Queen's University

DEPARTMENT OF SURGERY

ANNUAL REPORT 2015

Queen's Surgery 2015 Highlights

"We imagine in order to exist and we are curious in order to feed our imaginative desire."

"Curiosity" by Alberto Manguel

Queen's University | Faculty of Health Sciences

DEPARTMENT OF SURGERY
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DEPARTMENT OF SURGERY

ANNUAL REPORT 2015

WELCOME MESSAGE

FROM THE DEPARTMENT HEAD

JOHN RUDAN BSC (HON), MD, FRCSC
HEAD OF DEPARTMENT OF SURGERY
QUEEN'S UNIVERSITY

The best surgical outcomes for patients occur when the surgical plan is carried out with precision and accuracy. Over the years, we have come a long way to achieving this objective and we still have a long way to go. Alberto Manguel, a prominent Canadian writer and thinker wrote in his book *Curiosity* that "we imagine in order to exist, and are curious to feed our imaginative desire. There is only one great imaginative question, why". We live in an exciting age where change happens at an ever increasing pace. Developments in technology, increased computational power and nanotechnology have revolutionized our ability to build sophisticated tools.

The role of the academic department is to use these tools with imagination. To answer the question why, we must imagine new ways of doing things. We must change and adapt to build on our strengths and to reimagine the future. We must imagine and create new paths and translate thought into action. To do so, we have to reorganize our resources and talents to work faster, more efficiently and more effectively to leverage our resources. We must collaborate not only amongst ourselves, but across departments, across faculties, across universities, and across our borders. Translation of ideas from bench to bedside requires energy and hard work.

This year I would like to highlight one venture that is making a difference. Dr J. Engel our Chair of the Division of Surgical Oncology and his team of residents, computer scientists, engineers and molecular pathologist set out to answer the question.

25%

Why do a quarter of all women

with breast cancer have a positive margin after lumpectomy surgery? Why should it take a second surgery to obtain clear surgical margins?

This result for women around the world is unacceptable as it causes women more pain, anxiety, and costs our health care systems tens of millions of dollars annually!

The team's response was to build a better solution - one that would localize the tumour and guide the surgeon with precision and accuracy to excise the tumor while minimizing the amount of normal tissue to maintain breast cosmesis. This multidisciplinary team created a method tested in the lab, prototyped the tools for the operating room, and entered into clinical trials within 18 months of starting the project! The results have been spectacular with early findings showing a reduced positive margin of 50% and at the same time, 50% less normal tissue has been excised compared to conventional surgery. The team has presented papers around the world resulting in winning medals and acclaim for their results. There is still much work left to do and randomized controlled studies will be forthcoming within the year.

To take it to the next level, the team is partnering with Imperial College London and Waters Corporation of Boston. We will be linking our Nav technology with their iKnife technology. The iKnife utilizes mass spectroscopy to analyze the smoke plume produced by the electrocautery used by the surgeon to excise the cancerous tissue. This technology can give a surgeon a read out within one second to alert the surgeon as to whether the tumor margin has been breached. Linking our Nav technology with the iKnife makes the iKnife spatially aware thus creating the potential to bring the breast cancer re-operation rate to zero.

These are exciting times at Queen's and are yet another example of how imagination, curiosity, highly motivated and skilled people working together can make a difference.

"We must imagine and create new paths and translate thought into action. To do so, we have to reorganize our resources and talents to work faster, more efficiently and more effectively to leverage our resources."

Linear Process Through Patient Journey

RADIOLOGY

ONCOLOGY

SURGERY

ONCOLOGY
Pathology | Radiology

POST OPERATIVE CARE

BY THE NUMBERS
ACADEMIC YEAR 2015

101	Undergraduate Medical Students
30	Undergraduate Visiting Elective Students
15	Postgraduate Orthopaedic Surgery Residents
21	Postgraduate General Surgery Residents
35	Adjunt Faculty
16	Postgraduate Fellows
5	Administration Staff
38	Active Clinical Faculty

PROGRAM UPDATES

PROGRAM UPDATE:
SURGICAL FOUNDATIONS RESIDENCY PROGRAM

The Department of Surgery welcomes our new Surgical Foundations Program Director, Dr Darrin Payne.

Dr Darrin Payne completed his residency training at Western University in London, Ontario and then went on to complete his fellowship at the Institut Universitaire de Cardiologie et de Pneumologie de Quebec in Laval, Quebec. He is pleased to engage with the residents while fulfilling his interests in teaching and education.

There has been a positive response toward the efforts made to re-establish the teaching sessions that are provided for the residents in preparation for their exams. In addition to our surgical faculty, an excellent effort has been made to broaden the scope of the teaching sessions to include our colleagues in Medicine, Critical Care, Anaesthesia, and Emergency Medicine. The residents and attending staff have recognized the value in this teaching method. Receiving education from a wide range of expertise has been a successful and effective approach for the residents.

Our goal is to launch CBME (Competency Based Medical Education) by July 2017 as per The Royal College of Physicians and Surgeons of Canada's mandate. The current focus within the Surgical Foundations Residency Program is to develop a hybrid of the program by July 2016 to ensure a smooth and successful launch in 2017. Although the curriculum will not change, the delivery of the content is expected to be positively different. Rather than focusing on time based evaluations, the CBME approach will place a greater focus on competency based evaluations and provide students with the tools and confidence to become great doctors.

DARRIN PAYNE, MD, FRCSC
PROGRAM DIRECTOR
SURGICAL FOUNDATIONS

Residents in a Surgical Suturing Skills Lab

PROGRAM UPDATE:

GENERAL SURGERY RESIDENCY PROGRAM

This past year has been one of positive changes and growth for the Queen's General Surgery Residency Program. We welcome two new attending staff to the division: surgical oncologist Dr Shaila Merchant and colorectal surgeon Dr Sunil Patel.

Over the next few years, the postgraduate program will be experiencing significant changes as a result of the development and implementation of the Competency Based Medical Education program. The overall goal of CBME is to use improved evaluation systems as a means to provide the residents with better feedback with the hope that they become well prepared to transition to their fellowship.

General Surgery Residents in a Technical Skills Lab

The residents continue to expand their experience through their rotations in the Lakeridge Hospital's Acute Care Service (ACS) in Oshawa. The rotation equips the residents with a great breadth of exposure and experience to develop their technical and surgical skills.

There has also been an increased use of Queen's Simulation Centre, a state of the art teaching and learning facility which opened in 2011. The Simulation Centre provides the residents with access to an innovative and unique curriculum focused on the high fidelity surgical simulation. The increased use of the Simulation Centre provides greater opportunities for the residents to enhance their hands-on surgical and emergency skills in suturing and knot-tying, laparoscopy, tissue handling, and fracture treatment.

It has been an exciting year for some of our general surgery residents as four of them completed international rotations in a variety of countries including Uganda, South Africa, Burundi, and Nepal. These humanitarian experiences are encouraged as they provide our residents with excellent learning opportunities – both clinically and culturally.

DIEDERICK JALINK MD, FRCSC
PROGRAM DIRECTOR
GENERAL SURGERY

The residents have also been actively involved in research projects this past year. The quality of the research continues to improve and encourage research participation among all residents which yields a positive representation of the Department of Surgery. A number of residents presented their work at the William Ersil Resident Research Day. Dr Morgan Schellenberg won the award for Best Paper in General Surgery for her paper titled "The Diagnostic Yield of Commonly Used Investigations in Pelvic Gunshot Wounds."

PROGRAM UPDATE:

ORTHOPAEDIC SURGERY RESIDENCY PROGRAM

The Queen's Orthopaedic Surgery Residency Training Program has had another successful year.

Residents have been actively involved in research activities throughout the year. A number of our residents presented their work at the William Ersil Resident Research Day. Dr Allison Tucker won the award for best paper in orthopaedic surgery titled: "A Randomized Controlled Trial Comparing Arthrographic Joint Injection with and without Steroids for the Treatment of Adhesive Capsulitis." All our orthopaedic residents continue to actively participate in research activities and many were asked to present papers at national conferences this past year.

FOR MORE ON THE WILLIAM ERSIL RESIDENT RESEARCH DAY, PAGE 21

Residents have been excited with the program's new structure and educational sessions. There has been greater focus on the academic days within the program with modifications to the academic teaching schedule. This new schedule features weekly educational rounds for the sports medicine/upper extremity, arthroplasty, pediatric and trauma services. It has improved residents' ability to focus on ward rounds and prepare for their OR duties. There are also monthly full day teaching sessions which include surgical simulations, OSCEs, etc. This new structure of academic days has enhanced the orthopaedic academic program which has been beneficial for both faculty and our residents.

We had another successful year as all our graduating residents passed their RCPSC exams. In addition, they all continued their training and have pursued various fellowships in orthopaedic surgery.

MARK HARRISON MD, FRCSC
PROGRAM DIRECTOR
ORTHOPAEDIC SURGERY

Orthopaedic Residents in a Sawbones Simulation Lab

PROGRAM UPDATE:

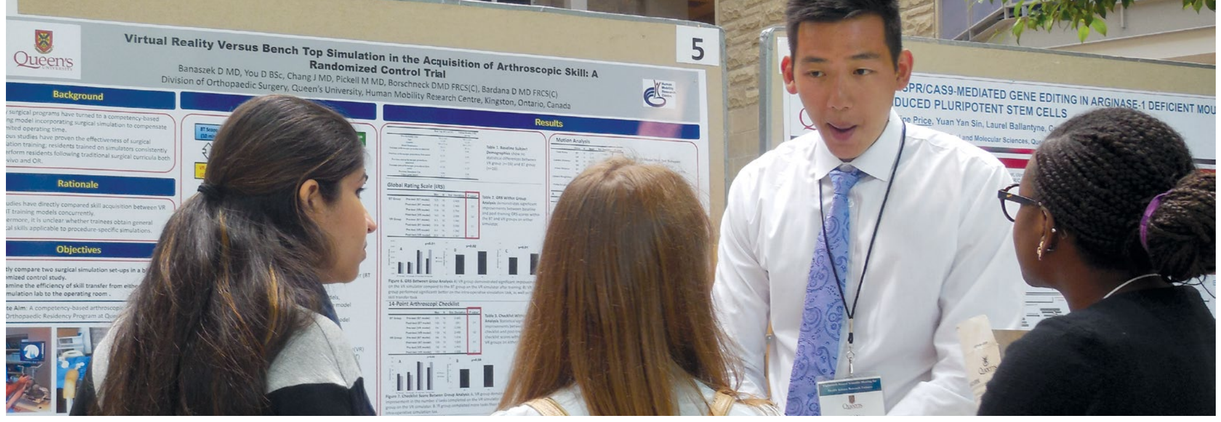
UNDERGRADUATE MEDICAL EDUCATION PROGRAM

As the Director of Undergraduate Surgical Education, Dr Mila Kolar continues to provide Queen's medical students with a nurturing and supportive environment.

MILA KOLAR MD, MSC, PHD
UNDERGRADUATE SURGICAL EDUCATION DIRECTOR

Since assuming this role, Dr Kolar has felt a great sense of joy and purpose in her career. Dr Kolar has described her work as "a mutual process of learning" between herself, the faculty, and the students. "We're enriching each other through these roles. Our students are able to shape their training." The students have an active role in helping the faculty achieve their mission. Dr Kolar believes in the importance of understanding the students' perspectives and experiences because of their capacity to enhance the development of surgical education programs and the overall educational experience. A major focus of her role involves the shift toward competency-based training and using appropriate assessment measures to evaluate the students' progress and learning experience. Dr Kolar is dedicated to her work as a liaison between faculty, residents, and students.

Dr Kolar and her colleagues promote the practice of medicine as an art form. Students are taught that medical practice goes beyond the scope of treating patients based on medical knowledge. The students are taught to have an active role in advocating for their patients, providing culturally sensitive practices, responding to the needs of the patients, and adopting specific attitudes and behaviours. All these requirements encompass a set of competencies needed to create a positive patient experience.



Medical student presenting a poster at the Annual Meeting for Queen's Health Sciences Research Trainees

Recent changes have been made to the assessment tools used in the surgery rotation. The department recognized that improvements could be made in order to better understand the students' learning needs and concerns. Previous assessments were based on a Likert-based scale whereas the new assessment is a rubric-based assessment with a defined criterion for increasing competency. The response thus far has been a positive one among the students, faculty, and residents after conducting a pilot test of this new assessment. Dr Kolar says: "we are hoping to make one step forward in the assessment of our students. We want to provide them with useful, appropriate, and frequent feedback to guide their learning, to fill their knowledge gaps, to monitor their progress and to identify clerks in need of additional support."

The rubric-based assessment tool provides formative feedback. The overall goal during the period of formative feedback is to provide an assessment for learning rather than an assessment of learning ensuring that students can receive the guidance and feedback to achieve the set of knowledge, skills, and attitudes required for their practice. The use of these rubrics will also be a meaningful step in facilitating the transition toward competency based medical education.

Student feedback has been valued and has led to a number of developments within undergraduate education. During their work in the CTUs, students have expressed an interest in expanding their exposure to a wider variety of clinical presentations and thereby gaining more exposure to clinics and operating rooms. The Undergraduate Surgical Education Committee (USEC) approved the initiative and it has been successful in enriching their practice and experience. In addition, students have been compliant in completing the required number of academic activity hours, which were formerly called duty hours. The students maintain a record of these hours on an assessment form. The assessment has been successful in creating a healthy balance of wellness and learning for the students because it enables them to have an appropriate level of engagement in the clinical environment while also having sufficient time to prepare for their exams. As the Gastroenterology and Surgery Course Director, Dr Kolar in collaboration with Dr Heather Murray, the Second Year Curricular Director has modified the structure of the course based on the feedback from the students. Previously, the inclusion of topics in urology was a slight disruption in the flow of the course. After re-evaluating and restructuring the content, the course is exclusively focused on gastrointestinal surgery.

The Undergraduate Surgical Education team is avidly engaged in the pursuit to create a nurturing, supportive and creative learning environment for the medical students.

"We want to provide [students] with useful, appropriate, and frequent feedback to guide their learning, to fill their knowledge gaps, to monitor their progress and to identify clerks in need of additional support."

PROGRAM UPDATES

THE DEPARTMENT OF SURGERY WELCOMES

NEW SURGICAL RESIDENTS

GENERAL SURGERY
Leanne Murphy
David Yu
Lisa Zhang
Shannon Zhang

ORTHOPAEDIC SURGERY
Emad Anam
Julie Chan
Laura Michaud

THE DEPARTMENT OF SURGERY WELCOMES:

DR MARK ORMISTON

The Department of Surgery welcomes Dr Mark Ormiston, who joined Queen's University as an Assistant Professor in October 2015.

As a Tier II Research Chair in Cardiovascular Regenerative Medicine, Dr. Ormiston is jointly appointed in the Departments of Biomedical and Molecular Science, Medicine and Surgery.

Dr Ormiston's professional path in life sciences began during his undergraduate studies in Chemical Engineering at Queen's. During his fourth year, he was introduced to the link between biology and engineering. His interest in the area of life sciences led him to complete a MSc. in Chemical and Biomedical Engineering at the University of Toronto and a PhD in Biomedical Engineering and Cardiovascular Sciences at the University of Toronto and St. Michael's Hospital. Shortly after completing his PhD, he completed a Post Doctoral Fellowship at the University of Cambridge with Dr Nick Morrell.

Dr Ormiston's research is focused on the circulating cells of the immune system, which are examined in order to determine their influence on vascular structure with a specific focus on pulmonary circulation and pulmonary hypertension. Another area of his research is on natural killer cells, which have a capacity to influence the vascular structure during pregnancy. The vision for the research is to gain an understanding of the immune factors that influence vascular structure which can then be translated into creating new therapies for pulmonary vascular diseases, including pulmonary hypertension. Dr Ormiston notes that although pulmonary hypertension is a rare disease, it is an informative model to apply toward other diseases such as pre-eclampsia or tumor angiogenesis.

Dr Ormiston's work involves an extensive degree of collaboration within and outside of Queen's University. Dr Ormiston set up his lab on Botterell Hall's second floor as a strategic decision to engage with his team. He says: "the reason why I picked this lab and this floor is because Drs DJ Cook, Alastair Ferguson, and Don Maurice are here. Don and I are cardiovascular scientists, DJ is a neurosurgeon who focuses on stroke and Alastair is a neuroscientist. It produces a really nice neurovascular centre." He maintains his connections with Dr Duncan Stewart from the Ottawa Hospital Research Institute, his previous PhD supervisor, and Dr Morrell and his team from Cambridge University. Dr Ormiston is also listed as a named collaborator for Dr Lindsay Fitzpatrick's CIHR grant. Dr Fitzpatrick's work is in affiliation with the Human Mobility Research Centre (HMRC). Her work is focused on inflammatory responses to biomaterials. Dr Ormiston's collaborations in this regard are an excellent way for him to connect back to his experience in chemical engineering. He is pleased to be back at Queen's to conduct his work. "Kingston is a wonderful place to envision building a lab and a life."

Dr Ormiston's work involves an extensive degree of collaboration within and outside of Queen's University.

THE DEPARTMENT OF SURGERY WELCOMES:

DR SHAILA MERCHANT

The Department of Surgery extends a warm welcome to Dr Shaila Merchant, an Assistant Professor and surgical oncologist who arrived at Queen's in July 2015.

Dr Merchant moved from Los Angeles, California where she completed her fellowship in Complex General Surgical Oncology. Prior to that, she completed her residency at the University of British Columbia in Vancouver. She is an Assistant Professor in the Department of Surgery as well as an Attending Staff member at Kingston General Hospital and Hotel Dieu Hospital. She is excited to start her career in Kingston.

"You can't cure everyone of their cancer, but you can certainly help everyone in some way."

Dr Merchant has an interest in Health Services Research. Her team is using the databases from the Institute of Clinical Evaluative Sciences (ICES) to determine trends and practice patterns in treatments for breast cancer and gastrointestinal cancer. The multidisciplinary management of cancer invites the opportunity for collaboration. Collaborators on these research projects include: Dr Christopher Booth, Dr Sulaiman Nanji, Dr Sunil Patel, Dr Douglas McKay, and Dr Glykeria Martou. She is currently working on projects related to reconstruction after mastectomy for breast cancer. The goal of this research is to evaluate current trends in post-mastectomy reconstruction and to identify ways of improving access to reconstruction. This is a complex issue as "every patient's cancer and reconstructive management can be different and requires a thoughtful, well-planned, multidisciplinary approach." Dr Merchant is also interested in optimizing cancer care among the elderly population through the investigation of Ontario population data.

Dr Merchant's clinical work involves a broad range of surgical oncology with the majority of her practice focused on breast and gastrointestinal cancer. Her strong passion for surgical oncology developed during residency. In her view, surgical oncology provides the opportunity to work with a diverse range of people and pathologies and the opportunity to make a real difference in the lives of cancer patients.

THE DEPARTMENT OF SURGERY WELCOMES:

DR SUNIL PATEL

The Department of Surgery welcomes Dr Sunil Patel, an Assistant Professor and colorectal surgeon who arrived at Queen's in August 2015.

Dr Patel completed his residency training at Western University and completed a colorectal fellowship at New York Presbyterian Hospital and Memorial Sloan Kettering Cancer Center in New York City. He is an Assistant Professor in the Department of Surgery as well as an Attending Staff member at Kingston General Hospital and Hotel Dieu Hospital.

Dr Patel's clinical work is primarily focused on colorectal surgery. He has extensive training in laparoscopic and minimally invasive surgery. He intends to introduce the new techniques he has learned in minimally invasive procedures.

Dr Patel's research within the Department of Surgery is focused on colorectal pathology. He will be using population data from the Institute of Clinical Evaluative Sciences (ICES) to determine the outcomes of this patient population. He is working in collaboration with Dr Sulaiman Nanji, Dr Susan Brogly and Dr Shaila Merchant. Each member of this team is integral to the research process. Dr Patel says: "it's very effective because we all come from slightly different backgrounds and we all have ideas on how we can use that data and what would be interesting questions." The investigation of the ICES population data has led the team to question a number of different facets of healthcare utilization from an epidemiological standpoint. Such questions include whether appendectomy is a safe procedure to perform in the middle of the night as opposed to the daytime. He states: "I think it's an interesting question because most of these patients aren't that sick when they come in. So would delaying their operation 6-8 hours benefit them or not? Maybe it does, we're not really sure. We're looking into that question." The team is also examining whether accessibility and proximity to cancer centers or an MRI can have an effect on a patient's condition. The population data allows them to examine how many people are following their treatment guidelines in a timely manner and whether compliance and access to treatment has an effect on their outcomes. Dr Patel stated that he is also interested in issues surrounding the timing of treatment. For example, do adjuvant therapy delays after surgery affect survival?

He also hopes to start more projects surrounding inflammatory bowel disease through the access to the ICES database. Further questions will be generated as the team accesses more data.

RESEARCH

DR ANDREW & MARGARET BRUCE
Visiting Scholar In Surgical Innovation Lectureship

DR NICK MORRELL, VISITING SCHOLAR

The Department of Surgery proudly hosted their Fourth Annual Dr Andrew and Margaret Bruce Visiting Scholar in Surgical Innovation Lectureship in November 2015.

The lectureship was held from November 2nd to 5th and hosted Dr Nick Morrell, a well renowned scholar from the University of Cambridge, England. His four-day visit was filled with tours, meetings, discussions, and lab visits. The title of Dr Morrell's lecture was "Stepping into The Unknown: The Era of Genomic Medicine and Stem Cells."

These generous contributions have enriched the Department of Surgery's landscape for research and innovation.

This endowment has been made possible every year as a result of the generous contributions made by Dr Andrew Bruce and the Departments of Surgery and Urology. These contributions have enriched the Department of Surgery's landscape for research and innovation.

Dr Bruce's motivations for starting the endowment were twofold. First, he and his wife Margaret Bruce have a strong connection to Queen's University. He describes Queen's as "their first love." Secondly, he wanted to provide the Department of Surgery with substantial opportunities for discussions and networking with the visiting scholars. Providing the visiting scholar with an opportunity to spend an extended period of time would be mutually beneficial for both the scholar and the Department of Surgery.

When reflecting on the timely nature of Dr Morrell's visit to Queen's, he states: "Dr Morrell reviewed the whole history of genetics and he reviewed material on stem cell implants and this is exactly what we needed. To me, that was the highlight! The second part that I'll also emphasize is that he showed great interest in Queen's and an interest in coming back and participating in joint projects. That's really one of the major objectives of this program: to get Queen's hooked up with other areas of interest. Whether they're doing the same type of research, they can help each other and Nick Morrell was unbelievably good!"

VISITING SCHOLAR:
Dr Nick Morrell (left) with Dr Andrew Bruce

DESIGNING & IMPLEMENTING SURGICAL TECHNOLOGIES TO ADDRESS 21ST CENTURY NEEDS

Although surgical interventions have always played an important role in the management of chronic disease and inflammation, there have been few opportunities to understand if a procedure went as planned and to determine if the outcomes of that particular intervention were successful. This is certainly the case in breast conservation surgeries, wherein 25% of women have to undergo a second resection in order to remove the entire tumor. The same is true for the 2% of Canadian patients that undergo joint replacement surgeries and suffer from sub-optimal outcomes such as re-implantation or amputation because of prosthetic joint infection. These challenges arise because of our serialized approach to patient care and the lack of modalities that detect, for example, positive margins and microbial contamination before the patient leaves the operating room. At a minimum, these limitations put patients at risk and do little to curb the costs of delivering their health care.

25 percent of women have to undergo a second resection in order to remove an entire tumor.

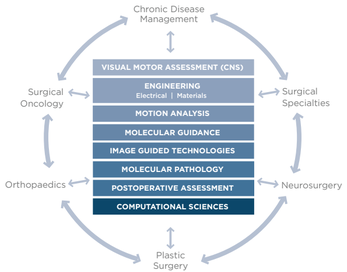
Over the last year, the Department of Surgery at Queen's University has taken a leadership role and has mobilized resources to bridge this unmet need in patient care and surgical productivity through partnership development with Imperial College London and Waters Corporation. This has enabled the Department to acquire specific equipment designed to make real-time pathological measurements. The installation of the intelligent Knife (iKnife) and desorption electrospray ionization (DESI) platforms have the potential to transform the manner of how surgeons assess every surgical intervention by measuring the metabolic fingerprints of tissue and bacteria. The use of molecular and image guidance in surgery is a technological revolution that is very similar to how computer assisted surgeries revolutionized how orthopaedic surgeons improved the post-operative care and mobility of millions of patients.

Mass spectral imaging using DESI

"The Department of Surgery with Imperial College London, Waters Corporation, and other health care providers are taking a leadership role in improving surgical care and outcomes for patients."

Mobilizing technologies and building partnerships are strategies to help improve all aspects of surgical planning, intraoperative and postoperative care for patients through integration of varied patient health data. The promotion of teamwork between physicians across all surgical specialties and sub-specialties has also improved surgical planning. Investments made in computer assisted surgeries and in new molecular guidance technologies, combined with partnerships built with Imperial College London and other universities in Canada and abroad are examples of how we embrace the importance of innovation and how we differentiate ourselves in surgery. These efforts will raise the bar in our standard of care for our patients while lowering costs.

Leveraging Technology to Improve Surgical Outcomes



Integrating Technologies – Patient Centric

THE NAVIGATED iKNIFE TO ENHANCE SURGICAL PRECISION

The Intelligent Knife, also known as the iKnife, represents an emerging technology that has the potential to revolutionize surgery by detecting diseased tissue in real-time as it is being resected.

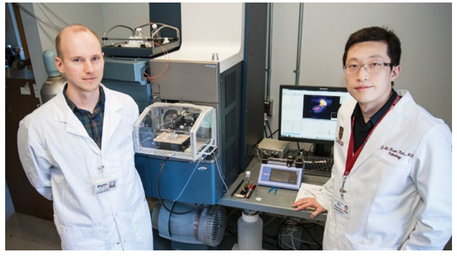
The iKnife performs mass spectrometry analysis on the smoke vented by a conventional electrosurgery cautery device during surgery. The destruction of a cell by ionization and rapid evaporation produces a microscopic cloud of distinctive chemicals (phospholipids) that are readily identified by mass spectrography. The iKnife was invented by Dr Zoltan Takats at Imperial College London, UK. where it has been used successfully in the characterization of variety of tissue types including brain, colon, breast, liver and microorganisms.

"[The new system...] has the potential to be faster, better, cheaper than current technologies that rely on antibodies and DNA sequencing."

Dr Jeremy Nicholson, one of the co-developers of the iKnife, was our 2012 Dr Andrew and Margaret Bruce Visiting Scholar in Surgical Innovation. Having been greatly impressed by the surgical navigation research at Queen's, Dr Nicholson became highly enthusiastic about empowering the iKnife with spatial navigation capabilities developed at Queen's. The Queen's team obtained multiple major infrastructure and equipment grants and thus Queen's University became the only academic institution outside Imperial College London to own an iKnife, let alone two. One is dedicated for lab research and another is a clinical grade device for data acquisition in the operating room.

Combining the iKnife with spatial navigation opens up bold new avenues for interdisciplinary translational clinical research. Dr John Rudan, Head of Surgery, has recruited into the project a cadre of distinguished clinician and engineering scientists at Queen's University and the Kingston General Hospital.

Dr Gabor Fichtinger, Professor in the School of Computing, leads the work to endow the iKnife with spatial awareness, allowing the surgeon to relate the current position of a scalpel or probe to the patient's radiology image, such as ultrasound. By "sniffing" chemical constituents in living tissue as it goes under the knife, the Navigated iKnife guides the surgeon in three-dimensional space in carrying out accurate and precise operations.



Dr Martin Kaufmann (left) and Dr Kevin Ren (right)

Dr David Berman, Director of Queen's Cancer Research Institute, leads the efforts to create a "chemical encyclopedia" of specific types of diseases, focusing on cancers of the breast, prostate, brain, and colon, to uniquely link the iKnife spectral signatures with relevant pathological properties. Dr Berman and his colleagues run concurrent investigations into each of these cancers, Drs Sonal Varma and Jay Engel working on breast cancer, Drs Berman and Robert Siemens studying prostate cancer, Drs D.J. Cook, Chris Wallace, and John Rossiter working on brain cancer, and Dr Sulaiman Nanji guiding the colorectal cancer project, Drs John Rudan and Elaine Petrof investigating bacterial agents responsible for chronic infections of surgical wounds. The combined effort aims to establish a new disease classification system based on chemicals. According to Dr Berman, the new system and its associated technology "has the potential to be faster, better, cheaper than current technologies that rely on antibodies and DNA sequencing." The result aims to provide more accurate, cost-effective, and rapid ways to classify and identify diseased tissue while improving the quality of surgical care.

PAUL B. HELLIWELL CHAIR FOR ORTHOPAEDIC RESEARCH

The Department of Surgery is proud to announce that Dr David Pichora MD, FRCSC, Professor of Surgery, and Mechanical and Materials Engineering, and CEO of Hotel Dieu Hospital, has been appointed as the first recipient of the Paul B. Helliwell Chair in Orthopaedic Research.

Dr Pichora will hold the position for a 5-year term during which he will engage in a variety of research and teaching projects within the department.

The Helliwell Chair has been made possible through the generous financial support of $1 million from the Paul B. Helliwell Foundation. The money will be used toward research and education such as graduate student stipends, operating budgets for various research projects, or any equipment that may be required for research.

This Chair is an important merger of computer science, engineering, and medical science to address important issues of human mobility.

The trustee of the Helliwell Foundation, Mr. John Jenah, and Dean Richard Reznick have established an agreement to invest in the enhancement and support of musculoskeletal research through the Helliwell Chair position. Dr Pichora will be supporting and enhancing the research agenda for the Division of Orthopaedic Surgery and the Human Mobility Research Centre (HMRC) while building a multi-disciplinary partnership with professionals in engineering, computer science, orthopaedics, rehab, and rheumatology. Dr Pichora is involved with research projects within the field of musculoskeletal health including biomechanics, computer assisted surgery, and clinical initiatives. He aims to further research integration strategies between Queen's University, Kingston General Hospital and Hotel Dieu Hospital, and pursue collaborative strategies with industry partners and funding agencies. A significant part of the Helliwell Chair commitment involves working with specific research teams at HMRC, providing coordination, mentorship and training for students completing their Orthopaedic Residency, Masters, PhD, or Post Doctorate degrees.

There has been a large amount of enthusiasm and support generated by the Helliwell Chair appointment. The Chair is well aligned with Dr Pichora's previous and ongoing work to build on the success of orthopaedics. He is optimistic of the potential that the Helliwell Chair can bring to the field of orthopaedic research and greatly appreciates the Foundation's support and investment in our research. This will further enable HMRC to excel and translate into reality by bringing benefit to our citizens. In addition, John Jenah has expressed his tremendous support for the Helliwell Chair. He says: "this Chair is an important merger of computer science, engineering, and medical science to address important issues of human mobility. Queen's has been doing great work in the area of human mobility. I've seen some of their technology and it is inspiring. It's a worthwhile cause with tremendous potential and by supporting it, we are putting our money where our mouth is."

APPOINTED FIRST RECIPIENT: Dr David Pichora (right) with John Jenah

THE 2015 CHARLES SORBIE FACULTY RESEARCH DAY

On Friday, April 17, 2015, the Department of Surgery held its Fifth Annual Charles Sorbie Faculty Research Day.

GENEROUS DONOR DR JANET SORBIE (centre) with Bill Leacy (left) and Valerie Sorbie (right)

This full-day event provides an occasion for the faculty to share their research with other faculty, residents, and fellows. Furthermore, this is an excellent opportunity for the surgical residents to receive mentorship from faculty.

The invited speaker for this event was Dr Gabor Fichtinger who is a professor of Queen's University's School of Computing and the Cancer Care Ontario Research Chair. The topic of his presentation was: "Tracked Ultrasound Navigation in Surgery and Interventions."

The annual event is made possible through the generous donation of Dr Janet Sorbie in loving memory of her husband Dr Charles Sorbie. Dr Charles Sorbie made significant contributions to the Department of Surgery during his forty-five years at Queen's. He held the position of Department Head for ten years with a great deal of vigor and imagination. His family members try to attend the Charles Sorbie Faculty Research Day every year as a way of showing their full support for the event. Dr Pamela Stone, one of Dr Sorbie's daughters, attended the event for the first time in 2014. In her opinion, the Charles Sorbie Faculty Research Day encapsulates her father's vision for research, practice, and education. She says "he had an unquenchable curiosity for learning that allowed him to flourish as an academic surgeon and researcher. I know that he would love to try to pass that on the residents and fellows that he taught." The family is honoured by the legacy that Dr Charles Sorbie left on the Queen's community.

THE 34TH ANNUAL WILLIAM ERSIL RESIDENT RESEARCH DAY

The Department of Surgery held its 34th Annual William Ersil Resident Research Day on November 16th, 2015.

Approximately 100 individuals, including residents, faculty members, graduate students, and medical students attended the event this year.

The residents from the Department of Surgery are required to present ongoing clinical and basic science research while under the supervision of attending staff. Twenty-six residents presented their research and three residents were selected for awards. The William Ersil Memorial Award for the Best Paper in Orthopaedic Surgery, which has been made possible through the generous donation of Dr Don Chow, was awarded to Dr Allison Tucker's paper titled "A Randomized Controlled Trial Comparing Arthrographic Joint Injection with and without Steroids for the Treatment of Adhesive Capsulitis." A unique characteristic of this paper was the incorporation of a randomized controlled trial into the study design.

Our guest speaker, Dr Peter Armstrong, gave two lectures on "Shriners Hospitals Children: the History, The Challenges and the Future" and "A Surgeon Imbedded in the Orthopaedic Industry." Dr Bicknell, who has been coordinating the event for the past nine years, states that the lectures were "interesting from a world knowledge, translational, and career development point of view."

The William Resident Research Day was established in honour of Dr William Ersil who received his medical degree from Queen's in 1979 and entered the Orthopaedic Surgery Residency Program. Unfortunately, during his chief year of residency, he was diagnosed with a malignant disease and he passed away before he could complete his residency. His inquisitive nature and strong belief in the value of research inspired this annual research day to come to fruition.

BEST PAPER IN GENERAL SURGERY: Dr Peter Armstrong (keynote speaker for the William Ersil Resident Research Day) and Dr Morgan Schellenberg (right)

The annual research day, which is held in conjunction with the Office of Continuing Medical Education, has become one of the most important events in the Department of Surgery. The event provides an occasion for the all participants to interact with each other in a professional and casual setting while establishing and renewing personal connections. The Department of Surgery extends a warm thank you to the residents, attending staff, and visitors who attended this event for another successful year.

CONGRATULATIONS TO THE FOLLOWING AWARD WINNERS!

DR ALLISON TUCKER
The William Ersil Memorial Award for the Best Paper in Orthopaedic Surgery for "A Randomized Controlled Trial Comparing Arthrographic Joint Injection with and without Steroids for the Treatment of Adhesive Capsulitis"

DR MORGAN SCHELLENBERG
Best paper in General Surgery for "The Diagnostic Yield of Commonly Used Investigations in Pelvic Gunshot Wounds"

DR DANIEL BANASZEK
Best poster for "The Design, Engineering, and Experimental Testing of a Novel Medial Portal ACL Guide: An Anatomic Study"

AWARDS

THE McGILL ALUMNI GLOBAL LIFETIME ACHIEVEMENT AWARD

The Department of Surgery is proud to announce Dr Richard Reznick is this year's recipient of the McGill Alumni Global Lifetime Achievement Award.

SINCE 2009, THIS ANNUAL AWARD HAS BEEN PRESENTED TO A McGILL ALUMNUS WHO HAS BEEN RECOGNIZED FOR A LIFETIME OF ACHIEVEMENTS THAT EXUDE STRONG LEADERSHIP.

Dr Reznick has accepted this prestigious award with humility and honour. He feels proud to have won this award from his alma mater alongside previous award recipients including Dr Phil Gold, who was widely recognized for his discovery of one of the most common markers of cancer known as CEA, and Dr Charles Scriver, a well-known leader of medical genetics in Canada.

Dr Reznick was the inaugural Director of the University of Toronto Faculty of Medicine Centre for Research in Education at University Health Network, The Wilson Center, which is one of the top medical education research centers in the world. He held his appointment from 1997 until 2002. The Wilson Center will be celebrating its 20th anniversary in 2016. Prior to his arrival at Queen's, he served as Chair of the Department of Surgery at University of Toronto. Much of Dr Reznick's research work has focused on assessment in medical education. He and his colleagues' research on technical competence have led to the development of an assessment tool that is being used worldwide. His work has been widely disseminated as an author or co-author of over 120 peer reviewed publications and through numerous lectures at hospitals, universities, and scientific institutions across the world.

Dr Reznick has won a number of other awards including the Royal College of Physicians and Surgeons of Canada Medal in Surgery, the Association for Surgical Education Distinguished Educator Award, the National Board of Medical Examiners John P. Hubbard Award, the Karolinska Institute Prize for Research in Medical Education, the Canadian Association of Medical Education (CAME) Distinguished Contribution to Medical Education Award, the James IV Traveling Fellowship, and the Daniel C. Tosteson Award for Leadership in Medical Education.

Dr Reznick attributes his successful career path toward "the road less taken." Shortly after completing his surgical training, he pursued a Masters of Education and devoted 30 years of his career to promoting medical education through a scholarly approach. Dr Reznick's passion for enhancing the educational climate continues in his current role.

DR RICHARD REZNICK (right)
AWARD RECIPIENT
Photo credit: Paul Fournier

Receiving the McGill Alumni Global Lifetime Achievement award is a tremendous honour for Dr Reznick and contributes to Queen's pursuit for research prominence. Dr Reznick is the Dean of the Faculty of Health Sciences and has recently been appointed as the Dean for a second term. While playing a largely collaborative role internally and externally, he has a number of plans for the remainder of his term. He says: "we have a thriving research operation which I want to see, grow, and intensify." Dr Reznick plans to champion and support the faculty's desire to promote new educational models, such as transforming our training programs to a competency-based design. On the clinical side, he believes that we are taking really good care of the patients in our Kingston area but we want to expand our reach to play a more prominent role both regionally and provincially. In so doing, it is our quest to attract top talent to Kingston and hire people who have at their heart that joint mission of looking after patients and promoting academic scholarship.

DR TAMAS UNGI
AWARD RECIPIENT

BEST PAPER AWARD AT THE ANNUAL ISCAS CONFERENCE

The Department of Surgery is proud to announce Dr Tamas Ungi as the recipient of the Olympus ISCAS Best Paper Award at The International Society for Computer Aided Surgery (ISCAS) Conference for his paper titled "Real Time Navigation and Breast Tumour Surgery."

This year's annual conference was held in Barcelona, Spain in June 2015. The co-authors of this paper were: Dr Gabrielle Gauvin, Dr Caitlin T. Yeo, Dr C. Jay Engel, Dr John Rudan, and Dr Gabor Fichtinger.

Dr Ungi is currently an adjunct assistant professor at the Laboratory for Percutaneous Surgery (Perk Lab) in the Queen's School of Computing and the Department of Surgery. The main goal of the Perk Lab is to find new technologies that can help physicians to perform real-time interventions that will allow surgeons to carry out procedures with greater accuracy and precision, while also saving time and increasing efficiency during operations. The Southeastern Ontario Academic Medical Organization (SEAMO) is a major source of funding for Dr Ungi's research.

Dr Ungi was pleasantly surprised to have won this award. The award has boosted the awareness of his team's research on an international scale. Dr Ungi's paper will be listed on ISCAS's website for one year. He says: "it certainly draws more attention to my work. That's the biggest value in the award". The project has been well known within the Department of Surgery. Since winning this award, he has been commended on the value in his research. In fact, many of his colleagues have expressed an interest in starting similar projects in their labs.

The Perk Lab has been involved in developing a surgical navigation system for breast cancer surgery. The results of the project have been translated into clinical settings within the span of two years. The

"...ongoing relationship with the Department of Surgery has enabled the research team to produce translatable results within a quick timeframe."

School of Computing's ongoing relationship with the Department of Surgery has enabled the research team to produce translatable results within this quick timeframe due to the lessons that have been learned and applied to operating room technology. Dr Ungi elaborates that it has been a seven-year process of developing a versatile surgical navigation technology platform that enabled this system for breast cancer surgery. Throughout this process, the team has gained a lot of experience that accelerated this project which led to the rapid translation from bench to the operating room, as recognized by this award. From the beginning, the team was mindful of the specific requirements that were needed for bringing the device into the operating room and maintained that focus while completing the experiments.

Dr Ungi attributes the project's unique innovative success to the close working relationship of the team members. The Perk Lab includes physicians, mechanical engineers, electrical engineers, software engineers, and students from various departments. "To get the results in the paper, we needed a team with very different people who work really closely together, share ideas, and understand each other. That is unique. I was asked at a conference, if the technology has been around for several years, why hasn't anybody implemented this solution for breast tumor surgery before? I think what hasn't happened before is that such an effective team is working together on the solution." Dr Ungi is firm in his belief that Kingston's overall friendly nature has translated to the work environment in the lab.

SEAMO CLINICAL RESEARCH FELLOWSHIP PROGRAM AWARD

The Department of Surgery is proud to announce Dr Michelle Zec as a recipient of the SEAMO Clinical Research Fellowship Program (CRFP) award.

DR MICHELLE ZEC
AWARD RECIPIENT

Before coming to Queen's, Dr Zec attended the University of Calgary and the University of British Columbia (UBC). She completed her MD and PhD studies at the University of Calgary. Her PhD work in Biomechanics was completed under the supervision of Dr Cy Frank and Dr Nigel Shrive. After finishing medical school, she completed her residency in Orthopaedic Surgery at UBC. Following this, she undertook a clinical fellowship training with a focus on Hand, Wrist, and Elbow surgery at UBC. She then came to Kingston to complete a Hand and Upper Extremity Surgery Fellowship under the supervision of Dr David Pichora and Dr Ryan Bicknell.

"The early findings of this work have been very promising..."

Dr Zec's current CRFP research is supervised by Dr Pichora, the Paul B. Helliwell Chair in Orthopaedic Research. The major focus of her surgical education project is to develop teaching and assessment tools for surgical procedures of the hand and wrist. Her study uses "soft-embalmed" cadaver specimens on which orthopaedic residents perform various hand and wrist procedures. The use of soft-embalmed specimens has been extensively characterized by Dr Pichora's research group and is used in this study to simulate "living tissue." In a pilot study conducted last spring, residents used both soft-embalmed and fresh-frozen tissues as part of their academic day studies. Dr Zec and her co-investigators did not expect the residents to have a preference between the specimens, but when surveyed afterwards, the majority expressed a preference for using soft-embalmed tissue.

That pilot work laid the foundation for her current, ongoing study which uses soft-embalmed specimens in the assessment of resident performance of simulated surgical procedures. "The early findings of this work have been very promising," states Dr Zec. "We have received considerable positive feedback from our residents" with respect to using these models. Moreover, "with the implementation of Competency Based Medical training, there will be an even greater need for effective assessment tools, as well as the need for high fidelity simulation models, and this work addresses both of those needs."

Dr Zec is honoured to have the support of SEAMO and the Department of Surgery for her CRFP research project. Through her clinical research fellowship training, she plans to apply her research skills and clinical knowledge to the art of teaching and assessing surgical skill.

THIS $50,000 AWARD IS GRANTED ANNUALLY TO A PHYSICIAN WHO COMPLETED POSTGRADUATE TRAINING IN FAMILY MEDICINE OR A MEDICAL SPECIALITY AND IS SUPERVISED BY A SEAMO PHYSICIAN.

2015 GRANTS

Principal Investigator: Adams Michael A,
Biomedical and Molecular Science
Co-Investigator: Hamilton G Andrew York
Sponsor: MITACS
Total Awarded: 30,000
Project Title: Improved method of donor kidney storage at sub-zero temperatures

Principal Investigator: Bardana Davide, Surgery
Co-Investigators: Waldman, Stephen;
Pang Stephen C
Sponsor: Physicians' Services Inc.
Foundation (PSIF)
Total Awarded: 169,000
Project Title: Development of Human Engineered Cartilage Suitable for Joint Resurfacing

Principal Investigator: Bicknell Ryan, Surgery
Sponsor: Pan Am Clinic Foundation
Total Awarded: 2,500
Project Title: Arthroscopic Bankart Repair with and without Arthroscopic Infraspinatus Remplissage in Anterior Shoulder Instability with a Hill-Sachs Defect: A Randomized Controlled Trial

Principal Investigator: Booth Christopher M,
Cancer Care and Epidemiology
Co-Investigators: Biagi James J; Hanna Timothy; Krzyzanowska Monika; Mackillop William J; **Nanji Sulaiman**; Peng Yiingwei P
Sponsor: Canadian Institutes of Health Research
Total Awarded: 218,101
Project Title: Optimizing the Use of Adjuvant Chemotherapy for Colon Cancer: A Population-Based Study of Practice and Outcomes

Principal Investigator: Borschneck Daniel P, Surgery
Co-Investigator: Deluzio Kevin
Sponsor: Queen's University
Total Awarded: 20,475
Project Title: Biomechanical and kinematic testing of the adolescent knee after patellofemoral reconstruction for chronic patella-femoral dislocation

Principal Investigator: Borschneck Daniel P, Surgery
Co-Investigators: Bardana Davide, Bicknell Ryan, Campbell Aaron, Harrison Mark, Davidson Lindsay, Mann Stephen, Pichora David, Rudan John, Wood Gavin, Yach Jeff, Yen David
Sponsor: Zimmer
Total Awarded: 50,000
Project Title: Excellence in Orthopaedic Education

Principal Investigator: Borschneck Daniel P, Surgery
Co-Investigator: Rainbow Michael
Sponsor: Conmed Linvatec Canada
Total Awarded: 15,000
Project Title: ACL Human Performance Study

Principal Investigator: Boyd J. Gordon, Medicine
Co-Investigators: Hamilton G Andrew York; Saha Tarit K; Scott Stephen H
Sponsor: Queen's University
Total Awarded: 10,000
Project Title: Correlation of cerebral oxygenation with neurological recovery after coronary artery bypass grafting surgery

Principal Investigator: Brander Rosemary, School of Rehabilitation Therapy
Co-Investigator: O'Riordan Anne, **Davidson Lindsay**, Neumann-Fuhr Denise, Pinchin Sheila
Sponsor: Queen's Centre for Teaching & Learning - Teaching Enhancement Grant
Total Awarded: 6,965
Project Title: Collaborative Practice: Introduction and Application through Online Modules and Experiential Team Learning Events for Health Sciences Students

Principal Investigator: Brogly Susan, Surgery & Medicine
Co-investigators: Dow Kim, Davies Greg, Newman Adam, Johnson Ana
Sponsor: Queen's Principal's Senate Advisory Research Committee
Total Awarded: 10,000
Project Title: Neonatal abstinence syndrome in Ontario

Principal Investigator: Cook Douglas J, Surgery
Sponsor: Queen's University
Total Awarded: 10,000
Project Title: Does resting state brain network reorganization predict recovery following stoke?

Principal Investigator: Cook Douglas J, Surgery
Sponsor: The Brain Aneurysm Foundation
Total Awarded: 15,000
Project Title: Probing the link between indolent aneurysmal dome infection and brain aneurysm growth and rupture

Principal Investigator: Cook Douglas J, Surgery
Sponsor: Botterell Foundation for the Neurological Sciences
Total Awarded: 10,000
Project Title: Enhancing peri-infarct synaptogenesis in chronic stroke with a BDNF-Hydrogel implant

Principal Investigator: Drover John W, Surgery
Co-Investigator: Muscedere John G
Sponsor: Nestle Canada
Total Awarded: 155,000
Project Title: The DIVINE study: Dietary management of glucose Variability in the ICU

Principal Investigator: Fichtinger Gabor, School of Computing
Co-Investigator: Rudan John Frederick
Sponsors: Canadian Institutes of Health Research and Natural Sciences and Engineering Research
Total Awarded: 276,024
Project Title: Mobile Image overlay System (MIOS) for Musculoskeletal Needle Placement Guidance

Principal Investigator: Flynn Leslie V, Continuing Professional Development
Co-Investigators: Dagnone J Damon; Stockley B Denise; Van Melle Elaine P; **Walker G Ross**
Sponsor: Southeastern Ontario Academic Medical Organization
Total Awarded: 15,000
Project Title: Using the Concerns-based Adoption Model's Stages of Concern to Understand the Experience of a Transition of Postgraduate Residency Programs to Competency-based medical education (CBME): Building Capacity for Competency Based Medical Education

Principal Investigator: Hamilton G Andrew York, Surgery
Sponsor: Southeastern Ontario Academic Medical Organization
Total Awarded: 84,237
Project Title: Robotic technology to quantify neurological outcome after cardiac surgery

Principal Investigator: Ho Anthony, Anesthesiology and Perioperative Medicine
Co-Investigators: Mizubuti Glenio, Murdoch John, **Nanji Sulaiman**
Sponsor: Southeastern Ontario Academic Medical Organization
Total Awarded: 16,704
Project Title: Analgesic and hemodynamic effects of continuous epidural analgesia compared to paravertebral block in liver resection patients (CTAQ award)

Principal Investigator: Levy Ron, Surgery
Sponsor: Canada Foundation for Innovation
Total Awarded: 48,000
Project Title: Monkey models of movement disorders: Electrophysiology and neuromodulation therapies

Principal Investigator: Mann Stephen, Surgery
Co-Investigators: **Davidson Lindsay**; Joneja Mala
Sponsor: Southeastern Ontario Academic Medical Organization
Total Awarded: 15,000
Project Title: Resident Perceptions of Competency-Based Medical Education

Principal Investigator: Payne Darrin, Surgery
Co-Investigators: Boyd J Gordon; **Brown Peter M**; **Hamilton G Andrew York**; **MacDonald P Hugh**; Nicholson Joanne; **Petsikas Dimitri**; **Rudan John Frederick**; Saha Tarit K; Scott Stephen H
Sponsor: Botterell Foundation for the Neurological Sciences
Total Awarded: 10,000
Project Title: Post-operative cognitive dysfunction following major surgery: A pilot trial

Principal Investigator: David Pichora, Surgery
Co-Investigator: Zec Michelle
Sponsor: Southeastern Ontario Academic Medical Organization SEAMO
Total Awarded: 50,000
Project Title: The development of teaching and assessment tools in hand and wrist anatomy and reconstruction

Principal Investigator: Rainbow, Michael, Mechanical and Materials Engineering
Co-Investigator: Pichora David R
Sponsor: Queen's University
Total Awarded: 8,865
Project Title: The Role of Laxity in Carpal Mechanics

Principal Investigator: Rudan John Frederick, Surgery
Sponsor: Depuy Orthopaedics
Total Awarded: 119,700
Project: Title: 36mm Ceramax™ Ceramic Hip System PMA Post-Approval Study: Short to Mid-Term Follow-up of New Study Subjects

Principal Investigator: Rudan John Frederick, Surgery
Co-Investigators: Fichtinger Gabor; Petrof Elaine
Sponsor: Canadian Institutes of Health Research
Total Awarded: 8,050
Project Title: Characterizing Prosthetic Joint Infections using High Resolution Mass Spectrometry

Principal Investigator: Shyam Vidur, Anesthesiology and Perioperative Medicine
Co-Investigators: Ho Anthony; Murdoch John; Sawhney Mona; **Wood Gavin C**
Sponsor: Queen's University
Total Awarded: 9,960
Project Title: Does magnesium sulfate as a supplement in adductor canal blocks improve pain control after total knee arthroplasty?

Principal Investigator: Shyam Vidur, Anesthesiology and Perioperative Medicine
Co-Investigator: Ho Anthony; Murdoch John; Sawhney Mona; **Wood Gavin C**
Sponsor: Queen's University
Total Awarded: 10,000
Project Title: Does magnesium sulfate as a supplement in adductor canal blocks improve pain control after total knee arthroplasty?

Principal Investigator: Wood Gavin Campbell, Surgery
Sponsor: Population Health Research Institute
Total Awarded: 24,500
Project Title: Hip Attack (HIP fracture Accelerate surgical care and Treatment track)

Principal Investigator: Wood Gavin Campbell, Surgery
Sponsor: McMaster University
Total Awarded: 32,000
Project Title: Femoroacetabular Impingement Randomized Controlled Trial

FACULTY PROMOTIONS

DR HUGH MACDONALD
Division of General Surgery
Promoted to Associate Professor

DR DAVID ZELT
Division of Vascular Surgery
Promoted to Associate Professor

2015 PUBLICATIONS

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PUBLICATIONS 2015

RETIREMENT OF DR PAUL BELLIVEAU

HONOURING DR BELLIVEAU: A special evening was held in May 2015 to celebrate Dr Belliveau's retirement

Born in Moncton, New Brunswick and educated at McGill University, Dr Belliveau received his MD in 1974. After a residency in General Surgery in Montreal and a Colorectal fellowship in London, UK under the late Sir Alan Parks, and a second Colorectal surgery fellowship at University of Minnesota, he was appointed Assistant Professor in the Department of Surgery at McGill in 1981. He was appointed to the rank of Associate Professor in 1995. He became a Senior Surgeon, Surgical Oncology Service Chief as well as Section Director for General Surgery at the Royal Victoria Hospital until 2001.

In January 2001, he was recruited to Kingston to assume a position of Associate Professor at Queen's University as an active Colorectal Surgeon in the Division of General Surgery and Surgical Educator. He was appointed Professor of Surgery with Tenure. In 2004 he was selected as Chair of the Division of General Surgery at Queen's for a five year mandate.

In 2005 he obtained a Master's in Public Administration at Queen's. From 2005 to 2010, he served on the Hospital Boards representing the Medical Staff. In 2010 he served as Acting Chief of Staff at Hotel Dieu Hospital and has served on the Senate Budget Committee and Chaired the School of Medicine Assessment Committee and the Awards Committee. Outside the University, he has served as Chair of the Colorectal Surgery Specialty Committee of the royal College of Physicians and Surgeons of Canada.

Acclamations:

- Acknowledged Nationally & Internationally
- Recognized by the Canadian Association for Surgical Education with the Outstanding Educator Award (2006)
- Recipient of the 2013 John Provan Award for Excellence in Undergraduate Surgical Education in Canada

Dr Belliveau is acknowledged nationally and internationally for his scholarship in surgery for inflammatory bowel disease, colon cancer and surgical education. He has held several visiting professorships.

At the National level, in 2006 he was elected President of the Canadian Association of General Surgeons. He is a Past President of the Canadian Society of Colon and Rectal Surgeons, the Canadian Association of Academic Surgeons, the Canadian Undergraduate Surgical Education Committee. In 2006 he was recognized by the Association for Surgical Education ASE with the Outstanding Educator Award.

Dr Belliveau's expertise as an educator was recognized by receipt of the 2013 John Provan Award for Excellence in Undergraduate Surgical Education in Canada. This is an extremely prestigious award recognized at a national level. The award is designed to recognize outstanding contribution to undergraduate surgical education in Canada.

He finished his tenure with Queen's as the Department's Clerkship Director for the Core Surgery Course of the Queen's Faculty of Health Sciences, and Director of Education in the Department of Surgery.

A special evening was held in May 2015 where several people joined Dr Belliveau to celebrate his retirement and honour his outstanding commitment to the profession. Many colleagues, current and former surgical residents, administrative staff, senior hospital administrators, family and friends attended this wonderful tribute to Dr Belliveau.

Dr Belliveau is happily married and has three lovely children, as well as six wonderful grandchildren. We wish him all the best in his retirement.

DEPARTMENT OF SURGERY

MEMORIAM

DR JOHN HENSON
1953-2015

Dr John Henson passed away suddenly on January 20, 2015 at the age of 61. He will be greatly missed by his three children, family, friends and the innumerable patients he treated over the span of his career. He often spoke of his children with great pride. It was well known that his vocation was as a surgeon, but his true passion was his hobby farm.

John graduated Queen's Medical School in 1980 and completed his post graduate training in General Surgery at Queen's in 1985, after which he accepted a staff appointment at Hotel Dieu and Kingston General Hospitals.

John was passionate in his role as a surgeon, caring deeply about his patients and their needs. He was a mentor to our surgical resident and medical students and gave freely of his time to broaden their experience and understanding of Surgery. Former residents enjoyed his teaching technique, as well as his colorful stories of life in medicine and life on the farm. He served his community and will be remembered for his skills, compassion and wonderful sense of humour. He treated both staff and patients with the highest respect and will be remembered fondly. The members of the Department were deeply saddened by the news of the death of Dr Henson.

Queen's University | Faculty of Health Sciences

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