison (R4).

During his R4 year, Bryan Heard was chosen as the recipient of the 2022-2023 Dr. Spencer McLean Memorial Award, which was announced at the June 2023 year-end celebration. Congratulations!

Welcome Zainy Abdy who is the Program Administrator for the residency program.

Thank you, Kelsey Glover, for your tremendous work as the Interim Program Administrator. Your work has been greatly appreciated!

Research – Skeletal Mentions!

Congratulations to all involved in our in person May 11, 2023 10th Annual Orthopaedic Resident Research Day – Awardees are: (a) Full Presentations: D. You 1st Place, and A. Abbott for both 2nd Place and People's Choice; (b) Abbreviated Presentations: L. Woods 1st Place, J. Rizos 2nd Place, and B. Heard People's Choice; and (c) 3MT Presentations: G. Ryan 1st Place, and T. Ludwig for both 2nd Place and People's Choice. A huge thank you to our adjudicators R. O'Toole, B. McDonald and P. Duffy, as well as to P. Schneider and J. Crawford for organizing the day.

For 2023 Clinician Scientist Awardees see details below under McCaig Institute.

Faculty Catalyst Grant Applications (formerly known as Faculty Seed Grants) call for applications will take place early in the new year – details TBA.

Request for COREF Applications was distributed to Residents/Faculty/Research Coordinators in early July with a deadline date of September 18th.

News from the McCaig Institute for Bone and Joint Health

2023 Clinician Scientist Collaboration Seed Grants Awardees: (1) S. Manske/N. White "Evaluation of carpal kinematics following reduction and association of the scapholunate (RASL) procedure for scapholunate dissociation"; (2) M. Choi/A. Dufour "Sporadic inclusion body myositis proteomics to identify novel biomarkers (SPIN)"; (3) R. Walker/B. Edwards "Posterior horn medial meniscal root tears: A novel use of weight-bearing computed tomography to assess meniscal function post repair"; (4) P. Schneider/E. Agbani "Multi-modal analysis of platelet function in the setting of antiplatelet thromboprophylaxis use following total knee and total hip arthroplasty"; and (5) G. Swamy/H. Sparks "Exploring cellular heterogeneity in annulus fibrosus of degenerative spondylolisthesis and degenerative scoliosis patients".

Welcome to Joshua Mang the new Biomechanics Lab Tech (you can reach him at 403-220-6799 or email at joshua.mang@ucalgary.ca).

Important event dates: September 25th the Cy Frank Legacy Lecture; November 4th the Wood Forum – for more details on either of these events contact: mccaig@ucalgary.ca.

Course Organization/Participation:

Rubini Pathy and Laura Morrison were leaders in the 2023 Canadian Orthopaedic Association's Ortho Cutting Edge Initiative - the COA stated that Drs. Pathy and Morrison's dedication and expertise have been instrumental in bringing this program to life.

Awards/Honours:

Prism Schneider has been awarded the J. Édouard Samson Award from the Canadian Orthopaedic Foundation for her research entitled "Multi-modal Investigation of Trauma-induced Coagulopathy for Prevention of Venous Thromboembolism".

Nigel Shrive was appointed as an Officer of the Order of Canada for his groundbreaking contributions to structural mechanics, notably his translational and multidisciplinary research in both biomedical and civil engineering.

Brent Edwards has been appointed as one of twenty-two of the inaugural prestigious new University of Calgary Research Excellence Chairs – this is a new program which recognizes University of Calgary research leaders.

Tanya Cherppukaran, trainee with Prism Schneider, has received an AbSPORU Graduate Studentship in Patient-Oriented Research for her project "Development of a Screening Tool for Identifying Perpetrators of Violence in Cast and Hand Clinics".

Tactile Orthopaedics, a Calgary based Company whose Co-Founder and Board Chair is Rick Hu and Board Member is Ryan Martin, received one of the Doug Thomson Best Booth Awards at the COA Annual Meeting in June 2024 – this award recognizes a booth's overall appeal, design, interactive attendee experience and the proactivity and positivity of exhibiting representatives.

With regards to the 2023 Annual McCaig Institute Summer Student Symposium, Alana Stahl (trainee with Roman Krawetz received the Fan Favourite Award for her podium presentation "Proteomics analysis of osteoporotic bone treated with antiresorptive agents in an ovariectomized cynomolgus monkey model" and Christoff-John Lee (trainee with Prism Schneider) received the Fan Favourite Award for his poster presentation "Biomechanical evaluation of optimal dual vs single plate configuration for humeral distal fracture fixation".

Prism Schneider and team competed in the "Sharpest Knife (Live Grant) Competition" as part of the 40th Annual Surgeons' Day, June 9, 2023 - they were the successful team and have been awarded a \$10,000.00 grant from the Office of Surgical Research.

Grants:

Michael Monument/Brent Edwards; Ranita Manocha/David Hart; Koren Roach/Andrew Dodd; and Prism Schneider/Sarah Manske were all recipients of McCaig Institute Clinician-Scientist Seed Grants for 2023 (see McCaig Institute Section for full details).

Brent Edwards (PI) and Roman Krawetz (Co-Investigator) received a CIHR Project Grant for their research project "Quantifying the Relationship Between Intracortical Remodeling, Microdamage, and Bone Quality in a Novel In Vivo Loading Model".

Presentations:

Prism Schneider: "What you knee-d to know about viscoelastic testing in arthroplasty", 40th Annual Surgeons' Day, June 9, 2023.

Ganesh Swamy: "Can intervertebral disc mechanics predict spinal deformity? Building a multi-disciplinary team to answer questions", 40th Annual Surgeons' Day, June 9, 2023.

Annalise Abbott: "Southern Alberta metastatic cancer to bone initiative: Improving care delivery for patients with metastatic bone disease", 40th Annual Surgeons' Day, June 9, 2023.

Daniel You: "An early coagulation-factor dominant hypercoagulability is followed by a prolonged platelet-dominant hypercoagulability in patients with hip fracture", 40th Annual Surgeons' Day, June 9, 2023.

Other:

Mike Monument and Kevin Hildebrand were hosts of the 40th Annual Surgeons' Day, June 9, 2023.

Mike Monument was a Moderator for the Health Systems and Education Section of the 40th Annual Surgeons' Day, June 9, 2023

Brent Edwards and his trainee Olivia Bruce were highlighted in the May 15th edition of UToday for their work on investigating why women are at higher risk of overuse injury (stress fractures: understanding the link with bone shape).

Prism Schneider and team were highlighted in UToday on August 11 and McCaig This Week of August 23 for their \$1.2M grant from the Partnership in Research and Innovation in Health System – Digital Health (PRIHS) - funds provided by Alberta Innovates and Alberta Health Services, for their POWER Program: Personalized Osteoporosis Care with Early Recognition.

Some recent publications:

Hiemstra LA, Kerslake S, Fritz JA, Clark M, Temple-Oberle C, Boynton E, Lafave M: Rates of burnout in female orthopaedic surgeons correlate with barriers to gender equity [published online ahead of print, 2023 Apr 21]. *J Bone Joint Surg Am* 2023;10.2106/JBJS.22.01319. doi:10.2106/JBJS.22.01319 <https://pubmed.ncbi.nlm.nih.gov/37083849/>.

You D, Xu Y, Krzyzaniak H, Korley R, Carrier M, Schneider P: Safety of expedited-surgery protocols in anticoagulant-treated patients with hip fracture: a systematic review and meta-analysis. *Can J Surg*. 2023;66(2):E170-E180. Published 2023 Mar 31. doi:10.1503/cjs.010021 <https://pubmed.ncbi.nlm.nih.gov/37001973/>.

Hart DA: Sex differences in musculoskeletal injury and disease risks across the lifespan: Are there unique subsets of females at higher risk than males for these conditions at distinct stages of the life cycle?. *Front Physiol* 2023;14:1127689. Published 2023 Apr 11. doi:10.3389/fphys.2023.1127689.

Hart DA: Homo sapiens - A species not designed for space flight: Health risks in low Earth orbit and beyond, including potential risks when traveling beyond the geomagnetic field of Earth. *Life (Basel)*. 2023;13(3):757. Published 2023 Mar 10. doi:10.3390/life130307567.

Krawetz RJ, Larijani L, Corpuz JM, Ninkovic N, Das N, Olsen A, Mohtadi N, Rezanoff A, Dufour A: Mesenchymal progenitor cells from non-inflamed versus inflamed synovium post-ACL injury present with distinct phenotypes and cartilage regeneration capacity. *Stem Cell Res Ther* 14, 168 (2023). <https://doi.org/10.1186/s13287-023-03396-3>.

Agbani EO, Chow L, Nicholas J, Skeith L, Schneider P, Gregory A, Mahe E, Yamaura L, Young D, Dufour A, Paul PP, Walker AM, Mukherjee PG, Poole AW, Poon MC, Lee A: Overexpression of facilitative glucose transporter-3 and membrane procoagulation in maternal platelets of preeclamptic pregnancy. *J Thromb Haemost* 2023 Jul;21(7):1903-1919. doi: 10.1016/j.jth.2023.03.014. Epub 2023 Mar 22. PMID: 36963633.

Wu X, Chen J, Sun W, Hart DA, Ackermann PW, Ahmed AS: Network proteomic analysis identifies inter-alpha-trypsin inhibitor heavy chain 4 during early human Achilles tendon healing as a prognostic biomarker of good long-term outcomes. *Front Immunol*. 2023 Jul 6;14:1191536. doi: 10.3389/fimmu.2023.1191536. PMID: 37483617; PMCID: PMC10358850. <https://pubmed.ncbi.nlm.nih.gov/37483617/>.

Hanai H, Hart DA, Jacob G, Shimomura K, Ando W, Yoshioka Y, Ochiya T, Nakagawa S, Nakamura M, Okada S, Nakamura N: Small extracellular vesicles derived from human adipose-derived mesenchymal stromal cells cultured in a new chemically-defined contaminate-free media exhibit

enhanced biological and therapeutic effects on human chondrocytes in vitro and in a mouse osteoarthritis model. J Extracell Vesicles. 2023 Jul;12(7):e12337. doi: 10.1002/jev2.12337. PMID: 37367299; PMCID: PMC10295161. <https://onlinelibrary.wiley.com/doi/10.1002/jev2.12337>.

Delgado-Bravo M, Hart DA, Reimber RA, Herzog W: Alterations in skeletal muscle morphology and mechanics in juvenile male Sprague Dawley rats exposed to a high-fat high-sucrose diet. Scientific Reports 13(1):12013, 2023. <https://doi.org/10.1038/s41598-38487-x>.

Hart DA: (2023). Regulation of bone by mechanical loading, sex hormones, and nerves: Integration of such regulatory complexity and implications for bone loss during space flight and post-menopausal osteoporosis. Biomolecules, 13(7), 1136. <https://doi.org/10.3390/biom13071136>.

Wu X, Chen J, Sun W, Hart DA, Ackermann PW, Ahmed AS: (2023). Network proteomic analysis identifies inter-alpha-trypsin inhibitor heavy chain 4 during early human Achilles tendon healing as a prognostic biomarker of good long-term outcomes. Frontiers in immunology, 14, 1191536. <https://doi.org/10.3389/fimmu.2023.1191536>.

2023 Orthopaedic Residents Golf Yearly Tournament

The event took place on August 3rd at Kananaski. We had ten teams of four and for the first time ever we had a tie for first place (six teams tied)! We thank everyone who participated, especially faculty and industry and a big shout-out to all who provided sponsorship for the residents.



The theme this year was “Battle of the Bands”

(R1s - Beach Boys; R2s - Guns N Roses; R3s - Beatles with Yoko Ono; R4s - Backstreet Boys; R5s - Beatles)

Residency 50th Anniversary Homecoming Celebration

On June 24th, we gathered to celebrate our residency program’s 50th anniversary (which was actually in 2020). We had over two hundred attendees and all reported that they had a great time and loved catching up with so many colleagues. Attendees received a printed Memory Book, and post-event we added more photos and this updated memory book will be distributed in electronic format in September (if you need the link please contact Judy at acortho@ucalgary.ca). A huge thank you goes out to the following individuals: the planning committee, the speakers, individuals who provided narratives for the booklet, and especially those who attended the event – THANK YOU!!!!



Mark your Calendar: the Annual Christmas Holiday Brunch will be on November 26, 2023 – Details to be distributed soon!

The Calgary Section of Orthopaedic Community was well represented at the 2023 COA, CORS, CORA Meetings which took place in Calgary from June 21-24 – Congratulations to all of you!

COA SESSION CHAIRS/MODERATORS:

A Abbott and M Sabo: COA Critical Issues Paper Session

J Werle: Alberta Spotlight Lecture 1 – The Alberta Bone and Joint Health Strategic Clinical Network: Provincial Level Quality Improvement in Orthopaedics

L Phillips: Paediatric General Paper Sessions 1

R Martin: Sanofi Lunch n’ Lean – Are Canadian Practice Guidelines Applicable to You? Debating the Evidence and Clinical Experience

M Abouassaly: COLLA (Canadian Orthopaedic Limb Lengthening Association): Case-based Learning on Use of Deformity Principles in Trauma, an International Perspective

N Mohtadi: General Sports Symposium – “Confession Session – I won’t make this mistake twice!”

A Meldrum and J Powell: Care Team Paper Session

N Desy: Adult Reconstruction Hip Paper Session 2

L Morrison: Education/Quality and Safety Paper Session

J LeBlanc and M Sabo: Upper Extremity Paper Session 1

L Collings and L Morrison: DePuy Synthes Lunch n’ Lean – More to Life Than Just Bones: Diversifying Your Career in Orthopaedic Surgery

M Clark: Meeting Highlights Paper Session

N White: Hand & Wrist Paper Session

C Kwong and R Martin: Sports / AAC ICL: Knee

J LeBlanc: Upper Extremity Paper Session 2

K Johnston: Sports / AAC Hip Paper Session & Special Presentations

P Schneider: Trauma: 2 Minutes/2Slides – Tips & Tricks for Orthopaedic Trauma

S Puloski: AAC & CANOOS Combined Symposium – Modern Pigmented Villonodular Synovitis (PVNS) Management

M Sabo: Sports & Upper Extremity: Shoulder Paper Session

M Abouassaly: COFAS & CPOG Symposium – Complicated Foot Deformities: Age Doesn't Discriminate

N White: Hand & Wrist / WECAN: Complex Distal Radius Fractures and Associated Injuries – Challenges and Controversies

C Brauer: WECAN: The Paediatric/Adolescent Wrist – An Approach to Four Paediatric Wrist Conditions

M Clark: 2023 COA Annual Meeting Program Chair - she lead all planning for the educational content delivered at the Meeting

COA PODIUM PRESENTATIONS:

S Gibbon, A Federico, S Kerslake, L Hiemstra: A gender pay-gap in orthopaedic surgery is statistically significant

K Matovinovic, S Willms, L Kennedy, S Yee, E Billington, P Schneider: Defining imminent risk using FRAX score multipliers for patients with recent non-hip fragility fractures

COTS, P Schneider, R Leighton, R Buckley, R Korley, S Yee, K Rondeau, P Duffy: A randomized controlled trial comparing operative and non-operative treatment of ulnar diaphyseal fractures

P Schneider, A Negm, S Yee, K Goldstein, M Amedeo, R Reindl, G Berry, H Johal: Cost comparison between open reduction and internal fixation and functional bracing for humeral diaphyseal fracture management

P Schneider, M Amedeo, S Yee, K Rondeau, R Reindl, G Berry: Humeral diaphyseal nonunion occurs more commonly with elevated body mass index and simple fracture types

P Schneider, L Skeith, S Yee, A Clarke, L Yamaura, P Duffy, A Dodd, R Martin, K, Rondeau, R Korley: Non-O Blood type is risk factor for venous thromboembolism in orthopaedic trauma patients

J Werle: The role of Strategic Clinical Networks (SCNs) including the Bone and Joint Health SCN in Alberta Health Services and provincial successes to date

B Mattiello, SCRUBS: The Case: Problem identification – metals in the orthopaedic OR

J Bourget-Murray, S Piroozfar, ABJHI, P Megaloikonomos, J Powell, J Werle, K Johnston, R Sharma: Can anterior approach total hip arthroplasty be safely introduced into contemporary arthroplasty practice?

M Abouassaly: Case Presentations – COLLA

N Mohtadi, D Chan, P Bertiche, S Allende, D Hunter, H Marmaura, D Bryant: Predictors of radiographic osteoarthritis at 5 years after anterior cruciate ligament reconstruction

R Martin and S French: Panelists - “Confession Session – I won't make this mistake twice!”

R Sharma, S Piroozfar, ABJHI, CART Group: Skin temperature following total knee arthroplasty: A longitudinal observational study

P Schneider L Kennedy, E Billington, S Yee, P Duffy, A Dodd, R Martin, R Buckley, R Korley: Evaluation of a hybrid digital and in-person outpatient fracture liaison service for non-hip fragility fractures

P Schneider, M Amedeo, K Rondeau, R Reindl, G Berry: Improved shoulder range of motion and earlier return to work occurs following open reduction and internal fixation of humeral diaphyseal fractures

P Schneider: Research in orthopaedics

A Dodd: Complex ankle fractures

M Leslie, C Schindler, G Rooke, A Dodd: CT-verified union rate following arthrodesis of ankle, hindfoot, or midfoot: A Systematic review and meta-analysis

P Spanswick, D You, M Wong, R Korley, R Martin, I Haider, P Schneider: Assessment of radiographic healing reliability and accuracy in distal radius fractures

E Patterson, C Elliott, G Dhaliwal, E Sayre, N White: Risk factors for the development of persistent scaphoid non-union after non-union surgery

J LeBlanc: How I assess severity of bone loss preoperatively

R Pathy, R Koehler, D Gregory, J Mooney, M Gannotti: Identification and treatment of hip instability in Down Syndrome: A scoping review

B Heard, I Bains, R Krawetz, D Hart, P Salo, G Swamy: Inappropriate MRI use in the diagnosis of acute sciatica

P Schneider, D You, A Dodd, P Duffy, R Martin, L Skeith, K Rondeau, R Korley: Prolonged platelet-mediated hypercoagulability occurs following surgically treated hip fractures and ASA reduces platelet hyperactivity

A Abbott, J Kendal, B Wajda, B Lavender, S Puloski, P Schneider, M Monument: Evaluating venous thromboembolism in patients with metastatic bone disease: Are we treating patients with appropriate thromboprophylaxis?

R Boorman, K More: What happens to patients long term when we don't repair their cuff tears? Ten year rotator cuff quality of life index (RC-QOL) outcomes following non-operative treatment of patients with full thickness rotator cuff tears

S Hunt: Panelist - COFAS & Trauma: Geriatric Foot and Ankle Trauma – Current Trends & Surgical Techniques

K Hildebrand: Nonoperative management – Hand & Wrist / WECAN ICL: Management of Distal Humerus Fractures in Elderly Patients

J Werle: TJA in patients with obesity – understanding the scale of the challenge – CAS: Obesity & Joint Replacement – Defining the Problems and Identifying the Solutions

P Schneider: Tips & Tricks for Orthopaedic Trauma

M Monument: PVNS overview and new systemic options

R Martin: Getting behind the cruciates – Novel arthroscopic techniques

G Dhaliwal: Understanding radiocarpal fracture dislocations

R Sharma: Panelist – CAS ICL: Tips and Tricks in Hip and Knee Arthroplasty

P Schneider: Stuck in the middle: Interprosthetic fracture management and challenges

C Brauer: Scaphoid fractures and non-unions

COA 2023 MEETING HIGHLIGHTS PAPER SESSION:

L Yamaura, L Skeith, M Monument, S Puloski, P Duffy, R Korley, A Dodd, R Martin, P Schneider: Thrombelastography-defined hypercoagulability is platelet-mediated in patients with surgically treated metastatic bone disease

D Chan, N Mohtadi, P Bertiche, S Allende, D Hunter, H Marmura, D Bryant: Predictors of radiographic osteoarthritis at 5 years after anterior cruciate ligament reconstruction

P Schneider, M Amedeo, K Rondeau, R Reindl, G Berry: Improved shoulder range of motion and earlier return to work occurs following open reduction and internal fixation of humeral diaphyseal fractures

COA VIRTUAL POSTER PRESENTATIONS:

- S Montgomery, J Bourget-Murray, D You, L Nherera, A Khoshbin, A Atrey, J Powell: Cost-effectiveness of dual-mobility components in patients with displaced femoral neck fractures
- CORRG, P Schneider: A novel team-based longitudinal approach to scholarly education in residency training
- C Hunter, N Mohtadi, S Culos-Reed, V Lung, K Somerville, A Black: Brace yourself: Understanding adherence to the non-surgical management of the medial collateral ligament of the knee
- K Hildebrand, K Hildebrand, C Salazar-Arcila, K Marritt, M Monument: Evaluating the roles of host and tumor STING expression in the efficacy of STING as an immunotherapy for undifferentiated pleomorphic sarcoma
- J Kendal, C Hamad, A Abbott, D Brown, R Trikha, L Wessel, S Puloski, M Monument, N Bernthal: What are the indications and survivorship of tumor endoprosthetic reconstructions for patients with extremity metastatic bone disease?
- K Hildebrand, K Hildebrand, C Salazar-Arcila, F Zemp, M Monument: Investigating how macrophages influence the immune landscape and response to clinically relevant therapies in a murine model of soft tissue sarcoma
- CORRG, S Yee, K Rondeau, P Schneider: The impact of hand dominance on functional recovery following upper extremity injuries
- G Ryan, S Yee, A Dodd, P Duffy, R Martin, R Korley, P Schneider: Blood type and risk of transfusion in orthopaedic trauma patients
- A Negm, L Yamaura, A Clarke, D Chaudhry, T Cherppukaran, P Schneider: Effectiveness of thromboprophylaxis following hip fracture: A network meta-analysis
- D You, R Korley, A Dodd, P. Duffy, R Martin, A Soo, P Schneider: An early coagulation factor dominant hypercoagulability is followed by a prolonged platelet-dominant hypercoagulability in patients with hip fracture

CORA SESSION CHAIRS/MODERATORS:

- L Collings and L Morrison: 2023 CORS Chairs - Led resident program planning, contributed resident perspective at COA Board meetings throughout the year, key contributors to DePuy Synthes Women in Orthopaedics Lunch n' Learn session as well as the Early Exposure to the Cutting Edge session for medical and undergrad students
- M Marien: CORA Paper Session 1
- L Collings and L Morrison: CORA Innovation in Orthopaedic Surgery
- A Dodd and T Ludwig: CORA Paper Session 2
- H Greene: CORA Paper Sessions 3

CORA PODIUM PRESENTATIONS:

- R Martin: Balancing clinical duties and industry demands
- T Lasswell: Current and future trends in surgical innovation
- CORRG, B Benavides, J Lukenchuk, M Wong, D You, P Schneider: The impact of hand dominance on functional recovery following upper extremity injuries
- K Matovinovic, S Willms, L Kennedy, S Yee, E Billington, P Schneider: Defining imminent risk using FRAX score multipliers for patients with recent non-hip fragility fractures
- L Collings, P Sharplin, H Greene, K Rondeau, P Schneider: Reliability of multiple radiographic union scoring tools in humeral diaphyseal fractures: A pilot study

CORA VIRTUAL POSTER PRESENTATIONS:

- M Leslie, C Schindler G Rooke, A Dodd: CT-verified union rate following arthrodesis of ankle, hindfoot, or midfoot: A systematic review and meta-analysis
- G Ryan, S Yee, A Dodd, P Duffy, R Martin, R Korley, P Schneider: Blood type and risk of transfusion in orthopaedic trauma patients

CORS SESSION CHAIRS/MODERATORS:

- D You: CORS Paper Session 1 – Arthroplasty Focus
- A Abbott: Panelist - CORA & CPOG – Fireside Chat – What Not to Miss in the Paediatric Trauma Patient in Practice (or on the Exam!)
- G Swamy: CORS Paper Session 3
- P Schneider: CORS – Patient Engagement in Research: Benefits, Challenges, and Standards

CORS PODIUM PRESENTATIONS:

- B Goodyear, P Railton, A Delaney, J Matyas, S Lama, G Sutherland, J Powell: Hip replacement alters the functional connections of the brain's pain processing regions
- P Schneider: Multi-modal investigation of trauma-induced coagulopathy for prevention of venous thromboembolism

CORS INVITED SOCIETY - CANADIAN CONNECTIVE TISSUE SOCIETY (CCTS) PODIUM PRESENTATIONS:

- A Masson: Induced chondrocyte depletion does not promote articular cartilage degradation in mice
- G Swamy: Can changes in annulus fibrosus mechanical properties lead to clinical spinal disorders?

CORS VIRTUAL POSTER PRESENTATIONS:

- M Dhiman, T Bader, D Hart, G Swamy, N Duncan: Quantifying the interlamellar mechanical properties of adult patients with spinal deformities

ALBERTA ORTHOPAEDIC SOCIETY (AOS) – OPEN FORUM PRESENTATIONS:

- J Werle: Rapid Access Clinics (RAC) and Facilitated Access to Specialized Treatment (FAST)

CANADIAN ORTHOPAEDIC FOUNDATION (COF):

- R. Buckley announced/presented all of the Grants and Awards on behalf of the COF

Within this newsletter in the COA/CORA/CORS section, if you read/notice duplications, it is because those presentations appeared in more than one location in the COA/CORA/CORS Programs.

If we missed any presentations/posters/session chairs or moderator positions etc. for the 2023 COA, CORS, CORA Meetings please accept our sincerest apologies, as it would be an oversight on our behalf and was not intentional.