

Faculty Of Health Sciences | School of Medicine



Queen's
UNIVERSITY

DEPARTMENT OF

Surgery

2020/21



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UNDERGRADUATE
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ACTIVE CLINICAL
FACULTY MEMBERS

MESSAGE FROM THE DEPARTMENT HEAD



Head, Department of Surgery **DR. G. ROSS WALKER**

Despite the challenges of COVID-19, our programs are growing, and we continue to attract new Faculty members to our divisions.

I took on the role of Department Head in September 2020, in the midst of the COVID-19 crisis and during a time of great uncertainty around the world. There is no doubt that the pandemic has had a significant impact on our Department, one that will be felt for years to come. However it has also given us opportunities to adapt our processes and practices as we face an evolving world. We struggled to finalize our 2019 annual report and it did not come out until late in 2020.

With staff absences and turnover, it became impossible to produce a 2020 annual report, so we made the decision to align our annual report with the academic year from July to June. This report covers the entire calendar year of 2020 and the first half of 2021 to incorporate the 2020-21 academic year. Our staffing situation has stabilized and I am optimistic that we will be able to put out our annual reports in a much more timely fashion, going forward.

Unlike many medical encounters, surgeons cannot operate online or virtually. The delays to surgical procedures and the impact on our

patients has been distressful for all, however I know that everyone is focused on treating patients however possible – including providing support to colleagues in other departments.

Despite the challenges of COVID-19, our programs are growing, and we continue to attract new Faculty members to our divisions. New programs, such as those in Neurosurgery and Endovascular Surgery, are giving our patients access to leading-edge treatments and technology without having to travel to larger centres.

Our colorectal robotics program, for example, continues to be the highest volume program in Canada, completing between 80 and 110 robotic cases per year, double the number performed in larger centres across Canada. The program also provides our medical residents training on some of the most up-to-date technology.

We are attracting strong candidates in our fellowship programs, and have increased the number of fellowship opportunities,

MESSAGE FROM THE DEPARTMENT HEAD

particularly in our bariatric, thoracic, cardiac and colorectal programs. These positions offer excellent opportunities for surgeons to gain expertise, while contributing to our department's front-line clinical and research activities.

Although they were held virtually, our Ersil Resident and Sorbie Faculty Research Days continue to be popular, with engaging keynote speakers and outstanding research presentations. Congratulations to all who presented and to the award winners of the Ersil Best Orthopedic Resident and General Surgery Resident research presentations.

Over the past couple of years, we have also experienced several staffing challenges, the most significant being that of Caroline Burke, our long-time Department Manager and holder of all of our corporate knowledge, who has been on medical leave since July 2020. We are very grateful to Jill McCreary, the Manager of Operations for Emergency Medicine, who graciously took on additionally managing our Department until August 2021.

We also happily welcomed Samantha Reed as Staffing and Administrative Assistant during Spring 2021. Mara Kottis, our Undergraduate Medical Education Coordinator retired in June 2021 after 20 years of employment in the Department. We were sad to see Mara depart, however she was gracious enough to agree to remain on in a temporary casual role in order to facilitate a transition to a new Staff Member in the fall. Nicole De Smidt, our long-standing Postgraduate Medical Education Coordinator, departed in June 2021 for a new opportunity with the UGME Program. We wish her all the best in her new position. There have been

numerous other staff changes during this timeframe, however we have now stabilized and we look forward to rebuilding our administrative team.

Dr. John Rudan's guidance and leadership as the Head of Surgery from 2009 – 2020 created a stable and academic-focused growth environment for our Department. In April 2021, he was appointed as the Chair in Surgical Innovation and Research, and Director of Research for the Department of Surgery, a role that recognizes his prolific career as a researcher, and leverages his exceptional mentorship talents.

Although it has been a time of challenge and disruption, it is important to take time to reflect on our accomplishments over this time. As surgeons and researchers, we are trained to tackle challenges and embrace opportunity. I am confident that, as a team, we will continue to grow and contribute to a healthier future.



Education

UNDERGRADUATE SURGICAL
EDUCATION

POSTGRADUATE SURGICAL
EDUCATION

SURGICAL FOUNDATIONS PROGRAM

GENERAL SURGERY RESIDENCY
PROGRAM

ORTHOPAEDIC SURGERY RESIDENCY
PROGRAM

**Program Director
Undergraduate Surgical Education
DR. MILA KOLAR**

Faculty members at the Department of Surgery continue to make important educational contributions at all levels of surgical education at Queen's, including clinical mentorship of medical students, surgical residents and clinical fellows.

Undergraduate Surgical Education

The COVID-19 pandemic has dramatically changed the learning environment, with profound effects on surgical education for medical students. Early on, clerks were withdrawn from in-hospital clinical teaching, and visiting electives were suspended. To mitigate the halt on in-hospital clerkship, the Department of Surgery faculty and residents pivoted quickly to supporting students through virtual clerkship teaching.

Initially, our goal was to deliver didactic material online, however after succeeding in this and overcoming many technological barriers, we began working on the development of student clinical skills, exercising clinical reasoning and decision-making skills through virtual clinical cases. Although these activities could not replace hands-on experience in a clinical setting, novel solutions resulted in virtual surgical education that helped students prepare for their return to clerkship, with rotations shortened to four weeks instead of eight weeks.

Along with implementing virtual teaching, we have established a surgical boot camp to



help students develop essential procedural skills, as well as pathology and radiology teaching for students on Surgery Clerkship. As a part of the boot camp, Dr. Kristi Wood provided instruction on the MSK exam, and our residents Dr. David Yu, Dr. Jessica MacIntire, Dr. Ron Nguyen, Dr. Yasser Tawfeeq worked with me to establish and run four additional boot camp stations that have run on a monthly basis.

We've also added new integrated rotations at our regional campuses in Brockville and Cobourg. Although the pandemic has been a major disruptor for faculty, residents and medical students, it has also created opportunities to think about new ways of teaching and learning in medical education. Faculty members at the Department of Surgery continue to make important educational contributions at all levels of surgical education at Queen's, including clinical mentorship of medical students, surgical residents and clinical fellows. Our faculty have strong representation across the undergraduate program in tutoring, surgical skills boot camp, clerkship selective and in supervising medical students and residents. The journey of undergraduate surgical education continues to inspire us.





**Program Director
Postgraduate Surgical Education
DR. SARAH JONES**

“It’s been a challenging couple of years, but our faculty members and residents have really demonstrated resilience and dedication to their colleagues and their work,” she says.

Postgraduate Surgical Education

In February 2021, Dr. Sarah Jones was appointed as the inaugural Director of Postgraduate Surgical Education in the Department of Surgery. The role involves providing support for all postgraduate and fellowship training programs, and ensuring that general surgery, orthopaedic and surgical foundations programs are prepared for surgical accreditation.

Dr. Jones notes that training residents during the pandemic has been a trying task. “Delays in surgeries have had a significant impact on patients and families, and also on learning,” she says. “Our residents have taken this in stride and supplemented with simulators and independent learning. They’ve also stepped up to help other services that are struggling to meet demands during the pandemic.”

Dr. Jones notes that the program is also seeing the first cohorts who have gone through the complete CBME assessment system. “We are one of the first universities to have students successfully begin and end their studies on

the CBME platform, thanks to the very hard work of many in the department,” she says.

New programs continue to be added, including a new PGY1 research course to introduce residents to the fundamentals of research, with opportunities to work with faculty members early on in their training.

As this is a new position, Dr. Jones is working on strategic planning for the future of the post-graduate programs, while also leading a community of practice for colleagues across the country, to share knowledge and best practices for post-graduation education.

“It’s been a challenging couple of years, but our faculty members and residents have really demonstrated resilience and dedication to their colleagues and their work,” she says. “I’m looking forward to continuing to grow our programs and train Canada’s future surgeons.”

EDUCATION

Surgical Foundations Program

The Surgical Foundations program works in conjunction with individual surgical specialties to deliver fundamental skills and knowledge to surgical residents, with the goal of providing a sound grounding in principles common to all surgical disciplines.

The pandemic has had a significant impact on the Surgical Foundations program, however, students are continuing to work on achieving their Entrustable Professional Activities (EPAs), a core component of the CBME assessment program. Although students and educators have had to accommodate some restrictions and limitations to hands-on learning opportunities, trainees have progressed well and have taken on more independent learning and simulation training.

Our students have supported other areas of the hospital over this time to support other critical services within the hospital. We look forward to our upcoming Surgical 'Boot Camp' to provide students with concentrated hands-on learning of basic surgical and emergency skills.



**Program Director
Surgical Foundations Program
DR. DARRIN PAYNE**

General Surgery Residency Program

The General Surgery Residency clinical and non-clinical programs have been, like other programs, disrupted by the pandemic. We have, however, learned several new ways to teach, with changes resulting in a greater use of simulation tools.

Despite COVID-19, our residents were able to progress through their program, and we were also able to fully integrate Competency-Based Medical Education (CBME). Residents took on more independent learning and became skilled at simulation training. The 2020 William Ersil Resident Research Day was held on November 16th, with Dr. Zuhaib Mir winning the Best General Surgery paper.



**Program Director
General Surgery Residency Program
DR. DIEDERICK JALINK**



EDUCATION



**Program Director
Orthopaedic Surgery
Residency Program
DR. DAVIDE BARDANA**

Orthopaedic Surgery Residency Program

Students, faculty members and staff have all been challenged by the pandemic, which has severely restricted the residency program. With teaching rounds modified and simulations curtailed, faculty members have had to learn to be online teaching experts, and become skilled at electronic interactions.

With programs delayed, the pandemic has provided more time to implement nuances in the official Competency By Design (CBD) program as specified by the Royal College, allowing us to continue to improve our practices and approaches to resident evaluation.

Our 2020 candidates had their Royal College exam delayed until the Fall and were not offered an oral component of the exam. All candidates were offered the opportunity to extend their program, but despite the challenges, did not feel the need to do so. Our 2021 candidates completed the written and oral components of their exam virtually.

In addition, CaRMS for 2020 was converted into a virtual event. The residency program adapted to display the benefits and advantages of the Queen's program in various online forums, as well as holding all interviews virtually.

While ongoing research has mostly been delayed, there has been important work around the impact of COVID-19 on patients and health professionals. As well, our annual William Ersil Research Day was held virtually in November 2020, with 24 presentations and guest speaker Dr. Christopher Wallace. We look forward to getting together again in person to share knowledge and to continue to develop the next generation of orthopaedic surgeons.





Divisional Updates

CARDIOVASCULAR SURGERY

GENERAL SURGERY

NEUROSURGERY

ORTHOPAEDIC SURGERY

OTOLARYNGOLOGY – HEAD AND
NECK SURGERY

PLASTIC SURGERY

THORACIC SURGERY

DIVISIONAL UPDATES

Cardiovascular Surgery Update

In 2020, the Cardiac and Vascular programs joined forces to become the Cardiovascular Division, which continues to expand to bring leading-edge treatments to patients.

Our minimally invasive robotics program for cardiac surgery is growing in size and scope. In 2020, we welcomed Dr. Igo Ribeiro, a cardiac surgeon specializing in minimally invasive cardiac surgery. We also plan to add another surgeon to our structural heart program. Our volume of work is increasing rapidly, with Mitraclip procedures seeing significant growth. We continue to work with Interventional cardiologists as the lines between disciplines become more blurred and we introduce increasingly advanced procedures.

In 2021, we welcomed Dr. Michael Yacob, a vascular surgeon with specialized competency in complex endovascular aneurysm repair. He has started performing an endoscopic vein clipping technique in conjunction with conventional in-situ bypass techniques. This technique is unique to Queen's University and Kingston Health Sciences Centre, as it employs a technology familiar to cardiac surgery, however is currently considered completely novel to vascular surgery. The major advantage of this technique is that it facilitates a major bypass through two small incisions, rather than a larger incision along the inner leg. Early results have been very promising.

Dr. Zelt spearheaded a group of multidisciplinary clinicians to develop a Community of Practice to improve the delivery of care and outcomes for Type B aortic dissections. There is a significant crossover with these patients, and this multidisciplinary approach both improves care and advances discovery in vascular procedures.



Division Chair
DR. DARRIN PAYNE

General Surgery Update

The General Surgery program has maintained a busy schedule during the pandemic, particularly for oncology patients. The program continues to expand, with active recruiting taking place for two new general surgeons, a bariatric surgeon and a third hepatobiliary surgeon.

Our robotic colorectal program is growing and is a national leader in colorectal surgery, reducing recovery times for patients and providing opportunities for our surgeons and trainees to practice minimally invasive techniques with leading-edge tools. The Centre of Excellence for Bariatric Surgery will also expand as we recruit another surgeon.

Our research program continues to focus on population-based health outcomes and global health initiatives, particularly in regard to oncology patients, treatment delays and minimally invasive surgery. We look forward to sharing our results to inform and improve the quality of surgical care in Canada and beyond.



Division Chair
DR. DIEDERICK JALINK

Neurosurgery Update

The Department of Neurosurgery continues to grow, with innovative labs and programs that are attracting new talent and improving outcomes for patients. Multidisciplinary collaborations and partnerships have led to innovative treatments for our patient population, and exciting trials to explore new therapies for traumatic brain injury, stroke and brain tumours.

Dr. Levy's Functional Neurosurgery Program is providing leading-edge treatments for patients with chronic pain, Parkinson's Disease, other movement disorders and epilepsy. In March 2020, he received an Innovation Award from the Southeastern Ontario Academic Medical Organization (SEAMO) for his research using patient-specific electrophysiological mapping and objective outcome measures to optimize the delivery and efficacy of neuromodulation therapy.

DIVISIONAL UPDATES

Our aneurysm coiling program is growing through a strong collaboration between colleagues in Radiology and Neurosurgery. This endovascular technique is complementary to our minimally-invasive open cerebrovascular surgery practice and has allowed us to provide the full spectrum of cerebrovascular care in our community. It has been a pleasure to welcome Dr. Tampieri and the radiology group into our combined neurovascular rounds.

We have enjoyed a number of collaborative projects with academic and industry partners. One highlight has been our collaboration with Kingston-based ArcheOptix Biomedical, which markets a handheld near infrared scanner for detecting brain bleeds. We were supported by the Ontario Centres of Excellence, the Centre for Aging & Brain Health Innovation and the Women's Giving Circle to complete studies evaluating this new device. We are also exploring new therapies for acute ischemic stroke with NoNO Inc, a Toronto-based pharmaceutical company, and also launching a collaboration with the University of Waterloo and DRDC for sub-concussive brain impacts in military personnel.

Dr. Jamie Purzner joined us in 2020. Jamie trained at the University of Toronto with a PhD from Stanford University. His research expertise is in developmental neuroscience, brain tumour biology and cell cycle regulation. We enthusiastically welcome Jamie to the group as we continue to grow our team, build on our research discoveries and improve patient lives.

Dr. Chris Wallace retired on June 30, 2020 after nine years as the Head of the Division of Neurosurgery at Queen's. Chris wrapped up an extraordinary and decorated career as a leader in neurosurgery, a surgeon scientist

and an educator. Chris trained and worked at the University of Toronto and Toronto Western Hospital prior to moving to Queen's. He is globally recognized as an exceptional educator, and remains a frequent visiting professor and examiner in a number of countries. He has also become a key figure in the CMPA. We are thankful to Chris for his service at Queen's, where he was key in attracting significant new funding for the Department and developed a strong research environment by protecting time and mentoring our clinician-scientists.



Division Chair
DR. D.J. COOK

Orthopaedic Surgery Update

Orthopaedics, like all divisions, has had to be innovative during the pandemic. We successfully transitioned to virtual academic sessions and rounds, and expanded our virtual patient care appointments. This took significant effort and contributions from faculty members, residents and our administrative team.

We are pleased to welcome two new faculty members to the team:

Dr. Faizal Kassam completed his residency and fellowships at Queen's, and specializes in Orthopaedic Trauma and Spine Surgery. He has collaborated with the neurosurgical group at Queen's and has an interest in using robotics as a way to measure neurologic dysfunction.

Dr. Parham Daneshvar is an orthopaedic surgeon specializing in hand and upper extremity surgery with a special interest in rheumatoid arthritis. He is an avid teacher and is active in providing high-quality orthopaedic care in developing countries.



Division Chair
DR. JEFF YACH

DIVISIONAL UPDATES

Otolaryngology - Head and Neck Surgery Update

The Division of Otolaryngology – Head and Neck Surgery joined the Department of Surgery in January 2020, with seven members providing clinical care and teaching, and conducting research for disorders of the ear, nose and throat.

The Division provides a wide range of services for a regional patient population. There is a vigorous Head and Neck Surgery Oncology program and a vibrant Otology Cranial Base Surgery program. The strength of these programs has attracted Otolaryngology Head and Neck residents from other programs to do elective rotations in our division. Government funding was recently received to expand the Bone Anchored Hearing Aid Program, increasing the range of services available to patients with hearing disorders.

Division members have presented at the Canadian Society of Otolaryngology-Head and Neck Society meeting, have authored several papers in peer reviewed journals, and are undertaking leadership roles in developing patient care pathways.

An annual Otolaryngology – Head and Neck Research competition has been created to showcase ongoing research and to provide a platform for students to present their work.



**Division Chair
DR. EDMUND JONES**



Division Chair
DR. DOUG MCKAY

Plastic Surgery Update

The Division of Plastic Surgery continues to evolve, with innovative research projects and continued growth in our programs. Despite delays due to the pandemic, a new South East Regional Plastic Surgery e-consult group was developed through the Southeastern Ontario Academic Medical Organization (SEAMO) in 2020, with Drs. Watkins and McKay providing specialist consults.

Dr. Doug McKay received a SEAMO award in March 2020 for his work studying intraoperative margin assessment during basal cell carcinoma excision using mass spectrometry in real time, through image-guided procedures and in collaboration with surgeons using the iKnife.

Dr. Glykeria Martou continues to grow the Breast Reconstruction program, and received funding for the Breast Cancer Reconstruction Outcome Survey. In 2020, she joined the

Physician Wellness Advisory Committee, which has representation from SEAMO, the Faculty of Health Sciences, Kingston Health Sciences Centre and Providence Care.

Dr. Mike Hendry is continuing his work on advancing peripheral nerve regeneration research, with publications on complex nerve injuries and phantom limb pain. He recently received funding to explore the impact of Herceptin (an antibody-based cancer treatment) on the incidence of peripheral neuropathy.

Queen's medical students continue to match to Plastic Surgery programs in record numbers despite the challenges posed by COVID. The changing landscape has afforded the Division to have much greater involvement in their candidacy. Kim Yuen and Val Castanov from this year's graduating class have successfully matched to Plastic Surgery training programs and will follow the strong tradition of Queen's medical students within the discipline.

DIVISIONAL UPDATES

Thoracic Surgery Update

The Thoracic Surgery Division has had a busy 18 months. Unlike many other divisions, thoracic surgeries increased during the pandemic due to restrictions around elective surgeries, freeing up surgical time and space. The waiting list for lung cancer surgery was actually eliminated for the first time.

Research trials are underway for the DICE trial, examining video-assisted thoracoscopic surgery decortication versus interventional radiology-guided chest tube insertion for the management of empyema. Other ongoing research includes early intervention in pleural space infections and endoscopic therapy for esophageal cancer in collaboration with colleagues in Gastroenterology.

Although there were no clinical fellows, we welcomed a locum in January 2021 and are currently recruiting for a new thoracic surgeon.



Division Chair
DR. KEN REID



New Faculty

DR. FAIZAL KASSAM

DR. JAMIE PURZNER

DR. IGO RIBEIRO

DR. MICHAEL YACOB

DR. ANTONIO CAYCEDO

DR. PARHAM DANESHVAR

NEW FACULTY

Dr. Faizal Kassam



Dr. Faizal Kassam is an orthopaedic surgeon specializing in orthopaedic trauma and spine surgery. Before joining the Department of Surgery at Queen's University and the Kingston Health Sciences Centre, he completed his residency at Queen's, followed by fellowships in Trauma (Queen's) and Combined Neurosurgical & Orthopaedic Spine Surgery (University of Calgary).

Dr. Kassam has collaborated with the neurosurgical group at Queen's to establish a pilot study assessing the role of a robotic exoskeleton (KINARM) to bring objectivity to assessments of neurologic dysfunction due to chronic spinal cord compression. He had

support in Calgary to carry out similar robotic assessments to bring objectivity to assessment of cervical myelopathy and he hopes to continue this project with the eventual goal of robotics becoming a widely used adjunct to measure neurologic dysfunction.

Dr. Jamie Purzner

Dr. Jamie Purzner is a general neurosurgeon and biologist who trained at the University of Toronto and Western University, with graduate training at Stanford University in developmental biology. His previous research has focused on how inhibitory DNA binding protein complexes are critical for timing during neuron differentiation. This discovery led to a potential new therapy that pushes cancer cells to become non-dividing neurons, as opposed to relying on cellular damage to kill the cells, which often does not work.

Current research projects include the development of novel differentiation therapies for brain tumours and comprehensive spatial maps of human glioblastoma invasion, and the genomic alterations that drive the invasion.



NEW FACULTY

Dr. Igo Ribeiro

Dr. Igo Ribeiro is a cardiovascular surgeon specializing in minimally invasive cardiac surgery with a particular interest in valvular heart disease and aortic surgery. He earned his medical degree at the Federal University of Ceara State.

Dr. Ribeiro moved to Canada to pursue advanced training in vascular, endovascular and complex cardiac surgery at the University of Toronto, and certified in cardiac surgery, at the University of Ottawa Heart Institute, becoming a fellow of the Royal College of Surgeons of Canada in 2019. Before joining the Department of Surgery at the Queen's University, he pursued training in Robotic and Minimally Invasive Cardiac Surgery as a clinical associate at the Cleveland Clinic, one of the most prestigious institutions in heart surgery.

Dr. Ribeiro also has a special interest in surgical education and teaching. He obtained a Master of Science Degree in Health Profession Education at the Massachusetts General Hospital Institute of Health Professions in Boston. He is also an alumnus of the Harvard Macy Institute of Health Care Education. His research interests focus on surgical quality and outcomes, minimally invasive techniques and surgical simulation in cardiac surgery.



Dr. Michael Jacob



Dr. Michael Jacob earned his medical degree at the University of Limerick, Ireland and completed his vascular surgery training at the University of Ottawa. During this time, he earned additional certification as a Registered Physician in Vascular Interpretation (RPVI) from the American Registry for Diagnostic Medical Sonography.

Throughout his training, Dr. Jacob has gained specialized competency in complex endovascular aneurysm repair, which includes the minimally invasive treatment of thoracic, thoracoabdominal, and abdominal aortic aneurysms. His clinical interests include

arterial aneurysms, peripheral vascular disease, cerebrovascular disease, vascular trauma, renovascular disease, mesenteric vascular disease, thoracic outlet syndromes, vascular anomalies/tumors, vasculitis connective tissue diseases, vascular imaging, radiation safety, lymphedema, and venous disease.

NEW FACULTY

Dr. Antonio Caycedo

After working for over 8 1/2 years at Health Sciences North in Northern Ontario, Dr. Antonio Caycedo-Marulanda moved to Queen's as an Associate Professor with the Department of Surgery. He earned his medical degree at El Bosque University and subsequently completed his general surgery training at Javeriana University, both in his native Colombia. After moving to Canada in 2004, Dr. Caycedo retrained in general surgery at the University of Ottawa, followed by a colorectal surgery fellowship at Western University. He also obtained a Masters degree in clinical research at the University of Liverpool.

Dr. Caycedo introduced the Transanal minimally invasive surgery (TAMIS) procedure to Canada, helped to pioneer Transanal total mesorectal excision (taTME) in the country, and developed the Canadian taTME expert Collaboration (CaTACO). His research interest is mainly focused on rectal cancer, minimally invasive surgery, innovation and clinical outcomes.



Dr. Parham Daneshvar

Dr. Parham Daneshvar is an orthopaedic surgeon specializing in hand and upper extremity surgery with a special interest in rheumatoid arthritis. He has a full time practice at Kingston Health Science Centre and is an Assistant Professor at Queen's University, Department of Surgery.

Dr. Daneshvar completed his undergraduate degree in the Sciences at the University of Waterloo, Canada in 2002. His medical degree and orthopaedic surgery residency were completed at the University of Ottawa in 2007 and 2012 respectively. This was followed with a one year fellowship in hand and upper extremity at the Roth/McFarlane Hand and Upper Limb Centre in London, Ontario. Following his fellowship, he worked as a staff hand and upper extremity surgeon at St. Paul's Hospital, Vancouver, British Columbia for nearly seven years.

Dr. Daneshvar is an avid teacher, and has been involved in training orthopaedic residents and fellows subspecializing in hand and upper extremity surgery since 2013. He received the 2020-2021 Michael A. Simurda Award for Excellence in Orthopaedic Education.





Research

HMRC / CENTRE FOR HEALTH
INNOVATION

ADVANCES IN IMAGE GUIDANCE

NEW METHODS IN BREAST SURGERY

SEAMO INNOVATION GRANT

SURGICAL ROBOTICS

ERSIL WINNER

RESEARCH UPDATE

ORTHOPAEDICS

HELLIWELL CHAIR RESEARCH

OTOLORARYNGOLOGY

HMRC evolves with a radical approach to interdisciplinary health solutions

With over 40 years of collaborative research to help people live fuller, more mobile lives, the Human Mobility Research Centre (HMRC) has been at the centre of innovation in the development of effective treatment strategies for bone and joint disorders. Now the Centre is expanding, bringing together teams of scientists and experts across a broad range of disciplines to forge a path to the next generation of transformative health care.

In 2021, HMRC was re-named as the Centre for Health Innovation (CHI), funded in part by the Department of Surgery and the Faculties of Health Sciences, Arts & Science, and Engineering and Applied Science, with a vision to develop health solutions that redefine better health for all. “The Centre for Health Innovation will bring together teams of inspired, interdisciplinary investigators to fuel a solutions-based approach to translational health research,” says Director Dr. Amber Simpson. “Members will have diverse backgrounds, including medicine, engineering, science, technology, and humanities, and a shared passion for the innovative power of collaborative discovery.”

The Centre builds on a strong foundation of interdisciplinary research at HMRC. For example, the Niagara Foot, an innovative, low-cost prosthetic that has helped amputees around the world, was developed at the Centre through a collaboration of biomedical, biomechanics and materials experts, along with an industry partner.



Current facilities provide shared research space for clinicians, faculty members, trainees and industry members at Queen’s and at Kingston Health Sciences Centre campuses. Plans include the expansion of these facilities for genomics, pathology, mass-spectrometry labs, as well as a data centre and biobank, to leverage interdisciplinary expertise, provide shared resources and provide a hub of intellectual activity. These specialized labs will support pioneering work in genomics, advanced imaging, surgical navigation, machine learning, digital humanities and chemical mapping.

Dr. Simpson notes that CHI’s facilities are situated within and adjacent to health care campuses, facilitating patient-centered research and care. “Insights from the front lines of care and real-world experiences will guide our work,” she says. “We’ll be able to take advantage of technologies and data to blend research with clinical practice for a true bench to bedside approach to care.”

RESEARCH

Novel tool combines leading-edge technologies to transform breast cancer treatments

A Queen's-unique trial that merges two new technologies to more accurately locate and remove breast cancer tumours is promising to become the next big discovery in breast cancer treatment. The combination of the Naviknife, a guidance tool, and the iKnife, a mass spectrometry tool, is resulting in a next-generation system that can reduce the need for additional surgeries and significantly improve outcomes for women with breast cancer.

Breast cancer is the second-leading cause of female cancer-related deaths, and affects one in nine women. Early detection is critical, however the nature of breast tissue makes tumours difficult to locate and isolate.

"One out of every five women undergoing breast cancer surgery ends up with a 'positive margin', which means there may still be cancer

left behind," says Dr. Jay Engel, the Chair of Surgical Oncology. "Additional surgery to completely remove the cancer results in complications, psychological distress and increased costs."

In 2017, researchers in the Department of Surgery partnered with the Queen's School of Computing to develop the Naviknife, a next-generation surgical navigation system that uses novel multiparametric ultrasound imaging to accurately obtain a 3D view of a tumour and trace a margin around it. Electromagnetic sensors then show the precise location of the cautery tip in relation to that margin.

Researchers are now exploring the potential to combine the Naviknife's GPS-like technology with the iKnife, a surgical tool developed at Imperial College in London, England. The iKnife detects cancerous tissue by using a mass spectrometer to analyze the smoke that is emitted while using the cautery device in tissue.



Combining the Naviknife and iKnife technologies gives surgeons a powerful tool for breast cancer patients. The Naviknife shows the surgeon where they are cutting in relation to the tumour, while the iKnife technology analyzes the smoke from the knife to instantly identify if cancerous tissue has been encountered outside of the virtual margin. This would allow the surgeon to instantly alter the resection to ensure a clear margin.

“Usually, pathology reports take about two weeks, which means that patients are waiting and wondering if we got all of the cancer,” says Dr. Engel. “But this technology can immediately

determine during surgery if we have removed the cancerous tissue, while reducing the amount of healthy tissue that we remove.”

Although the pandemic has slowed the opportunity to enrol patients in the research trial due to surgery delays, Dr. Engel says that patients are enthusiastic about participating. “We continue to enrol patients who see the benefits and are eager to help us test this new technology,” he says. “They are key to helping us move this technology from a trial to the operating room.”

New methods reduce opioid use in outpatient breast surgery

Opioids are frequently used to manage pain after surgery, but there’s evidence that surgeons prescribe too much, which can be dangerous for patients. Dr. Shaila Merchant is exploring how to optimize non-opioid methods for pain management, with a goal to provide safe and high-quality patient care for women undergoing outpatient breast surgery.

Dr. Merchant is a surgical oncologist with clinical interests in gastrointestinal and breast cancers. Her academic interests include studying patient-related outcomes and finding ways to improve patient-doctor communication and shared decision-making in patients with cancer. She received a Clinical Teachers’ Association of Queen’s (CTAQ) Research Endowment award in 2021 for her research project, which aims to develop and

implement patient educational material and a multimodal analgesic protocol for patients undergoing outpatient breast surgery.

“Breast cancer is the most common cancer in Canadian women and, as such, breast surgery is regularly performed, with opioids often prescribed post-surgery,” she says. “There is ample evidence to suggest that opioids have negative consequences, that surgeons generally prescribe too much, and patients do not take what is prescribed, leading to issues such as misuse by others, diversion, and inappropriate disposal.”

Dr. Merchant’s research revealed that opioid prescribing at Kingston Health Sciences Centre is far less than provincial prescribing in patients undergoing outpatient breast surgery, however she notes that even the lesser amount prescribed here is not always necessary.

RESEARCH



Surgical Oncologist DR. SHAILA MERCHANT

“Our provincial data shows that there is extreme variability in opioid prescribing in terms of amount and agent,” she says. “This is contradictory to newer evidence that suggests that very few, if any, opioids are required in the post-operative pain management of patients undergoing outpatient breast surgery.”

Dr. Merchant is looking at optimizing the utilization of regional blocks prior to surgery, local anesthetic during surgery, and using agents like Tylenol and Ibuprofen after surgery with a rescue plan for opioids only if needed. She notes that reducing opioid prescribing will also result in reduction of the negative consequences of this type of medication. Patient education is also a critical component,

and Dr. Merchant is working to improve patient education around pain expectations and post-operative pain management. “We are in the process of working with key stakeholders in Anesthesia, Surgery, Nursing and Quality Improvement to develop appropriate patient educational material and a standardized discharge prescription that reduces reliance on opioids,” she says. “The impact (positive and/or negative) of our interventions will be assessed with quality improvement methodology. If our approach is beneficial, then eventually we can develop and implement in it other populations undergoing outpatient surgery. Elements of this model may also be utilized in patients who undergo more extensive operations”.



Colorectal Robotics Surgery program a leader in Canada

The A.B. Smith QC Robotics program at Kingston Health Science Centre (KHSC) has grown quickly since its inception in 2019, and is now considered to be a national leader in colorectal surgery. The program is dramatically reducing recovery times for patients, while providing exceptional opportunities for surgeons and trainees to use minimally invasive techniques for colorectal surgeries and collaborative procedures to address multiple medical conditions.

Minimally invasive surgery using robotics offers many benefits over traditional laparoscopic techniques. “There’s a lot less trauma to the abdominal wall, which results in less pain for the patient,” says Dr. Sunil Patel, a colorectal surgeon with specialized training in minimally invasive surgery. A study by Dr. Patel and colleagues to compare procedures revealed that minimally invasive techniques decrease the length of a patient’s hospital stay by half, resulting in a quicker discharge and recovery time. The procedure is also more appropriate for difficult cases, such as patients with obesity.

Dr. Patel says that the program was initially conceived as a collaborative approach to surgery, with colorectal, urological and

gynecological surgical teams learning together and sharing equipment. “This has resulted in exceptional training opportunities in complex procedures, but has also provided opportunities to perform combined surgical procedures for patients with multiple issues,” he says. “For example, we have performed a colon resection and a hysterectomy in one operation, rather than subjecting a patient to two separate surgeries.”

The KHSC program is unique in having two attending surgeons in the room, which provides a higher volume experience, and also provides hands-on experience for surgical trainees. “Our residents are getting exceptional training in robotics, practicing techniques that they would not learn anywhere else,” says Dr. Patel. With the highest volume of colorectal procedures in the country, the program has attracted the interest of surgeons from other centres, who have come to observe and learn.

Dr. Patel says that the program means that local patients are receiving leading edge procedures that may not be offered anywhere else in Canada. “Our surgical approaches are getting patients home quicker and back to their normal activities,” he says. “We are truly changing the quality of surgical care in Canada.”

RESEARCH

Optimizing surgical techniques for patients – and the planet

Dr. Antonio Caycedo has a reputation for introducing novel surgical techniques that improve how we treat patients with colorectal and rectal cancer. Now, he's also working to combat climate change by advocating for environmentally-conscious processes and supplies in operating rooms.

Dr. Caycedo joined Queen's Department of Surgery after spending over eight years at Health Sciences North in Sudbury, Ontario. Originally from Colombia, Dr. Caycedo was the first to introduce the Transanal Minimally Invasive Surgery (TAMIS) procedure to Canada, and pioneered Transanal total Mesorectal Excision (taTME) in the country. He is also a founder of the Canadian taTME expert collaboration CaTaCO), a consortium of surgeons from major Canadian rectal cancer centres working to create guidelines for ensuring the safe performance of TaTME.

Dr. Caycedo's focus on surgical optimization includes research into minimally invasive and robotic techniques for colorectal surgery.

"Queen's is a national leader in robotic colorectal surgery," he says. "We are exploring new forms of advanced imaging and robotics to provide the best care possible to our patients."

One area of research interest includes using a Desorption Electro-Spray Ionization (DESI) mass spectrometry process to identify metabolic signatures in rectal cancer. "If we can identify the different types of rectal cancer, we can more effectively personalize our treatments," he says.

For Dr. Caycedo, surgical optimization also has an environmental component. "The amount of waste during an operation is significant, and much of it can be avoided," he says. "We now have evidence that many items that are currently disposable can be easily and safely re-used. We have items wrapped in plastic that don't need to be."

Dr. Caycedo notes that anesthetics are a greenhouse gas, and yet they are not considered part of the inventory of greenhouse gases in Canada. But not all anesthetics have the same impact on the environment. One in particular, Desflurane, has a particularly larger carbon footprint than others. "For a five-hour operation, the difference between Desflurane and other anesthetic gases can be described as the impact of driving from Kingston to Orlando, Florida versus driving to Brockville," he says. "It's clear that we could be more efficient." He and a group of other physicians are also lobbying the government to consider carbon taxing for anesthetic gases.

Dr. Caycedo says that surgical innovation is key to our quest to treat cancer, but we must also work to look at how we can prevent illness from climate change. "Climate change is more serious than anything else right now," he says. "As surgeons, we can do our part to reduce our carbon footprint and make investments now for change in the future."

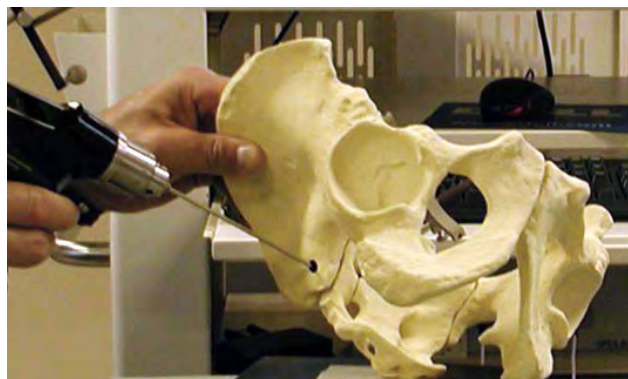
New knowledge for hip surgeries

Orthopaedic surgery resident Mina Tohidi has already earned a reputation for her research into hip fractures, and translating that knowledge into the operating room is a goal that combines her love of research with her passion for surgery. As a PhD Candidate in Epidemiology, Dr. Tohidi is working to understand what treatments provide the best outcomes for hip fracture patients, and how various patient and surgeon factors can affect surgery procedures and outcomes.

Dr. Tohidi works with data to answer research questions, with a focus on what influences decisions around surgical treatments and the resulting outcomes. She is currently comparing total hip arthroplasty with hemiarthroplasty for hip fracture. "I'm using administrative data to better understand patient factors that affect treatment decisions and outcomes, such as age, co-morbidities or the incidence of arthritis," she says. "Our study results will likely raise more research questions, but they also help us understand how certain conditions might affect our choice of treatment, resulting in a more personalized approach to patient care."

Dr. Tohidi notes that surgeon factors also come into play. "Some surgeons are more comfortable with one technique than another, or may have specific reasons for choosing a certain procedure," she says. "Surgical delays may also play into the decision-making." She has executed a survey of orthopaedic surgeons to understand how surgeons make decisions around hip fracture treatments.

Dr. Tohidi's research will help inform decision-making around surgical procedures in the operating room, where she finds the most enjoyment in her work. "I've always liked working with my hands," she says. "There's great satisfaction in fixing a problem and seeing the result right away." She also notes that the variety of surgical procedures, and the strong comradery within the department makes orthopaedics a great choice. "I love working with different age groups of patients and with the amazing team within Orthopaedic Surgery," she says. "This is a great place to call home."



RESEARCH

New techniques for visualizing complex elbow fractures

Complex elbow fractures can be difficult to visualize, necessitating the release of ligaments and large soft tissue windows to treat the fracture, which can result in several complications. New approaches are increasing visualization and access for surgeons, while reducing complications for patients and improving outcomes for rehabilitation.

Dr. Parham Daneshvar, who specializes in hand and upper extremity surgery, has compared the use of proximal ulna osteotomy versus olecranon osteotomy. "Current methods of distal humerus articular surface visualization allows only a limited view of the joint," he says. "Using proximal ulna osteotomy, 3-D scans allow us to visualize 87.6% of the total distal humerus surface, as opposed to 65.6% using the more traditional approach."

The proximal ulnar osteotomy approach also avoids the release of elbow ligaments to visualize the joint. Dr. Daneshvar would like to assess how such an approach can help decrease bio-mechanical load on elbow replacements. While not as common as hip replacements, elbow replacements are an option for patients with arthritis, elbow instability or loss of function.

Dr. Daneshvar says that Queen's has an illustrious history of discovery in elbow surgery including arthroplasty replacement, noting that Dr. Charles Sorbie, the founder of the Human Mobility Research Centre and a former Head of the Department of Surgery, was the co-inventor of the Sorbie Questor elbow replacement. "Dr. Sorbie was a pioneer in this field," he says. "We have the opportunity to build on his knowledge and continue to innovate for optimal, high-quality orthopaedic care."





Preparing for the future of health data

The unprecedented impact of the COVID-19 pandemic has made clear the critical need to understand the significance of health data and how it informs decision making. A collaborative group of multidisciplinary researchers at Queen's, including members of the Surgery department, has developed a new training program to ensure that we have a workforce with skills in computing and informatics to understand big data for health, and leverage it to revolutionize health care.

"AI and informatics show great promise in analyzing next-generation large-scale data," says Dr. David Pichora, the President and CEO of Kingston Health Sciences Centre and the Paul B. Helliwell Chair in Orthopaedic Research. "In order to harness that information, we need a workforce that has the highly specialized training required to analyze health data for evidence-based decision making."

Dr. Pichora and his colleagues received \$1.6 million in funding from the Natural Sciences and Engineering Research Council's (NSERC) Collaborative Research and Training Experience (CREATE) program to develop a skilled workforce with specialized training in health

data. The program, led by Dr. Parvin Mousavi in Queen's School of Computing, provides multidisciplinary training and mentoring for undergraduate, graduate and post-doctoral fellows working at the interface of engineering and health sciences. Investigators in the program include researchers at Queen's and Western University working in computing, imaging, surgery, molecular science and biomedical engineering.

Current projects include a collaboration with the Canadian Institute of Health Information (CIHI) and the Ontario Health Data Platform (OHDP) to tackle challenges in data management and security, as well as using computational models of disease using machine learning, deep learning and evolutionary algorithms.

Dr. Pichora notes that trainees will be skilled in informatics and health data, but will also develop a depth and breadth of understanding of the health data context, and how to stay current as technology evolves. "We are working with partners to ensure that technical training is complemented by innovations in problem solving, experiential learning and professional growth," he says. "They will be fully prepared to become global leaders in digital health solutions."

RESEARCH

Improving management of disorders of the ear

Hearing is one of our most important senses, helping us to communicate and connect with the world around us. Hearing loss can have a significant impact on our quality of life, limiting interactions with others and contributing to social isolation. Dr. Jason Beyea, an ICES clinician-scientist, is exploring population data and new surgical techniques to improve the quality of life for those with hearing loss and related conditions.

Approximately 20% of our population experiences some level of hearing loss. While a small group have congenital hearing loss, one of the more common causes of hearing loss is exposure to long-term noise. “We see hearing loss in people who work in environments that consistently expose them to noise, such as factories,” says Dr. Beyea. “In our practice, we see many members of the military, who are often subjected to loud noises, such as explosions and firearms, throughout their career.”

Hearing loss can also be the result of other factors. Diabetics, for example, are at a higher risk of hearing loss, as are older adults. Dr. Beyea has also studied the effect of cancer treatments in children and subsequent hearing loss. “Chemotherapy and radiation are toxic to the inner ear,” he says. “We have studied dose levels and toxicity in large populations, and have determined levels of chemotherapy and radiation that result in long term hearing loss. These results help guide ear physicians and surgeons to detect hearing loss, and also to guide oncologists as they determine what treatments will be most optimal for their patients.”

Dr. Beyea and others in the Department of Otolaryngology, in collaboration with Audiology, have created the Bone Anchored Hearing program at Kingston Health Sciences Centre, a surgical procedure that is particularly effective for patients who have at least one inner ear that functions normally, such as a patient with a tumour or a malformation of the outer or middle ear. The procedure involves surgically implanting a prosthetic device that treats hearing loss through bone conduction of sound vibrations to the inner ear. The program recently received government funding to expand the range of services available to patients.

Dr. Beyea’s research includes the full range of ear conditions, including tinnitus, imbalance, complex ear microsurgery, vertigo, and Ménière’s disease. He has extensively published in high-impact factor journals on these subjects, and presented his work internationally. He also collaborates with colleagues in the Department of Surgery to better understand lateral skull base tumours, including vestibular schwannomas (acoustic neuromas), which are non-cancerous tumours that grow in nerves that supply the inner ear.

Although some hearing loss is unavoidable, Dr. Beyea notes that there is much we can do to prevent damage to one of our most important senses. “We need to be aware of how noise in our environment can affect our hearing, and take precautions,” he says. “Make sure you protect one of the most important senses that you have.”



Three-Dimensional Digital Ear Imaging

Dr. Beyea's clinical practice is pioneering the use of three dimensional imaging of the ear to obtain the perfect fit for hearing aids, and ensure the best possible rehabilitation of hearing loss.

(Image courtesy Otometrics/Natus)

RESEARCH

Collaborative approaches to produce better outcomes for skin cancers

Basal Cell Carcinoma (BCC) is the most common type of cancer worldwide with a high incidence rate and high subsequent revision surgeries due to incomplete tumour removal. Dr. Doug McKay is collaborating with other surgeons to explore the use of mass spectrometry data during real time excision to better identify cancerous skin tissue and improve surgical outcomes.

“We are aiming to revolutionize skin cancer surgery through intraoperative identification of BCC and benign tissue at the surgical tooltip using Rapid Evaporative Ionization Mass Spectrometry (REIMS),” says Dr. McKay, an Assistant Professor and the Interim Chair for the Division of Plastic Surgery. “We believe that benign tissue and BCC have unique molecular signatures that can be identified with REIMS during surgery. REIMS enables real-time evaluation of the tissue cut during surgery, allowing us to slightly extend the resection area to avoid incomplete tumor removal.”

Considering the growing number of patients with skin cancer worldwide, a reduction in revision surgeries could lead to major cumulative economic benefits, as well as psychological benefits for patients. A reduction in the number of surgeries required also has a positive impact in terms of cosmetic outcomes, as BCC often occurs on cosmetically-sensitive areas of the skin, which can lead to disfiguration.



DR. DOUG MCKAY



Lectures and Events

WILLIAM ERSIL RESIDENT

RESEARCH DAY

CHARLES SORBIE FACULTY

RESEARCH DAY

DR. J HUGH AND MIRIAM MCGUIRE

LECTURESHIP IN SURGERY

THE DR. ANDREW AND MARGARET

BRUCE ENDOWMENT

LECTURES AND EVENTS

2020 William Ersil Resident Research Day

The William Ersil Resident Research Day is an annual day-long event designed to enable residents from the Department of Surgery to present ongoing clinical and basic science research performed during the year under the supervision of attending staff. It also provides a forum for surgeons to renew or establish professional and personal liaisons, and to recognize outstanding research by residents. Dr. William Ersil obtained his medical degree from Queen's in 1979. He entered the Orthopaedic Surgery program at Queen's, however he was diagnosed with a liposarcoma and passed away during his second year of residency training in 1984. This research day, named in his memory, has been an annual event ever since.

The Department of Surgery at Queen's University held its 39th Annual William Ersil Resident Research Day on November 16, 2020, with 24 presentations and Guest Scholar Dr. M Christopher Wallace, former Division Chair, Neurosurgery. Dr. Wallace spoke about choosing a career in academic surgery.

Congratulations to the following winners!

Best General Surgery Paper Winner – awarded to Dr Zuhaib Mir for: Predictors of Post-Operative Liver Decompensation Events Following Partial Hepatectomy in Patients with Cirrhosis and Hepatocellular Carcinoma: A Population-Based Study

Best Orthopedic Surgery Paper Winner – awarded to Dr Joshua Hobson for: Utility of Routine Post-Operative Chest Radiography in Patients Undergoing Clavicle Fixation

2021 Charles Sorbie Faculty Research Day

The Charles Sorbie Faculty Research Day provides participants with a valuable opportunity to learn more about the research activities within the Department of Surgery. Along with presentations from researchers across the department, this annual day-long event features a guest speaker and the presentation of several departmental awards. The Faculty Research Day is made possible by a generous donation from Dr. Janet Sorbie, in loving memory of her husband, Dr. Charles Sorbie, who was a member of the Department of Surgery for 45 years. Dr. Sorbie had a distinguished career as a researcher and a surgeon during his time at the university, and was the first Chair of the Orthopedic Residency Training Program. He had a founding role in the Human Mobility Research Centre, and also served as the Head of the Department of Surgery for ten years.

The 2021 Charles Sorbie Faculty Research Day took place on Friday, April 9th, 2021, with guest speaker Dr. Nathalie Agar, the Daniel E. Ponton Distinguished Chair in Neurosurgery at Brigham and Women's Hospital and Associate Professor of Neurosurgery and of Radiology at Harvard Medical School. She spoke on "Mass Spectrometry Imaging for Surgical Pathology and Drug Development." The Research Day also included 16 presentations.

Dr. Agar's research aims to develop and implement comprehensive molecular diagnoses through improved biochemical classifications. This will ultimately enable surgeons and oncologists to tailor treatment from the time of surgery, and allow precision cancer care using molecular imaging with mass spectrometry approaches.

Congratulations to the following Award winners!

John Rudan Resident Award for Excellence
– Dr. Andrew McGuire (PGY4-Orthopedic
Surgery)

Resident Clerkship Award – Dr. Daniel Potter
(PGY2-General Surgery)

Faculty Clerkship Award – Dr. Boris Zevin
(Division of General Surgery)

*Note: The Dr. J. Hugh and Miriam McGuire
Lectureship in Surgery and the Dr. Andrew
and Margaret Bruce Endowment for Visiting
Scholars in Surgical Innovation events were
last held in 2019.*





**Awards and
Achievements**

SEAMO 2020 Innovation Fund – Dr. Ron Levy and Dr. Doug McKay

In 2020, SEAMO received 49 applications for the Innovation Fund competition and funded 11 projects.

Dr. Levy received funding for his research using patient-specific electrophysiological mapping and objective outcome measures to optimize the delivery and efficacy of neuromodulation therapy. Dr. McKay received funding for his researching for intraoperative margin assessment during basal cell carcinoma excision using mass spectrometry in real time.

SEAMO 2020 MEDP Award – Dr. Kristi Wood and Dr. Tim Phillips

The Medical Education Development Program (MEDP) Award supports SEAMO's objective of building an academy of physician educational leaders and scholars.

Dr. Wood will be using her funds for the Canadian Leadership Institute for Medical Education to develop strategies to foster scholarly work within the Department of Surgery and the Faculty of Health Sciences. Dr. Phillips will use his funds on the Harvard Macy Program for Educators in Health Professions leadership course.

SEAMO 2021 Endowed Scholarship and Education Fund – Dr. Wiley Chung

The Endowed Scholarship and Education Fund supports projects that add value to the continuum of medical education offered through Queen's School of Medicine.

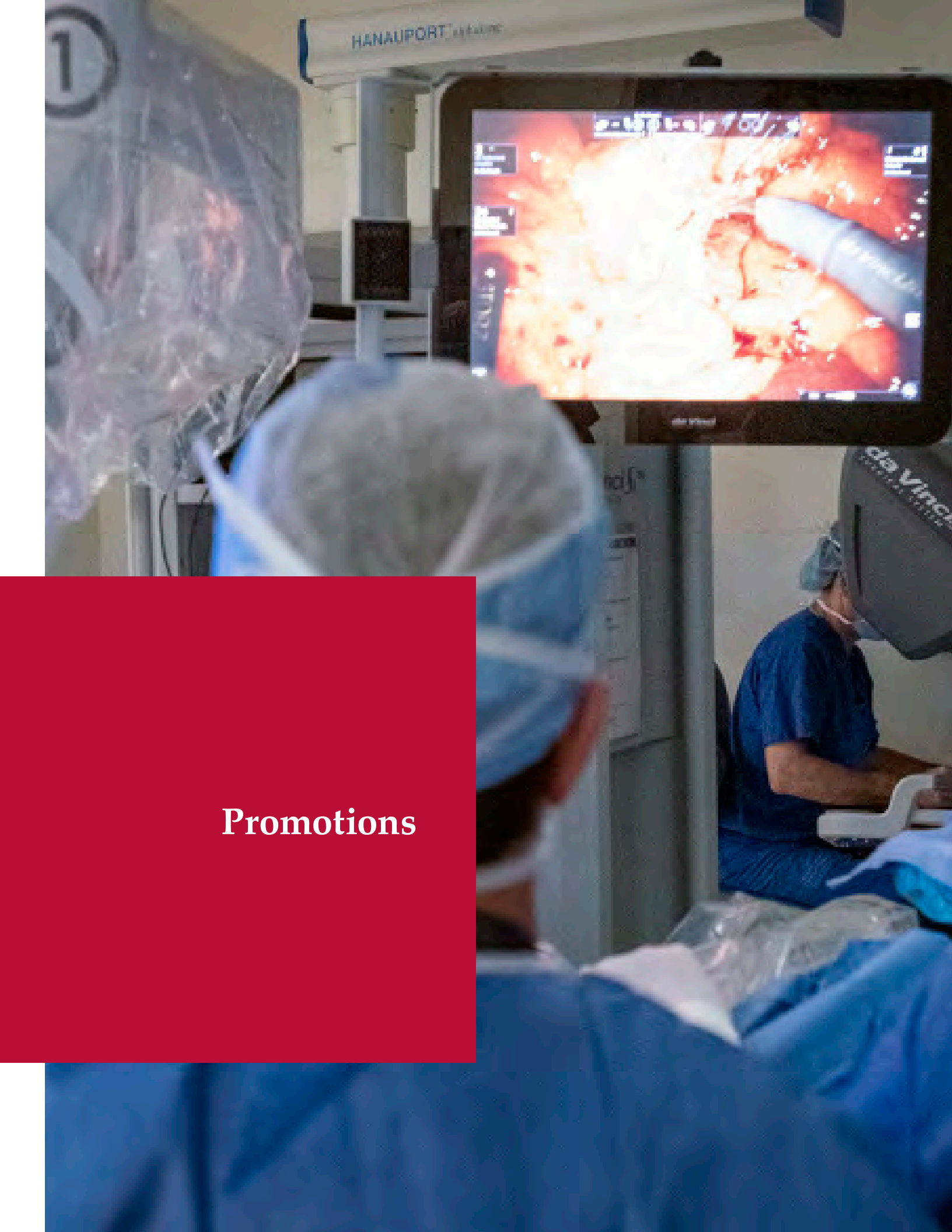
Dr. Wiley Chung was awarded for his project entitled "Views from the Frontline: the perceived impact of shorter resident call shifts on learning opportunities."

2021 SAGES Early Career Faculty Researcher Award – Dr. Boris Zevin

The Society of American Gastrointestinal and Endoscopic Surgeons (SAGES) Early Career Faculty Research Award is designated for a young member of the Society who is 3-5 years post fellowship. The criteria includes significant clinical and/or basic science research, publications and presentations at national meetings.

2020-21 Michael A Simurda Award – Dr. Parham Daneshvar

The Michael A. Simurda Award for Excellent in Orthopaedic Education was established to honour the late Dr. Michael Simurda, who was the founder and former Division Chair of Orthopaedics. This annual award is given to a faculty member chosen by the residents in appreciation for outstanding contribution and dedication to resident learning.



Promotions

**Dr. Sunil Patel,
promoted to Associate Professor**





Retirements

Dr. Andrew Hamilton

Dr. Andrew Hamilton retired from Queen's University in September 2020 after 21 years in the Department of Surgery, and joined Brockville General Hospital in July 2021 as Chief of Staff. He has over three decades of surgical experience, specializing in cardiac surgery.

After receiving his M.D. from Dalhousie University, Dr. Hamilton had specialty training in general surgery, followed by a fellowship in cardiothoracic surgery. This passion led to him becoming a regular attending cardiac surgeon at Kingston General Hospital in addition to running his own practice.

Dr. Hamilton served for 15 years as Chair of Cardiac Surgery at Kingston Health Sciences Centre, 11 years as Deputy Chief of Surgery at Queen's University and five years with the College of Physicians and Surgeons of Ontario, most recently as Complaints Chair for Surgical Specialty panels. Over his career, he has been a member of numerous hospital, university, and provincial committees. He is excited about participating in the implementation of the Lanark, Leeds and Grenville Ontario Health Team.



RETIREMENTS

Dr. Christopher Wallace

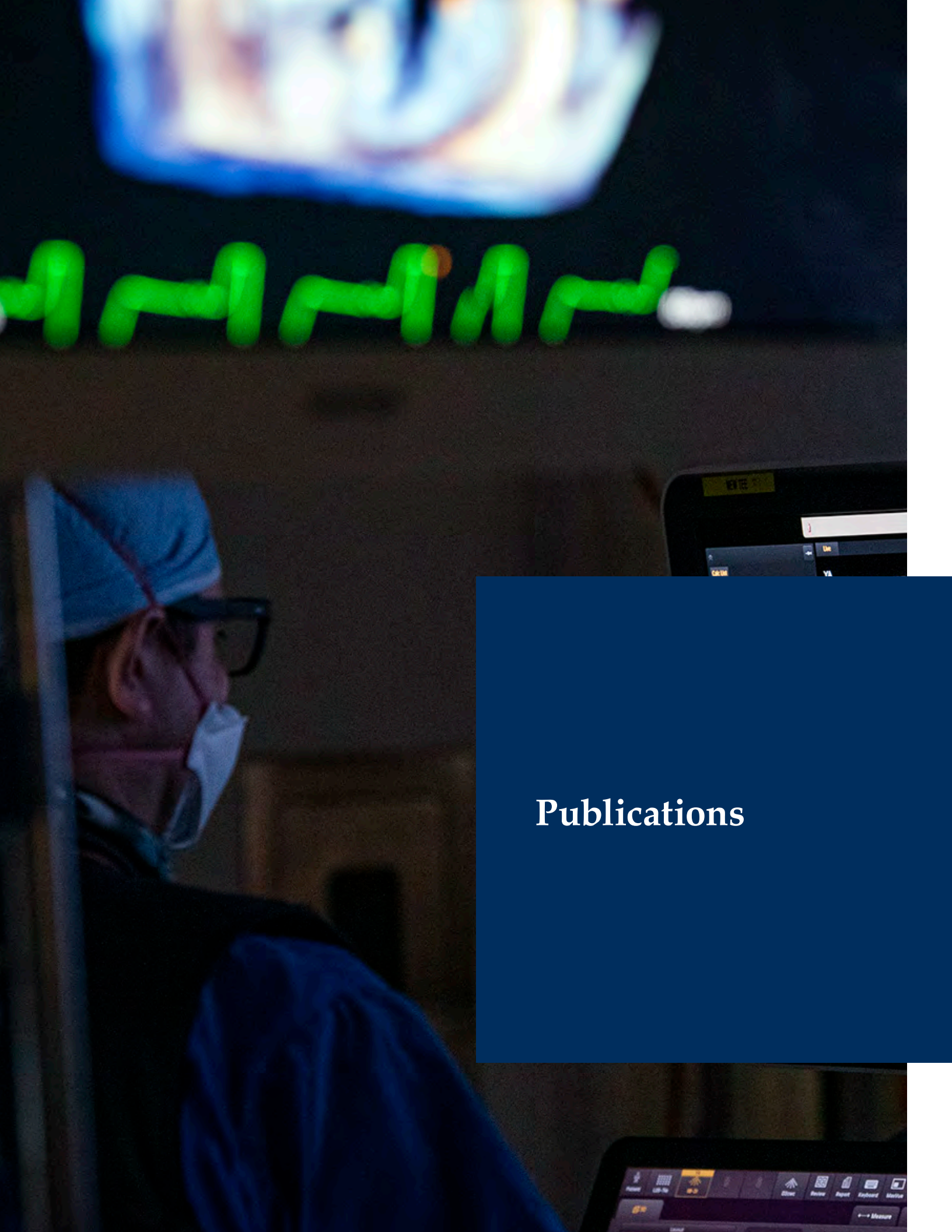
Dr. Christopher Wallace retired from Queen's University in June 2020 after nine years in the Department of Surgery. He received his medical degree from Queen's, did his residency in neurosurgery at the University of Toronto and completed fellowships at the universities of Western Ontario and Glasgow.

Dr. Wallace was a full-time faculty member at the University of Toronto from 1988-2011, and held numerous positions as professor, head of the division of neurosurgery at the University Health Network, program director (neurosurgery), and the director at Toronto Western Research Institute and the Foundation

Baxter & Alma Ricard Chair in Cerebrovascular Neurosurgery.

Dr. Wallace "returned" to Queen's in 2011, joining as head of the division of neurosurgery, focusing on recruitment and the development of a research program. He served as president of the Canadian Neurosurgical Society (CNSS) and the Neurosurgical Society of America. In 2017, he received the CNSS Lifetime Achievement Award (Charles Drake Medal) for his contribution to Canadian neurosurgery. He is well known for his passion for residency education.





Publications

PUBLICATIONS

Albarifar F, Jamzad A, Santilli A, Kauffman M, Janssen N, Connolly L, Ren K, Vanderbeck K, Wang A, **Mckay, D, Rudan J**, Fichtinger G, Mousavi P, Graph-based analysis of mass spectrometry data for tissue characterization with application in basal cell carcinoma surgery. 2-2021 *Medical Imaging 2021: Image-guided Procedures, Robotic Interventions and Modeling*, Epub

Afaq S, O'Hara NN, Schemitsch EH, Bzovsky S, Sprague S, Poolman RW, Frihagen F, Heels-Ansdell D, Bhandari M, Swiontkowski M, Slobogean GP; FAITH Investigators (**Bicknell R, Yach J, Bardana D, Wood G, Harrison M, Yen D**); HEALTH Investigators: Arthroplasty Versus Internal Fixation for the Treatment of Undisplaced Femoral Neck Fractures: A Retrospective Cohort Study, 11-2020, *J Orthop Trauma*, Vol. 34 Suppl S3:S9-S14

Allan M, Mahawar K, Blackwell S, Catena F, Chand M, Dames N, Goel R, Graham YN, Kothari SN... **Zevin B**, Wilson MS. PRODUCE study. COVID-19 research priorities in surgery (PRODUCE study): A modified Delphi process. 10-2020, *The British Journal of Surgery*, Vol. 107(11):e538-e540

Al-Mansour MR, **Caycedo-Marulanda A**, Davis BR, Alawashez A, Docimo S,

Qureshi A, Tsuda S. SAGES TAVAC safety and efficacy analysis confocal laser endomicroscopy. 5-2021 *Surg Endosc*. Vol. 35(5):2091-2103

Areshenkoff CN, Nashed JY, Hutchison M, Hutchison M, **Levy R, Cook DJ**, Menon RS, Everling S, Gallivan JP. Muting, not fragmentation, of functional brain networks under general anesthesia. 05-2021 *NeuroImage* Vol. 231:117830

Arora D, Yeung R, Furlan M, **Bicknell RT**. Does Implant Modularity Affect Radiographic Outcome Following Anatomic Shoulder Arthroplasty. *Seminars in Arthroplasty*. 2-2021 JSES Vol. (2):285-90

Atrey A, Khoshbin A, Rolfson O, Campbell D, **Wood G**, Bohm E, Jones C, Kandel C, Davis J, Atri N, Abdelbary H, Moojen DJ, Dunbar M, Manning L, Paxton EW, Yates P, Waddell JP, Ravi B, Reed M. Infection: The Final Frontier of Arthroplasty Management – A proposal for a global periprosthetic joint infection registry from a multinational collaborative group, the GAIA (Global Arthroplasty Infection Association). 1-2021, *The American journal of sports medicine*, Vol. 49(1):25-34

Ayeni OR, FIRST Investigators (**Wood GCA**). Osteochondroplasty

and Labral Repair for the Treatment of Young Adults with Femoroacetabular Impingement: A Randomised Controlled Trial. *Am J Sports Med* 1-2021, Vol. 49(1):25-34

Ayeni OR, Karlsson J, Heels-Ansdell D, Thabane L, Musahl V, Simunovic N, Duong A, Bhandari M ... **Wood GCA**... Routapohja MP, Femoroacetabular Impingement Randomized Controlled Trial (FIRST) Investigators. Osteochondroplasty and Labral Repair for the Treatment of Young Adults With Femoroacetabular Impingement: A Randomized Controlled Trial. *Am J Sports Med*. 1-2021, Vol. 49(1):25-34

Azin A, Hirpara DH, Draginov A, Khorasani M, **Patel SV**, O'Brien C, Queresly FA, Chadi SA, Adequacy of lymph node harvest following colectomy for obstructed and nonobstructed colon cancer. 2-2021, *Journal of surgical oncology*, Vol. 123(2):470-478

Barber D, Morkem R, Dalgarno N, Houlden R, Smith K, Anvari M, **Zevin B**. Patients eligible and referred for bariatric surgery in southeastern Ontario: Retrospective cohort study. 1-2021, *Canadian family physician Medecin de famille canadien*, Vol. 67(1):e31-e40

Batty LM, Firth A, Moatshe G, Bryant DM, Heard M, McCormack RG, Rezansoff A, Peterson DC, **Bardana D**, MacDonald PB, Verdonk PCM, Spalding T, Getgood AMJ; STABILITY Study Group, Willits K... Van Haver M. Association of Ligamentous Laxity, Male Sex, Chronicity, Meniscal Injury, and Posterior Tibial Slope With a High-Grade Preoperative Pivot Shift: A Post Hoc Analysis of the STABILITY Study. *Orthop J Sports Med.* 4-2021, Vol. 6;9(4):23259671211000038

Beaulieu K, **Alkins R**, Ellis R, Kunz M. Rapid Intraoperative Reconstruction of Cranial Implants. 9-2020, *Proc Inst Mech Eng H.* Vol. 234(9):1011-1017

Bechara R, Chen L, **Chung W**, Varma S. Salvage Circumferential Endoscopic Submucosal Dissection for Refractory Dysplastic Barrett's Esophagus. 8-2010. *Video Gastrointestinal Endoscopy* Vol. 5 (12):641-642

Bennett S, Chesney T, Coburn N, Zuk V, Haas B, Zhao H, Hsu A, Mahar A, Hallet J. Long-term dependency outcomes in older adults following hepatectomy and pancreatectomy for cancer: a population-based analysis. 3-2021 *Annals of Surgery.* Epub ahead of print

Beyea JA, Lau C, Cooke B, Hall S, Nathan PC, Gupta S. Long-term Incidence and Predictors

of Significant Hearing Loss Requiring Hearing Assistive Devices among Childhood Cancer Survivors: A Population-Based Study. 8-2020, *J Clin Oncol.* Vol. 38:2639-2646

Beyea JA, Cooke B, Rosen E, Nguyen P. Association of Tympanostomy Tubes with Future Assistive Hearing Devices—A Population Based Study. 2-2020, *BMC Pediatrics* Vol. 20:76

Bernaus M, Slobogean GP, Bzovsky S, Heels-Ansdell D, Zhou Q, Bhandari M, Swiontkowski M, Sprague S, FAITH Investigators (**Bicknell R, Yach J, Bardana D, Wood G, Harrison M, Yen D**). Early Radiographic Union Score for Hip Is Predictive of Femoral Neck Fracture Complications Within 2 Years. 6-2020, *Journal of Orthopaedic Trauma*, Vol. 34(6):e195-e202

Bhanji F, Miller G, Cheung WJ, Puligandla PS, **Winthrop A**, Baird R, Davies D, Lopushinsky SR, Webber EM. The future is here! Pediatric surgery and the move to the royal college of physicians and surgeons of Canada's competence by design. 5-2020, *Journal of Pediatric Surgery*, Vol. 55(5):796-799

Bicknell RT, Furlan M, Bertelsen A, Matsen F. Factors Affecting Stability of the Reverse Total

Shoulder Arthroplasty: A Cadaveric Biomechanical Study. 12-2020, *The Open Orthopedics Journal* Vol. 14:154-60

Bielawska B, Ouellette-Kuntz H, **Patel SV**, Anvari M, **Zevin B**. Severe nutritional complications after bariatric surgery in Ontario adults: a population-based descriptive study. 11-2020, *Surgery for obesity and related diseases: official journal of the American Society for Bariatric Surgery*, Vol. 16(11):1784-1793

Blankstein M, Schemitsch EH, Bzovsky S, Axelrod D, Poolman RW, Frihagen F, Bhandari M, Swiontkowski M, Sprague S, Schottel PC; **FAITH Investigators; HEALTH Investigators (Bicknell R, Yach J, Bardana D, Wood G, Harrison M, Yen D)**: The Faith and Health Trials: Are We Studying Different Hip Fracture Patient Populations. 11-2020, *J Orthop Trauma*, Vol. 34 Suppl 3:S1-S8

Boehnke SE, Robertson EL, Armitage-Brown B, Wither RG, Lyra E Silva NM, Winterborn A, **Levy R, Cook DJ**, De Felice FG, Munoz DP, The effect of lumbar puncture on the neurodegeneration biomarker neurofilament light in macaque monkeys. 12-2020, *Alzheimer's & dementia (Amsterdam, Netherlands)* Vol. 12(1):e12069

PUBLICATIONS

Borges FK, Bhandari M, Guerra-Farfan E, Patel A, Sigamani A, Umer M, Tiboni ME, Villar-Casares MDM, Tandon V, Tomas-Hernandez J, ... **Wood GCA**, ... Devereaux PJ, on behalf of the **HIP ATTACK Investigators (Bardana D, Wood GCA)**. Accelerated surgery versus standard care in hip fracture (HIP ATTACK): an international, randomised, controlled trial. *Lancet* 2020

Bougie O, McClintock C, Pudwell J, **Brogly SB**, Velez MP. Short-term outcomes of endometriosis surgery in Ontario: A population-based cohort study. 6-2021 *Acta Obstet Gynecol Scand. Acta Obstet Gynecol Scand.* Vol. 100(6):1140-1147

Brickman AR, Wu V, **Zevin B**. Preparing for Surgery Observerships During Medical School: A Cross-Sectional Study. 9-2020, *Journal of Surgical Education*, Vol. 77(5):1097-1105

Brogly SB. Invited Commentary: A predictive instrument for cesarean delivery after labor induction. 11-2020, *JAMA Netw Open* Vol. 3(11):e2025676

Brogly SB, Velez MP, Weler MM, Li W, Camden A, Guttmann A. Prenatal opioid analgesics and the risk of adverse birth

outcomes. 5-2021 *Epidemiol.* Vol. 32(3):448-456

Brzezinska P, Simpson NJ, Hubert F, Jacobs AN, Umana MB, MacKeil JL, Burke-Kleinman J, **Payne DM**, Ferguson AV, Maurice DH. Phosphodiesterase 1C integrates store-operated calcium entry and cAMP signaling in leading edge protrusions of migrating human arterial myocytes. 6-2021, *J Bill Chem*, Vol. 10, 248

Bzovsky S, Comeau-Gauthier M, Schemitsch EH, Swiontkowski M, Heels-Ansdell D, Frihagen F, Bhandari M, Sprague S; **FAITH Investigators (Bicknell R, Yach J, Bardana D, Wood G, Harrison M, Yen D); HEALTH Investigators**: Factors Associated With Mortality After Surgical Management of Femoral Neck Fractures. 11-2020, *J Orthop Trauma*, 34(11):S15-21

Castro DA, **Yang J**, **Kolar M**, Soboleski D. Imaging Features and Enhancement Technique to Diagnose and Classify Intrathoracic Lymphatic-Venous Malformation. A Case Report and Literature Review. 5-2020, *Radiology Case Reports* Vol. 16(7):1888-1894

Caycedo-Marulanda A, **Patel S**, **Merchant S**, Brown C. Introduction of new techniques and technologies

in surgery: Where is transanal total mesorectal excision today? 5-2020, *World Journal of Gastrointestinal Surgery*, Vol. 12(5):203-207

Caycedo-Marulanda A, Patel SV, Verschoor CP, Chadi SA, Möslin G, Raval M, Lightner A, Chand M, Jimenez-Rodriguez R, Knol J, Maeda Y, Monson JRT, Wexner SD, Mayol J. Comparing 'Twitter' polls results with an online survey on surgeons perspectives for the treatment of rectal cancer. 12-2020, *BMJ Innovations*, Vol. 7(1) Online

Caycedo-Marulanda A, Karimuddin A, Caswell J, Raval M, Conlon M, Phang T, Brown C. Important outcomes for transanal total mesorectal excision in a Canadian population after using transanal minimally invasive surgery (flexible) or transanal endoscopic microsurgery (rigid) platforms. 05-2020 *Annals of Laparoscopic and Endoscopic surgery*. Epub

Caycedo-Marulanda A, Verschoor CP. Experience beyond the learning curve of transanal total mesorectal excision (taTME) and its effect on the incidence of anastomotic leak. 4-2020 *Tech Coloproctol*. Vol. 24(4):309-316

Caycedo-Marulanda A, Brown CJ, Chadi SA, Ashamalla S, Lee L, Stotland P, Hameed U, Melich

G, Ma G, Letarte F, Karimuddin A, Queresy F, Phang T, Raval M, Vikis E, Liberman AS, Bouchard A, Bouchard P, Drolet S. Canadian taTME expert collaboration (CaTaCO) position statement. 7-2020 *Surg Endosc*. Vol. 34(9):3748-3753

Caycedo-Marulanda A, Caswell J, Mathur S. Comparing the environmental impact of anesthetic gases during transanal total mesorectal excision surgery at a tertiary healthcare centre. 5-2020 *Can J Anaesth*. Vol. 67(5):607-608

Caycedo-Marulanda A, Nadeau K, Verschoor CP, Sands D, Spinelli A, Ashamalla S, **Patel SV**, Di Candido F, Mujukian A, Zaghiyan K, Stevenson G, Wolthuis A, Clark DA, D'Hoore A, Stevenson A, Wexner SD. Exploring the perioperative outcomes of a sample of successful adopters of transanal total mesorectal excision (taTME) during the learning phase. *Surgery*. 4-2021 Vol. 169(4):774-781

Caycedo-Marulanda A, **Patel SV**, Verschoor CP, Uscategui JP, Chadi SA, Moeslein G, Chand M, Maeda Y, Monson JRT, Wexner SD, Mayol J. A Snapshot of the International Views of the Treatment of Rectal Cancer Patients, a Multi-regional Survey: International Tendencies in Rectal Cancer. 1-2021, *World journal of surgery*, Vol. 45(1):302-312

Caycedo-Marulanda A, Lee L, Chadi SA, Verschoor CP, Crosina J, Ashamalla S, Brown CJ. Association of Transanal Total Mesorectal Excision With Local Recurrence of Rectal Cancer. 2-2021 *JAMA Netw Open*. Vol. 4(2):e2036330

Chadi SA, Guidolin K, **Caycedo-Marulanda A**, Sharkawy A, Spinelli A, Queresy FA, Okrainec A. Current Evidence for Minimally Invasive Surgery During the COVID-19 Pandemic and Risk Mitigation Strategies: A Narrative Review. 8-2020 *Ann Surg*. Vol. 272(2):e118-e124

Chan B, **Rudan JF**, Mousavi P, Kunz M. Intraoperative integration of structured light scanning for automatic tissue classification: A feasibility study. *Int J Comput Assist Radiol Surg*. 4-2020, Vol. 15(4):641-649

Champagne AA, Coverdale NS, Ross A, Chen Y, Murray CI, Dubowitz D, **Cook DJ**. Multimodal normalization of resting-state using local physiology reduces changes in functional connectivity patterns observed in mTBI patients. 12-2020, *NeuroImage. Clinical*, Vol. 26, 102204

Champagne AA, Coverdale NS, Fernandez-Ruiz J, Mark CI, **Cook DJ**. Compromised resting cerebral metabolism after sport-related concussion:

A calibrated MRI study. 2-2021, *Brain Imaging and Behavior*, Vol. 15(1):133-146

Chapman K, Berger M, Doherty C, Anastakis D, Baltzer H, Boyd K... **Hendry JM** ... Yeung J. Recommendations for patients with complex nerve injuries during the COVID-19 pandemic. 8-2020 *Canadian Journal of Neurological Sciences / Journal Canadien Des Sciences Neurologiques*, 1-23

Cherkaoui Z, González C, Wakabayashi T, Delattre B, Léost E, Serra S, Huppertz J, Klein F, Stéphan M, Meyer JM, Schaff A, Martinis E, Bangoura E, Kieffer S, Blanès S, Haddad E, De Guio G, Felli E, Pernot S, Marescaux J, Mutter D, Lugiez C, Pessaux P. IHU-VBHC Working Group... **Nanji S**. A Standard Set of Value-Based Patient-Centered Outcomes for Pancreatic Carcinoma: An International Delphi Survey. 2-2021, *Annals of Surgical Oncology*, Vol. 28(2):1069-1078

Chung J, Stevens LM, Chu MWA, Dagenais F, Peterson MD, Boodhwani M, Bozinovski J, El-Hamamsy I, Yamashita MH, Atoui R, Bittira B, **Payne D**, Ouzounian M, Canadian Thoracic Aortic Collaborative (CTAC). The impact of age on patients undergoing aortic arch surgery: Evidence from a multicenter national registry. 2-2020, *The Journal of thoracic and cardiovascular surgery*, Vol. 162(3):759-766.e1

PUBLICATIONS

Connolly L, Jamzad A, Kaufmann M, Ruvino R, Sedghi A, Ungi T, Asselin M, Yam S, **Rudan J**, Nicol C, Fichtinger G, Mousavi P. Classification of tumor signatures from electrosurgical vapors using Mass Spectrometry and Machine Interventions. 3-2020 *Image-Guided Procedures, Robotic Interventions and Modelling*, Vol 11315Q

Coverdale NS, Fernandez-Ruiz J, Champagne AA, Mark Cl, **Cook DJ**. Co-localized impaired regional cerebrovascular reactivity in chronic concussion is associated with BOLD activation differences during a working memory task. 12-2020, *Brain imaging and behavior*, Vol. 14(6):2438-2449

Cross KP, Heming EA, **Cook DJ**, Scott SH. Maintained Representations of the Ipsilateral and Contralateral Limbs during Bimanual Control in Primary Motor Cortex. 8-2020, *The Journal of neuroscience: the official journal of the Society for Neuroscience*, Vol. 40(35):6732-6747

Dagnone JD, Taylor D, Acker A, Bouchard M, Chamberlain S, DeJong P, Dos Santos A, Fleming M, Hall AK, Jaeger M, **Mann S**, Trier J, McEwen L. Seven ways to get a grip on implementing Competency-based Medical Education at the program level. 9-2020

Canadian Medical Education Journal, Vol. 11(5):e92-e96

Daneshvar P, Willing R, Lapner M, Pahuta MA, King GJW. Rotational Anatomy of the Radius and Ulna: Surgical Implications. *J Hand Surg Am*. 11-2020, Vol. 45(11):1082.

Dion JMM, Campbell RJ, Nguyen P, **Beyea JA**. Preoperative Anesthesiology Consult Utilization in Ontario – A Population-Based Study. *J Eval Clin Pract*. 6-2021. Online ahead of print

Elsolh B, Brar A, Gyawali B, **Patel SV**. Reviewing the Reviewers: Potential Financial Conflicts of Interest in Editorial Boards of Surgery Journals. 6-2021 *Annals of surgery*, Epub

Ethier T, **Bisleri G**, **Ribeiro IB**, **Payne D**. Surgical Removal of Migrated Broken Sternal Wire Using Endoscopic Assistance. 2-2020, *The Annals of thoracic surgery*, Vol. 109(2):e107-e108

FAITH Investigators; Health Investigators (**Bicknell R**, **Yach J**, **Bardana D**, **Wood G**, **Harrison M**, **Yen D**) Study Summaries. 11-2020, *J Orthop Trauma* Vol.34 Suppl 3:Sii-Siii

Flemming JA, Mullin M, Lu J, Sarkar MA, Djerboua M, Velez MP, **Brogly S**, Terrault NA.

Outcomes of pregnant women with cirrhosis and their infants in a population-based study. 11-2020, *Gastroenterology* Vol. 159(5):1752-1762.e10. Epub

Galica J, Liu Z, Kain D, **Merchant S**, Booth C, Koven R, Brundage M, Haase K. Coping during COVID-19: A mixed methods study of older cancer survivors. 01-2021, *Support Care Cancer* Vol. 6:1-10

Gauvin G, Yeo CT, Ungi T, **Merchant S**, Lasso A, Jabs D, Vaughan T, **Rudan JF**, **Walker R**, Fichtinger G, **Engel CJ**. Real-time Electromagnetic Navigation for Breast-Conserving Surgery Using NaviKnife Technology: A Matched Case-Control Study. *Breast J*. 3-2020, Vol. 26(3):399-405

Gerolami J, Wu V, Fauerbach PN, Jabs D, **Engel CJ**, **Rudan J**, **Merchant S**, **Walker R**, Anas EMA, Abolmaesumi P, Fichtinger G, Ungi T, Mousavi P. An End-to-End Solution for Automatic Contouring of Tumor Region in Intraoperative Images of Breast Lumpectomy. 7-2020, *IEEE Eng Med Biol Soc*. 2003-2006

Getgood A, Hewison C, Bryant D, Litchfield R, Heard M, Buchko G, Hiemstra LA, Willits KR, Firth A, MacDonald P, STABILITY Study Group (**Bardana D**). No Difference

in Functional Outcomes When Lateral Extra-Articular Tenodesis Is Added to Anterior Cruciate Ligament Reconstruction in Young Active Patients: The Stability Study. 6-2020, *Arthroscopy: The Journal of Arthroscopic and Related Surgery* (2020 Best Clinical Research Award) Vol. 36(6):1690-1701

Getgood A, Bryant D, Litchfield R, Heard M, McCormack R, Rezansoff A, Peterson D, **Bardana D**, MacDonald P, Verdonk P, Spalding T, STABILITY Study Group. Lateral Extra-Articular Tenodesis Reduces Failure of Hamstring Tendon Autograft ACL Reconstruction –Two Year Outcomes from the STABILITY Study Randomized Clinical Trial. 2-2020 *American Journal of Sports Medicine* (O’Donoghue Sports Injury Research Award) Vol. 48(2):285-297

Gnanasegaram JJ, Leung R, **Beyea JA**. Evaluating the Effectiveness of Learning Ear Anatomy Using Holographic Models. 8-2020 *J Otolaryngol Head Neck Surg*. Vol. 49:63

Grenier-Pleau I, Tyryshkin K, Le TD, **Rudan J**, Bonnell E, Thibault P, Zeng K, Lässer C, Mallinson D, Lamprou D, Hui J, Postovit LM, Chan EYW, Abraham SA. Blood extracellular vesicles from healthy individuals regulate hematopoietic stem cells as

humans age. 11-2020 *Aging Cell*. Vol. 19(11):e13245

Gupta S, Guha D, Taslimi S, Priola SM, Waggass G, Heyn C, Graham S, Foster S, Kongkham P, Sinclair J, **Cook DJ**, Spears J, Das S, Mainprize T, Cusimano MD, Sahgal A, Zadeh G, Bernstein M, Wilson B, Kasper E, DeMarchi R, Murty N, Drake B, Muller P, Perry J, Yang VXD, Multi-modality imaging assisted fluorescence-guided resection of glioblastoma: Case report. 5-2020, *Interdisciplinary Neurosurgery*, Vol. 19

Hage A, Stevens LM, Ouzounian M, Chung J, El-Hamamsy I, Chauvette V, Dagenais F, Cartier A, Peterson MD, Boodhwani M, Guo M, Bozinovski J, Moon MC, White A, Kumar K, Lodewyck C, Bittira B, **Payne D**, Chu MWA, Impact of brain protection strategies on mortality and stroke in patients undergoing aortic arch repair with hypothermic circulatory arrest: evidence from the Canadian Thoracic Aortic Collaborative. 7-2020, *European journal of cardio-thoracic surgery: official journal of the European Association for Cardio-thoracic Surgery*, Vol. 58(1):95-103

Haase KR, Kain D, **Merchant S**, Booth C, Koven R, Brundage M, Galica J. Older survivors of cancer in the COVID-19 pandemic: Reflections and recommendations for future

care. 12-2020, *Journal of Geriatric Oncology*, S1879-4068(20)30501-4

Heinhelt M, **Phillips T**. The Migrating Sialolith: A Case Report. 4-2021, *SN Comprehensive Clinical Medicine*, Vol. 3:2052–2055

Hip Attack Investigators (**Bardana D, Bicknell RT, Harrison MM, Mann S, Wood GCA, Yach J**): Accelerated Surgery Versus Standard Care in Hip Fracture (HIP ATTACK): An International, Randomised, Controlled Trial. *Lancet*, 2-2020, Vol. 395(10225):698-708

Horton GA, Simpson MTW, Beyea MM, **Beyea JA**. Cerumen Management: An Updated Clinical Review and Evidence-Based Approach for Primary Care Physicians. 1-2020, *J Prim Care Community Health*, Online

Horton GA, Ibrahim O, Jansen M, Trier J, Milev R, **Beyea JA**. Repetitive Transcranial Magnetic Stimulation for the Treatment of Chronic Tinnitus: A Preliminary Study of the Influence of Traumatic Brain Injury on Treatment Response. 3-2021, *Int Tinnitus J*. Vol. 1(25):51-58

Ibrahim M, Stevens LM, Ouzounian M, Hage A, Dagenais F, Peterson M, El-Hamamsy I, Boodhwani

PUBLICATIONS

M, Bozinovski J, Moon MC, Yamashita MH, Atoui R, Bittira B, **Payne D**, Lachapelle K, Chu MWA, Chung J. Canadian Thoracic Aortic Collaborative. Evolving Surgical Techniques and Improving Outcomes for Aortic Arch Surgery in Canada. 5-2021, *CJC Open*, Vol. 3, 1117-1124

Jamzad A, Sedghi A, Santilli AML, Janssen NY, Kaufmann M, Ren KYM, Vanderbeck K, Wang A, **McKay D**, **Rudan JF**, Fichtinger G, Mousavi P. Improved Resection Margins in Surgical Oncology Using Intraoperative Mass Spectrometry. Medical Image Computing and Computer Assisted Intervention – MICCAI 2020. *Lecture Notes in Computer Science*, 9-2020, Sep(12263):44-53

Janssen NNY, Kaufmann M, Santilli A, Jamzad A, Vanderbeck K, Ren KYM, Ungi T, Mousavi P, **Rudan JF**, **McKay D**, Wang A, Fichtinger G. Navigated tissue characterization during skin cancer surgery. 10-2020, *Int J Comput Assist Radiol Surg*. Vol. 15(10):1665-1672

Kasper G, Samuel N, **Alkins R**, Khan O. Practice patterns in the management of recurrent and residual non-functioning pituitary adenoma: results from a Canada-wide survey. 1-2021, *eNeurologicalSci*. Online ahead of print

Kassam F, **Yach J**. Significance of extracanalicular cement extravasation in thoracolumbar kyphoplasty. 7-2020, *Canadian Journal of Surgery*, Epub

Kay J, Simunovic N, Heels-Andsell D, Bhandari M, Ayeni OR; FIRST Investigators (**Wood GCA**). Lower body mass index and age are predictive of improved pain and health utility scores following arthroscopic management of femoroacetabular impingement. 5-2021, *Knee Surg Sports Traumatol Arthrosc*. Vol. 29(5):1461-1473

Kolar M, Pilkington M, **Winthrop A**, Theivendram A, Lajkosz K, **Brogly SB**. Diagnosis and treatment of childhood intussusception from 1997 to 2016: A population-based study. 8-2020, *Journal of Pediatric Surgery*, Vol. 55(8):1562-1569

Kouzmina E, **Mann S**, Chaplin T, **Zevin B**. An Evaluation of the Surgical Foundations Curriculum: A National Study. 5-2021, *J Surg Educ*. Vol. 78(3):914-926

Kouzmina E, Bechara R, **Zevin B**. Resection of fibrous pseudocapsule in a patient with secondary achalasia and persistent symptoms after removal of adjustable gastric band: Case report and review of the literature. 1-2021,

Bariatric Surgical Practice & Patient Care, Vol. 16(3)

Laframboise J, Ungi T, Sunderland K, **Zevin B**, Fichtinger G. Open-source platform for automated collection of training data to support video-based feedback in surgical simulators. 3-2020, *SPIE Medical Image-Guided Procedures, Robotic Interventions, and Modeling*, Vol. 1131517

Leitch JK, Duggan S, Ho AM, **Franklin J**, Mizubuti GB. Acute reversible hand ischemia following radial artery cannulation. 3-2020, *Can J Anaesth*. Vol. 67(3) 377-378

Lee ECS, Roach NT, Clouthier A, **Bicknell RT**, Bey MJ, Young NM, Rainbow MJ. Three-dimensional Scapular Morphology is Associated with Rotator Cuff Tears and Alters the Abduction Moment Arms of the Supraspinatus. 8-2020, *Clin Biomech*, Vol. 78:105091. Epub

Lemke M, Lia H, Gabinet-Equihua A, Sheahan G, **Winthrop A**, **Mann S**, Fichtinger G, **Zevin B**. Optimizing resource utilization during proficiency-based training of suturing skills in medical students: a randomized controlled trial of faculty-led, peer tutor-led, and holography-augmented

methods of teaching. 4-2020, *Surgical Endoscopy*, Vol. 34(4):1678-1687

Letourneau, S, **Hendry JM**. 2020. Management patterns of painful neuroma and phantom limb pain in Ontario awareness and attitudes towards targeted muscle reinnervation. 12-2020, *Plastic and Reconstructive Surgery Global Open*. 8(12):e3287

Lohre R, Bois A, Athwal G, Goel D, Canadian Shoulder and Elbow Society (**CSES – Bicknell RT**): Improved Complex Skill Acquisition by Immersive Virtual Reality Training: A Randomized Controlled Trial. 3-2020, *J Bone Joint Surg Am*, Vol. 102(6):e26

Lohre R, Bois A, Pollock J, Lapner P, McIlquham K, Athwal G, Goel D, Canadian Shoulder and Elbow Society (**CSES – Bicknell RT**): Effectiveness of Immersive Virtual Reality on Orthopedic Surgical Skills and Knowledge Acquisition Among Senior Surgical Residents: A Randomized Controlled Trial. 12-2020, *JAMA Network Open* Vol. 3(12):e2031217

MacDonald DRW, Neilly D, Schneider PS, Bzovsky S, Sprague S, Axelrod D, Poolman RW, Frihagen F, Bhandari M, Swiontkowski M, Schemitsch EH, Stevenson IM; FAITH Investigators (**Bicknell R**,

Yach J, Bardana D, Wood G, Harrison M, Yen D): Health Investigators: Venous Thromboembolism in Hip Fracture Patients: A Subanalysis of the FAITH and HEALTH trials. 12-2020, *J Orthop Trauma*, Vol. 34(11):S70-S75

Malcolm R, Pilkington M, **Merchant S**, Velez MP, **Brogly SB**. Work-related factors and pregnancy outcomes in female surgeons. 6-2021 *Ann Surg Open*. Vol. 2(2): e069

Makhdom AM, Buksbaum J, Rozbruch SR, **Da Cunha RJ**, Fragomen AT. Antibiotic Cement-Coated Interlocking Intramedullary Nails in the Treatment of Septic Complex Lower Extremity Reconstruction; A retrospective analysis with two year Minimum follow up. 5-2020, *J Bone Jt Infect*. Vol. 5(4): 176-183

Mann S, Hastings Truelove A, Beesley T, Howden S, Egan R. Resident perceptions of Competency-Based Medical Education. 09-2020, *Canadian Medical Education Journal*, Vol. 11(5):e31-e43

McClure RS, **Brogly SB**, Lajkosz K, McClintock C, **Payne D**, Smith H, Johnson A. Economic burden and healthcare resource utilization for thoracic aortic dissections and thoracic aortic aneurysms - a population-based cost-of-

illness analysis. 6-2020, *J Amer Heart Assoc*. Vol. 9(11):e014981

McClure RS, Berry RF, Dagenais F, Forbes TL, Grewal J, Keir M, Klass D, Kotha VK, McMurtry MS, Moore RD, **Payne D**, Rommens K, The Many Care Models to Treat Thoracic Aortic Disease in Canada: A Nationwide Survey of Cardiac Surgeons, Cardiologists, Interventional Radiologists, and Vascular Surgeons. 2-2021, *CJC Open*, Vol. 3(6):787-800

McGillion MH, Parlow J, Borges FK, Marcucci M, Jacka M, Adili A, Lalu MM, Yang H, Patel A, O'Leary S, Tandon V, **Hamilton GM**, Mrkobrada M...**Pichora DR**, Yousef H, Moloo H, Sehmbi H, Waggott M, Belley-Cote EP, Whitlock R, Devereaux PJ; PVC-RAM Investigators (**Da Cunha R, Patel S, Payne D, Yacob M**). Post Discharge after Surgery Virtual Care with Remote Automated Monitoring Technology (PVC-RAM): protocol for a randomized controlled trial. 3-2021, *CMAJ Open*. Vol. 2;9(1):E142-E148

McGillion MH, Parlow J, Borges FK, Marcucci M, Jacka M, Adili A, Lalu MM, Ouellette C, Bird M, Ofori S, Roshanov PS, Patel A, Yang H, O'Leary S, Tandon V, **Hamilton GM**, Mrkobrada M... Simunovic M, Williams DC, Halman S, Harlo PVC-RAM Investigators (**Da Cunha R, Patel S, Payne D, Pichora D, Yacob M**). Post-

PUBLICATIONS

discharge after surgery Virtual Care with Remote Automated Monitoring-1 (PVC-RAM-1) technology versus standard care: randomised controlled trial. 9-2021, *BMJ (Clinical research ed.)*, Vol. 374, n2209

McGuire A, Krysa N, Mann S. Hair of the Dog? Periprosthetic Joint Infection with *Streptococcus can is.* 2-2021, *Arthroplast Today*. Vol. 27;8:53-56

Meloni BP, Chen Y, Harrison KA, Nashed JY, Blacker DJ, South SM, Anderton RS, Mastaglia FL, Winterborn A, Knuckey NW, **Cook DJ.** Poly-Arginine Peptide-18 (R18) Reduces Brain Injury and Improves Functional Outcomes in a Nonhuman Primate Stroke Model. 4-2020, *Neurotherapeutics*, Vol. 17(2):627-634

Merchant SJ, Nair CK, Booth CM. Leveraging High-Quality Research to Define the Gastric Cancer Landscape in India. 9-2020, *Indian Journal of Surgical Oncology*, Vol. 11(3):334-336

Merchant SJ, Brogly SB, Booth CM, Goldie C, Peng Y, **Nanji S, Patel SV,** Lajkosz K, Baxter NN. Management of Cancer-Associated Intestinal Obstruction in the Final Year of Life. 4-2020, *Journal of Palliative Care*, Vol. 35(2):84-92

Merchant SJ, Kong W, Gyawali B, Hanna T, **Chung W, Nanji S, Patel SV,** Booth CM. Effectiveness of Trastuzumab in Routine Clinical Practice: A Population-based Study of Patients with HER-2-positive Oesophageal, Gastroesophageal and Gastric Cancer. 7-2020 *Clin Oncol (R Coll Radiol)* Vol. 31:S0936-6555(20)30295-8

Merchant S, Lajkosz K, Brogly S, Booth C, **Nanji S, Patel S,** Baxter N. Management of Cancer-Associated Intestinal Obstruction in the Final Year of Life. 04-2020, *Journal of Palliative Care* Vol. 35(2):84-92

Merchant SJ, Kong W, Brundage M, Booth CM. Symptom Evolution in Patients with Esophageal and Gastric Cancer Receiving Palliative Chemotherapy: A Population-Based Study. 1-2021, *Annals of Surgical Oncology*, Vol. 28(1):79-87

Merchant SJ, Booth CM. Palliative chemotherapy for upper GI cancer: balancing hope, reality, survival, and symptoms. *Annals of Surgical Oncology*, 01-2021, Vol. 28(1):88-89

Merchant SJ, Booth CM. ASO Author Reflections: Palliative Chemotherapy for Upper Gastrointestinal Cancer:

Balancing Hope, Reality, Survival, and Symptoms. 1-2021, *Annals of Surgical Oncology*, Vol. 28(1):88-89

Mir ZM, Yu D, Merchant SJ, Booth CM, **Patel SV.** Management of rectal cancer in Canada: an evidence-based comparison of clinical practice guidelines. 1-2020, *Canadian Journal of Surgery - Journal canadien de chirurgie*, Vol. 63(1):E27-E34

Motomura D, **Chung W,** Bechara R. Endoscopic therapy for T1b esophageal cancer. 1-2021, *Gastrointestinal Endoscop*, Vol 93, Issue 1, 282-283

Mullin M, Linton S, Parker S, Noseworthy C, O'Callaghan N, **Reid K,** Digby G. Impact of a standardized triage pathway on assignment to physician specialty, timeliness of care, and health system efficiency for patients with lung cancer. 10-2020, *JCO Oncol Pract*. Vol. 158(4):A1469

Nanji S, Mir ZM, Karim S, Brennan KE, **Patel SV, Merchant SJ,** Booth CM. Perioperative Blood Transfusion and Resection of Colorectal Cancer Liver Metastases. 03-2021, *Outcomes in Routine Clinical Practice HPB (Oxford)* Vol. 23(3):404-412

Nasute Fauerbach PV, Tyryshkin K, Rodrigo SP, **Rudan J**, Fichtinger G, Reedijk M, Varma S, Berman DM. Lack of definitive presurgical pathological diagnosis is associated with inadequate surgical margins in breast-conserving surgery. 6-2021, *Eur J Surg Oncol*. Vol. 4:S0748-7983(21)00542-4

Nayak R, **Brogly SB**, Lougheed D, Lajkosz K, **Petsikas D**. Two decades of thoracic empyema in Ontario, Canada. 5-2020, *Chest* Vol. 157(5): 1114-1116

Nayak R, **Brogly S**, Lougheed MD, **Petsikas D**. Response, changing and unchanging trends for an old disease. 12-2020, *Chest*. Vol. 158(6):2702

Newman A, Mauer-Vakil D, Coo H, Newton L, Wilkerson E, McKnight S, **Brogly SB**. Rooming-in for infants at risk for neonatal abstinence syndrome: Outcomes five years after its introduction as the standard of care at one hospital. 11-2020, *Am J Perinatol*. Online ahead of print

Newsted D, Rosen E, Cooke B, Beyea MM, Simpson MTW, **Beyea JA**. Approach to Hearing Loss. 11-2020, *Can Fam Physician*. Vol. 66:803-809

Newsted D, Rosen E, Cooke B, Beyea MM, Simpson MTW,

Beyea JA. Aborder la perte auditive. 11-2020, *Can Fam Physician*. Vol. 66:e279-e286

Ohlin A, Ayeni OR, FIRST investigators (**Wood GCA**). Low Rates of adverse events in a randomized controlled trial addressing the surgical treatment of femoroacetabular impingement (FAI) syndrome. 6-2021, *Knee Surg Sports Traumatol Arthrosc*. Vol. 29(6):2015-2020

Park R and **Wood KS**. Case Report: Pediatric Posterior Shoulder Dislocation. 1-2021, *JSES RRT*. Online

Park R, **Wood G**, Hopman W, Grant H, **Yen D**. Hospital Environmental Influences and the Rate of Periprosthetic Joint Infections at a Canadian Tertiary Center: A Retrospective Chart Review. 5-2021, *Current Orthopaedic Practice*, Vol. 32(3):223-231

Patel SV, Zhang L, Wei XS, **Merchant SJ**, **Nanji S**, James PD, Booth CM. A Population-Based Cohort Study of Venous Thromboembolism Rates Following Surgery and During Adjuvant Chemotherapy in Patients With Colon Cancer. 3-2020, *Diseases of the Colon and Rectum*, Vol. 63(3):336-345

Patel S, **Brogly S**, Raphael M, Survival and Outcomes After

Noncompletion of Treatment for Anal Cancer-Reply. 10-2020, *Jama Oncology*, Vol. 6(12):1977-1978

Patel SV, Hendren S, Zaborowski A, Winter D. for Members of the Evidence Based Reviews in Surgery group., Evidence-based Reviews in Surgery Long-term Outcome of Surgery Versus Conservative Management for Recurrent and Ongoing Complaints After an Episode of Diverticulitis: Five-year Follow-up Results of a Multicenter Randomized Controlled Trial (DIRECT-Trial). 8-2020, *Annals of surgery*, Vol. 272(2):284-287

Patel SV, Ko G, Raphael MJ, Booth CM, **Brogly SB**, Kalyvas M, Li W, Hanna T. Salvage Abdominoperineal Resection for Anal Squamous Cell Carcinoma: Use, Risk Factors, and Outcomes in a Canadian Population. 6-2020, *Diseases of the Colon and Rectum*, Vol. 63(6):748-757

PelvEx Collaborative (**Caycedo-Marulanda A**). Predicting outcomes of pelvic exenteration using machine learning. 12-2020, *Colorectal Dis*. 2020 Vol. 22(12):1933-1940

PelvEx Collaborative (**Caycedo-Marulanda A**). Simultaneous pelvic exenteration and liver resection for primary rectal cancer with synchronous

PUBLICATIONS

liver metastases: results from the PelvEx Collaborative. 10-2020, *Colorectal Dis.* 2020 Vol. 22(10):1258-1262

PelvEx Collaborative (**Caycedo-Marulanda A**). The global cost of pelvic exenteration: in-hospital perioperative costs. 10-2020, *Br J Surg.* Vol. 107(11):e470-e471

PelvEx Collaborative (**Caycedo-Marulanda A**). The impact of the COVID-19 pandemic on the Management of Locally Advanced Primary/Recurrent Rectal Cancer. 10-2020, *Br J Surg.* Vol. 107(11):e547-e548

PelvEx Collaborative (*Caycedo-Marulanda A*). Management strategies for patients with advanced rectal cancer and liver metastases using modified Delphi methodology: results from the PelvEx Collaborative. 9-2020, *Colorectal Dis.* Vol. 22(9):1184-1188

PelvEx Collaborative (**Caycedo-Marulanda A**). International expert consensus guidance on indications, implementation and quality measures for transanal total mesorectal excision. 7-2020, *Colorectal Dis.* Vol. 22(7):749-755

PelvEx Collaborative (**Caycedo-Marulanda A**). Induction chemotherapy followed by chemoradiotherapy versus

chemoradiotherapy alone as neoadjuvant treatment for locally recurrent rectal cancer: study protocol of a multicentre, open-label, parallel-arms, randomized controlled study (PelvEx II). 5-2021, *BJS Open.* Vol. 7;5(3)

PelvEx Collaborative (**Caycedo-Marulanda A**). Perioperative management and anaesthetic considerations in pelvic exenterations using Delphi methodology: results from the PelvEx Collaborative. 1-2021, *BJS Open.* Vol. 8;5(1)

Pilkington M, Theivendram A, **Brogly SB**, **Kolar M**. Rising incidence of childhood intussusception in Ontario: A Population-Based Study From 1997-2016. 4-2021, *Am Surg.* 2021. Online ahead of print

Pilkington M, Khong E, Lajkosz K, **Brogly SB**, **Winthrop A**, **Kolar M**. The cost of childhood intussusception in Ontario from 2003-2016: a population-based study. 5-2020, *J Pediatr Surg.* Vol. 55(5):883-888

Pinilla RE, Aramendiz MC, Williams E, **Caycedo-Marulanda A**. Endo-VAC® customization for sinus/anastomotic-leaks/dehiscence after colorectal anastomosis. 10-2020, *Tech Coloproctol.* Vol. 24(10):1095-1096

Pinilla R, **Caycedo-Marulanda A**, Castro JM, Fuentes MA. Manejo del cáncer colorrectal durante la pandemia por SARS-CoV-2. 4-2020, *Revista Colombiana de Cirugía.* Vol. 35(2):235-43

Prada C, Tanner S, Marcano-Fernandez F, Bzovsky S, Schemitsch EH, Jeray K, Petrisor B, Bhandari M, Sprague, FLOW Investigators (**Bicknell RT**, **Campbell A**, **Pichora D**): How Successful Is Antibiotic Treatment for Superficial Surgical Site Infections After Open Fracture? A Fluid Lavage of Open Wounds (FLOW) Cohort Secondary Analysis. 12-2020, *Clin Orthop.* Vol. 478(12):2846-2855

Raphael MJ, Ko G, Booth CM, **Brogly SB**, Li W, Kalyvas M, Hanna TP, **Patel SV**. Factors Associated With Chemoradiation Therapy Interruption and Noncompletion Among Patients With Squamous Cell Anal Carcinoma. 6-2020, *JAMA Oncology.* Vol. 6(6):881-887

Ribeiro IB, Weirup P, Burns D, Gillinov M. Robotic-Assisted Mitral Valve Commissuroplasty: An Easy Fix for a Complex Jet. 11-2020, *CTSNET* Epub

Ribeiro IB, Weirup P, Burns D, Gillinov M. Robotically-Assisted Myxoma Resection: Tips and Tricks. 6-2020, *CTSNet*, Epub

Ribeiro IB, Ngu JMC, Gill G, Rubens FD. Development of a high fidelity pressurized porcine beating heart simulator for cardiac surgery training. 10-2017, *Perfusion*, Vol. 32(7):568-573

Rosati F, Hassan SMA, **Reid K**, Dejong P, **Bisleri G**. Left atrium perforation with lung injury after catheter ablation. 8-2020 *Journal of Cardiac Surgery*, Vol. 35(10)

Sadiq I, **Kassam F**, Nicholls F, Swamy G, Lewkonja P, Thomas K Jacobs WB, Miller N, Tanguay R, Soroceanu A. Chronic pre-operative opioid use is associated with higher peri-operative resource utilization and adverse outcomes in adult spinal deformity patients. *The Spine Journal*. 2020. S174

Santilli AML, Jamzad A, **Janssen NNY**, Kaufmann M, Connolly L, Vanderbeck K, Wang A, **McKay D**, **Rudan JF**, Fichtinger G, Mousavi P. Perioperative Margin Detection in Basal Cell Carcinoma Using a Deep Learning Framework: A Feasibility Study. *Int J Comput Assist Radiol Surg*. 5-2020, Vol. 15(5):887-896

Santilli AML, Jamzad A, Sedghi A, Kaufmann M, Logan K, Wallis J, Ren KYM, **Janssen N**, **Merchant S**, **Engel J**, **McKay D**, Varma S, Wang A, Fichtinger G,

Rudan JF, Mousavi P. Domain adaptation and self-supervised learning for surgical margin detection. 5-2021, *Int J Comput Assist Radiol Surg*. Vol. 16(5):861-869

Santilli AML, Jamzad A, Sedghi A, Kaufmann M, **Merchant S**, **Engel J**, Logan K, Wallis J, **Janssen N**, Varma S, Fichtinger G, **Rudan JF**, Mousavi P. Self-Supervised Learning For Detection Of Breast Cancer In Surgical Margins With Limited Data. 04-2021, *IEEE Biomedical Imaging (ISBI)* pp980-984

Sattar J, Wu V, **Beyea JA**. Current State of Otolaryngology Head and Neck Surgery Teaching in Canadian Medical Schools. 4-2020, *J Contemp Med Edu*. Vol. 10:87-93

Savage T, Wang JZ, Vo TX, **Ko G**, Karmali RJ, Siu J, **Spano S**, **You D**, **Kolar M**, **Winthrop A**, **Mann S**. A technical skills elective program for pre-clerkship medical students reduces levels of high anxiety for performing technical skills. 7-2020, *American Journal of Surgery*, Vol. 220(1):90-94

Schottel PC, Blankstein M, Sprague S, Swiontkowski M, Bzovsky S, Bhandari M, Schemitsch EH. FAITH Investigators (**Bicknell R**, **Yach J**, **Bardana D**, **Wood G**, **Harrison M**, **Yen D**). Optimal Technical Factors During Operative Management of Low-Energy

Femoral Neck Fractures. 2-2021, *Journal of Orthopaedic Trauma*, Vol. 35(2):92-99

Semrau JS, Scott SH, **Hamilton AG**, **Petsikas D**, **Payne DM**, **Bisleri G**, Saha T, Boyd JG, Quantified pre-operative neurological dysfunction predicts outcome after coronary artery bypass surgery. 2-2020, *Aging clinical and experimental research*, Vol. 32(2):289-297

Serrano PE, Gu CS, Moulton CA, Husien M, **Jalink D**, Martel G, **Tsang ME**, Hallet J, McAlister V, Gallinger S, Levine M. Effect of PET-CT on disease recurrence and management in patients with potentially resectable colorectal cancer liver metastases. Long-term results of a randomized controlled trial. 5-2020, *Journal of Surgical Oncology*, Vol. 121(6):1001-1006

Sivaratnam S, Comeau-Gauthier M, Sprague S, Schemitsch EH, Poolman RW, Frihagen F, Bhandari M, Swiontkowski M, Bzovsky S; FAITH Investigators (**Bicknell R**, **Yach J**, **Bardana D**, **Wood G**, **Harrison M**, **Yen D**); HEALTH Investigators: Predictors of Loss to Follow-up in Hip Fracture Trials: A Secondary Analysis of the Faith and Health Trials. 11-2020, *J Orthop Trauma*, Vol 34(11):S22-S27

Slobogean GP, Sprague S, Bzovsky S, Scott T, Thabane L, Heels-Ansdell D, O'Toole

PUBLICATIONS

RV, Howe A, Gaski GE, Hill LC, Brown KM, Viskontas D, Zomar M, Della Rocca GJ, O'Hara NN, Bhandari M; FAITH-2 Investigators (**Bicknell R**): Fixation using Alternative Implants for the Treatment of Hip Fractures (FAITH-2): The Exploratory Health-Related Quality of Life and Patient-Reported Functional Outcomes of a Multi-Centre 2 × 2 Factorial Randomized Controlled Pilot Trial in Young Femoral Neck Fracture Patients. 2-2021, *Injury*. Vol. 52(10):3051-3059

Stennett CA, O'Hara NN, Sprague S, Petrisor B, Jeray KJ, Leekha S, Yimgang DP, Joshi M, O'Toole RV, Bhandari M, Slobogean GP, the FLOW Investigators (**Bicknell RT, Campbell A, Pichora D**). Effect of Extended Prophylactic Antibiotic Duration in the Treatment of Open Fracture Wounds Differs by Level of Contamination. 3-2020, *Journal of Orthopaedic Trauma*, Vol. 34(3):113-120

Stockley D, Egan R, van Wylick R, Hastings-Truelove A, McEwen L, Dagnone D, **Walker R**, Flynn L & Reznick R. A systems approach for institutional CBME adoption at Queen's University. 8-2020, *Medical Teacher*, Vol. 42(8):916-921

Strauss S, **Yacob M**, Bhandari A, Jetty P. Carotid Endarterectomy Versus Carotid Artery Stenting: Survey of the Quality,

Readability, and Treatment Preference of Carotid Artery Disease Websites. 11-2020, *Interactive journal of medical research*, Vol. 9(4):e23519

Sykes EA, Wu V, Beyea MM, Simpson MTW, **Beyea JA**. Pharyngite: Approche diagnostique et thérapeutique. 4-2020, *Can Fam Physician*. Vol. 66:e119-e126. Review. French

Sykes EA, Wu V, Beyea MM, Simpson MTW, **Beyea JA**. Pharyngitis – An approach to diagnosis and treatment. 4-2020, *Can Fam Physician* Vol. 66:251-257

Sykes EA, Lemke M, Potter D, Li T, Mir ZM, Sheahan G, Wu V, **Zevin B**. Evaluating bowel enterotomy closures in simulated deep body cavities using the reversing half-hitch alternating post and square knots: a randomized controlled trial. 2-2021, *Canadian journal of surgery. Journal canadien de chirurgie*, Vol. 64(1):E59-E65

Tarantino R, Chiu LLY, Weber JF, Tse Y, **Bardana DD**, Pang SC and Waldman SD. Effect of Nutrient Metabolism on Cartilaginous Tissue Formation. 1-2021, *Biotechnology and Bioengineering*, E-pub

Tornetta P, Della Rocca G, Morshed S, Jones C, Heels-Ansdell D, Sprague S, Petrisor

B, Jeray K, Del Fabbro G, Bzovsky S, Bhandari M, FLOW Investigators (**Bicknell RT, Campbell A, Pichora D**), Risk Factors Associated With Infection in Open Fractures of the Upper and Lower Extremities, 12-2020, *JAAOS: Global Research and Reviews*, Vol. 4(12):e20.00188

van Oostendorp SE, Roodbeen SX, Chen CC, **Caycedo-Marulanda A**, Joshi HM, Tanis PJ, Cunningham C, Tuynman JB, Hompes R. Transperineal minimally invasive APE: preliminary outcomes in a multicenter cohort. 8-2020, *Tech Coloproctol*. Vol. 24(8):823-831

Wasilewski NV, **Caycedo-Marulanda A**. TAMIS repair of rectovaginal fistula. 8-2020, *Tech Coloproctol*. Vol. 24(7):765-766

Williams E, Hanna N, Menard A, Mussari B, Nasirzadeh R, Tarulli E, Dhillon GR, **Reid KR, Petsikas D**, Pereira J, Heffernan P, **Chung W**. Study Protocol for DICE Trial: Video-assisted thoracoscopic surgery decortication versus interventional radiology guided chest tube insertion for the management of empyema. 4-2021, *Contemporary Clinical Trials Communications* 22(5):100777

Wong S, O'Malley L, Menard A, **Jalink D, Nanji S**. Surgical Planning of Hepatic Metastasectomy Using Radiologist Performed

Intraoperative Ultrasound. 10-2020, *Journal of Clinical Oncology – open access*

Wurdemann FS, Poolman RW, Krijnen P, Bzovsky S, Sprague S, Kaptein BL, Hegeman JH, Schemitsch EH, Bhandari M, Swiontkowski M, Schipper IB; Sutch Hip Fracture Audit Group and FAITH Investigators (**Bicknell R, Yach J, Bardana D, Wood G, Harrison M, Yen D**): Clockwise Torque of Sliding Hip Screws: Is There a Right Side?, 11-2020, *J Orthop Trauma*, Vol. 34(11):S76-S80

Yacob M, Lotfi S, Tang S, Jetty P. Wikipedia in Vascular Surgery Medical Education: Comparative Study. 6-2020, *Journal of Medical Internet Research*, Vol. 6, 18076

Yeo C, **Merchant SJ**. Considerations in the Management of Malignant Bowel Obstruction. 06-2021, *Surg Oncol Clin N Am*, Vol. 30(3):461-474

Ying Y, **Yacob M**, Khambati H, Seabrook C, Gerritzen L. Does being in the hot seat matter? Effect of passive vs active learning in surgical simulation. 9-2020, *American journal of surgery*, Vol. 220(3):593-596

You DZ, Tomlinson M, Borschneck G, **Borschneck A**, MacDonald M, Deluzio K,

Borschneck D. The Effect of Ankle Brace use on a 3 Step Volleyball Spike Jump Height. 10-2020, *Arthroscopy, Sports Medicine and rehabilitation* Vol. 2(5): e461–e467

Yuen K, Asai Y, **Hendry JM**. Thumb Ulcer Presenting As Soft Tissue Infection in a Patient With Sweet’s Syndrome Intolerant To Systemic Corticosteroids: A Case Report. 01-2021, *Plastic Surgery Case Studies* Epub

Zevin B. Comment on: Laparoscopic sleeve gastrectomy induces sustained changes in gray and white matter brain volumes and resting functional connectivity in obese patients. 3-2020, *Surgery for obesity and related diseases: official journal of the American Society for Bariatric Surgery*, Vol. 16(3):e22-e23

Zevin B, Martin M, Dalgarno N, Chan L, Sivapalan N, Houlden R, Birtwhistle R, Smith K, Barber D. Survey of perceptions and educational needs of primary care providers regarding of patients with class II and III obesity in Ontario. Canada. 1-2021, *BMC family practice*, Vol. 22(1):14

Zhang L, Lemke M, Mir ZM, **Patel SV**. Delayed vs. Early Appendectomy (DELAY) trial for adult patients with acute appendicitis: Study protocol for

a randomized controlled trial. 3-2021, *Contemporary clinical trials*, Vol. 102, 106288



Research Funding

RESEARCH FUNDING JAN 1, 2020 - DEC 31, 2020

Principal Investigator:
Appireddy R
Co-Investigators: Braund H,
Dalgarno N, **Haji F**
Sponsor: SOUTHEASTERN
ONTARIO ACADEMIC MEDICAL
ORGANIZATION - Research
(CTAQ) Endowment Fund
Total Awarded: \$20,000
Project Title: A pilot study
of facilitators, barriers, and
physician/resident experience
using virtual care

Principal Investigator:
Appireddy R
Co-Investigators: Braund H,
Dalgarno N, **Haji F**, James A,
McKeown S
Sponsor: SOUTHEASTERN
ONTARIO ACADEMIC MEDICAL
ORGANIZATION - AFP
Innovation Research Fund
Total Awarded: \$15,000
Project Title: Telemedicine
and medical education: a
systematic review

Principal Investigator:
Arellano R
Co-Investigators: **Da Cunha
R**, Marosi K, Parlow J **Patel S**,
Payne D
Sponsor: QUEEN'S UNIVERSITY
- Faculty of Health Science
Total Awarded: \$10,000
Project Title: Post discharge
after surgery Virtual Care with
Remote Automated Monitoring
technology (PVC-RAM) Trial

Principal Investigator: **Bardana
D (Surgery)**
Co-Investigators: Champagne
A, McGuire A

Sponsor: PHYSICIANS' SERVICES
INC. FOUNDATION (PSIF)
Total Awarded: \$50,000
Project Title: Comparison of the
microstructural integrity and
clinical recovery of autografts
in anterior cruciate ligament
reconstruction using diffusion
tensor imaging

Principal Investigator: **Bardana
D (Surgery)**
Co-Investigators:
Sponsor: MCMASTER
UNIVERSITY – Clinical Trial
Total Awarded: \$14,000
Project Title: Shoulder
instability Trial comparing
Arthroscopic stabilization
Benefits compared with
Latarjet procedure Evaluation
(STABLE)

Principal Investigator: **Bardana
D (Surgery)**
Co-Investigators: Champagne
A, McGuire A
Sponsor: QUEEN'S UNIVERSITY
- Department of Surgery
Total Awarded: \$12,850
Project Title: Comparison of the
microstructural integrity and
clinical recovery of autografts
in anterior cruciate ligament
reconstruction using diffusion
tensor imaging

Principal Investigator: **Bicknell
RT (Surgery)**
Co-Investigators: Chen XYK
Sponsor: QUEEN'S UNIVERSITY
- Department of Surgery
Total Awarded: \$15,000
Project Title: Comparison of
Total and Reverse Shoulder
Arthroplasty Techniques in the
Treatment of Osteoarthritis

Principal Investigator: **Bisleri G
(Surgery)**
Co-Investigators: **Brogly S**
Sponsor: QUEEN'S UNIVERSITY
- Department of Surgery
Total Awarded: \$15,000
Project Title: Atrial Fibrillation
ICES study

Principal Investigator:
Borschneck D (Surgery)
Sponsor: MCMASTER
UNIVERSITY – Clinical Trial
Total Awarded: \$22,500
Project Title: Prospective
Evaluation of Sport Activity
and the Development
of Femoroacetabular
Impingement in the
Adolescent Hip (PREVIEW)

Principal Investigator: **Brogly S
(Surgery)**
Co-Investigators: Velez M
Sponsor: NIH-NATIONAL
INSTITUTES OF HEALTH
Total Awarded: \$56,123 USD
Project Title: A Population-
Based Study to Quantify the
Risks of Opioid Analgesics in
Pregnancy

Principal Investigator: **Brogly S
(Surgery)**
Sponsor: QUEEN'S FACULTY
ASSOCIATION -
Total Awarded: \$200
Project Title: Fund for Scholarly
Research and Creative Work
and Professional Development

Principal Investigator: **Brown P
(Surgery)**
Co-Investigators: **Brogly S**,

RESEARCH FUNDING JAN 1, 2020 - DEC 31, 2020

Tranmer JE, **Yacob Zelt DT**
Sponsor: QUEEN'S UNIVERSITY
- Department of Surgery
Total Awarded: \$15,000
Project Title: The associations between diabetes and metformin with abdominal aortic aneurysm and aortic dissection

Principal Investigator: Enriquez A
Co-Investigators: Abdollah H, Baranchuk AM, **Bisleri G**, Chacko S, Redfearn DP, Simpson CS
Sponsor: ABBOTT LABORATORIES LIMITED - Research Grant
Total Awarded: \$2,500
Project Title: (Smartwatch-AFL) Implementation of a Smartwatch-Based Strategy to Guide Anticoagulation Post-Ablation of Typical Atrial Flutter

Principal Investigator: Galica J
Co-Investigators: Booth CM, Brundage M, Kain D, **Merchant S**
Sponsor: QUEEN'S UNIVERSITY - COVID-19 Rapid Response
Total Awarded: \$10,000
Project Title: The psychosocial implications of COVID-19: How are cancer survivors coping?

Principal Investigator: Gallivan J
Co-Investigators: **Levy R**
Sponsor: QUEEN'S UNIVERSITY - BOTTERELL/HOWE/VIOLET E. POWELL
Total Awarded: \$25,500
Project Title: Functional neuroimaging-guided

enhancement of deep brain stimulation therapy
Principal Investigator: **Haji F (Surgery)**
Co-Investigators: Braund H, Chahine S, Melendez S
Sponsor: QUEEN'S UNIVERSITY - Department of Surgery
Total Awarded: \$14,875
Project Title: Systematic Review: Needs Assessment and Module Development

Principal Investigator: **Haji F (Surgery)**
Co-Investigators: Braund H, James A
Sponsor: QUEEN'S UNIVERSITY - Department of Surgery - Start up Grant
Total Awarded: \$180,000
Project Title: Designing and implementing innovations in health professions education: from bench to global bedside

Principal Investigator: **Haji F (Surgery)**
Co-Investigators: Braund H, James A
Sponsor: SCHOOL OF MEDICINE - Research Initiation Grant
Total Awarded: \$30,000
Project Title: Exploring the relationship between cognitive load, learner engagement, and learning during simulation-based training in the health professions

Principal Investigator: **Hendry M (Surgery)**
Co-Investigators Brogly S, Ethier JL, Patel R

Sponsor: QUEEN'S UNIVERSITY - Department of Surgery
Total Awarded: \$15,000
Project Title: Assessing the impact of Herceptin, an antibody-based cancer treatment, on the incidence of peripheral neuropathy in patients also receiving taxane-based chemotherapy

Principal Investigator: **Levy R (Surgery)**
Co-Investigators: Allen M
Sponsor: SOUTHEASTERN ONTARIO ACADEMIC MEDICAL ORGANIZATION - AFP Innovation Research Fund
Total Awarded: \$195,921
Project Title: Using patient specific sensory mapping in spinal cord stimulator programming to optimize the treatment of chronic pain

Principal Investigator: Marosi K
Co-Investigators: Arellano R, **Da Cunha R**, Parlow J **Patel S**, **Payne D**
Sponsor: QUEEN'S UNIVERSITY - Translational Institute of Medicine Grant
Total Awarded: \$10,000
Project Title: Post discharge after surgery Virtual Care with Remote Automated Monitoring technology (PVC-RAM) Trial

Principal Investigator: **Martou G (Surgery)**
Co-Investigators: Almakky M, **Brogly S**, Ritter A
Sponsor: QUEEN'S UNIVERSITY - Department of Surgery
Total Awarded: \$5,250

RESEARCH FUNDING JAN 1, 2020 - DEC 31, 2020

Project Title: The Breast Cancer Reconstruction Outcome Survey - The ROSE Study

Principal Investigator: **McKay D (Surgery)**

Co-Investigators: Fichtinger G, Janssen N, Kaufmann M, Mousavi P, Ren YMK, **Rudan JR**, Ungi T, Wang A
Sponsor: SOUTHEASTERN ONTARIO ACADEMIC MEDICAL ORGANIZATION - AFP Innovation Research Fund
Total Awarded: \$146,875
Project Title: Intraoperative margin assessment during basal cell carcinoma excision using mass spectrometry in real-time

Principal Investigator: **Merchant S (Surgery)**, Gilron I
Co-Investigators: Alqaydi A, **Brogly S**, La J
Sponsor: SOUTHEASTERN ONTARIO ACADEMIC MEDICAL ORGANIZATION - Research (CTAQ) Endowment Fund
Total Awarded: \$20,000
Project Title: Development and implementation of an opioid-sparing standardized multimodal analgesic protocol for patients undergoing outpatient breast surgery

Principal Investigator: Mousavi P
Co-Investigators: **Engel CJ**, Fichtinger G
Sponsor: NATURAL SCIENCES AND ENGINEERING RESEARCH COUNCIL OF CANADA
Total Awarded: \$10,756

Project Title: An integrated spectroscopy-US surgical navigation system for residual cancer detection in breast surgery - CHRP

Principal Investigator: Mousavi P
Co-Investigators: **Engel CJ**, Fichtinger G
Sponsor: CANADIAN INSTITUTES OF HEALTH RESEARCH - COVID-19 SUPPLEMENT
Total Awarded: \$6,895
Project Title: An integrated spectroscopy-US surgical navigation system for residual cancer detection in breast surgery - CHRP

Principal Investigator: Nanji S (Surgery)
Co-Investigators: Flemming J, Groome PA, **Patel S**
Sponsor: QUEEN'S UNIVERSITY - Department of Surgery
Total Awarded: \$14,268
Project Title: Derivation and validation of a risk prediction tool for mortality after non-hepatic abdominal surgery in patients with Cirrhosis

Principal Investigator: Parlow J
Co-Investigators: Arellano R, **Da Cunha R**, Marosi K, **Patel S**, **Payne D**
Sponsor: POPULATION HEALTH RESEARCH INSTITUTE – Clinical Trial
Total Awarded: \$20,000
Project Title: Post discharge after surgery Virtual Care with Remote Automated Monitoring

technology (PVC-RAM) Trial

Principal Investigator: **Patel S (Surgery)**

Co-Investigators: Booth CM, **Brogly S**, Dyer T, Hanna T, Kong W, **Merchant S**
Sponsor: CANADIAN INSTITUTES OF HEALTH RESEARCH
Total Awarded: \$95,500
Project Title: Disparities in the management and outcomes in patients with rectal cancer: A Population Based Study

Principal Investigator: **Petsikas D (Surgery)**

Co-Investigators: **Brogly S**, Nayak R
Sponsor: QUEEN'S UNIVERSITY - Department of Surgery
Total Awarded: \$11,255
Project Title: Patient and hospital factors associated with thoracic empyema outcomes

Principal Investigator: **Phillips T (Surgery)**

Sponsor: SCHOOL OF MEDICINE – Research Initiation Grant
Total Awarded: \$30,000
Project Title: Margin Analysis in Advanced Head and Neck Non-Melanoma Skin Cancer
Principal Investigator: Scott S
Co-Investigators: Deluzio K, **Levy R**, Mousavi P, Munoz DP
Sponsor: HAS-MOTION INC. – Research Contract
Total Awarded: \$150,000
Project Title: Translating knowledge on brain function into next generation

RESEARCH FUNDING JAN 1, 2020 - DEC 31, 2020

technologies for neurological assessment

Principal Investigator: **Rudan JR (Surgery)**

Sponsor: WATERS LTD.

Total Awarded: \$100,000

Project Title: Waters research collaboration agreement

Principal Investigator: **Rudan JR (Surgery)**

Sponsor: QUEEN'S UNIVERSITY – Department of Surgery

Total Awarded: \$111,905

Project Title: External Special Research Project

Principal Investigator: Scott S

Co-Investigators: **Cook DJ**

Sponsor: CANADIAN INSTITUTES OF HEALTH RESEARCH

Total Awarded: \$20,106

Project Title: Impact of temporary lesions of frontoparietal cortex on feedback processing during voluntary motor actions

Principal Investigator: **Wood GC (Surgery)**

Co-Investigators: Bryant JT, Ploeg HL

Sponsor: QUEEN'S UNIVERSITY – Department of Surgery

Total Awarded: \$14,702

Project Title: A biomechanical assessment of the Exeter short revision stem as a primary total hip arthroplasty system

Principal Investigator: **Wood GC (Surgery)**

Sponsor: THE ARTHRITIS SOCIETY – Research Contract

Total Awarded: \$12,750

Project Title: Randomized controlled trial of staged versus simultaneous bilateral knee arthroplasty

Principal Investigator: **Zevin B (Surgery)**

Co-Investigators: Potter D

Sponsor: SOUTHEASTERN ONTARIO ACADEMIC MEDICAL ORGANIZATION - Research

(CTAQ) Endowment Fund

Total Awarded: \$19,990

Project Title: Structured Remote Surgical Coaching to Improve Operative Performance in Laparoscopic Cholecystectomy: A Multicenter Randomized Control Trial

RESEARCH FUNDING JAN 1, 2021 - JUN 30, 2021

Jan 1, 2021 – Jun 30, 2021

Principal Investigator:

Appireddy R

Co-Investigators: Braund H,
Chan S, Dalgarno N, Digby G,
Haji F

Sponsor: CANADA HEALTH
INFOWAY – Research Contract
Total Awarded: \$50,000

Project Title: Virtual care and
risk project

Principal Investigator: **Cook DJ
(Surgery)**

Sponsor: NATURAL SCIENCES
AND ENGINEERING RESEARCH
COUNCIL OF CANADA

Total Awarded: \$105,567

Project Title: Linking Head
Kinematics and Multi-Modal
Imaging Using a Finite Element
Head Model to Assess mTBI Risk
Mitigation

Principal Investigator:

Daneshvar P (Surgery)

Co-Investigators: **Bicknell RT**

Sponsor: ACUMED – Research
Contract

Total Awarded: \$51,675 USD

Project Title: OLEXTEND: A
randomized controlled trial
assessing triceps strength
following olecranon fracture
fixation using a triceps tendon
sparing palate vs triceps tendon
split plate

Principal Investigator: Gallivan J

Co-Investigators: **Levy R**

Sponsor: MINISTRY OF
RESEARCH, INNOVATION AND
SCIENCE - Early Researcher
Award

Total Awarded: \$140,000

Project Title: Functional
mapping and enhancement of
brain network function through
multi-site stimulation

Principal Investigator:

Merchant S (Surgery)

Sponsor: Department of
Surgery, Queen's University
Total Awarded: \$15,000

Project Title: Patterns in
utilization and outcomes of
palliative therapies in incurable
bowel cancer (small intestine,
large intestine, rectum)

Principal Investigator: Saha TK
Co-Investigators McMullen MC,
Patel S

Sponsor: OTTAWA HOSPITAL
RESEARCH INSTITUTE

Total Awarded: \$39,750

Project Title: PREPARE Trial:
a parallel arm multicenter
randomized trial of frailty-
focused PReoperative Exercise
to decrease PostoperAtive
complication Rates and
disability scorEs

Principal Investigator: **Zevin B
(Surgery)**

Co-Investigators: Alqaydi A,
Nanji S, Williams E

Sponsor: SOCIETY OF
AMERICAN GASTROINTESTINAL
AND ENDOSCOPIC SURGEONS
Total Awarded: \$30,000

Project Title: Optimizing the
Consent Process for Emergent
Laparoscopic Cholecystectomy
Using an Interactive Digital
Education Platform: A
Randomized Control Trial

Principal Investigator: **Zevin B
(Surgery)**

Sponsor: POPULATION HEALTH
RESEARCH INSTITUTE – Clinical
Trial

Total Awarded: \$17,500

Project Title: Bariatric
surgery for the Reduction of
cArديوascular Events feasibility
randomized controlled trial
(BRAVE)



DEPARTMENT OF
SURGERY

Kingston Health Sciences Centre

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