The HIP ATTACK Trial was awarded an IMPACT Award of $1.849 million from the Ontario SPOR Support Unit (OSSU). Dr. PJ Devereaux and Dr. Mohit Bhandari were co-Principal Investigators on the grant. Locally, the strong efforts of co-investigators and leadership at Juravinski Hospital and St. Joseph’s Hospital were crucial to the success of the grant. HIP ATTACK is a randomized controlled trial comparing surgery for hip fracture within an accelerated timeline (medical clearance and surgery within 6 hours) to standard care (within 48 hours) on patient-important outcomes. The funding from OSSU will allow HIP ATTACK to strengthen its design and implementation by bringing together 12 Ontario hospitals, several Ontario research centres of excellence (Institute for Clinical Evaluative Sciences, Clinical Trials Ontario, Ottawa Health Research Institute, Women's xChange, Population Health Research Institute), and patient representatives.

HIP ATTACK will be presented at OSSU’s June Showcase in Toronto to major stakeholders, including members of the Ministry of Health/Government of Ontario, hospital leadership, industry, NGOs, patient representatives, and researchers to further gain input on maximizing value and impact of the trial.
University Scholar

Dr. Bhandari has been honoured with a University Scholar title. In addition to Dr. Bhandari, Dr. Gregory Steinberg (Professor of Medicine) and Dr. P.J. Devereaux (Professor of Clinical Epidemiology and Biostatistics) from Faculty of Health Sciences and 6 other faculty members across campus were given this title. University Scholar title is intended to recognize faculty members in mid-career who have already distinguished themselves as international scholars. Recipients of this award are considered global leaders in a number of diverse research areas and academic disciplines, and the award recognizes those who have demonstrated excellence and innovation in research, teaching and service.

Post-Humous Teaching Award

A post-humous Orthopaedic Surgery Teaching Award was created by the graduating class of 2015 to honour Dr. Richard Lachowski, who passed away in late 2014. The award was accepted by Mrs. Lachowski on behalf of her late husband.

Dr. Richard Lachowski was a beloved surgeon, mentor and an irreplaceable member of the MacOrtho community.
In this issue we are happy to highlight our Faculty Members who have taken on various roles outside of McMaster University.

Dr. Mohit Bhandari

Dr. Bhandari served as keynote speaker and Director of the Hip Fracture Forum in Barcelona, May 14, 2015. With over 200 participants, the course was a major success.

He was also a speaker and judge at the 1st Innovation and Research idea Day in Doha, Qatar. Over 30 innovative ideas were presented across the surgical specialities.

Dr. Michelle Ghert

Dr. Michelle Ghert has been appointed Deputy Editor for Bone and Joint Research Journal. She will be working closely with Professor Hamish Simpson from Edinburgh in leading the journal.

Dr. Olufemi Ayeni

Dr. Olufemi Ayeni has been appointed to the Editorial Board of the American Journal of Sports Medicine. This highly regarded journal is the official journal of the American Orthopaedic Society for Sports Medicine and has an Impact factor of 4.699 ranking it as number 1 for all Orthopaedics titles.

Dr. Ayeni has also accepted a role on the Clinical Advisory Board for the Pivot App being developed by the University of Pittsburgh. This application “app” is funded by Coulter at Pitt Translational Research Partnership (TPII) Program and will help identify kinematic function of the anterior cruciate ligament after reconstruction, specifically.
The American Academy of Orthopaedic Surgeons (AAOS) Annual Meeting was held from March 24 to March 28 in Las Vegas. Many of our MacOrtho members participated on the AAOS Meeting. Please find summaries of few of the activities below:

- Dr. Michelle Ghert and colleagues received the ‘Best Poster Award’ for the study titled “The epigenetic regulation of SOX9 by miR-145 in human chondrosarcoma.”

- Dr. Nathan Evaniew did a podium presentation in the Spine III: Lumbar session as he presented the study “Minimally invasive versus open surgery for cervical and lumbar discectomy: a systematic review.”

- A study co-authored by Dr. Bhandari titled “A Prospective Evaluation of PCS and RUST Scoring in Tibial Shaft Fractures Treated with IM Nailing” was also presented.

- Dr. Nathan Evaniew also presented “What is at the core of multi-center RCT” at the Musculoskeletal Tumor Society (MSTS) Specialty Day.

- Dr. Michelle Ghert presented “The osteoclast in bone disease” on March 30th, 2015.

- Dr. Bhandari presented “Orthopaedic Evidence-based Medicine” in the symposium session ‘Evidence, Quality, Costs, and Reimbursement: Connecting the Dots’

- Dr. Bhandari along with Drs. Beaule, Gofton and Solomon led the course “The Learning Curve in Orthopaedics: Defining and TICKET Controlling It”

- Dr. Michelle Ghert was the Chair of the Musculoskeletal Tumor Society (MSTS) Specialty Day on March 28th, 2015. This year the attendance was a record high!

- The FIRST study, led by Dr. Ayeni, had their 1st Investigator meeting.

- Dr. Michelle Ghert, as the Deputy Editor, had multiple meetings with the publisher and Editor-in-Chief of Bone and Joint Research Journal to develop the direction of the journal.

- Sheila Sprague and Paula Mckay led the FLOW trial close-out meeting
Canadian-French-Belgian-Swiss (CFBS) Travelling Fellowship

MacOrtho was pleased to host the 2015 Canada-France-Belgium-Swiss (CFBS) Travelling fellows from June 3rd to June 7th. Dr. Eric Nectoux from France presented his research on Femoroacetabular impingment and SCFE while Dr. Frederic Paternostre from Belgium discussed the benefits of personalized surgical instrumentation for total knee arthroplasty.

Dr. Eric Nectoux is currently an Assistant Professor in Paediatric Surgery at the Lille University Hospital. His clinical interests include pediatric trauma, thoracic deformities, spine surgery, lower limb surgery including congenital, developmental, neuromuscular and post-traumatic and telemicrosurgery. Dr. Nectoux is the medical manager of the pediatric trauma activity within the Paediatric Emergency department.

Dr. Frederic Paternostre joined us from Belgium. He comes from a strong educational background with having completed various courses on spine surgery, orthopaedics, and trauma. Additionally, Dr. Paternostre has multiple publications related to patient-specific instrument planning.

At McMaster University, the visiting fellows had the opportunity to present their research, participate in senior residents’ research presentation, tour McMaster University Medical Centre and spend a day with Dr. Michelle Ghert at Juravinski Centre. They also met various faculty members, residents, fellows and spent the weekend at Niagara Falls.

For more information about the CFBS Travelling Fellowship, please visit:

Our Champions for Change fundraising video and website were launched in July 2014. These resources share MacOrtho’s vision and explain why your support is critical to the success of our innovative and world-leading programs.

High-quality education, global outreach, and research initiatives are extremely costly and we are not able to cover the costs of these activities through government funding alone. Therefore, your support is vital to improving the lives of people with orthopaedic injuries and disorders around the globe. Funds raised will enable us to attract and retain talented new orthopaedic surgeons and enhance our infrastructure which will ensure the ongoing success of MacOrtho.

Please click the following link to access our donation page:
http://fhs.mcmaster.ca/macortho/support_macortho.html

On November 26th, 2014, we launched a mini showcase of our new MacOrtho apparel as part of our newly revealed MacOrtho Spirit Campaign. The purpose of the MacOrtho Spirit Campaign is to allow for our faculty, residents, staff, and community to join together and support the Division. In support of this campaign, we will be taking orders for our MacOrtho gear. Please email macortho@mcmaster.ca to place your orders.

Please consider supporting our world-leading programs!
On February 20th, 2015, Dr. Peter Giannoudis joined us from United Kingdom to be part of the Visiting Professor Leadership Series at McMaster University. Dr. Giannoudis shared his life journey as he spoke about his education, mentors, research and family. The lecture was followed by a private faculty/resident luncheon with Dr. Giannoudis and his wife.

Dr. Peter Giannoudis is a Professor at University of Leeds and Honorary Consultant at Leeds General Infirmary. In addition, he has served as the President of the British Trauma Society (2006-2009) and the President of the European Society of Pelvis and Acetabulum, (2008-2011). Currently, he is the Editor in Chief of the Injury Journal and Chair of the International Committee of the Orthopaedic Trauma Association. Dr. Giannoudis has published over 450 peer review papers and has written 7 Orthopaedic and Trauma textbooks as well as given over 250 invited national and international guest lectures and Keynote lectures since 2004.
We are pleased to announce the new MacOrtho grants received over the past few months:

**Femoroacetabular Impingement RandomiSed Controlled Trial with an Embedded Prospective Cohort (FIRST-EPIC)**

**Funding Agency:** MSA Innovation grant 2015  
**Principal Investigator:** Olufemi Ayeni  
**Co-Investigator:** Mohit Bhandari  
**Amount Funded:** $29,996.96

**Summary:**  
Femoroacetabular impingement (FAI) is a condition of the hip where there is a mismatch of the femoral head (ball) and hip acetabulum (socket). This mismatch creates abnormal contact between the bones and causes hip pain which can lead to damage and eventually osteoarthritis of the hip. Surgical treatment aims to correct the morphology of the hip joint by trimming down the bone causing the impingement. Hip arthroscopy (minimally invasive surgical technique) is arguably the most rapidly growing field in orthopaedic surgery and as a treatment for FAI. Some estimates suggest that the rate of hip arthroscopy procedures will double over a 5 year span (from 30,000 to 70,000 annually), resulting in a corresponding increase in health care costs. There is a need to pragmatically evaluate the outcomes of this surgical approach. Following the success of our pilot study, we have initiated the definitive phase of the Femoroacetabular Impingement RandomiSed controlled Trial (FIRST). MSA funded our proposed external validation cohort using a “RCT with and Embedded Prospective Cohort design” during the definitive trial phase (FIRST-EPIC). This cohort arm will allow us to determine the true effectiveness and cost-effectiveness of the trial interventions.

**Distractions on the Road: Injury eValuation in Surgery And FracturE clinics (DRIVSAFE)**

**Funding Agency:** Physicians Services Incorporated - Resident Research Grant  
**Principal Investigators:** Harman Chaudhry and Bill Ristevski  
**Co-investigators:** Mohit Bhandari, Brad Petrisor, Sheila Sprague, Dale Williams  
**Amount Funded:** $20,000.00

**Summary:**  
Distracted driving is any activity that diverts drivers' attention away from the primary task of driving. Previous research suggests that distracted driving is a factor in approximately 4 million road traffic collisions annually in North America. However, the prevalence is likely underreported given that data are often obtained from police and hospital reports. In order to assess the burden of distracted driving on musculoskeletal injuries, the DRIVSAFE study will administer questionnaires to 1315 patients who present to a local Ontario fracture clinic. Specifically, the DRIVSAFE study will determine: 1) the prevalence of patients who present to a local fracture clinic with an injury that is the direct or indirect result of distracted driving; and 2) the prevalence and severity of various types of musculoskeletal injuries sustained as a direct or indirect result of distracted driving. Additionally, the questionnaire will explore reasons that participants are attending the fracture clinic (e.g. type(s), severity, and cause of injury). It will also collect information about participants' opinions and experiences with distracted driving. For participants who are attending the fracture clinic due to an injury from a road traffic collision, the questionnaire also queries participants about whether distracted driving played a role in their injury.
Prospective Abuse and Intimate Partner Violence Surgical Evaluation (PRAISE-2): An Ontario-based Multi-Centre Prospective Cohort Study

Funding Agency: Physicians Services Incorporated - Health Research Grant  
Principal Investigator: Brad Petrisor  
Co-Principal Investigator: Sheila Sprague  
Co-investigators: Mohit Bhandari, Emil Schemitsch, Diana Tikasz, Clare Freeman  
Project Manager: Kim Madden  
Amount Funded: $156 000.00

Summary:  
Every six days a woman in Canada is killed by her intimate partner. Intimate partner violence (IPV), also known as domestic abuse, is a leading cause of non-fatal injury in women worldwide. The cost of IPV in Canada is estimated at $5 billion annually. We recently completed a large, cross-sectional study of 2945 women (PRAISE) identifying 1 in 6 women attending surgical fracture clinics as self-reporting a history of IPV in the past year (Lancet, 2013). Given the high prevalence and costs associated with IPV, there is a need to identify health outcomes associated with IPV, the incidence of new and worsening cases of IPV, and resource use among IPV victims. Building upon the success of PRAISE and the importance of collecting follow up outcomes on injured women, we will conduct a prospective cohort study of 100 women with musculoskeletal injuries to assess differences in injury-related outcomes (time to fracture healing, injury-related complications, and return to pre-injury function) between abused and non-abused women. This study will also determine whether a musculoskeletal injury can lead to new or worsening abuse by an intimate partner and how patterns of IPV change over time following musculoskeletal injuries. We will also examine changes and differences in quality of life and utilization of support services and associated costs between abused and non-abused women. Finally, our proposed study will also inform the feasibility of a larger multinational cohort study.

Collaborative prospective research in rare cancers: A qualitative study to determine factors that drive a paradigm shift in the research landscape  
Funding Agency: MSA Innovation grant 2015  
Principal Investigator: Michelle Ghert  
Amount Funded: $19 659.00

Summary:  
Bone sarcomas are rare cancers treated in specialty tertiary care centers. Patient-centered research to improve clinical care for bone cancer patients has been impeded by a lack of collaboration in the surgical field treating these patients (orthopaedic oncology). However, a recent randomized controlled trial initiated at McMaster University (www.PARITYtrial.com) has generated collaboration among 63 hospitals across 17 countries and 6 continents. The reason for this massive shift in orthopaedic oncology research philosophies is of great interest and importance to future research. In this study, we will use established qualitative research methods and PARITY network focus groups to identify incentives, facilitators and barriers to prospective comparative research in sarcoma surgical care. The knowledge gained from this study will guide study design and future large-scale collaborative research development for rare cancers such as bone sarcomas.
Recent Faculty and Resident Publications (January 2015 – May 2015)


Resident Connect

Annual Resident Retreat

The Annual Resident Retreat was held this year at the Dundas Valley Golf and Curling Club with Dr. Petrisor. Everyone dressed in their best tacky sweaters, plaid shirts/pants and furry hats for the occasion! The event started with a curling lesson and games, and ended with conversation over drinks and appetizers. The day was full of team building and friendly competition. A great time was had by all!

OTA Junior Fracture Course

The PGY1s attended the OTA Junior Fracture Course, which was held from April 15th to 19th in Chicago. This course not only allow the residents to increase their knowledge but also bond as residents.
Resident Connect

Resident Research Day 2015

This year the CFBS Travelling Fellowship was coupled with our Resident Research Day 2015. The following PGY5s presented their research:

- **Stuart Bisland**: Retrospective Review of Pain Management in Patients with Bony Metastases Secondary to Prostate Cancer

- **Kevin Chan**: Systematic Review of Delayed vs. Early Motion Rehab Following Arthroscopic Rotation Cuff Repair

- **Khaled Hasan**: PARITY Survey

- **Justin Todd**: A Comparison of Orthopaedic Faculty and Resident Perceptions of the Learning Needs of Residents

- **Moin Khan**: Arthroscopic surgery for degenerative tears of the meniscus: a systematic review and meta-analysis

In addition to the PGY5s, our residents in the Surgeon Scientist Program also presented their work:

- **Dr. Nathan Evaniew**: Strategies to improve the credibility of meta-analyses in spine surgery: A systematic survey


- **Dr. Raman Mundi**: Nonunion in Patients with Tibial Shaft Fractures—Can Early Functional Recovery Predict Healing?
Resident Awards

Dr. Nathan Evaniew
- Dr. Nathan Evaniew was awarded a Frederick Banting and Charles Best Canada Graduate Scholarships Doctoral Award from the Canadian Institutes of Health Research.
- He also received the Resident’s Best Paper Award at the 15th Annual Scientific Conference of the Canadian Spine Society and Excellence in Poster Presentation Award at the FHS Research Plenary.

Dr. Ilyas Aleem
- Dr. Ilyas Aleem received the Fergus Mills Scholarship for work on the study: “The Global Burden of Spine Fractures: A Prospective Multi-centre Evaluation”
- He also received the Excellence in Poster Presentation Award at the FHS Research Plenary.

Dr. Darren de SA
- He was awarded the Dr Joseph Mikhael Award for Medical Education (Resident) by the Resident Doctors of Canada.

Dr. Raman Mundi
- Dr. Raman Mundi was awarded the Outstanding Achievement Award at the FHS Research Plenary.

Fellowships

MacOrtho is very pleased to announce the following residents matched to prestigious fellowships:

Dr. Moin Khan will be at University of Michigan with Dr. Bedi and Dr. Miller amongst others to cover all Michigan Wolverine Sports.

Dr. Marcin Kowlaczuk will be at University of Pittsburgh. He will work with Dr. Fu and Dr. Musahl amongst others to care for the Pittsburgh Steelers and Penguin.

Dr. Kevin Chan has been matched to a world class fellowship at Weill Cornell University. This 1-year Combined Hand and Upper Extremity fellowship will be at the Hospital for Special Surgery. Dr. Kevin Chan will work with world leaders addressing complex and congenital upper extremity injuries.

We would like to welcome the new Orthopaedic Fellows who also began on July 1st, 2014.

- Kamaljeet Banga (Upper Extremity and Sports)
- Robert McCloy III (Arthroplasty & Community Oncology)
- Ivan Dzaja (Sports Medicine)
- Meaghan Rollins (Upper Extremity)
- Stuart Bisland (Arthroplasty)
- Herman Johal (Trauma and Research)
- David Cantu-Morales (Arthroplasty - HAG group)
- Patricia Farrugia (Foot and Ankle)

There will be two fellows from Saudi Bureau who will be continuing their fellowships with us:

- Jamal Al-Asiri (Trauma, Foot and Ankle)
- Hussain Al Radwan (Upper Extremity)
Alumni Update: Jihad Abouali

Dr. Jihad Abouali is a fellowship-trained Orthopaedic Surgeon specializing in Sports Medicine and Arthroscopy. He earned his Doctor of Medicine and completed his residency in Orthopaedic Surgery at McMaster University in 2012. He completed his Fellowship in Sports Medicine at the University of Toronto.

Dr. Abouali is a member of the Division of Orthopaedic Surgery at the Toronto East General Hospital. He has been invited to present his sports medicine research at numerous National and International conferences. As a Lecturer at the University of Toronto, he trains resident physicians and orthopedic surgeons of the future.

At the Toronto 2015 PanAm Games he was appointed the role of Lead Medical Physician for the Rugby Sevens event. He has acted as the team Orthopaedic Surgeon for the Toronto Argonauts and Toronto FC, and consulted with several other professional teams.

His practice involves treating recreational, amateur and professional athletes with upper and lower extremity injuries, with a special interest in arthroscopic knee, hip and shoulder surgery.

Alumni Update: Michael Tran

We are pleased to announce that MacOrtho Alumni, Dr. Michael Tran, will be joining Woodstock Hospital as an Orthopaedic Surgeon.

Dr. Michael Tran graduated as a Doctor of Medicine from McMaster University in 2008. Dr. Tran then spent five years as a Resident of Orthopaedic Surgery with the Michael G. DeGroote School of Medicine, completing his degree in 2013. Since graduating, Dr. Tran completed his Fellowship in Orthopaedic Sports Medicine with the Fowler Kennedy Sport Medicine Centre at Western University.

A resident of Woodstock, Dr. Tran is pleased to be part of a growing community. “I really enjoy living in Woodstock and working at WH. The new facility is wonderful and the people I work with are supportive and welcoming - WH has an exceptionally considerate culture.

Upcoming Events

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<td>COA Annual Meeting</td>
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<td>MacOrtho Faculty Retreat 2015</td>
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