



DEPARTMENT OF SURGERY

Annual Report 2013/2014

April 1, 2013 to March 31, 2014



**Alberta Health
Services**



UNIVERSITY OF CALGARY
CUMMING SCHOOL OF MEDICINE
Department of Surgery

Report designed, compiled and edited by Arielle Berze and Christine Bourgeois

All Content and photography (unless otherwise stated) by Arielle Berze

We wish to thank all of the surgeons, administrators and other team members whose tremendous efforts made this report possible.

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Arielle Berze

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A Message from the Department Head

Dear Colleagues;

We are pleased to present some of the accomplishments of the past fiscal year. The breadth and depth of work across the Department and its Sections continues to amaze; the stories within capture some of the landmark achievements that you continue to lead. We continue to evolve towards collaborative team based care. We establish and improve measurement of outcomes that matter to our patients. We develop clinical care pathways that improve care and outcomes and reduce cost. We advocate for and introduce new technologies using best evidence and transparent costing. We provide outstanding care for our patients. The success stories within pay tribute to the work of the members of the Department of Surgery and our colleagues in Surgical Services.

Examples are the launch of the Enhanced Recovery after Surgery Program, the advances in surgical simulation, the advent of interdisciplinary care in trauma, the introduction of the National Surgical Quality Improvement Program for reporting and improvement of surgical outcomes resulting from the Bone & Joint Hip Fracture Pathways, amongst others.

The Department is host to a diverse faculty. This year we are pleased to profile our basic science members who are essential in helping us bridge the gap from bench to bedside. Their careers and achievements are remarkable and we hope that you will enjoy the stories they have shared with us.

Dr. Jacques Bouchard, who is co-leading the eSIM Project for faculty and AHS Calgary Zone, describes the successful launch of the Surgical Simulation Lab within the Advanced Technical Skills Laboratory. This was



Dr. John Kortbeek, Head, Department of Surgery

a sentinel achievement for our City and Department and will allow us to lead in surgical education and simulation.

The South Hospital had its first year of full operation; the care has been exemplary and has established a strong record of safety. We have welcomed a number of new Faculty who will begin their careers at the South Health Campus and appreciate the contributions and efforts of our senior faculty who have moved to the South Health Campus to lead the beginning of this important new institution.

Drs. Fiona Costello and Elizabeth Oddone-Paolucci continue to lead and improve our research

infrastructure, reporting and accountability. They are bringing new ideas forward for the department, executive and members to consider to grow our research and innovation enterprise. Drs. Lea Austen and Paule Poulin, who had developed and implemented a highly successful health technology assessment and innovation program in Calgary, are now instrumental in helping to lead this across the Province working with Dr. Trevor Schuler at the University of Alberta.

Many of our members have been active in the Strategic Clinical Networks, which include Bone & Joint, Cancer, Obesity and Nutrition as well as Surgery. These networks offer the best opportunity for standardizing care, measurement, reporting and feedback and ultimately improving outcomes in access, quality and cost across our provincial programs.

The Retreat focussed on cancer and cancer surgery. It was led by Dr. Greg McKinnon and helped us concentrate our efforts on dealing with immediate growth priorities utilizing the aCATS data, which has finally become available. The retreat also identified priorities for standard clinical care pathway development and furthering immediate feedback loops such as synoptic reporting. Dr. Walley Temple's leadership in this regard has been greatly appreciated. Dr. Temple is an example of

an outstanding mentor, teacher and leader. He, together with the Surgical Oncology team at the Foothills Medical Centre, have been international leaders in developing the peritoneal stripping and intra-peritoneal chemotherapy programs for advanced abdominal malignancies. Many surgeons now practicing around the world have been trained at the University of Calgary under his tutelage and a special event recognizing these achievements was hosted by the Department of Surgery with attendance by all of his past fellows. This alone speaks to the esteem and respect for Dr. Temple's work and lifetime record of service.

We hope you will enjoy reviewing these stories of success and achievement over the past year as we continue to work together to confront the challenges facing us as we journey forward.

Sincerely,

John B. Kortbeek, MD, FRCSC, FACS
Department Head, Surgery
Alberta Health Services
Professor and Head, Department of Surgery
Professor, Department of Critical Care Medicine
University of Calgary, Cumming School of Medicine

Surgical Executive Team

Dr. John Kortbeek, Department Head Surgery

Dr. Mary Brindle, Deputy Head,

Department of Surgery

Ms. Andria Marin-Stephens, Manager,

Department of Surgery

Ms. Christine Bourgeois,

Administrative Assistant to Dr. Kortbeek

Dr. Eduardo Kalaydjian, Section Chief,

Dentistry and Oral Health

Dr. Francis Sutherland, Section Chief, General Surgery

Dr. Michael Ashenhurst, Section Chief, Ophthalmology

Dr. Richard Edwards, Section Chief,

Oral Maxillofacial Surgery

Dr. Kevin Hildebrand, Section Chief, Orthopaedics

Dr. Wayne Matthews, Section Chief, Otolaryngology

Dr. Frankie Fraulin, Section Chief,

Paediatrics and Facility Chief, ACH

Dr. Francois Harton, Section Chief, Podiatry

Dr. A. Robertson Harrop, Section Chief,

Plastic Surgery

Dr. Greg McKinnon, Section Chief, Surgical Oncology

Dr. Sean McFadden, Section Chief, Thoracic Surgery

Dr. Anastasio Salazar, Section Chief, Transplant

Dr. Paul Petrasek, Section Chief, Vascular Surgery

Dr. Kevin Carlson, Section Chief, Urology

Dr. Jason Werle, Facility Chief, RGH

Dr. John Donaghy, Facility Chief, PLC

Dr. Donald Buie, Facility Chief, FMC

Dr. Beth Lange, Facility Chief, SHC

Dr. Jacques Bouchard, Director,

Office of Surgical Education

Dr. Fiona Costello, Director, Office of Surgical Research

Dr. Lea Austen, Physician Lead,

Health Technology and Innovation

Drs. Elaine Joughin and Sean Grondin,

Physician Leads, Quality and Safety

Dr. Andrew Kirkpatrick, Medical Director,

Trauma Services

Dr. Maureen O'Brien,

Faculty Ombudsman and Advisor on Diversity

Dr. Marie-France Guimond,

Resident Ombudsman, Department of Surgery

Dr. Craig Pearce, Acting Department Head, Anesthesia

Ms. Michele Austad,

Manager, Department of Anesthesia

Dr. Doug Wilson, Department Head,

Obstetrics and Gynecology

Dr. Imtiaz Ali,

Section Chief Cardiac Surgery, Cardiac Sciences

Dr. John Wong,

Section Chief Neurosurgery, Clinical Neurosciences

Dr. Ken Thomas, Spine Program Lead

Ms. Shawna Syverson, Senior Operating Officer, FMC

Ms. Denise Brind, Executive Director, Surgery, FMC

Mr. James Finstad, Communications

Ms. Margaret Fullerton, Vice President, ACH

Ms. Jill Woodward, Executive Director, Inpatient Care,

Child and Women's Health, ACH

Ms. Debra Harris, OR Manager, ACH

Ms. Janice Stewart, Director, Surgery, RGH

Ms. Susan Reader, OR Manager, RGH

Ms. Val Marsten, Director, Surgery, PLC

Ms. Joanne Cabrera, Executive Director,

Surgery & Women's Health, SHC

Department Members 2013/2014

We are a total of 383 members

270 Surgeons
40 Members in Dentistry & Oral Health
12 Members in Oral & Maxillofacial Surgery
15 Members in Podiatric Surgery
3 PhD Appointments
29 Cross Appointments
14 Adjunct Appointments
14 Sections in Total

New Faculty 2013/2014

Dr. Patrick Gooi joined the Section of Ophthalmology,
May 1, 2014.

Dr. Marlis Sabo joined the Section of Orthopedics,
July 1, 2014.

Dr. Graham Cobb joined the Section of Oral and
Maxillofacial Surgery, March 1, 2014.

Dr. Raj Sharma joined the Section of Orthopedics,
April 1, 2014.

Dr. Shawn Higashi joined the Section of Oral and
Maxillofacial Surgery, January 1, 2014.

Dr. Alex Soroceanu joined the Section of Orthopedics,
September 2, 2014.

Dr. Stephen French joined the Section of Orthopedics,
September 1, 2013.

Dr. Jason Chau joined the Section of Otolaryngology,
Head and Neck Surgery, September 1, 2013

Dr. Stephen Hunt joined the Section of Orthopedics,
July 1, 2014.

Dr. Monica Hoy joined the Section of Otolaryngology,
Head and Neck Surgery, September 1, 2013

Dr. Jeremy Lamothe joined the Section of Orthopedics,
September 1, 2014.

Dr. Ramon Grover joined the Section of Plastic Surgery,
November 1, 2013

Dr. Justin Leblanc joined the Section of Orthopedics,
February 1, 2014.

Dr. Frederick Loiselle joined the Section of Plastic
Surgery, November 1, 2013

Dr. Ryan Martin joined the Section of Orthopedics,
October 1, 2014.

Appointments

Dr. Michael Ashenhurst accepted the position of Section Chief, Ophthalmology.

Dr. W. Donald Buie accepted the position of Foothills Medical Centre, Facility Chief of Surgery.

Dr. Frankie Fraulin accepted the position of Section Chief Pediatric Surgery and Facility Chief Surgery, Alberta Children's Hospital.

Dr. Sean Grondin accepted the position of Co-Director of Safety for Surgical Services, Calgary Zone.

Dr. Elaine Joughin accepted the position of Co-Director of Safety for Surgical Services, Calgary Zone.

Dr. Gregory McKinnon accepted the position of Section Chief, Surgical Oncology.

Clinical Promotions

Dr. Bill Chow, Section of Ophthalmology, has been promoted to rank of Clinical Assistant Professor.

Dr. Chad Ball, Section of General Surgery, has been promoted to rank of Clinical Associate Professor.

Dr. Frankie Fraulin, Section of Pediatric Plastic Surgery, has been promoted to rank of Clinical Associate Professor.

Report from the Surgery Strategic Clinical Network

Our Mission: "Bringing patients, clinicians, administrators and policy-makers together to advance surgical care in Alberta".

Milestone for aCATS project

A significant milestone has been reached in relation to the aCATS project. The aCATS data from the initial 10 pilot sites has undergone an external audit to validate the data's accuracy and quality. Health Information Management Professionals compared the aCATS code recorded on the surgical booking form to the preoperative diagnosis on the OR Report and determined if the two were a match. 1400 records were audited and 92% of the charts reviewed matched. As a result, the Surgery SCN has determined this success rate is acceptable and has given the aCATS project the green light to release the aCATS reports for operational use.

Seven reports that encompass all sites and surgical services have been developed. Most important of the reports is the surgeon detail and surgeon summary report. These provide the surgeon and their office staff an overview of their waitlist and a summary of patients waiting in and outside their surgical access target. The aCATS leads will be meeting with each Zone's surgical leadership to determine how the other reports will be distributed and utilized to assist in Zone surgical planning. Regular, annual audit activities will continue to ensure the aCATS data remains reliable and accurate.

aCATS= scheduled cases as of March 31, 2014

Total Cal Zone acute as of Mar 2014:	65395
ACH -	10331
Total adult acute =	55064
Unscheduled/ emerg cases with no acats code & Without ach	17118
Cases Scheduled with Acats ~~=	37, 946

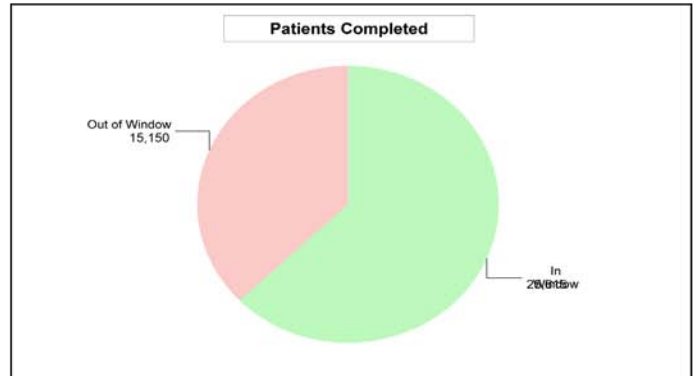
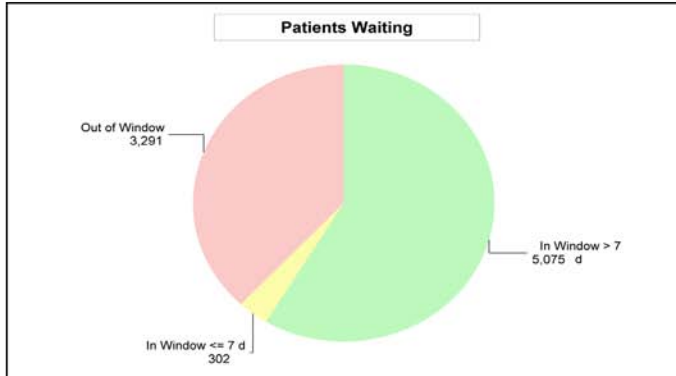
This report excludes the few services that are not participating in the aCATS coding.(e.g. Cardiology 1304 , Transplant 518, Respiratory 70, etc)

ANNUAL REPORT 2013-2014

Wait List of aCATS Diagnosis by Site by Service Summary

Site: FMC, TBCC, RGH, PLC, SHC Show Sites: Combined Service: ALL Cancer (Y/N/ALL): ALL Show Graph: Yes

from: 2013-09-01
to: 2014-08-31



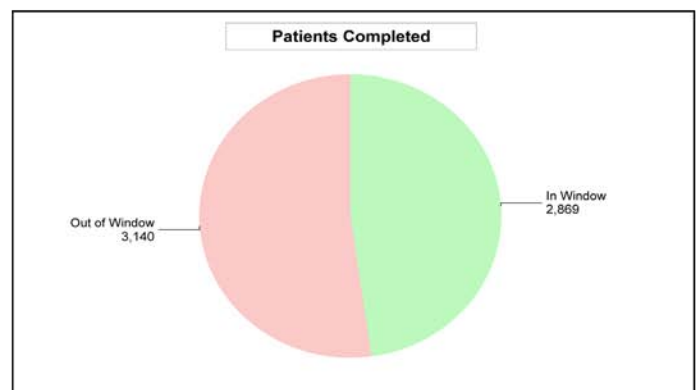
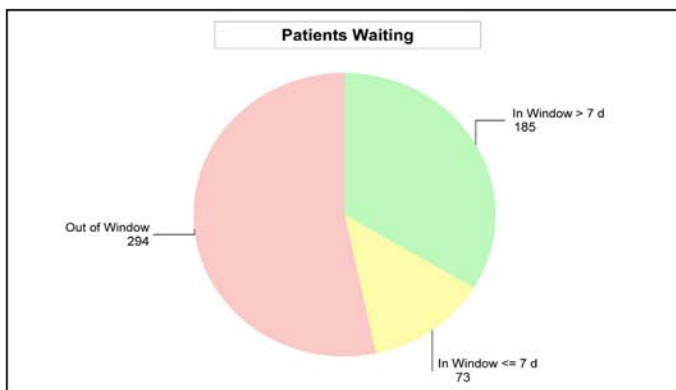
Patients Waiting	Total
Waiting In Window > 7 days	5,075
Waiting In Window <= 7 days	302
Waiting Out of Window	3,291
% Waiting Out of Window	38
Total Patients Waiting	8,668

Patients Completed	Total
Completed In Window	25,615
% Completed In Window	63
Completed Out of Window	15,150
% Completed Out of Window	37
Total Patients Completed	40,765

Wait List of aCATS Diagnosis by Site by Service Summary

Site: FMC, TBCC, RGH, PLC, SHC Show Sites: Combined Service: ALL Cancer (Y/N/ALL): Y Show Graph: Yes

from: 2013-09-01
to: 2014-08-31



Patients Waiting	Total
Waiting In Window > 7 days	185
Waiting In Window <= 7 days	73
Waiting Out of Window	294
% Waiting Out of Window	53
Total Patients Waiting	552

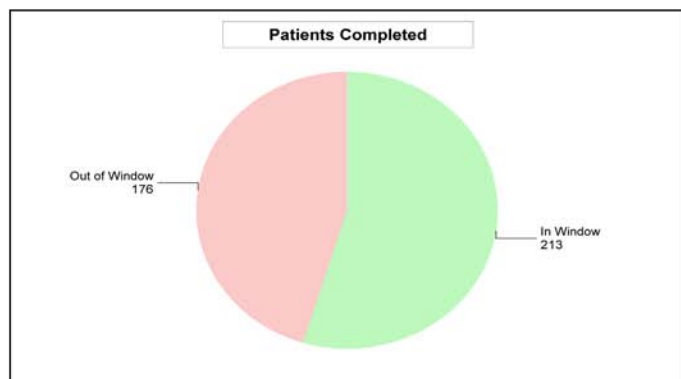
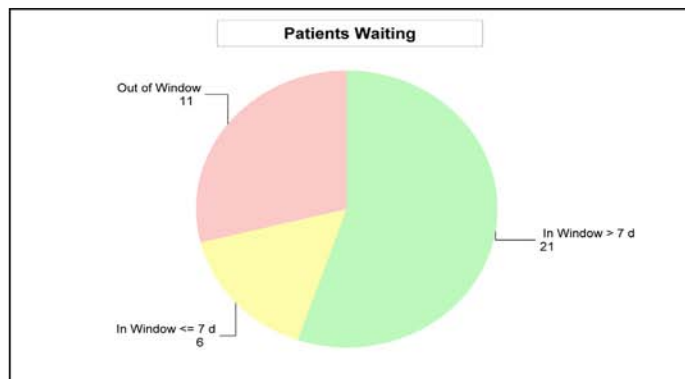
Patients Completed	Total
Completed In Window	2,869
% Completed In Window	48
Completed Out of Window	3,140
% Completed Out of Window	52
Total Patients Completed	6,009

ANNUAL REPORT 2013-2014

Wait List of aCATS Diagnosis by Site by Service Summary

Site: FMC Show Sites: Individually Service: THO Cancer (Y/N/ALL): Y Show Graph: Yes

from: 2013-09-01
to: 2014-08-31



Patients Waiting	Total
Waiting In Window > 7 days	21
Waiting In Window <= 7 days	6
Waiting Out of Window	11
% Waiting Out of Window	29
Total Patients Waiting	38

Patients Completed	Total
Completed In Window	213
% Completed In Window	55
Completed Out of Window	176
% Completed Out of Window	45
Total Patients Completed	389

Enhanced Recovery after Surgery (ERAS)

The Surgery SCN has been successful in its application for funding from the Partnership for Research and Innovation in the Health System (PRIHS) from Alberta Innovates Health Solutions. The funding will be used to optimise care through the Enhanced Recovery after Surgery (ERAS) project.

Each year, more than 230,000 surgeries are performed across Alberta at 59+ Alberta Health Services (AHS) sites. The Surgery SCN believes surgical care can be delivered sooner, safer and smarter in all areas of the province. Enhanced Recovery after Surgery (ERAS) project standardizes care before, during and after surgery, in an effort to get patients back on their feet sooner while shortening hospital stays and reducing complications after surgery.

Drawing from best practices and evidence from around the world, the project improves protocols related to nutrition, mobility after surgery, and anesthetics and pain control. ERAS also makes patients part of the team participating in their preparation and post-operative recovery and return them to their previous level of functioning. It aims to improve outcomes, improve patient experience and decrease length of stay.

For more information about AHS ERAS implementation contact Jill Robert, at Jill.Robert@albertahealthservices.ca

Surgery Strategic Clinical Network Introduces NSQIP and TQIP

The National Surgery Quality Improvement Program (NSQIP) and Trauma Quality Improvement Program (TQIP) are two initiatives that use clinical data to understand and improve performance. The first five sites - Rockyview General Hospital, University of Alberta Hospital, Red Deer Regional Hospital, Queen Elizabeth II Hospital and Chinook Regional Hospital - are poised to implement NSQIP this year.

that benchmark performance on a variety of outcomes. Performance reports will be used at each site to design and implement rapid quality improvement activities. The SSCN will host learning collaboratives involving all participating sites to share learnings and optimize our results! These programs have been widely successful in improving quality, reducing complications and reducing costs.

Foothills Medical Centre, University of Alberta and the Royal Alexandra Hospitals will enrol in TQIP. All participating sites will submit data to the American College of Surgeons and, in turn receive regular reports

For more information please contact Stacy Kozak at stacy.kozak@albertahealthservices.ca or go to <http://site.acsnsqip.org/>

Safe Surgery Checklist – Provider Satisfaction Survey

The impact the Safe Surgery Checklist (SSC) project had on clinicians was assessed. With the support of AHS' Survey & Evaluation a brief online survey was developed. Using an online survey tool provided the simplest option for analyzing and categorizing qualitative data. In addition, the online tool allowed for an efficient way to disseminate the report provincially.

Using various resources within each Zone, surgeons, anaesthetists and OR nurses across the province were targeted, with an understanding that it would be difficult to determine a denominator or get full engagement.

Over a two-week period in December, 500 responses were received. Distribution of zone responses was

aligned closely with surgical volumes and there was good representation from the targeted groups (RN- 43%; Surgeon – 32%; Anesthetist – 18%; ORT – 3%; other – 4%).

A third of the respondents reported that use of the SSC contributed to preventing an adverse event, and approximately 75% of respondents agreed that the SSC should be used for all procedures.

The Surgery SCN will use the feedback from this survey to determine any gaps in engagement and share the results with the Zones to continue to strengthen their engagement.

Bone and Joint Clinical Pathways

The hip fracture clinical pathway was introduced in 2010 when Alberta doctors decided to develop a province wide pathway. It was piloted at four sites, with another four used as control sites.

The clinical pathway was a joint effort between the Department of Surgery and Department of Medicine grant.

In 2011, a focus group was formed which worked to further modify the pathways, as well as allow the rollout to 14 sites in Alberta in January 2013.

Each clinical pathway site has a different focus and their own key performance indicators and score cards.

“Now in 2014, we’re starting to look at our first real data across the province across all the sites,” says, Dr. Kevin Hildebrand, section head of orthopaedic surgery.

Clinical pathways provide a standardized method of care that includes multi-disciplinary aspects to improve efficiency and the patient experience, as well as to improve safety and the utilization of resources.

Dr. Hildebrand helped to set up the bone and joint clinical pathway. He is now a part of the hip fracture pathway, which focuses on hip fractures and the prevention of a second fracture.

The pathway looks at and documents after-care, rehabilitation, and care received at nursing homes. There is also a prevention program called “Catch a Break,” which works to educate patients and staff on the prevention methods to avoid future fractures.

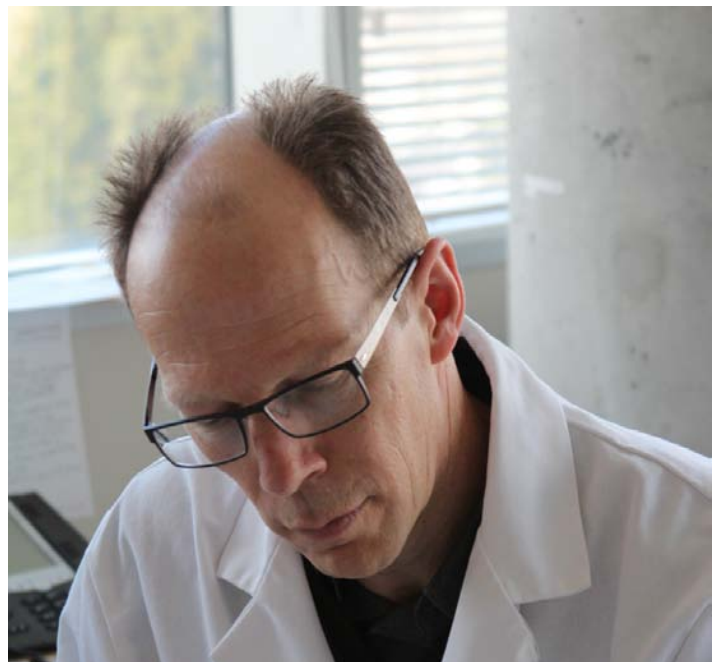
“Many of these people with hip fractures have osteoporosis, so now we’re trying to raise awareness for patients as well as their primary care physicians, regarding appropriate investigations and osteoporosis treatments,” says Dr. Hildebrand.

As some people will go to rehabilitation centres while others will head to long-term care, Dr. Hildebrand says after-care still needs lot of standardization.

“We’re starting to develop a pathway for care once patients have finished their treatment at the hospital where they had their surgery,” he says.

Catch a Break will be interconnected between health link in the future. This will help to determine whether a fracture was a fragility fracture or due to an outside force such as a vehicular accident. A pilot program has currently been introduced in Edmonton.

There is also research being done to examine the flow of patients after a fracture and after the surgery is completed. Dr. Hildebrand says this needs to be focused on as currently hospitals and after care services use two different languages, which makes it difficult to figure out what happens to the patient after surgery.



*Dr. Kevin Hildebrand
Section Head of Orthopaedic Surgery*

Cancer Care Retreat

Dr. Gregory McKinnon April 3&4, 2014 hosted the Cancer Care Retreat. The retreat opened Thursday evening at the Banff Centre to begin the dialogue on “continuous, collaborative approaches to cancer care.”

The oncology retreat built upon and spearheaded several important contributions including:

1. Development of measurement systems to support program quality improvement (NSQIP, aCATS, Synoptic Reporting).
2. Developing the expansion of Surgical Services to meet increasing demand: OR Block Management, Triage and Support Services.
3. Prioritizing opportunity to collaborate with the Surgical and Oncology Networks in the development of care pathways.

“We felt that it was time to assess the availability and quality of cancer treatment being delivered everyday,” says Dr. McKinnon.

Four speakers presented on the various types of cancer care in Alberta on Friday.

Presentations included thoughts on provincial programs, access to care and measurement tools, as well as various cancer-care pathways and the development of pathways.

The retreat worked to look at and develop new and innovative ways of delivering care, as well as new ways of organizing care while engaging provincial representatives.

Participants later worked in groups to address various action planning questions while the table hosts gave a brief presentation.

Dr. McKinnon says that the brainstorming between surgeons and non-surgeons was the highlight of the day.

Surgeons who attended were informed of the progress of other groups in delivering cancer care as well as being introduced to new resources in improving cancer care.

He says he believes that the provincial cancer control representatives were impressed with the willingness of Calgary surgeons in putting the time and energy into holding this event.



CHAPPS

CHAPSS, or the Centre for Hepatobiliary and Pancreatic Surgical Services, is an organization created by Drs. Elijah Dixon, Chad Ball, Oliver Bathe and Francis Sutherland to fund research and improve outcomes for current and future cancer patients. It aims to improve surgical treatment and patient care for those affected by liver, pancreatic, and gallbladder cancer.

“Each of the four surgeons has similar but different academic research interests regarding cancer care” says Dr. Dixon.

“We wanted to bring everyone together so that we could more effectively collaborate with each other and work as a group together. And also to try and help us raise funding support to carry on the research.”

“The core is to try and generate a profile for our service and try to improve funding for research,” says Dr. Chad Ball.

CHAPSS currently works on multiple projects, including clinical trials on the use of steroids in cancer care, and health services research projects such as examining the wait times for cancer surgery across Canada.

The surgeons are also writing a review article on the prevention of gallbladder cancer via the prophylactic removal of the gallbladder in patients with asymptomatic gallstones.

“There’s some evidence that gallstones are one of the big risk factors for gallbladder cancer,” says Dr. Dixon.

“In certain geographic areas of the world, you have a gallbladder removed if it has stones,” he says.

“That’s one of the questions we want to look at, what the risk is in terms of lifetime risk of developing gallbladder

cancer in relation to asymptomatic gallstones and whether or not there’s value in removing the gallbladder in people with gallstones.”

Dr. Dixon says that CHAPSS tends to choose smaller, lower budget projects to make up for the challenge of receiving funding. CHAPSS has received local, regional, and international grants since it was created.

“We’re still new, so we’re still looking for donors and trying to raise money,” says Dr. Ball.

He says that CHAPSS is a “jewel in the Foothills Medical Centre” having generated funding for research for liver, gallbladder and pancreatic cancer care, as well as conducting multiple randomized clinical trials and retrospective looks at clinical questions.

“The collaboration amongst the surgeons and research assistants involved with CHAPSS results in a lot of ideas for future research,” says Dr. Dixon. Dr. Ball says he agrees that the collaboration and teamwork amongst members is one of their biggest accomplishments.



Dr. Chad Ball, Dr. Oliver Bathe, Dr. Elijah Dixon, and Dr. Francis Sutherland, founders of CHAPPS.

Photo provided by Nicole Anderson

Hand Program

An innovative combined plastic and orthopaedic surgery Hand Program was launched at the South Health Campus. The program will provide access to and triage patients with joint and degenerative hand injuries.

Members of the program include:

- Dr. Vaughan Bowen, Clinical Professor, Section of Orthopaedic Surgery
- Dr. Gurpreet Dhaliwal, Clinical Lecturer, Section of Orthopaedic Surgery
- Dr. Christina Hiscox, Clinical Lecturer, Section of Orthopaedic Surgery
- Dr. Neil White, Clinical Lecturer, Section of Orthopaedic Surgery
- Dr. James Kennedy, Clinical Lecturer, Section of Plastic Surgery
- Dr. Fred Loiselle, Clinical Lecturer, Section of Plastic Surgery
- Dr. Ramon Grover, Clinical Lecturer, Section of Plastic Surgery

There was nothing like this in Calgary previously, and multiple problems such as neuromuscular hand are more easily covered with a specialized clinic.

Dr. Bowen was approached in 2012 to develop the Hand Program. In January 2013, surgeons gradually moved from the Foothills Medical Centre to the South Health

Campus. By the fall, the Hand Program had completed recruitment.

“Patients are increasingly referred to the program – we can cover any injury that comes in the door,” says Dr. Bowen.

The program is taking a look at more complex problems in the hand now, with one of the surgeons interested in peripheral nerves.

“The project has been very collaborative,” says Dr. Bowen. Multiple teams worked on the logistics of building the clinic, as well as designing the care pathways. “It was a complete startup from nothing.”

“Seeing it coming together and no major problems along the way and quality of care being increased has been a rewarding experience for him,” says Dr. Bowen. “We see a nice group coming together. We have really good communication.”

“We’re going to expand the program with hand therapists and we’re starting some research about the best way to teach research.”

The program is also focusing on outreach now – looking at increasing the interest among residents, fellows, and new medical students.



*The Hand Clinic is located at the new South Health Campus
Photo provided by Colin McHattie*

Helipad

McCaig Tower has been expanding since it was first built in the fall of 2010, so the addition of a new helipad is no surprise.

“It was a phased commissioning project, so the first unit moved in 2010, and we’ve slowly expanded,” Christine Vis said. “The helipad has allowed us to fully utilize the capabilities of the building.”

The helipad was originally supposed to open in spring 2013, but was delayed due to a severe windstorm last year, causing a need for roof repairs before the helipad could be opened for use. The helipad officially opened in spring 2014.

The new helipad was moved to the top of McCaig Tower, reducing the cross winds between buildings and allowing easier access into the building with dedicated paths. It also has a state of the art safety system, with fire retardant systems in place, and can accommodate the larger STARS AW 139 aircraft that can accommodate up to two patients.

“Opening that helipad has allowed STARS to use that helicopter within the Calgary zone to bring patients to the Foothills,” Vis said.

The new location allows for easier access to the hospital area, allowing it to fully utilize the capabilities of the building. It also has a dedicated elevator and pathways to make the process of moving a patient into treatment more efficient.

However, getting the teams and the clinical process together to have STARS safely land was a bit of a process Vis said. An interdisciplinary team including STARS, protection services, the emergency department and trauma, and the eSim and human factors departments, helped to determine set pathways and routes to safely bring patients from the helipad into the hospital.

McCaig Tower is also working on creating a direct route between the helipad to the operating rooms for life-saving trauma surgery. Not only that, but a second interventional operating room for focused cardiac sciences will be coming online in the near future.



Photo supplied by Chris Vis, Manager, Trauma Services

Leaders in Medicine

Dr. Sean Grondin is Head of the Leaders in Medicine program. It was originally started four years ago as an optional evening workshop series providing an introduction to basic concepts in leadership for medical students before starting clerkship. Dr. Grondin says that, “initially, the program was designed to help students prepare for the stresses of clerkship and avoid making common mistakes in leadership.” Workshop topics include leadership styles, negotiation and conflict resolution, time management, dealing with generational gap issues, and leading teams. The workshops were so popular that the series of interactive lectures has become an annual event scheduled every fall.

To foster success of the program, Dr. Grondin has recruited popular teachers such as Drs. Kevin Busche, Linda Mrkonjic and Francis Sutherland to make the workshops interactive and topical using real life examples for discussion. Each year Dr. Grondin coordinates the workshops with the help of the Third Year Class President who is instrumental in helping to schedule the lectures and providing feedback from students.

Each seminar is approximately one hour long. Topics have evolved over the years based on feedback from medical students attending the workshops. Next year he says he’ll be adding a seminar on email and social media management.

One particularly important workshop deals with leading high performance teams. As noted by Dr. Grondin, “Doctors are no longer the top dog, it is a team approach for caring for patients... you are now a member of the team and every member of the team has an important voice.”

It’s been a rewarding experience for Dr. Grondin, who’s seen students really benefit from the knowledge his seminars are providing. He also makes himself



*Dr. Sean Grondin, Head of the LIM program
Photo provided by Dr. Sean Grondin*

available to those who attend his lecture in order to give advice on a particular problem the student may be facing at the time.

He recalls a student who attended one of the “time management” seminars who emailed him the next day saying she was very stressed out, but realized she needed to develop some skills to manage her time better. Six months later the student emailed Dr. Grondin again saying she had read a book he recommended and was doing a lot better organizing her personal and student life.

“The response and feedback to the workshop series has been extremely positive with the majority of medical students wanting it as a part of their curriculum,” Dr. Grondin said.

“I think that leadership skill development is so important that this program should be incorporated into the curriculum as it is recognized as one of the 10 accreditation deliverables for medical schools at this

time. Unfortunately, the condensed medical school curriculum is so full now, there’s not much room for new content.”

Dr. Bruce Wright, Dean of Undergraduate Medical Education, has been very supportive of the workshop series and is currently examining the medical school curriculum to see if there is a spot for these lectures.

Surgical Oncology International Symposium Honoring Dr. Walley Temple



*Dr. Walley Temple
Photo provided by
Dr. Walley temple*



*Dr. Gregory McKinnon
Photo provided by
Dr. Gregory McKinnon*

The International Symposium took place November 2013 in honour of Dr. Walley Temple. His colleague Dr. Gregory McKinnon planned the event to thank Dr. Temple for his work as Division head of the department of oncology.

Symposiums don’t always mark a retirement said Dr. McKinnon. In this case, it’s marking a transition in leadership while Dr. Temple steps down as division head and pursues his career further.

17 former students of Dr. Walley Temple from five different countries attended the symposium in honour

of his leaving as head of the division. Distinguished professors who knew and worked with Dr. Temple also came to present.

“It’s a once in a lifetime opportunity to come back to the place of their fellowship,” said Dr. McKinnon. The symposium is meant to be a way to honour and give thanks to their former teacher, he said.

Dr. Temple said the symposium was a wonderful and humbling event. “You get so used to looking after the residents. I’m not used to somebody returning that – it’s a gift.”

Portraits of the former students were taken during the day, as well as a group photo with Dr. Temple and Dr. McKinnon. Dr. temple says the pictures help to remind everyone of the people they led on to their careers.

During the symposium, many students related their stories of Dr. Temple’s influence on them.

“One of my students came from Miami, and she told me I influenced her to be a surgical oncologist. It was amazing, I didn’t realize that before,” said Dr. Temple.

While it was difficult to coordinate people from all over the world and find a date that would work for each one, the fellows showed an amazing amount of support and cooperation in order to make the event happen.

“No one said no,” said Dr. McKinnon. “Everyone bent over backwards to make sure it happened.”

Due to the high success of this first symposium, Dr. McKinnon says he hopes to see others wanting to emulate the event.

Dr. Temple says that seeing the success of their past students felt good not only for him, but for the entire team who has worked with them in the past. “It reminds you of how worthwhile your work is,” he said.

“We should look at the legacy of many of the senior people who have left... people haven’t stopped to really think about it and don’t realize some of the major contributions people have made.”

Dr. Temple said he felt honoured and privileged that his own colleagues did all the hard work to make this happen.

“It’s rare to get such a dedicated group of people to work together for years – we have a perfect wonderful division.”



Dr. W. Temple and Graduates of the University of Calgary Surgical Oncology Fellowship

Back row left to right: Ibrahim Edhemovic, Slovenia; Lloyd Mack, Calgary; Carman Giacomantonio, Halifax; Joel Weaver, Ottawa; Claire Temple-Oberle, Calgary; Pam Hebbard, Winnipeg; Philip Haigh, Los Angeles; Oliver Bathe, Calgary

Front Row left to right: Wesley Francis, The Bahamas; Chris Balisky, Kelowna; Larissa Temple, New York; Yarrow McConnell Vancouver; Doug Zippel, Tel Aviv; Andrew McKay, Winnipeg; Gitonga Munene, Memphis; Elizabeth Saettler, London Ontario; Justin Rivard, Winnipeg; Antoine Bouchard-Fortier, Calgary

Photo provided by Dr. Gregory McKinnon

Interactive Knee Surgery

The Telus Sparks Centre and Alberta Health Services have teamed up to bring surgeries to the big screen. “Direct from the Operating Room” broadcasts live surgeries at the Dome Theatre once a month for junior high and high school students. The project was tested in August of 2013 and officially debuted to the first class in September.

Each surgery broadcasted is of a total knee replacement, where Dr. Jason Werle is attached to a microphone to explain each step in the surgery as well as answer questions posed by the audience.

“It’s very interactive,” says Dr. Werle.



Surgical resident Jessica Page and Telus Spark emcee introduce high school students to the operating room at Rockyview General Hospital during a simulation surgery.

Photo provided by The Calgary Herald

There have been 10 broadcasts so far, which have been attracting students and teachers from sports medicine and biology classes.

Dr. Janice Pasioka brought this idea to the Department of Surgery after learning of a Science Centre/Surgery collaboration in the United States.

Dr. Werle, then the head of joint replacement surgery, was then asked by Dr. John Kortbeek to help lead the project at the Rockyview General Hospital.

“I’d done live surgical broadcasts before for some continuing medical education events where we broadcast some surgery to conferences. So I had some familiarity with doing it in the past, and I thought it was something we could definitely achieve,” says Dr. Werle.



Grade 12 students Navia Garcia, left, and Emily Hintz react to the surgery.

Photo provided by the Calgary Herald

There are three programs in the United States which have chosen to broadcast a variety of surgeries including open heart surgery. The Rockyview General Hospital and Telus Sparks Convention Centre have chosen to start with total knee replacements.

The knee surgery is safe and reproducible while being fully exposed; meaning the camera angles will work well for the audience says Dr. Werle. Not only that, but complications are rare occurrences during a total knee replacement.

The broadcast not only details the surgery itself, but also takes a look at the preparation that goes into the surgery and delivery of healthcare.



Dr. Jason Werle

“It gives them an eye into the different careers in healthcare, and not just surgeons and anesthesiologists, but nursing careers and the other support staff like sterilization,” says Dr. Werle. “To think that that might have an impact and peak someone’s interest in following a healthcare career is just really a cool thing that the program can accomplish.”

The program has been a huge success, with a waitlist for teachers to bring their classes in.

“Right now, there’s higher demand than what we can supply,” says Dr. Werle.

With the increasing demand, Alberta Health Services and Telus are looking to further expand the program. Alberta Health Services is looking at broadcasting other areas of surgery. A live broadcast of ophthalmology surgeries has been in preliminary discussions, but special equipment will be needed before it can really take off.

Alberta Health is also trying to spread the broadcast further by broadcasting live on the web so that students can view the surgeries from their own classrooms.

“Telus Spark would like to see us broadcast to all of Alberta, or even wider to Western Canada,” says Dr. Werle.

McCaig 24/7

The Interventional Trauma Operating Room (ITOR) or more affectionately, the Resuscitation with Angiographic Percutaneous Techniques and Operative Repair (RAPTOR) suite was first built in the Foothills hospital in 2010 – a hybrid trauma operating room designed to treat haemorrhaging patients who may be in need of both interventional radiology and operative resuscitation.

Dr. Andrew Kirkpatrick, a trauma surgeon at the Foothills Medical Centre, has been working along with many colleagues on introducing the state of the art hybrid operating theatre in McCaig Tower since 2006. The idea to build a hybrid suite that would offer more flexible and multi-modal haemorrhage control was an initiative taken by Dr. John Kortbeek, head of the Department of

Surgery, Dianne Dyer, the then Regional Manager for Trauma Services in Calgary, and Dr. Kirkpatrick in order to provide better trauma care.

“It was a vision lots of people had,” said Dr. Kirkpatrick.

The idea was proposed to the Calgary Health Trust, which raised four million dollars between 2007 and 2008. The project was then fully completed and equipment installed in 2013. In March of 2014, the McCaig Tower provided 24/7 service, meaning this state of the art trauma resuscitative/interventional resource no longer only operated Monday to Friday, 9 to 5; but now 24/7/365, a difference that will mean many lives saved.

The RAPTOR suite was built specifically for unstable trauma patients, and is the only hybrid trauma suite in North America specifically designed in regards to and on behalf of, the exsanguinating patient, said Dr. Kirkpatrick.

“Every trauma hospital in the world should be building these hybrid suites however.”

The hybrid suite allows for interventional radiology (IR), which works to diagnose and treat patients, as well as surgical operations (OR) to take place in the same area. The suite is twice the size of a regular operating room, allowing surgeons and diagnostic teams to operate on a patient at the same time.

Before the RAPTOR suite, doctors would need to quickly diagnose the type of haemorrhaging and decide whether to send the patient to either IR or the OR. For example, bleeding in the pelvis or another inaccessible site would best be treated in the IR, where as bleeding from damage to an organ is best treated by the OR.

Each location offers the control of different types of haemorrhaging, and the wrong decision could mean death. On top of that, many patients need both OR and IR care simultaneously.

“It’s one-stop shopping, where you can do both at once,” said Dr. Kirkpatrick.

While the hybrid suite has been a success, it was initially a challenge to design.

“There was no model to cut and paste,” said Dr. Kirkpatrick.

Not only had a hybrid trauma specific suite never been done before, but there were also a vast number of people working on it, all of whom had slightly different visions said Dr. Kirkpatrick.

Despite the differences, the suite is a medical triumph, where the only other one in the world like it being in Sydney, Australia. Between the design and concept, and it now being open for use 24/7, there is only more success to come.

In June 2014, McCaig Tower will include a cardiac hybrid suite along with the original hybrid trauma suite, allowing for extra capacity during different emergencies.

“The greatest accomplishment will come 2-3 years from now when we can look back and measure the impact on patients’ lives,” said Dr. Kirkpatrick.



*The McCaig Tower
Photo provided by Meditek*

Surgeons' Day

The Department of Surgery hosts a Surgeons' Day every year – a research symposium and dinner to acknowledge and honour the accomplishments of residents, fellows, medical students and surgeons alike. The 32nd symposium was held at the Libin Theatre on Foothills Campus June 13, 2014.

The day started with four sessions where a broad range of research was presented, including, "Intravesical Onabotulinumtoxin A for bladder dysfunction in a real world clinical practice," "The use of MRU in the diagnosis of acute appendicitis in adults," and "Cytomegalovirus: A cause of corneal endotheliitis."

Drs. Luke Rudmik, Marcia Clark, Amin Kherani, and Beth Lange served as sessional moderators, introducing the speakers and moderating during the question periods that followed. Dr. Claire Temple-Oberle and Dr. Thomas Feasby were the judges for the day, as well as lecturers presenting their own research.

Dr. Temple-Oberle presented on the quality of life for patients and surgeons from a plastic surgeon's perspective, focusing on what could be improved in order to provide better patient care while also looking at how to improve the quality of life for those surgeon's looking after them.

Dr. Feasby presented on improving surgical outcomes through clinical trials, which focused on the benefits of clinical trials and appropriateness studies.

During the lunch break, a poster review was led by Dr. Rob Harrop.

The evening dinner and awards ceremony was held at the Gasoline Alley Museum at Heritage Park, where distinguished service and resident-nominated awards are presented annually.

The Distinguished Service Awards are presented to a surgeon from each Calgary facility. This year's recipients were Dr. William Hyndman, from Rockyview General Hospital, Dr. John Heine from Peter Lougheed Centre, Dr. Allan Narvey from Alberta Children's Hospital, and Dr. Norman Schachar from Foothills Medical Centre.

Due to the 2013 flood, the Educator and Ectopic Educator Awards, as well as the Surgical Innovation Award were presented for both 2013 and 2014 at this year's dinner. Drs. Shannon Puloski received the award for 2013, while Lloyd Mack received the educator of the year award for 2014. Dr. Donald Buie received the ectopic educator award for 2013, and Dr. Greg Samis received it for 2014.



Dr. Claire Temple-Oberle and Dr. Frankie Fraulin

Dr. Anastasio Salazar received the surgical innovation award for 2013, and Dr. Ferri de Barros received it for 2014.

The McPhedran Award for Innovation in Surgical Teaching was given to four doctors – Dr. Sean Grondin for the UME Leaders Curriculum, Drs. Adrian Harvey and Alicia Ponton-Carss for their Core Surgical Skills program, and Dr. Carol Hutchinson for the UME MSSK Course.

Resident awards were given to three categories – Best Overall Research, Honorable Mention for Overall Research, and Best Poster.

Dr. Jon Dautremont of the Section of Otolaryngology, received the award for Best Overall Research for his

presentation, “The Role of Postoperative Systemic Corticosteroids when Utilizing a Steroid-Eluting Spacer Following Endoscopic Sinus Surgery.”

Dr. Christopher Blackmore, of the Section of General Surgery, received the Honourable Mention for Overall Research for his presentation, “Should We Still be Performing Open Appendectomies? A Comparison of Outcomes for Laparoscopic Versus Open Appendectomy with Data from the Canadian Institute for Health Information (CIHI).”

Dr. Janice Austin of the Section of General Surgery received the award for Best Poster, for her poster, “Diagnostic delays: A problem for young women with breast cancer?”



Gasoline Alley, Heritage Park



Surgeons' Day Dinner 2014

Surgical Foundations

Dr. Marcia Clark is the director for the Surgical Foundations program in the Department of Surgery. She originally worked with the University of Alberta's Surgical Foundations program, and later moved to the Calgary South Health Campus.

As she created and implemented the Surgical Foundations curriculum at the University of Alberta, Dr. Clark was chosen to take a look at the strengths and weaknesses of Calgary's program, and suggest possible changes to further enhance the program.

The Surgical Foundations program is a two-year curriculum for surgical residents in their first two years of surgical training. It is embedded within their home program.

Dr. Clark worked to perform a curricular review and has started to suggest changes in the program to round out the curriculum and learning structure. She included looking at the strengths and areas to improve upon, developing a two to four year plan to accomplish her suggestions. These included using simulation not only for teaching, but also for assessing students. This is one of the key points the Royal College will be looking at when the University of Calgary is accredited in 2015.

The main challenge to making these changes to the program is getting to know the residents and what variables are affecting them. Dr. Clark said it's hard to get a good snapshot of everything a surgical resident sees and is exposed to in their first two years.

To get an idea of these variables, Dr. Clark says she focuses on building relationships with the other surgeons as well as the residents. Time is also a factor in getting an accurate snapshot of what a resident student is being exposed to during the start of their residency.

Dr. Clark is also focused on finding out how the university is assessing its students.

She says, "My real interest is how we're understanding how learning is really happening. How are we testing them? Is it formative or summative? Where can we do better?"

The program benefits both residents and patients by teaching and assessing the principles of surgery. In this way, the health and safety of surgeons can be looked after, thus resulting in better and safer patient care.

"Surgical Foundations is a program that is going to teach the principles of surgery and assess that. With having strong foundations of the discipline, and thinking about things such as physician health and safety in surgery, the program will only enhance further surgical training and hopefully lead to good insight and judgment," Dr. Clark says.



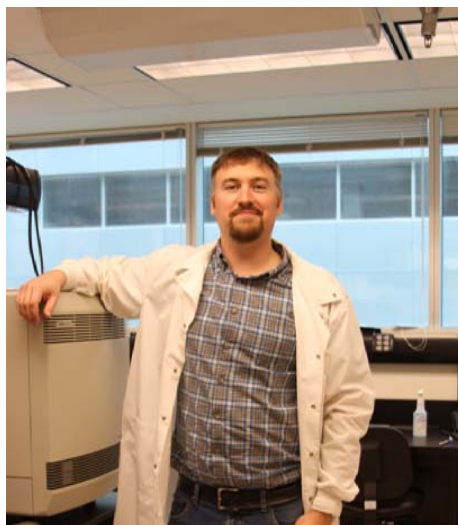
Dr. Marcia Clark

Research in the Department of Surgery Bench to Bedside



Dr. David Hart

Photo provided by Dr. David Hart



Dr. Roman Krawetz



Dr. Gail Thornton

Dr. David Hart

David Hart, a professor of surgery, medicine and microbiology and infectious diseases at the University of Calgary has a biochemistry background, and was initially interested in immunology and inflammation. He has since grown to have a special interest in understanding how to improve knee injury outcomes and arthritis after working with multiple Foothills Medical Centre researchers, clinicians and clinician-scientists.

Dr. Hart has worked with multiple Foothills doctors since joining the University of Calgary, including Dr. Cy Frank, Dr. Kevin Hildebrand, Dr. Marv Fritzler, and Dr. Paul Salo, and other non-clinical researchers such as Nigel Shrive, Gail Thornton, Janet Ronsky, Walter Herzog, Arin Sen, Tannin Schmidt, and Roman Krawetz.

He has also worked with astronauts and others interested in space medicine and responses to microgravity, and is currently on the Humans in Space Consultation Committee of the Canadian Space Agency.

“Things that happen in space give us new insights to things that occur on earth, so can provide unique insights into regulation of bones, muscles and joints. It’s provided opportunities to work with people from very different domains like astronauts and space agencies, and it has provided and opportunities to develop collaborations,” Dr. Hart says. Such collaborations have also expanded recently due to his involvement with the AIHS OA Team, and with the AHS Bone and Joint Strategic Clinic Network.

Wound healing is a central focus of his research, and he has multiple research projects that address more defined issues such as tendon, capsule and ligament healing, as well as stem cell influences on healing connective tissues following an injury.

“I don’t view them as separate directions, but very inter-

Current Research

1. Regulation and Application of Mesenchymal Stem Cells for repair of damaged connective tissues in the knee (e.g. cartilage, menisci, ligaments)
2. Role of joint injury and responses to joint injury (e.g. the knee) in development of osteoarthritis
3. Development of biomarkers for diagnosis and prognosis of various forms of arthritis and related diseases
4. Linkage between inflammation and degeneration of the knee and distal effects on the ocular system-preclinical models mainly
5. Role of inflammation and co-morbidities on tendon healing and tendinopathies-preclinical models and patients
6. Regulation of wound healing and fibrotic responses (skin, post-traumatic elbow contractures, pulmonary fibrosis)-new insights into mechanisms that have clinical application
7. Correlations between space flight/microgravity/prolonged bedrest and accelerated aging-preclinical models, astronauts, bed rest surrogates

related,” he says.

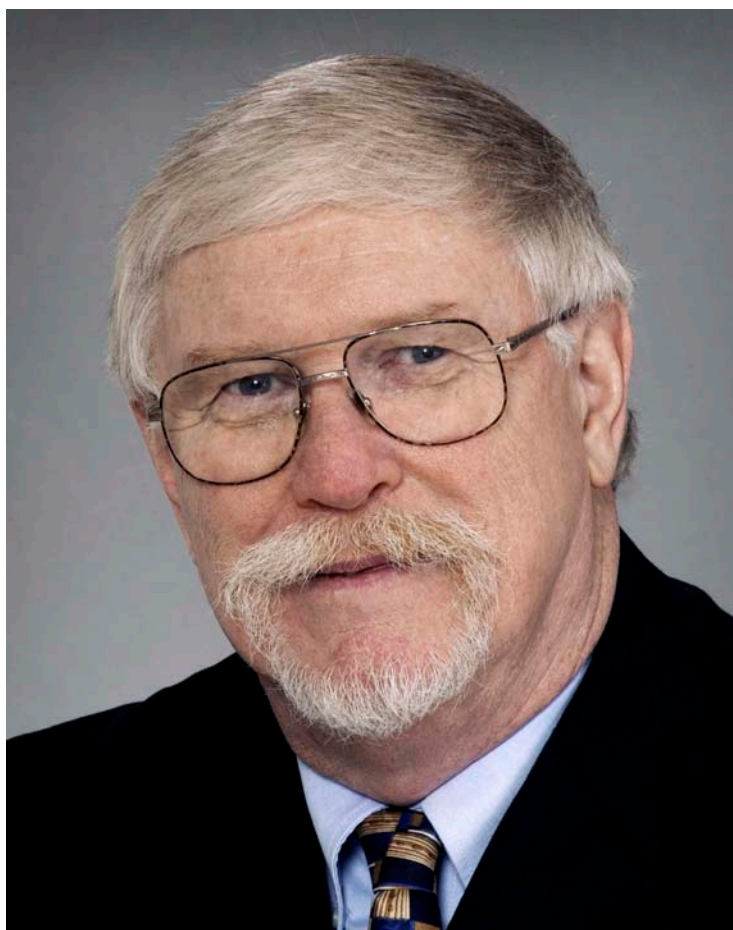
Dr. Hart’s original interest in wound healing began when he tore his Achilles tendon while playing soccer in 1984. “One of the rheumatologists introduced me to Dr. Frank and we became more interested in tendon repair, and

started a collaboration that continues to today! It was a personal interest, but it was also an area where I didn't have any training, but I had some skill sets that complemented what others had and I enjoyed working with them," he says.

Dr. Hart says one of the most rewarding things about this job is the training of younger people as students from all over the world who are coming to study with him. "It has to be somewhat fun, but it has to be productive as well." He also has enjoyed developing productive national and international collaborations with researchers in Vancouver, Sweden, Japan, Germany, Australia, South Africa, and the USA. "Research is a global enterprise, and working with people from around the world certainly expands our perspectives," says Dr. Hart.

Not only that, but turning the research and papers into clinical studies has also been a rewarding experience that's changed his perspective, he says. "There's been a few eureka moments along the way."

In the mid-2006, Dr. Hart discovered that injuring the knee could result in changes to tissues of the eye, and that these changes were dependent on the type of knee injury. He then corresponded with a Calgary ophthalmologist who said that he too found similar observations during the development of autoimmune and genetic diseases, and there were linkages between the knee and eye. Dr. Hart says this research is continuing to develop and it is providing some new insights into the mechanisms involved in these interactions. Certainly this is an example of "serendipity influencing research directions if one has an open mind!"



*Dr. David Hart, researcher at the Foothills Medical Centre
Photo provided by Dr. David Hart*

Dr. Gail Thornton

Gail Thornton, an engineer at the McCaig Institute for Bone and Joint Health, works in collaboration with orthopaedic surgeons and other McCaig researchers for her research on the mechanical behaviour of ligaments and tendons. She applies engineering principles to better understand how ligaments and tendons function under normal conditions, how they are injured, and how they are repaired.

“The human body is an interesting mechanical system, so if you’re going to spend your time studying a mechanical system, it’s the one we have to live with every day.”

Thornton has been doing research into the body’s mechanical systems for almost 20 years building on the research in her PhD. Her current research on the accumulation of damage in ligaments and tendons started over 10 years ago.

A ligament connects bones across a joint. A tendon connects a bone to a muscle. When the loads on the joint are not balanced, the affected joint is susceptible to osteoarthritis causing debilitating pain. One in four Canadians experience pain on a weekly or even daily basis. This limits their ability to maintain healthy, active lifestyles.

“We’re trying to understand how damage accumulates in ligaments and tendons, and what kinds of mechanical loading will be the most damaging. Then, hopefully, we could advise what kinds of loading to avoid while trying to rehabilitate an injury.”

Additionally, her research investigates damage to tendons during overuse or repetitive stress injury, particularly in the rotator cuff of the shoulder – a common sports injury. She studies how the hormone estrogen affects ligament biomechanics because more



*Dr. Gail Thornton
Researcher at the Foothills Medical Centre*

females suffer knee ligament injuries than their male counterparts in similar sports.

Addressing these multi-factorial problems requires a multi-disciplinary team of engineers, orthopaedic surgeons, molecular biologists, and other scientists.

“We are tackling issues affecting bone and joint health to ensure that Canadians have improved mobility throughout our lifespans. Because of this collaboration between researchers and physicians, we are uniquely positioned to discover and implement real-world solutions for patients suffering from pain due to bone and joint injuries.”

Staying motivated in light of these complex problems is easy.

“To this day, I am driven by the desire to solve problems. How does it work? How can we fix it? These questions

are often applied to things that are not living systems, like a bridge or your car. What is even more fascinating is when we ask these questions about the mechanical system that we all live with every day – the human body. How is it that I am able to walk from point A to point B? Why is it so painful for me to walk that I can't even make it from point A to point B? Answering these questions really makes a difference."

Her research helps Canadians of any age who are dedicated to maintaining physically active lifestyles whether a young athlete is hoping to return to sport after an injury or an older citizen is striving to improve their health.

Dr. Roman Krawetz

Dr. Roman Krawetz is a basic science researcher at the Foothills Medical Centre, whose research focuses on wound healing and regeneration, particularly in articular cartilage. He began his career as a developmental biologist, and soon became interested in stem cell research.

"When I was in undergrad and even during my PhD, stem cell biology wasn't the hot field it is now. Learning about how the early stages of embryonic development occurred really got me interested in stem cell biology in general," says Dr. Krawetz. From there, he says he further trained in stem cell research and became interested in bone and joint health, and how it relates to stem cells.

Dr. Krawetz's lab looks at stem cells already present in adults, rather than embryonic stem cells.

His lab mainly uses the knee as a model system, but is now expanding their research into the hip to observe if stem cell populations are similar between different joints.

Other current research in his lab focuses on finding novel diagnostics to detect osteoarthritis earlier, such as by looking at markers in the blood. He is also researching the interplay of various factors between joints, such as how inflammation affects stem cells, the lubrication of the joint, and biomarkers of joint disease.



*Dr. Roman Krawetz
Researcher at the Foothills Medical Centre*

Dr. Krawetz is also examining why cartilage does not have any stem cells of its own, and how stem cells found in the adjacent synovial tissues may help to repair damage to the cartilage, especially in the case of traumatic joint injuries and osteoarthritis.

There is currently no known treatment to reliably stop the cartilage from further degrading after injury he says, and there are only temporary fixes available to those with osteoarthritis.

“Between the injury and the end stage of that disease, there’s really nothing that can be done to stop the cartilage from further degradation. At best, there are temporary fixes that may provide a year or two of relief of symptoms, but in most cases eventually they will lose most if not all their cartilage and require a joint replacement.”

Not only that, but he says with younger people playing higher competitive sports, joint injuries are becoming more common, and will lead to a greater incidence of osteoarthritis.

“These younger people are not ideal candidates for joint replacement, so they’re losing quality of life for potentially a very long time. Those are the people that we’re targeting – trying to find something that we can do to either slow, halt, or reverse that process, using either stem cells in the joint, or through figuring out why the stem cells already there are not fixing the cartilage.”

Dr. Krawetz works with many orthopedic surgeons interested in the role of stem cells in the joints. He is currently working with Dr. Jim Powell to see if stem cells are present in the hip, and how they have changed in those with hip injuries. The project focuses on determining the pathology and characterization of the stem cells in hip injuries.

Dr. Krawetz says looking at the characterization of stem cells is the key, as there are many different kinds of stem cells. He says that if you don’t select the specific type of stem cell needed to heal an injury, you may only see minor improvement in healing.

Dr. Krawetz not only works with orthopedic surgeons, but also trains graduate and post-graduate students interested in stem cell research.

“In Calgary, we have a lot of good trainees,” he says. “It’s a joint learning experience.”

He and his team would like to translate their findings into a cell therapy clinical trial in the near future. A new assessment unit is being added to the McCaig Institute that will equip them with all the outcome measures to make a clinical trial possible.

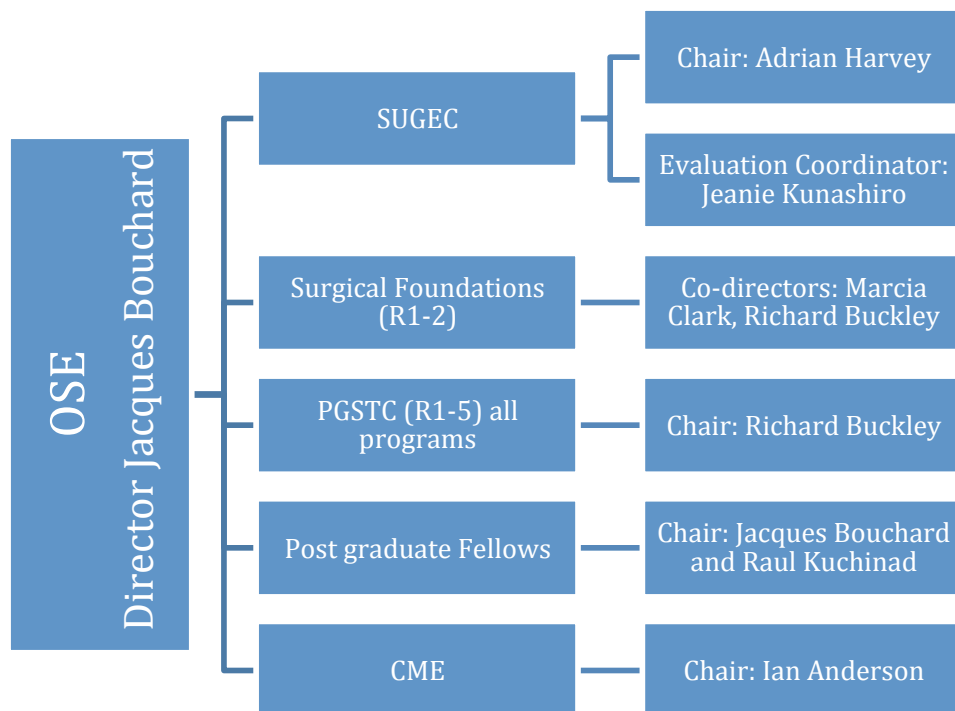
Office of Surgical Education

SECTION STRUCTURE AND ORGANIZATION

The Office of Surgical Education (OSE) is structured to assist with undergraduate medical education, post graduate education, fellowships and traineeships, and to oversee continuing medical education / professional development. The Office of Surgical Education is central to all of the educational undertakings in the Department of Surgery, and exists to assist and facilitate educational offerings and undertakings within the Department of Surgery and its sections and beyond to the external community.



*Dr. Jacques Bouchard, Office of Surgical Education Physician Lead
Photo provided by Colin McHattie*



ACCOMPLISHMENTS AND HIGHLIGHTS

The department is blessed to have a wide variety of excellent and dedicated surgical teachers at all sites and in every section of Surgery. Many of the surgeons have a local reputation of being highly effective teachers and have done this spontaneously and voluntarily for decades. Others have a National and International reputation and, in addition to teaching locally, are requested to teach at other centers. Many surgeons are participating in research on education and several new recruits have done additional training and research in education.

appreciated her accessibility and mentorship. She assisted in the organization and development of the PGY- Surgical Skills course and co-authored the course's Organizational manual. She participated in numerous undergraduate and postgraduate medical education committees at the University of Calgary as well as at the National level for the Canadian Undergrad Surgical Education Committee (SUGEC) and as Chair for 2 years for the Nurses in Surgical Education Committee for the Association for Surgical Education.

Dory Glaser- Watson will take over as Undergraduate Education Coordinator.

Thanks to the generosity of the McPhedran family a new award has been created in honor of Dr. Tait McPhedran. The first McPhedran award for Innovation in Surgical Teaching will be given at the June 2014 Surgeons' day ceremony.



Anita Jenkins, Undergraduate Education Coordinator

2013 was another great year for Ms. Anita Jenkins as Undergraduate Education Coordinator for the Department of Surgery who also announced her retirement effective June 2014 after 15 years of stellar service to surgical education. Her effective and respectful communication skills were appreciated and were fundamental in developing solutions to numerous education challenges. Over the years Anita guided over 1700 U of C clerks and over 1000 visiting clerks through their surgical rotations. The students



Dr. N. Tait McPhedran

Photo provided by the Department of Surgery

PROGRAM	Physician as Chair	FUNCTION
UME / SUGEC	Dr. Adrian Harvey	Course Chair of the Surgery Clerkship and chairs SUGEC. The section representatives of the Undergraduate Clerkship sit on the Surgical Undergraduate Education Committee (SUGEC).
	Dr. Jacques Bouchard	Sits on the University of Calgary UMEC, and the U of C Clerkship Committee.
Surgical Foundations	Dr. Marcia Clark Dr. Richard Buckley	Surgical Foundations coordinates the PGY1 and 2 curriculum, rotations, evaluations of the participating surgical residency programs
PGME / PGSTC	Dr. Rick Buckley	Chairs the Post Graduate Surgical Training Committee and sits on PGME, University of Calgary to represent the Department of Surgery
Fellowships / Traineeships	Dr. Jacques Bouchard (overall) Dr. Raul Kuchnad (Orthopaedic and spine)	Chairs Departmental Committee Conveys information to the Associate Dean, PGME
CME / CPD	Dr. Ian Anderson	Represents the Department of Surgery on University of Calgary CME / CPD committee, chaired by Associate Dean CME / CPD

The 2013 Ectopic Educator of the year award was given to Dr. Don Buie of General Surgery/Colorectal surgery.

The 2013 Educator of the year award was given to Dr. Shannon Puloski of Orthopaedic Surgery.

The wet lab component of the Advanced Technical Skills and Simulation laboratory opened in April 2013 allowing an expansion of simulation based training in the Department of Surgery. Drs. Jacques Bouchard and Vince Grant are Co-Directors of the centre.

Following up on the 2013 Department of Surgery retreat on Education Dr. Bouchard participated in an international gathering of Competency Based Medical Education experts facilitated by the Royal College of Physicians and Surgeons of Canada. The outcome of the deliberations will be published in 2014/2015.

Undergraduate Medical Education

The Chair of the Office of Surgical Education represents the Department of Surgery on the Undergraduate Medical Education Committee (UMEC) which is a faculty wide committee formulating overall policy for the undergraduate years. UMEC is chaired by the Associate Dean, UME, University of Calgary.

The Undergraduate Medical Education curriculum comprises the activities of all of the departments which contribute to the year 1 & 2 curriculum through the standing course committees. As a member at large, Dr. Bouchard is able to contribute to the policy making with regard to the undergraduate curriculum and to carry information back to the Department to be disseminated throughout the various sections.

Surgery Clerkship

Dr. Adrian Harvey is the Course Chair of the Surgery Clerkship for the Department of Surgery and chairs the Surgical Undergraduate Education Committee (SUGEC). Ms. Dory Glaser-Watson is the Education Coordinator for the surgery clerkship program and the Department of Surgery. The educational representatives, from each of the participating sections, sit on the Surgical Undergraduate Education Committee (SUGEC). The mandate of this committee is to revise and improve clerkship experiences in core general surgery, and in all specialties, as well as to guide the experiences that each of our clerks has within the surgical rotations. These rotations consist of compulsory surgical experiences in General Surgery and selectives in the other surgical specialties.

The clerkship Class of 2013 has a total of 180 clerks. The Department received 19-26 University of Calgary clerks for each of the eight Surgery blocks. The 6 week rotation included 3 weeks in General Surgery, 2 week assignments in either Orthopedic surgery, Plastic Surgery or Urology, as well as a one week 'selective' assignment in any one of Thoracic Surgery, Vascular Surgery, Neurosurgery or Urologic Surgery. A new 1 week selective has been created for Otolaryngology based on student feedback. The number of visiting elective clerks has also increased with the addition of new surgical residency programs, averaging 8 - 40 visiting clerks per month.

Surgical Foundations

Surgical Foundations is a Royal College requirement for many surgical specialties and there are specific guidelines to manage and coordinate the first 2 years of the participating residency programs. The Department of Surgery in Calgary previously provided these services through the Post-Graduate Surgical Education Committee.

Based on the new accreditation standards of the Royal College of Physicians and Surgeons of Canada the structure of the program in Calgary was changed and many enhancements were made. Many of the activities of Surgical Foundations dovetail into the PGSTC activity

so there is collaboration between the 2 committees to provide maximal resources with minimal overlap.

Dr. Marcia Clark and Dr. Richard Buckley are co-Director of the Surgical Foundations program. Dr. Clark chairs the committee and coordinate the academic curriculum, the PGY-1 basic skills simulation program, resident evaluations (with the home program Directors), the Critical thinking course (Research Fundamentals) and Dr. Buckley will continue to manage the CanMEDS session programs and assist with the Critical thinking course.

Post Graduate Medical Education

The Post Graduate Surgical Residency programs meet together to plan the 'Core' educational experiences for all of our surgical residents. Dr. Rick Buckley chairs the Post Graduate Surgical Training Committee (PGSTC) and sits on the Post Graduate Medical Education Committee at the University level (PGME) chaired by the Associate Dean of Post Graduate Medical Education. Dr. Buckley represents the Department of Surgery and helps to formulate and consider all policies related to post graduate medical education in surgery.

PGSTC guides and hosts the core educational activities such as the CanMEDS sessions and assist the Surgical Foundations committee with their roles. PGSTC is responsible for the educational needs of all the residents in Surgery for all years and for the residency programs that do not participate in the Surgical Foundations program. Some of the educational activities are also integrated with residency program of other Departments such as Cardiac Surgery, Neurosurgery, Ob-Gyn and anesthesia.

The Teaching Methods in Surgery (TIMS) course was also offered to senior residents and fellows.

The PGSTC assists the surgical residency programs to prepare for the on-site surveys which are conducted by the Royal College of Physicians and Surgeons to accredit the post graduate residency education programs at the University of Calgary every 6 years.

Surgery Residency Programs

There are surgery residency programs in Colorectal Surgery, General Surgery, General Surgical Oncology, Ophthalmology, Orthopedic Surgery, Otolaryngology, Plastic Surgery, Thoracic Surgery, Vascular Surgery, and Pediatric General Surgery, Dentistry & Oral Health.

PROGRAM	PROGRAM DIRECTOR	# of Residents
Colorectal Surgery	Dr. Don Buie	2
General Surgery	Dr. Lloyd Mack	33
General Surgical Oncology	Dr. Walley Temple	4
Ophthalmology	Dr. Linda Cooper	8
Orthopedic Surgery	Dr. Jason Werle	31
Otolaryngology	Dr. Doug Bosch	6
Pediatric General Surgery	Dr. Andrew Wong	1
Plastic Surgery	Dr. David McKenzie	10
Thoracic Surgery	Dr. Sean Grondin	1
Vascular Surgery	Dr. Joyce Wong	1
Dentistry & Oral Health	Dr. Eduardo Kalaydjian	2

Fellowships:

The OSE manages the ongoing accreditation and approval of surgery Fellowships within the teaching sections. The number of sections with accredited Fellowships is 3, with the number of Fellows (17) as follows:

- Orthopedics 12
- General Surgery 2
- Ophthalmology 3

The Fellows, both national and international, are raising the awareness of the program of excellence in surgery in Calgary, in addition to building academic clinical units at home which improve surgical care.

The Department of Surgery and the Faculty of Medicine have embarked on a major project to clarify Guidelines of Fellowship training, application, acceptance and funding mechanism as well as to continue with specific

Objectives of training and a more robust Evaluation process.

Continuing Medical Education & Continuing Professional Development (CME/ CPD)

Dr. Ian Anderson is the Department of Surgery representative on the University of Calgary Continuing Medical Education Committee. He coordinates activities and informs the various sections about opportunities for continuing professional development. The committee meets monthly and consists of CME representatives from every department in the medical school and the Calgary Zone and there are also plans underway to create a Department of Surgery CME committee that will host all of the various CME representatives from each Section to improve and enhance CME for surgical specialists.

Dr. Ian Anderson represents the Department of Surgery on the University of Calgary CME / CPD committee,

which is chaired by the Associate Dean CME / CPD. This committee is responsible for setting guidelines and providing oversight for accreditation of CME / CPD programs both within departments and sections in the faculty and external educational offerings.

Dr. Anderson has been busy reaccrediting all of the Departments rounds and educational activities with the new Royal College of Physician and Surgeon guidelines so that surgeons can gain maintenance of competence credits with their participation.

CHALLENGES

Clerkship:

The complexity of the surgery clerkship continues to increase, and the reduction in clerkship weeks from 8 to 6 does present challenges with decreased clinical exposure. We remain committed to offering a high quality experience for all University of Calgary clerks, as well as those visiting from other medical schools. We need to continue to improve clinical opportunities within existing resources.

Post-Graduate:

The creation of dedicated space to provide simulation training in the HRIC building (Medical school and FMC site) allows an expansion of simulation based training and evaluation. Although the facilities are there, the Residency and Fellowship programs must now integrate simulation training to their curriculum, consolidate their existing simulation, create new activities and provide Faculty Development for teaching in a simulated environment.

Fellowships:

The increasing demand for advanced clinical training experiences, from National and International trainees, puts pressure on our clinical faculty and offers competition for our current clinical teaching resources. Careful monitoring of the resident-fellow interactions must continue. Much work has been done to clarify guidelines for fellowship training and to standardize the process of advertising, accepting, credentialing and

funding fellows. This was a multi-department, Faculty of Medicine and Alberta Health Services collaborative effort which should be ratified in 2014.

WORKFORCE PLANNING FUTURE DIRECTIONS AND INITIATIVES

Simulation:

- **SIM:** This is the provincial network that links all of the medical simulation activities in the province and is divided into eSIM North and South. It is a partnership with U of C, U of A, U of L, MRU, GMU, SAIT, NAIT, HSERC, STARS, Department of National Defence and other. The simulation facilities remain relatively unknown to the medical faculty and students but there is increased resources and funding for simulation based teaching. Each hospital site in Calgary have or will have facilities for simulation. Such facilities exist at the ACH, PLC and FMC (McCaig Tower) and are planned for RGH and the South hospital.
- **ATSSL:** The wet lab (and largest component) of the Advanced Technical Skills and Simulation Laboratory was completed in 2013 and opened in April 2014. The laboratory is in the HRIC building. Renovations are ongoing currently to the special procedures lab which will add wet lab space and cadaver prep and storage areas. G-820 in HSC will cease “wet” activities and when funding permits will be built to a dry simulation area. In the meantime it will be used for certain specific dry simulation activities. The ATSSL operations committee has drafted a schedule of all existing and some of the future activities to integrate UME, PGME and CME activities. The executive committee continues to diligently work on issues related to governance and funding. Fundraising activities continue on the U of C and on the AHS side to continue planning of the dry lab and ARC portions of ATSSL and for purchase of equipment for the wet lab. The University, AHS and faculty have been strongly committed to this project.

- Current simulation activities in Surgery: Numerous courses have been offered over the years in makeshift installations including ATLS, ACLS, CPR, R1 basic surgery skills course, surgical exposures anatomy lab, laparoscopy courses, spine advanced course, peripheral nerve course, skull base labs, arthroscopy lab, AO fracture fixation courses. New simulators have been obtained by ophthalmology and urology. Otolaryngology has opened an expanded temporal bone lab with 4 stations. Neurosurgery continues to lead the world in robotic surgery and simulation in Dr. Garnette Sutherlands laboratory.

The OSE will continue to focus on expansion and improvement of our surgical education programs at all levels by advocating for Faculty development and teacher training to enhance surgical teaching skills. Financial remuneration and recognition for teachers is a focus for recruitment and retention of quality surgical educators.

We envision expanding our activities and increasing professional development across the continuum of surgical education, and will require infrastructure and resources to further our goals.

QUALITY ASSURANCE AND INNOVATION

Surgeons in the department have the dual responsibility to provide the highest quality care to their patients and at the same time an optimal educational environment for the trainees. This is primarily accomplished by very close supervision of the work of the trainees and by skillful evaluation of the trainee's strength and weaknesses and the determination of the patient's needs and wishes. Most, if not all Quality Assurance activities in the Department involve the trainees as team members. Innovation in teaching is expected to come from several young surgeons currently doing research in education and with expansion of our simulation facilities.



*The wet lab has been completed and opened in April 2013.
Photo provided by Dr. Jacques Bouchard*

Office of Surgical Research

OVERVIEW

The mission of the Office of Surgical Research (OSR) is to promote, support, and enhance research initiatives within the Department of Surgery. By partnering with our membership, we endeavor to foster a vibrant research culture across a spectrum of surgical disciplines. The OSR performs numerous roles, including, but not limited to:

1. Providing direction and support for discipline-specific research within the Department of Surgery
2. Fostering collaborations between sections within the Department of Surgery and thematically aligned institutes
3. Instructing our membership in the process of grant writing through workshops and statistical research consultation services
4. Enhancing internal grant review processes to optimize chances for funding success at the level of the CIHR and other external sponsoring agencies
5. Offering assistance in formulating research policy, direction, goals, and priorities within the Department of Surgery in consultation with the Research and Surgical Executive Committees
6. Overseeing the administration of the Surgeon Scientist Program (SSP)
7. Administering the Department of Surgery Prizes for Research and Education
8. Administering the Calgary Surgical Research Development Fund
9. Organizing the annual Surgeons' Day Research Symposium

MEMBERSHIP

The OSR represents and is accessible to all members of the Department of Surgery. Currently, the OSR infrastructure includes: a Director, Associate Director, Administrative Assistant and Department of Surgery Research Committee. The OSR directly reports to the Department Head (Dr. John Kortbeek) and to the City-Wide Surgical Executive Committee.

The OSR personnel include:

- 1. Director:** Fiona Costello, MD, FRCP
Associate Professor, Departments of Clinical Neurosciences and Surgery (Ophthalmology)
University of Calgary
Full Member, Hotchkiss Brain Institute
- 2. Associate Director:**
Dr. Elizabeth Oddone Paolucci, PhD
Assistant Professor, Departments of Surgery and Community Health Sciences
Chair, Medical Education Graduate Program
Member, Institute for Public Health
- 3. Administrative Assistant:** To be announced
- 4. Department of Surgery Research Committee (Members):**
Andrew Wong, Andria Marin, Richard Buckley, Fiona Costello, Marlis Sabo, Chad Ball, Christopher Blackmore, Claire Temple-Oberle, David McKenzie, Derek Drummond, Gary Gelfand, Greg McKinnon, Jacques Bouchard, John Esposito, John Kortbeek, Joyce Wong, Linda Mrkonjic, Elizabeth Oddone Paolucci, Lisa Lagrou, Lloyd Mack, Luke Rudmik, Mary Brindle, May Lynn Quan, Gregory McKinnon, Miller Smith, Paul Petrsek, Paule Poulin, Randy Moore, Rob Harrop, Wayne Matthews, Donald Buie, and Simon Goldstein

AFFILIATED PROGRAMS, GROUPS, AND COMMITTEES

The OSR partners with several existing programs within the Department of Surgery to strengthen research-related activities at the divisional, sectional, and inter-departmental levels.

- **City-Wide Surgical Executive Committee:** The OSR directly reports to the Department Head (Dr. John Kortbeek) and to the City-Wide Surgical Executive Committee.
- **The Department of Surgery Research Coordinator Interest Group (SRCIG):** Founded in 2008, the SRCIG is composed of researchers and coordinators working in different divisions within Surgery, and other Departments within the Faculty of Medicine. The SRCIG members meet every 2 months to share information, experiences, and challenges related to conducting successful research within Alberta. The SRCIG has grown from 5 to 23 members, and has hosted numerous informative presentations on topics of research interest (e.g., ethics, legal services, privacy office, and biostatistics).
- **The University of Calgary's Clinician Investigator Program (CIP)** is a postgraduate medical training program for residents in any specialty or subspecialty who want to develop a strong foundation for a career in clinical research. It provides a tailored combination of research, clinical and coursework experiences that graduates need to be successful in clinical and translational research in their chosen field. The CIP is recognized and accredited by the Royal College of Surgeons and Physicians of Canada (RCSPC). The CIP program is increasing its profile and infrastructure with the goal of supporting more residents going forward, than it has in the past. Although it is a fairly flexible program with regards to timing and program interests, the main stipulation and restriction is that the program must be done within the University of Calgary. For further details regarding the CIP program, interested parties can review this handbook <http://www.ucalgary.ca/cip/files/cip/cip-handbook-final-feb2013.pdf> and/or contact the Director of the CIP, Dr. Zelma Kiss.
- **Surgeon Scientist Program (SSP):** The SSP is a highly competitive, degree-based program for research training of residents within the Department of Surgery. The program provides the opportunity for residents to develop effective skills to conduct high-quality basic and/or clinical surgical research. Over the years, the SSP has supported a number of highly motivated residents who have successfully completed the program and in turn continued to produce excellent research within the Department of Surgery. Prospective applicants for the upcoming year are encouraged to submit their proposals by January 30th 2015.
- **The Research and Statistical Support Services Program:** This program is directed by Dr. Elizabeth Oddone Paolucci. All consultation services are focused on further developing research skills and knowledge in our faculty and residents. Investigators are encouraged to seek assistance at the early stages of their research projects, but support is available at any phase of the research cycle, from research question formulation through to dissemination of results. For more information on the services offered by the OSR please visit our website: <http://www.albertahealthservices.ca/4456.asp>
- **Surgery Prizes for Research and Education:** The Surgery Prizes for Research (\$75,000) and Education (\$25,000) reward excellence, innovation, and the potential for future success and impact on the Department of Surgery. All faculty members of the Department of Surgery are welcomed to submit their applications, although preference is given to those early in their investigative careers. Prospective applicants for the upcoming year are encouraged to submit their proposals by April 30th 2015.
- **Department of Surgery, Ethics Program The Conjoint Health Research Ethics Board (CHREB)** reviews protocols submitted by researchers from the University of Calgary's Faculties of Medicine, Kinesiology and Nursing. It is one of the three Health Information Act (HIA) designated Boards in

the province. The Board considers approximately 800 new protocols per year and oversees 2500 active studies at any one time. In 2014, Dr. Fiona Costello joined the CHREB to represent the Department of Surgery.

- **Department of Surgery Health Technology and Innovation:** The HT&I Office is continuing its work with the Surgery Clinical Networks in evaluating technology requests locally and/or province wide. For further information, please contact the Director, Dr. Lea Austen.
- **Internal Grant Review Committees:** Several additional committees are required for the review of programs administered by the OSR. These review committees are assembled through the recommendation of the Department of Surgery Research Committee and Chair, Dr. Fiona Costello. Review committees compiled and active over the last year include: the Calgary Surgical Research Development Fund Review Committee, the Surgery Research Prize Review Committee, the Surgery Education Prize Review Committee, and the Surgeon-Scientist Program Review Committee, and the Departments of Medicine and Surgery Research Development Fund Competition Committee.

2. Title: “A Prospective Study Applying Biomechanical Plastic Surgery Principles in the Correction of Pectus Excavatum”
Team: Drs. Brindle & Lai
3. Title: “Loop Mediated Isothermal Amplification PCR (LAMP) for Bedside Detection of Human Papillomavirus (HPV) in Oropharyngeal Squamous Cell Carcinoma (OPSCC)”
Team: Drs. Dort, Van Marle, Demetrick & Livingstone
4. Title: “Nonessential Imaging and Diagnostic Procedures in Solid Pancreatic Lesions”
Team: Drs. Ball, Dixon & Driedger
5. Title: “Multi-Source feedback for assessing clinical competence in surgical residents”
Team: Drs. Kassam, Oddone Paolucci & Quigley
6. Title: “Is Octaplex safe for reversal of warfarin anticoagulation in hip fracture patients? A retrospective quality assurance study”
Team: Drs. Shabani-Rad, MacAdams & Ng

ACCOMPLISHMENTS AND HIGHLIGHTS IN RESEARCH

- The Calgary Surgical Research Development Fund (CSRDF): The CSRDF has been created to encourage, promote, and provide financial support for high quality, scientifically valid research activities within the University of Calgary Surgical Training Programs. The CSRDF provides small grants, annually, ranging in amount from \$1,000 to \$4,000. In the 2014 funding year, six research projects across all divisions were supported:
 1. Title: “The effect of enteral fat infusion and glucagon-like peptide-2 hormonal therapy on intestinal adaptation in short bowel syndrome”
Team: Drs. Brindle, Chelikani & Lai



*Dr. Fiona Costello, Director OSR
Photo provided by Dr. Fiona Costello*

- **The Peter Cruse Memorial Award:** In 1996, the Peter Cruse Memorial Award was established to honor the outstanding contributions of Dr. Cruse to medical education in the Department of Surgery. The Cruse Award is given to the medical student with the best surgery related research project. In 2014, the recipient and honorable mention for the Peter Cruse Memorial Award were:
 - **Award Recipient:** Heena Singh
 - **Honorable Mention:** Natalie Chan
 - **Surgeon's Scientist Program (SSP):** The 2014 SSP recipient is **Dr. Carrie Liu**, R3, Section of Otolaryngology. Masters of Public Health.
 - **Surgery Research Prize (\$75,000):** The 2013 Surgery Prize for Research is **Dr. Adrian Harvey**, Section of General Surgery. Title of Proposal: "Quiet Eye Training in Surgical Skills Acquisition."
 - **The Department of Surgery Annual Research Day and Awards Banquet:** Annually, Surgeons' Day is organized by the OSR and supported by the entire Department of Surgery. Resident and fellow research with both podium and poster presentations are presented and the Research Day event is followed by an evening gala dinner and awards presentation.
2. **Honourable Mention - Overall Research:** Dr. Christopher Blackmore, General Surgery, R4 , "Should We Still be Performing Open Appendectomies? A Comparison of Outcomes for Laparoscopic Versus Open Appendectomy with Data from the Canadian Institute for Health Information (CIHI)."
3. **Best Poster:** Dr. Janice Austin, General Surgery, R4 "Diagnostic delays: A problem for young women with breast cancer?"



*Dr. Elizabeth Oddone Paolucci, PhD,
Associate Director OSR
Photo provided by Colin McHattie*

In 2014, the Research Day Symposium was held at the Libin Theatre, Foothills Hospital, Health Sciences Centre on June 13, 2015. The 2014 McPhedran Lecturer was Dr. Tom Feasby, BSc (Med), MD, FRCPC, DSc (Hon). Dr. Feasby's lecture was entitled: "Improving surgical outcomes through clinical trials and appropriateness studies." Dr. Clare Temple-Oberle, MD, MSc, FRCSC, delivered the 2014 McMurtry lecture, entitled: "Quality of Life for Patients and Surgeons: a Plastic Surgeon's Perspective."

Research Day award recipients included:

1. **Best Overall Research:** Dr. Jon Dautremont, Otolaryngology, R3
"The Role of Postoperative Systemic Corticosteroids when Utilizing a Steroid-Eluting Spacer Following Endoscopic Sinus Surgery."

Office of Health Technology and Information

SECTION STRUCTURE AND ORGANIZATION

Surgery Strategic Clinical Network (SSCN) Evidence Decision-Support Program for Technology Appraisal and Education

Programs

The SSCN is using an Evidence- Decision-Support Program when introducing new health technologies with respect to the health needs of the SSCN's target populations. The Program's purpose is: a) to introduce new health technologies into practice in a safe, effective, and evidence-informed manner while considering operational impact factors and b) to engage and educate physicians and managers throughout the province in the use of research evidence for introducing new health technologies into practice. The Program is funded and operated by the Departments of Surgery from Edmonton and Calgary and the Surgery SCN.

ACCOMPLISHMENTS AND HIGHLIGHTS

Clinical Service

- During the past year, the Surgery SCN EDSP worked on more than a dozen technology appraisals including robotic assisted surgery, a vertebral disc replacement system for either the cervical or lumbar spine, a novel ultrasonic osteotome for tissue-selective bone dissection, a diagnostic tool for point-of-care coagulation monitoring, a photo disinfection therapy to reduce surgical site infection, a preoperative skin prep policy and manual, a pre-operative pregnancy-test for pregnancy detection at an early stage, an electrosurgical generator to simultaneously seal and cut vessels and provide controlled dissection, a bone graft substitute for

autograft in foot and ankle fusions, a demineralized bone matrix as alternatives or supplements to bone autograft, a bone morphogenetic proteins as an alternative to bone autograft, a dual growing rod system with an internal drive for use in children with congenital scoliosis and chest deformity, and antibiotic prophylaxis for patients with implants who are undergoing dental work.

Education

- To engage and educate physicians and managers throughout the province in the use of the Decision-Support Program, appraisal and recommendation process, the SSCN EDSP team developed a series of interactive workshops. The rationale behind the development of these workshops is to improve the adoption of evidence-informed process and clinical appropriateness when introducing new health



*Dr. Lea Austen, HTI Physician Lead
Photo provided by Dr. Lea Austen*

technologies, apply technology appraisal and innovation concepts to real clinical case scenarios, provide real-world inquiry based education and engagement of clinicians to bring research evidence to practice, and to provide input for the further improvement of the Decision-Support Program.

Research

- This year, the team collaborated with other researchers to develop two grant proposals to Alberta Innovate Health Solutions PRISH-2 Competition, and one to the Royale College of Canada. In addition, two currently active projects includes our OR & Unit Manager Research Education Project entitled “Interactive Health Technology Assessment (HTA) Education Workshops for Health Care Practitioners and Managers in Surgical Services” and a Knowledge to Action project entitled “From Education to Engagement to Action: A dynamic, interactive and integrated knowledge translation approach to bring evidence into practice for introducing new health technologies”.



*Dr. Paule Poulin, PhD, HTI Administrator
Photo provided by Dr. Paule Poulin*

CHALLENGES

- The major challenge for the future involves adequate funding, staffing and resources support to ensure effective operational mechanisms to embed and support research and evidence-informed decision making by all members of the Department of Surgery when introducing new surgical technologies.
- Response to Issues
- Ongoing Matters and Plan of Action
- Future Risks

WORKFORCE PLANNING

- Future Needs – The SSCN EDSP team will be reviewing its program over the summer to make plans for new structure, operation, membership and resources requirements.
- Goals and Strategies
- Impact on other departments and zonal resources

QUALITY ASSURANCE, QUALITY IMPROVEMENT, AND INNOVATION

- General: Our office ensures that patient access to promising and innovative technologies is not prevented by lack of evidence, but is managed in an accountable manner while also generating new evidence when necessary. We support knowledge, research, quality, innovation, continuous improvement, and excellence in health services.

FUTURE DIRECTIONS AND INITIATIVES

- With the upcoming addition of Scientific Directors to the SSCNs, we are now preparing to move toward the incorporation of “Knowledge Creation” to the armament of processes for using evidence to inform decision making.

Section of Dentistry and Oral Health

SECTION STRUCTURE AND ORGANIZATION

Current Committees

Division of Adult Dentistry

Division members representing Adult Dentistry in the following committees

- Corrections Health – Dr. A. Paladino
- ADA&C Hospital Committee – Dr. E. Kalaydjian
- ZMAC (Zone Medical Advisory Committee) – Dr. E. Kalaydjian
- SAIT Dental Assisting Program – Dr. E. Kalaydjian, Dr. G. Yates, Dr. A. Houghton
- Surgical Foundations PGSTC – Dr. E. Kalaydjian
- Calgary Zone Surgical Executive Committee – Dr. E. Kalaydjian
- Combined FMC OR Committee – Dr. E. Kalaydjian
- Dental NHSF Committee – Dr. A. Tung, Dr. A. Paladino, Dr. E. Kalaydjian
- Dental CE Committee – Dr. E. Kalaydjian, Dr. A. Paladino
- Dental General Practice Residency Program Training Committee – Dr. E. Kalaydjian, Dr. A. Paladino, Dr. T. Yu, Dr. G. Shariff, Dr. S. Switzer, Dr. T. Wierzbicki
- Provincial Head and Neck Tumour Team Executive Committee – Dr. E. Kalaydjian
- CDAC (Commission on Dental Accreditation of Canada) Health Facilities / Dental Internship Committee – Dr. E. Kalaydjian

Division of Pediatric Dentistry

Division members representing Pediatric Dentistry in the following committees

- ACH Operating room Committee – Dr. M-C. Cholette
- ACH Pediatric Surgery Executive Committee – Dr. M-C. Cholette
- Dental General Practice Residency Program Training Committee – Dr. M-C. Cholette

- Dental CE Committee – Dr. C. Bell
- Royal College of Dentists of Canada (Examiners) – Dr. M-C. Cholette, Dr. R. Barsky, Dr. W. Loeppky
- ADA&C Hospital Committee – Dr. R. Barsky
- CDSA (Canadian Dental Specialist Association), President – Dr. R. Barsky
- CDSA Board Member for the Canadian Academy of Pediatric Dentists – Dr. R. Barsky
- Alberta Academy of Pediatric Dentistry, President – Dr. S. Hulland
- Western Society of Pediatric Dentistry, Alberta representative – Dr. S. Hulland
- Oral Health initiative for the Calgary Backpack Program, Director – Dr. S. Hulland
- Sponsorship Committee, Calgary and District Dental Society – Dr. S. Hulland
- Dental NHSF Committee – Dr. W. Loeppky
- Canadian Academy of Pediatric Dentistry Executive Committee – Dr. W. Loeppky
- Canadian Academy of Pediatric Dentistry, Immediate Past President – Dr. W. Loeppky
- Journal of The Canadian Dental Association, Expert Panel of Reviewers and Advisors – Dr. W. Loeppky
- Dentistry for All, Executive Director – Dr. B. Krusky
- Chairman of the Board and Executive Director, Healthy Mouth Healthy Body. (Non-profit charitable organization dedicated to assisting children in growing up in a healthy fashion by eradicating ECC, the most common of childhood chronic diseases.) – Dr. L. Smith
- ACH Institute for Maternal and Child Health Research – Dr. L. Smith
- Children's Tooth Fairy Foundation Board – Dr. K. Badwi
- Alberta Academy of Pediatric Dentists, President – Dr. F. Saher
- Alberta Academy of Pediatric Dentistry, Secretary/Treasurer – Dr. S. Schwann



*Dr. Eduardo Kalaydjian, Dentistry and Oral Health Section Chief
Photo provided by Colin McHattie*

Division of Community Dentistry/Dental Public Health Clinic Program

- SAIT Sterile Processing Technician Program Advisory Committee – Dr. H. Rabie
- SAIT Dental Assisting Program Advisory Committee – Dr. H. Rabie
- Dental Public Health Clinical Planning Committee – Dr. H. Rabie
- Dental General Practice Residency Program Training Committee – H. Rabie

Programs

Division of Adult Dentistry

- Regional After Hours On-Call Program
- FMC DENTAL CLINIC
 - Adult Special Needs Dentistry Clinic
 - Dental Oncology Clinic
 - Sedation Dentistry Clinic
 - Dental Hygiene Clinic
 - Speciality Clinics including:

- (a) Oral Medicine
- (b) Endodontics
- (c) Periodontics
- (d) Oral and Maxillofacial Surgery
- FMC DENTAL GENERAL PRACTICE RESIDENCY (GPR) PROGRAM
 - Hosted at Foothills Hospital Dental Clinic
 - Enrolment: 3 residents – added third resident as part of a pilot project for 2013-2014
- CORRECTIONS DENTISTRY
 - Dental care for inmates and remanded population in Calgary Correctional Institutions
- NHSF
 - Dental treatment for children and Special Needs patients under general anesthesia; insured service for children that meet established criteria.

Division of Pediatric Dentistry

- The outpatient pediatric dental clinic at the Alberta Children's Hospital offers care to infants, children, and adolescents who present unique dental/oral challenges, behavioral issues and/or more complex special care needs. Treatment modalities include communicative behavior guidance/ non-pharmacological behavior modification, minimal/moderate oral sedation or general anesthesia in the Alberta Children's Hospital operating room. Community pediatric dentists with privileges also provide dental care for children under general anesthesia at AHS contracted Non-Hospital surgical Facilities and participate in after-hour call services.

Division of Community Dentistry/Dental Public Health Clinic Program

- The Dental Public Health Clinic Program serves as a safety net delivering low-fee dental care to disadvantaged people. The program operates from two sites in Calgary: Sheldon M. Chumir Health Centre and Northeast (Sunridge Mall).

*Membership***Division of Adult Dentistry**

- As of March 31, 2014, Adult Dentistry Division membership composed of
 - 34 privileged members (Most members hold privileges based entirely on their affiliation with the provision of surgical dental services at the NHSF)
 - Dr. A. Paladino is the Chief of Adult Dentistry and the Clinical Director of the FMC Dental Clinic
- FMC DENTAL GENERAL PRACTICE RESIDENCY (GPR) PROGRAM
 - Dr. E. Kalaydjian is the Program Director of the Dental Residency Program
 - Dr. A. Paladino is the Site Director of the Dental Residency Program
 - Enrollment: three residents 2013-2014
 - Preceptors for FMC Dental Residency Program
 - general dentists
 - specialists
 - Oral and Maxillofacial Surgeons (OMFS)
 - Periodontists
 - Oral Medicine
 - Endodontist
- CORRECTIONS DENTISTRY
 - one casual dentist
 - actively recruited during 2013-2014 to hire more dentists to work at Corrections Site
- FMC DENTAL CLINIC
 - 2 full time dentists
 - several casual general dentists
 - several specialist preceptors for the dental residency program

Division of Pediatric Dentistry

- There are currently 17 pediatric dentists in Calgary 15 have AHS appointments and 14 have AHS privileges: Drs. Robert Barsky, Kari Badwi, Christine Bell, Marie-Claude Cholette, Sarah Hulland, J. Bradley Krusky, Orest Pilopowicz, Warren Loeppky, Farida Saher, Sandra Schwann,

Timothy Seto, Shirin Sheiny, Leonard Smith, Michele Thal and Rory Vinsky,

- Dr. Leonard Smith has retired his clinical privileges but does retain an appointment with the AHS; he continues to work in private practice.
- Dr. Charland was recruited in the fall of 2013 however; he recently resigned and will be moving back to Ontario.
- Drs. Bell and Cholette are hospital based.
- Dr. Cholette is the Interim Chief of Pediatric Dentistry and the Clinical Director of the ACH Dental Clinic.
- ACH Dental Clinic Workforce (2.2 FTE)
 - Dr. Christine Bell (1.0 FTE).
 - Dr. Marie-Claude Cholette (0.8 FTE)
 - Casuals:
 - Dr. Sarah Hulland (0.1 FTE)
 - Dr. Tim Seto (0.1 FTE)
 - Dr. Farida Saher (0.1 FTE) – March 2014
 - Dr. Michele Thal (0.1 FTE) – Maternity leave
 - Staff orthodontist: Dr. Darrell Kemp (1/2 day every 2 months)
 - Staff Oral & Maxillofacial Surgeon: Dr. Miller Smith (1/2 day every 2 months)
 - Cleft Palate Clinic Dental Consultants:
 - Orthodontists: Drs. Michael Bindman and Tarun Mehra
 - Oral & Maxillofacial Surgeons: Drs. Miller Smith and Douglas Vincelli
 - Pediatric Dentists: Drs. Christine Bell, Marie-Claude Cholette and Sarah Hulland

Division of Community Dentistry/Dental Public Health Clinic Program

- Dr. Adebayo Olowe, Dr. Heidi Rabie; Dr. Luke Shwart; Dr. Sylla Skaria; Dr. Sheila Varshney.
- Dr. L. Shwart is the Dental Public Health Officer.
- Dr. H. Rabie is the Chief of Community Dentistry and the Manager/Clinical Director of the Dental Public Health Clinics.
- The Public Health Dental Clinics have 2.3 FTE dentists on staff.

Accomplishments and Highlights

Clinical Service

Division of Adult Dentistry

- The AHS Dentist Compensation Review was completed in March 2014. The new compensation grid introduced for all Calgary Zone AHS employed general dentists and dental specialists.
- FMC DENTAL GENERAL PRACTICE RESIDENCY (GPR) PROGRAM
 - Accreditation was renewed by the Commission on Dental Accreditation of Canada (CDAC) for an additional five years (2013 - 2018).
 - A third dental resident was added for the 2013-2014 academic year as part of a pilot project.
 - Surgical Implant Program (development continues).
 - Continued partnership between FMC GPR PROGRAM, Adult Dentistry and OMFS for the afterhours on-call program.
- FMC DENTAL CLINIC
 - Accreditation was renewed by the Commission on Dental Accreditation of Canada (CDAC) for an additional five years (2013 - 2018).
 - Surgical Implant Program (development continues).
 - Improved fiscal profile of dental clinic.
 - The FMC Dental Clinic completed participation in the Access Improvement Measures (AIM) Program in June 2013.
 - Drs. A. Paladino and E. Kalaydjian completed a two drug IV sedation training program in October 2013. They are working in conjunction with administrative management team to introduce the service to the dental clinic in the near future.
- NHSF
 - Continues to stay within allocated budget
- CORRECTIONS DENTISTRY
 - Continue quality care for inmates.

Division of Pediatric Dentistry

- ACH Dental Clinic: comprehensive primary care.
- Dental specialty multi-disciplinary clinics: Orthodontics, oral & maxillofacial surgery and pediatric dentistry.
- The in-hospital delivery of VPI speech appliance.
- The ACH Dental Clinic continues to successfully offer NAM therapy.
- ACH Dental accreditation was renewed by the Commission on Dental Accreditation of Canada (CDAC) for an additional five years (2013 - 2018).
- Maintains accreditation by the Commission on Dental Accreditation of Canada (CDAC)
- The AHS Dentist Compensation Review was completed in March 2014. The new compensation grid was introduced for all AHS employed Zone general dentists and dental specialists.

Division of Community Dentistry/Dental Public Health Clinic Program

- Dental Public Health Clinic Program accreditation was renewed by the Commission on Dental Accreditation of Canada (CDAC) for an additional five years (2013 - 2018).
- Clinical Service- the Public Health Dental Clinics provide low income individuals with basic dental treatment. The individuals may include: working poor families, refugees and recent immigrants to Canada, the homeless, patients with mental issues leading to poverty and others who do not have any form of coverage.
- The AHS Dentist Compensation Review was completed in March 2014. The new compensation grid was introduced for all Calgary Zone AHS employed general dentists and dental specialists.

Education

Division of Adult Dentistry

Residents:

- Enrollment: 3 residents (third resident part of pilot project 2013-2014)
- Once again we noted a large increase in the number of qualified candidates applying

- Plans for the addition of third FMC Dental GPR Program Resident for the 2013-2014 academic years.
- Accreditation was renewed by the Commission on Dental Accreditation of Canada (CDAC) for an additional five years (2013 - 2018).

Fellows:

- None

Dental Students:

- Academic year 2013-2014, Foothills Hospital Dental hosted a total of nine 3rd year dental students from University of Alberta doing elective rotation in “Hospital Dentistry”.

Division of Pediatric Dentistry

- The staff pediatric dentists at ACH continue to welcome FMC GPR residents for 4 weeks per year, U of A Dental students, Family Medicine and Pediatric Residents as requested on a regular basis.
- The pediatric dentists also participate in half-day academic teaching for the Family Medicine and Pediatric Residents.

Division of Community Dentistry/Dental Public Health Clinic Program

Residents:

- The three FMC Dental General Practice residents each worked for 10 days in the Dental Public Health Clinics.

Fellows:

- None

Dental Students:

- The dental clinics hosted two dental students, from Scotland, who spent some time in Calgary learning about the Canadian dental system.

Research

Division of Adult Dentistry

- Canadian Optically Guided Approach for Oral Lesions Surgical Trial (COOLS Study) with The Terry Fox Research Institute – (Clinical Lead in the Calgary Zone is Dr. Dort). Dr. Kalaydjian is an FV specialist and co-investigator in AHS Calgary Zone.

- Clinical Trial (SWOG S0307). ‘Phase III Trial of Bisphosphonates as adjunctive therapy for Primary Breast Cancer.’ (Clinical Lead is Dr. Patterson, Tom Baker Cancer Centre).
- Clinical Trial (RTOG 1016). ‘Phase III Trial of Radiotherapy plus Cetuximab versus Chemotherapy in HPV-Associated Oropharynx Cancer.’

Division of Pediatric Dentistry

- Dr. Cholette is part of the Canadian Dental Sleep Apnea Network and is collaborating in a research project: “Incidence of Altered Craniofacial Morphology and Malocclusion in Children and Youth with Obstructive Sleep Apnea”. [SickKids Foundation New Investigator Grant program (NI14-012)]

Division of Community Dentistry/Dental Public Health Clinic Program

- The clinics have participated in one research project this year with Dr. William Connors from the infectious Disease HPTP unit. The study was aimed at providing a care pathway for patients presenting with orofacial abscesses of dental origin. The ultimate goal is to prevent repeat visits to the HPTP clinics by patients who could not afford to remove the infected tooth responsible for the abscess.

Challenges

Responses to Issues

Division of Adult Dentistry

- Quality Assurance
- Continued peer-lead QA strategies for Dental Cases (i.e. M&M Rounds)
- Accreditation was renewed by the Commission on Dental Accreditation of Canada (CDAC) for an additional five years (2013 - 2018).

- FMC DENTAL CLINIC

- IPC

- Dental Implants– it remains a challenge to operationalize as well as initiate the provision of dental implants to our patient population. We continue to work with IPC experts at Foothills Hospital and the dental implant manufacturer to address outstanding IPC concerns.
 - IPC Audit – participated in AB Health Compliance Unit MDR audit October 2013. Have switched to single use burrs to address concern identified.

- Recruitment and Retention

- Attracting qualified dentists remains a challenge. There is a 1.0 FTE vacant position since March 2013.

- Efficiency and Access Improvements

- The FMC Dental Clinic completed participation in the Access Improvement Measures (AIM) Program in June 2013

- OR Access

- Lack of OR access to our Special Needs patients at the FMC site continues to increase wait times for our patient populations. The service picks up scramble OR time whenever possible.

- Funding

- Inadequate provincial funding for dental services in the Calgary Zone continues to make it a challenge to provide optimal care within acceptable target times.
 - The hospital based dental service is a fee for service dental clinic and the dental services provided are uninsured. The clinic must however accept significantly reduced fees for patients covered by third party social service programs.

- FMC DENTAL GENERAL PRACTICE RESIDENCY (GPR) PROGRAM

- Recruitment and Retention

- attracting qualified preceptors for dental residency program remains a challenge

- CORRECTIONS DENTISTRY

- Recruitment and Retention

- attracting qualified dentists remains a challenge

Division of Pediatric Dentistry

The greatest challenge continues to be the Division's inability to post for a third full time pediatric dentist position for ACH Dental Clinic due to lack of global funding for our service. The ACH Dental Clinic is unable to maintain self-sufficiency caring for the most compromised, challenging and vulnerable children. We have unfortunately made no progress with advocating/lobbying for this position in the last four years.

Our hospital-based dental service receives fee for services for uninsured dental services provided. The Clinic must however accept significantly reduced fees for patients covered by provincial Social Services, Child Health Benefits and Indian Affairs. The Hospital Dentists of Alberta have made recommendations to the ADA&C to support further negotiation with ADSC for increase in fees.

The lack of adequate funding for staffing our service will result in major consequences. There will be tremendous pressure put on current clinic staff, increased wait times (longest ever) and inability to deliver optimal care within our target times.

At the community level, limited AHS Non-Hospital Surgical Facility funding to support the delivery of dental treatment under general anesthesia is restricting recruitment of much needed community-based pediatric dentists in the City of Calgary.

Division of Community Dentistry/Dental Public Health Clinic Program

- Constant increase in demand by our population base. Possibly due to care pathways leading to our service being displayed in urgent care/ ER's.

Ongoing Matters and Plan of Action

Division of Adult Dentistry

1. SPACE SHORTAGE AT FMC DENTAL CLINIC

- Functional Plan created for a dental clinic at New Calgary Cancer Centre Building on the FMC Campus.

2. DENTIST STAFF SHORTAGES

- FMC Dental Clinic
- Continue recruitment efforts for clinical dentists
- Preceptors for GPR
- Continue recruitment efforts for specialists and general practitioners

3. LACK OF DEDICATED OR TIME AT FOOTHILLS HOSPITAL

- The lack of dedicated OR access for our Special Needs Patients at the FMC Site continues to increase wait times for our patient populations. The service picks up scramble OR time whenever possible.
- We continue to perform procedures on-site at FMC Dental Clinic under Procedural Sedation that arguably would better be managed under deeper sedation/general anesthesia
- We continue to pick up OR scramble time whenever possible

4. VACUUM SYSTEM

- Continue to work with Management and Capital Planning to address the intermittent failures of the vacuum system

Division of Community Dentistry/Dental Public Health Clinic Program

- Constant improvements and changes in the field of medical device reprocessing and IP+C are costly and time consuming for the clinics. However we are keeping up and have purchased a new thermal disinfectant and a new vacuum based sterilizer in order to maintain the highest standards of IP+C as demanded by AHS.

Workforce Planning

Future Needs

Division of Adult Dentistry

- Limit privileges to dentist members (Adult Dentistry) that offer professional services to Acute Care Sites (eg. FMC)
- Limit privileges to dentist members (Adult Dentistry) working in rural areas wanting to service clients at NHSF or rural OR's.
- FMC DENTAL GENERAL PRACTICE RESIDENCY (GPR) PROGRAM
 - Preceptors Required
 - i) Prosthodontist – 0.5 day per month minimum
 - ii) General Dentist/Special Needs Dentist – casual, replacements
 - iii) Periodontist – 0.5 day per month minimum
- PATIENT ACCESS IMPROVEMENT MEASURES (AIM) PROGRAM in the Access Improvement Measures (AIM) Program in June 2013.
- CORRECTIONS
 - IPC
 - IPC Audit – working with IPC experts to address concerns and make service improvements within constraints of system (eg. limited physical space, limited money)

Division of Community Dentistry/Dental Public Health Clinic Program

- We have been following the Health Care Quality Council of Alberta reports - especially recent reports on referral issues and have been adjusting our practices accordingly in order to maintain better follow up of our patients.

Access of Family Physicians to specialists

Division of Adult Dentistry

- Telehealth Dental Information updated.
- Dental Presentations provided to LTC Facilities in Calgary Zone.

Division of Community Dentistry/Dental Public Health Clinic Program

- Talks with Mosaic and other PCN's have been held in the past and more are planned. The general idea is to funnel low -income patients with urgent dental problems to these clinics before they need to access acute care for these issues.

Patient flow through the Emergency Department

Division of Adult Dentistry

- During business hours, dental patients can access urgent care through the hospital Emergency Department or directly through FMC Dental Clinic.
- After hours service: dental patients in need of urgent care can access the Regional On Call Program (Adult Dentistry & Oral Health). Through a partnership with OMFS and FMC Dental Residency Program. This is a partnership between FMC GPR Program and OMFS and Adult Dentistry.
- Dental Presentation to Rural Emergency Physician Group
 - Feb 2014: "Dental Urgencies and Emergencies." Presenter: Dr. Antonietta Paladino University of Calgary, Faculty of Medicine Continuing Education, Emergency Medicine for Rural Hospitals

Division of Community Dentistry/Dental Public Health Clinic Program

- We have developed a continuity of care agreement with Sheldon Chumir Urgent care. They routinely send us patients with dental issues rather than have them pass through the urgent care to obtain an antibiotic. Our service is more definitive and less costly for the system than a visit to urgent care for antibiotics which attenuate the symptoms for a while, but do not solve the root cause of the problem. Also, a care pathway has been created in collaboration with HPTP clinics and has been distributed to urgent cares and ER's in the area in order to funnel patients in this direction rather

than acute care. Public health is funding this to prevent greater costs in acute care.

Future Directions and Initiatives

Division of Adult Dentistry

- Enhanced participation and engagement of members in divisional activities (eg. attending quarterly meetings, M&M Rounds, Region Wide Dentistry Rounds)
- FMC DENTAL CLINIC
 - Collaborate with FMC Clinic Manager with regards to the program and manpower planning which maintains the fiscal health of FMC Dental Clinic and provides optimal patient care within acceptable target times.
 - Operationalize the Dental Implant Program and begin to provide dental implant treatment to patients
 - Operationalize the Two Drug IV Sedation Program and begin to provide service to patients
 - Recruit a general dentist for the vacated 1.0 FTE position.
 - Maintain current standing with Commission on Dental Accreditation of Canada (CDAC).
- FMC DENTAL GENERAL PRACTICE RESIDENCY (GPR) PROGRAM
 - Expand program to include a third resident by July 2015
 - Recruit prosthodontist as preceptor
 - Recruit additional periodontist preceptors
 - Recruit additional endodontist preceptors
 - Recruit additional general dentist preceptors
 - Introduce dental implant surgery and restorations to the program
 - Maintain current standing with Commission on Dental Accreditation of Canada (CDAC).
- CORRECTIONS DENTISTRY
 - Recruitment of additional dentists.

Division of Pediatric Dentistry

- Recruitment of third full-time hospital based pediatric dentist
- Goal to reduce wait-times at the ACH Dental Clinic by increasing the dentist workforce.
- Recruit Division of Pediatric Dentistry Chief and ACH Clinical Director
- Develop a one year Post-graduate Pediatric Dentist Fellowship/Residency Program
- Maintain current standing with Commission on Dental Accreditation of Canada (CDAC). Accreditation Review planned for 2013.
- The ACH Dental Clinic continues to look for areas where specialized pediatric dentistry services can expand. Future areas of interest:
 - Comprehensive Orthodontic Clinic for Special Needs patients
 - Saliva/Drooling Clinic

Division of Community Dentistry/Dental Public Health Clinic Program

- As mentioned above, we are currently planning more talks with PCN's in order to provide better support to primary care and thereby reduce patients' chances of ending up in acute care due to dental infections. Prevention and or dental treatment is the key to avoiding complications.
- Solidifying the care pathways which have already been implemented this year to channel underprivileged patients from ER's, UC's and HPTP's to our clinic for definitive low cost care.
- When funding from Public Health becomes available we would like to hire more fulltime dentists. This may not be possible in the short term as no increase in public health funding is planned to date.
- We would be glad to host dental residents for more days if the Dental GPR Program and Foothills Medical Centre Dental Clinic decide to increase the number of residents. This would solve a logistical clinical training space issue for the FMC Dental Clinic and would provide our clinics with a workforce to help more disadvantaged people.
- Maintain current standing with Commission on Dental Accreditation of Canada (CDAC).

Section of General Surgery

The development and staffing of the South Health Campus with general surgeons continues to be a major focus for our section. The clinical assistant program has been very successful at providing extender and OR assistant support. These international medical graduates have integrated well into our system and are providing great patient care. The ACCESS (emergency surgery) program at SHC has been a particular success giving rapid care to a wide variety of emergency patients. Their care is often provided out of a highly efficient short stay unit. Further, the SHC anorectal clinic is now well established and is servicing an increasing volume of patients.

We also are pleased to announce the appointment of a new general surgeon at SHC. Dr. Namdar Manouchehri is a general /minimally invasive surgeon who completed his residency at the University of Alberta and MIS fellowship at McGill, University Health Centre. He will provide added expertise in laparoscopic and upper GI Surgery. Nam plans to focus on surgical education and the teaching of laparoscopic skills to surgical residents. His presence along with Dr. Artan Reso will give us the critical mass to move forward with development of the general surgery component of the new Simulation Centre.

Major kudos are extended to Dr. May Lynn Quan for obtaining a large program grant from the Canadian Breast Cancer Foundation and CIHR-ICR titled "Toward better outcomes for young women with breast cancer: A pan Canadian collaborative study". Dr. Quan has put together a team of researchers from across Canada to look at the impact of lifestyle, genetics, exercise and diagnostic delay on the outcome on a large prospective cohort of young patients. They will also evaluate fertility preservation. We look forward to hearing the results of their efforts in the years to come.

Congratulation also goes out to Dr. Don Buie and Dr. John Heine for their work in obtaining a PRIHS grant from Alberta Innovates Health Solutions investigating Enhanced Recovery after Surgery (ERAS) in colorectal patients.

The Bariatric program at the Peter Lougheed Centre is ramping up activity through the efforts of Drs. Debru, Church and Mitchell. The volume of Sleeve Gastrectomies has increased substantially and fewer band procedures are now being done. This program is successfully "catching up" to the other bariatric centres in Alberta.



*Dr. Francis Sutherland, General Surgery Section Chief
Photo provided by Colin McHattie*

The general surgery resident research day occurred in late January this year at the Alberta Children's Hospital. The award winners were Dr. Jan Grendar, "Effect of N-Acetylcysteine on liver recovery after resection and Dr. Derek Roberts, "Clinical manifestations of tension pneumothorax: a systematic review and meta-analysis". Our special guest this year was Dr. Paul Johnson from Dalhousie, who presented the Roy Preshaw Academic Lecture entitled, "Outcomes after non-elective surgery in older adult patients". This year we started a

new tradition with the first Jim Nixon Education Lecture. Dr. Nixon is honoured with this named lecture after more than 30 years of consisted dedication to resident education.

A special celebration of Dr. Temple's tenure as head of the Division of Surgical Oncology occurred last November. Former Surgical Oncology Fellows, now stationed around the world, from Israel to the Bahamas returned to give academic lectures and toast Dr. Temple's leadership.

Section of Ophthalmology

SECTION STRUCTURE AND ORGANIZATION

- Administrative: Admin Committee
- Section chief: Dr. Michael Ashenhurst
- Program Director: Dr. Linda Cooper
- Fellowship Director: Dr. Andrew Crichton
- Undergraduate education: Dr. John Huang
- Course Five coordinators: Dr. Karen Verstraten and Dr. Vivian Hill
- Research Day: Dr. Bryce Ford
- The Section of Ophthalmology provides clinical services through Alberta Health Service
- Facilities, Non Hospital Surgical Facility's and private offices.
- There are outpatient clinics located at the Rockyview General Hospital and Alberta Children's Hospitals.
- We operate at five non hospital surgical facilities for cataract and non-cataract ophthalmic surgery.
- We provide primary on call coverage for the five major hospitals in Calgary and subspecialty coverage for Southern Alberta.
- We have active residency and fellowship programs
- July 2013 saw the end of Dr. K. Romanchuk's time as Section Chief. We all wish to thank Dr. Romanchuk for many years of dedicated service and outstanding leadership. Dr. Michael Ashenhurst was appointed as the new Section Chief in Ophthalmology effective July 2013.
- As part of the transition, we underwent an external review. Dr. Jeff Hurwitz and Dr. Bruce Jackson are both have experience as departmental chiefs and came to Calgary to review the clinical, teaching, and research at the University of Calgary Ophthalmology program.
- We have established an annual stipend for section members of \$2000.00. These funds will be used via the University Eye Foundation to fund residency and section expenses.

Current Committees

- We have established a new administrative committee as chief's advisory, consisting of Dr. Anna Ells, Dr. Linda Cooper, Dr. Jit Gohill, Dr. Nand Goel, and Dr. Andrew Crichton.
- Monthly business meetings (all ophthalmologists with privileges in the Calgary Health Zone, three neuro-ophthalmologists, one affiliated vision research scientist, and guests)
- Recruitment and Retention Subcommittee chaired by the Section Chief Dr. Michael Ashenhurst, with one representative from each subspecialty (except two when recruiting to that subspecialty) and three comprehensive ophthalmologists.
- On-call Subcommittee chaired by Dr. Nand Goel.
- Residency Program Committee chaired by Residency Program Director, Dr. Linda Cooper.
- Fellowship Program Subcommittee chaired by Dr. Andy Crichton.
- Undergraduate Medical Education Subcommittee chaired by Dr. John Huang.
- Sectional Research Subcommittee chaired by Dr. Feisal Adatia and Dr. Fiona Costello.
- Grand Rounds Subcommittee chaired by Dr. Andy Crichton.
- Research Day Subcommittee chaired by Dr. Bryce Ford.

Programs

- Lions Eye Bank of Southern Alberta at Rockyview General Hospital
- Sight Enhancement Clinic at Rockyview General Hospital
- Dr. Bill Astle participates in the Childrens Travelling Sight Enhancement Clinic for Southern Alberta.
- University Eye Foundation (President Dr. Amin Kherani and Secretary and Treasurer Dr. Stan Smith).
- Calgary Ophthalmic Medical Technology Training Program at Rockyview General Hospital

- Subspecialty clinics at Rockyview General Hospital: cornea, glaucoma, Marfan syndrome connective tissue disorders eye clinic, neuro-ophthalmology, ocular oncology, retina, solid organ transplant eye clinic, urgent eye and Uveitis.
- Retinopathy of prematurity screening service to the Neonatal Intensive Care Units at Alberta Childrens Hospital, Foothills Medical Centre, Peter Lougheed Centre, Rockyview General Hospital and South Health Campus.
- 32,182 patient visits and 110246 procedures/tests annually at Rockyview General Hospital Eye Clinic.
- 17,675 patient visits annually at Alberta Children's Hospital Vision Clinic.
- 13,239 cataract surgeries annually in the contracted nonhospital surgical facilities
- 3,659 non-cataract eye surgeries in the contracted nonhospital surgical facilities
- 2098 eye surgeries at Rockyview General Hospital
- 645 pediatric eye surgeries at Alberta Children's Hospital

ACCOMPLISHMENTS AND HIGHLIGHTS

New staff

Clinical Service

- **Dr. Michael Ashenhurst** was appointed as the new Section Chief in Ophthalmology effective July 1, 2013.
- **Dr. Christopher Hanson** was appointed October 1, 2013.
- An indirect diode laser was purchased for treatment of retinopathy of prematurity in the Foothills Medical Centre, Neonatal Intensive Care Unit
- **Dr. Patrick Gooi** was appointed May 9, 2014.
We are pleased to announce the appointment of Dr. Patrick Gooi as Glaucoma specialist. Dr. Gooi completed his ophthalmology residency training at the University of Calgary. Dr. Gooi then completed a fellowship with Dr. Ike Ahmed in Ontario in Glaucoma and complex anterior segment surgery. Dr. Gooi takes special interest in surgical teaching and has already been involved in working with the residents in the surgical teaching lab.

Membership

Membership in the Section of Ophthalmology 2013-14			
F	Adatia	V	Hill
A	Al Ghoul	J	Huang
J	Anand	P	Huang
ME	Ashenhurst	J	Kassab
WF	Astle	A	Kherani
AE	Ball	F	Kherani
T	Bech-Hansen [#]	AH	Kirk
J	Bhamra	GE	Kirker
BP	Chow	R	Lang
L	Cooper	JA	McWhae
F	Costello [*]	P	Mitchell
AC	Crichton	RJ	Mitchell
RC	Culver	K	Punja
T	Demong	KG	Romanchuk
S	Dotchin	PR	Savage
G	Douglas	CM	Skov
AL	Ells	SS	Smith
WA	Fletcher [*]	S	Subramaniam [*]
B	Ford	JA	van Westenbrugge
PF	Gibson	KL	Verstraten
HV	Gimbel	E	Weis
N	Goel	RG	Williams
J	Gohill	J	Wong
P	Gooi	JP	Wyse
R	Gordon	R	Yau
C	Hanson [^]		
[*] neuro-ophthalmology [#] affiliated vision research scientist [^] contracted Urgent Eye Clinic			

- We are very excited to announce that Dr. Brand Gallie has joined us on a part-time basis. Dr. Gallie is a world authority on retinoblastoma and heads the program at Toronto Sick Kids Hospital. This Families and patients travel from Alberta as well as elsewhere in the country on a frequent basis to see Dr. Gallie for follow up visits and treatments for retinoblastoma.

Dr. Gallie will be able to offer services to Calgary patients via the Alberta Children's Hospital. This will greatly reduce stress on these families and will also realise significant cost savings.

- We are expecting delivery in the near future of the iSim technology for virtual cataract teaching. This has been a collaborative effort supported by numerous agencies and should be a tremendous tool for anterior segment surgery teaching. Our section members continue to be very active in research including numerous publications, clinical trials, presentations, and grants.

Education

- Residents
- We have two new residents in the PGY1 year as per our CaRMS match routine. Dr. Monique Monroe and Dr Brett Poulis.
- We established a new points system for the ranking of CaRMS candidates that received positive feedback.
- Dr. Tom Gonder, Dr. Stephanie Wood and Dr Azien Safarpour successfully passed their Royal College Certification in 2013.



*Dr. Michael Ashenhurst, Ophthalmology Section Chief
Photo provided by Dr. Michael Ashenhurst*

Residents in Ophthalmology in 2013-2014					
PGY1	H	Chung	PGY4	L	Lagrou
PGY2	F	Kassam	PGY4	A	Muzychuk
PGY2	M	Luong	PGY4	M	Gooi
PGY3	V	Lekhi	PGY5	A	Safarpour

Fellows

- We presently have two fellows training in our Retina program. We will have one fellow in Pediatric Ophthalmology come January.
- Both the fellowship programs in Pediatric Ophthalmology and Strabismus and in Retina

participate in the San Francisco annual fellowship match program. Our fellowship program in Pediatric Ophthalmology is certified by the American Association for Pediatric Ophthalmology and Strabismus.

Fellows in Ophthalmology in 2013-2014					
Neuro-ophthalmology			Retina (from July 1, 2012 to June 30, 2014)	K	Warrian
Oculoplastic Surgery			Retina (from July 1, 2013 to June 30, 2014)	T	Gonder
Refractive (August 13, 2012 to July 26, 2013)	S	Bali			

- **Medical Students**

Teaching of undergraduates continues in small group settings, surgical clinical clerkship rotations, and electives. Dr. Vivian Hill and Dr. Karin Verstraten have taken leadership roles in teaching ophthalmology in the newest undergraduate medical curriculum. Dr. John Huang has been active in coordinating ophthalmology electives and evaluations for medical students from University of Calgary and other Canadian universities,

Participation in local, provincial, national and international organizations

- Our section members continue to be very active in research including numerous publications, clinical trials, presentations, and grants.
- **Dr. Feisal Adatia** is co chair of our sectional Research Subcommittee, and a member of the Residency Training committee. Director of the Research Fellowship in Ophthalmology
- **Dr. Jamie Bhamra** continues to participate on the Corneal Tissue Committee and Working Group of the Canadian Blood Services, as well as a medical team advisor for A Better World Canada: Ophthalmology in Kenya. He is a member of the Canadian Ophthalmological Society Eye Bank committee
- **Dr. Bill Chow** continues to be an examiner for the Part 2 (LMCCQEII) process of the Medical Council of Canada, continues as a Comprehensive Ophthalmologist Member of the Alcon Glaucoma Advisory Committee, and is a member of the executive committee of the Eye Physicians and Surgeons Association of Alberta.
- **Dr. Linda Cooper** continues as the Residency Program Director for ophthalmology at the University of Calgary and is a member of the Specialty Committee of Ophthalmology of the Royal College of Physicians and Surgeons of Canada.
- **Dr. Fiona Costello** continues as the Director of the Office of Surgical Research for the Department of Surgery. She continues as an oral examiner for the Royal College of Physicians and Surgeons of Canada. Dr. Costello was named Chair of the Roy and Joan Allen Investigator ship in Sight Research with the University of Calgary.
- **Dr. Andrew Crichton** continues as an examiner in Ophthalmology for the Royal College of Physicians and Surgeons of Canada. He is member of the Global Glaucoma Advisory Board. He is the organizer of our annual Glaucoma Day in Calgary. He is the Chair of the Ophthalmology Fellowship Committee, is a member of the Residency Training Committee.
- **Dr. Thad Demong** continues as the Medical Director of the Lions Eye Bank of Southern Alberta and is a founding and ongoing member of the Canadian Cataract Institute.
- **Dr. Gordon Douglas** organizes our monthly sectional interesting case rounds.
- **Dr. Anna Ells** continues to be the Chair of the International NO-ROP Group, the Co-Chair of the Childhood Blindness Subcommittee of the International Agency for the Prevention of Blindness in Latin America, a member of the Clinical Practice Guideline Expert Committee of the Canadian Ophthalmological Society.
- **Dr. Bill Fletcher** is Associate Head of the Division of Neurology. He is Chair of the Royal College Specialty Committee in Neurology, a member of the Neuro-Ophthalmology Research Disease Investigator Consortium (NORDIC).
- **Dr. Bryce Ford** continues as the chair of the University of Calgary Visual Sciences Research Day, and is the glaucoma representative on the INRV fees review committee of the Alberta Association of Eye Physicians and Surgeons.
- **Dr. Howard Gimbel** is on the Advisory Board of Ocular Surgery News and on the Editorial Board of Video Journal of Ophthalmology. He is a member of the Canadian Subcommittee of the fellow/resident committee of the International Society of Refractive Surgery, and is on the Board of Directors of the LASIK Institute, the advisory board to Nidek Medical and Mastel Precision Medical, and an honorary member of the Board of Directors for Operation Eyesight Universal. He is a regular referee for the Journal of Cataract and Refractive Surgery.

He is a Professor in the Division of Ophthalmology, Department of Surgery, University of Calgary, and Professor in the Department of Ophthalmology, Loma Linda University.

- **Dr. Nand Goel** continues to update the on call inpatient consultation system in the Calgary Zone.
- **Dr. Jit Gohill** continues as a member of the advisory committee for the Calgary Ophthalmic Medical Technology Training Program at Rockyview General Hospital.
- **Dr. Robert Gordon** is an inspector of non-hospital surgical facilities for the College of Physicians and Surgeons of Alberta, usually five times a year.
- **Dr. Chris Hanson** continues as the Comprehensive Ophthalmologist running the Urgent Eye Clinic.
- **Dr. Vivian Hill** continues as co-chair of the ophthalmology teaching for undergraduate education at the University of Calgary (UME Course 5 Teaching Program), as a member of the course V undergraduate education planning committee of the Faculty of Medicine of the University of Calgary, as an examiner in Ophthalmology for the Royal College of Physicians and Surgeons of Canada, as a physician examiner for the Medical Council of Canada, and both as a member of the IRNV review committee and as a member of the Executive of the Eye Physicians and Surgeons of Alberta.
- **Dr. John Huang** is President Elect of the Eye Physician and Surgeons Society of Alberta, a member of the Senate of the University of Calgary, a member of the Community Engagement Committee of the Senate of the University of Calgary, the representative for Ophthalmology for the Department of Surgery Surgical Undergraduate Education Committee, a member of the planning committee for the University of Calgary Faculty of Medicine Annual Calgary Therapeutics Course, a member of the National council for Undergraduate Medical Directors of the Canadian Ophthalmological Society, Vice President of the University Eye Foundation of Calgary, a board member of Nepal Vision Charity, a trustee for the Dr Daniel Lupin Memorial scholarship of the Faculty of Medicine at the University of Alberta.
- **Dr. Peter Huang** continues to serve on the Program Curriculum Committee of Joint Commission of Allied Health Personnel for Ophthalmology, and is a member of its Board. He is also a member of the Executive Committee of the American Society of Cataract and Refractive Surgery. He is a member of the advisory committee for the Roy and Joan Allen Professorship of the Faculty of Medicine, University of Calgary. He is a member of the University of Calgary Residency Training committee and the Residency selection committee, a Board Member of Nepal Vision Charity, and awarded educator of the year for the Ophthalmology Residency program.
- **Dr. Amin Kherani** is President of the University Eye Foundation, co-director of the retinal fellowship program at the University of Calgary, and Chair of the Reina Society of Alberta. He is also an organizer of the yearly Western Canadian Retina Retreat for Ophthalmology residents from University of Calgary and University of Alberta, retinal fellows and faculty.
- **Dr. John McWhae** shares the running of the ocular oncology clinic at Rockyview General Hospital with Dr. Ezekiel Weis.
- **Dr. Patrick Mitchell** continues his work on establishing a pediatric vitreoretinal surgery service in Calgary.
- **Dr. Rob Mitchell** continues his work in international ophthalmology.
- **Dr. Karim Punja** continues as a member of the Fees Advisory Committee of the Alberta Medical Association and as a member of the advisory committee for the Calgary Ophthalmic Medical Technology Training Program at Rockyview General Hospital.
- **Dr. Ken Romanchuk** continues as a member of the Royal College of Physicians and Surgeons of Canada Credentials Committee, a member of the Royal College of Physicians and Surgeons of Canada Professional Development Committee, and is President of the Alberta Ophthalmological Society.
- **Dr. Paul Savage** is very actively involved in the teaching of students enrolled in the Calgary Ophthalmic Medical Technology Training Program at Rockyview General Hospital.

- **Dr. Stan Smith** continues as the Secretary-Treasurer of the University Eye Foundation.
- **Dr. Suresh Subramaniam** is the Medical Director of the Stroke Prevention Clinic, Medical co-director for the Neurovestibular Clinic and a member of the Acute Stroke/TIA Expert working group, Cardiovascular Health and Stroke SCN. He also is an OSCE examiner for the Alberta International Medical Graduate program.
- **Dr. Karin Verstraten** is co-chair (with Dr. Vivian Hill) of the ophthalmology teaching for undergraduate education at the University of Calgary (UME Course 5 Teaching Program), is an examiner for the Medical Council of Canada, and is a member of the Canadian Glaucoma Clinical Research Council of the Canadian National Institute for the Blind.
- **Dr. Ezekiel Weis** continues as the provincial medical director for the ocular brachytherapy program for Alberta, and travels from Edmonton to share the running of the ocular oncology clinic in Calgary with Dr. J McWhae. He is the Section Editor for the epidemiology section of the Canadian Journal of Ophthalmology, and is a referee for the Canadian Journal of Ophthalmology, Ophthalmology, and the British Journal of Ophthalmology. He is the academic coordinator for the annual Scientific Meeting of the Eye Physicians and Surgeons of Association of Alberta held in Banff in February of each year. Continues to come from Edmonton to share the running of the ocular oncology clinic with Dr. J McWhae, and continues to expand the ocular brachytherapy program in Alberta.
- **Dr. Geoff Williams** is the Secretary-Treasurer of the Canadian Ophthalmological Society, and continues as the Site Lead for Ophthalmology at Rockyview General Hospital, continues as a member of its Laser Safety Committee, continues as the co-director of the retinal fellowship program at the University of Calgary. He is also an organizer of the yearly Southern Alberta Retina Retreat for ophthalmology residents from University of Calgary and University of Alberta, retinal fellows and faculty.
- **Dr. Pat Wyse** remains a member of the non-hospital surgical facility committee of the College of Physicians and Surgeons of Alberta. He also holds specialized eye clinics for Marfan's/connective tissue disorders and also for solid organ transplants at Rockyview General Hospital.
- **Dr. Ryan Yau** gives an Optics Review Course to residents in ophthalmology at the University of Calgary and University of Alberta, and serves as a comprehensive ophthalmology member of the Alberta Health and Wellness expert advisory group studying corneal collagen cross-linking procedures.

Faculty Presentations (April 1, 2013 – March 31, 2014)

- S Kletke, S Arora and **F Adatia**. “Educational and vision-assistive smartphone Apps for patients: a quantitative evaluation”. Poster presentation at the Annual Scientific Meeting of the Canadian Ophthalmological Society, Montreal, Quebec, June 14-17, 2013.
- **F Adatia**. M Modabber, S Arora, KF Damji and **F Adatia**. “Relationship of new tonometers with central corneal thickness: a comparative chart review of Goldmann Applanation Tonometry, Tonopen, Ocular Response Analyzer and PASCAL Dynamic Contour Tonometry”. Poster presentation at the Annual Scientific Meeting of the Canadian Ophthalmological Society, Montreal, Quebec, June 14-17, 2013.
- M Luong, M Munro, MC Deschenes, **F Adatia**, **G Williams** and **A Kherani**. “Spontaneous closure of traumatic macular holes: a series of 3 cases”. Poster presentation at the Annual Scientific Meeting of the Canadian Ophthalmology Society, Montreal, Quebec, June 14-17, 2013.
- S Kletke, **F Adatia**, S Arora, Educational and Vision-assistive Smartphone Apps for patients: a quantitative evaluation. Canadian Ophthalmological Society Meeting 2013.
- S Kletke, **F Adatia**, S Arora, Educational and Vision-assistive Smartphone Apps for patients: a quantitative evaluation. Association for Research in Vision and Ophthalmology 2013.

- S Kletke, **F Adatia**, S Arora, Educational and Vision-assistive Smartphone Apps for patients: a quantitative evaluation. American Academy of Ophthalmology 2013.
- Tran D. Le, Euene S. Liu, J. Raymond Buncic, **F Adatia** and Susan Blaser, Evaluating the Staging of Pediatric Orbital Cellulitis Utilizing Computerized Tomography. American Academy of Ophthalmology 2013.
- **F Adatia**, Wet AMD: The Rare Rotten RPE Perspective, Canadian Retina Society Meeting, Banff 2013.
- **F Adatia**, Giant Retinal Tear: The Fourth Port Perspective, Canadian Retina Society Meeting, Banff 2013.
- M Modabber, S Arora, K Damji and **F Adatia**. "Critical review of high quality ophthalmology educational web resources targeting trainees". Poster presentation at the Annual Scientific Meeting of the Association for Research in Vision and Ophthalmology 2013.
- M Modabber, S Arora, K Damji and **F Adatia**. "Critical review of high quality ophthalmology educational web resources targeting trainees". Poster presentation at the Annual Scientific Meeting of the American Academy of Ophthalmology 2013.
- M Modabber, S Arora, K Damji and **F Adatia**. "Critical review of high quality ophthalmology educational web resources targeting trainees". Poster presentation at the Annual Scientific Meeting of the Canadian Ophthalmology Society, Montreal, Quebec, June 14-17, 2013.
- **M Luong**, M Munro, M Deschênes, **F Adatia**, **RG Williams** and **A Kherani**. "Spontaneous Closure of Traumatic Macular Holes: A Series of 3 Cases". Poster presentation at Ophthalmology and Vision Sciences Research Day, Calgary, May 13, 2013.
- **A Al-Ghoul**. "Advances in Corneal Surgery". Presentation at the Technical Session of the Rocky Mountain Eye Conference of the Eye Physicians and Surgeons Association of Alberta, Banff, February 22, 2014.
- M Boulet, **A Al-Ghoul** and **J Bhamra**. "Reliability of using slit-lamp versus electronic Toric Marker in predicting correct axis for Toric Intraocular Lens Placement". Poster presentation at Ophthalmology and Vision Sciences Research Day, Calgary, June 2014, Halifax.
- M Boulet, **A Al-Ghoul** and **J Bhamra**. "Reliability of using slit-lamp versus electronic Toric Marker in predicting correct axis for Toric Intraocular Lens Placement". Poster presentation at Ophthalmology and Vision Sciences Research Day, Calgary, May 13, 2013.
- **M Ashenhurst**. "Ptosis Assessment and Treatment". Presentation at the Technical Session of the Rocky Mountain Eye Conference of the Eye Physicians and Surgeons Association of Alberta, Banff, February 22, 2014.
- **F Kassam**, A Oryshak and **M Ashenhurst**. "Non-keratinizing squamous carcinoma (transitional type) of the lacrimal sac. Presentation at the Canadian Ophthalmic Pathology Society at the Annual Scientific Meeting of the Canadian Ophthalmological Society, Montreal, Quebec, June 14, 2013.
- **Astle WF**, Papp A, Stifter E, Sanders E. Simultaneous bilateral cataract surgery in premature babies with and without retinopathy of prematurity. *US Ophthalmic Review* 6(2):94-100, 2013.
- **Astle WF**, Heede S, Chua C, Sanders E. Primary Ahmed Valve Implantation: A surgical option for congenital and developmental glaucoma. *Clinical and Surgical Ophthalmology* 31:2 42-47, 2013.
- **Astle WF**, Heede S, **Huang PT**, Sanders E. Current Understanding and New Techniques in Refractive Surgery. Pediatric Refractive Surgery Chapter 6: 91 – 114. ISBN: 978-1-62808-748-2 Editor: Michael O'Keefe © 2013 Nova Science Publishers, Inc.
- **L Lagrou** and **W Astle**. "Outcomes of persistent fetal vasculature cataracts with primary intraocular lens implantation". Presentation at the Canadian Association of Pediatric Ophthalmology at the Annual Scientific Meeting of the Canadian Ophthalmological Society, Montreal, Quebec, June 16, 2013.
- **L Lagrou** and **W Astle**. "Outcomes of Persistent Fetal Vasculature Cataracts with Primary Intraocular Lens Implantation". Presentation at Ophthalmology and Vision Sciences Research Day, Calgary, May 13, 2013.

- **J Bhamra**, *A Safarpour* and *L Cuschieri*. “Safety and efficacy of a new approved corneal crosslinking (CXL) protocol. Poster presentation at the Annual Scientific Meeting of the Canadian Ophthalmology Society, Montreal, Quebec, June 14-17, 2013.
- *P Moinul*, **J Bhamra** and **A Al-Ghoul**. Comparison of biometric measurements using IOL Master and Lenstar Optical Biometry systems. Presentation at Ophthalmology and Vision Sciences Research Day, Calgary, May 13, 2013.
- **Costello, F**, “Predicting Visual Recovery after Optic Neuritis”, North American Neuro Ophthalmology (NANOS) Annual meeting, Rio Grande, Puerto Rico, March 1-6, 2014.
- **Costello, F**, Chan W., “A Squirmy Situation” Using Resting State Functional Magnetic Resonance Imaging to Track Recovery After Optic Neuritis, North American Neuro Ophthalmology (NANOS) Annual meeting, Rio Grande, Puerto Rico, March 1-6, 2014.
- **Costello, F**, Chan W., “Using Resting State Functional Magnetic Resonance Imaging to Track Recovery After Optic Neuritis,” North American Neuro Ophthalmology (NANOS) Annual meeting, Rio Grande, Puerto Rico, March 1-6, 2014.
- **A Crichton**, Glaucoma Surgery for the Retina Specialist”, “Glaucoma Lasers for the Retina Specialist”, Canadian Retinal Society Meeting, March 10, 2013, Banff, AB.
- **A Crichton**, “The Ideal Patient for SLT”, World Glaucoma Congress, July 19, 2013, Vancouver, BC.
- *A Crichton*, “The Foggy World of Glaucoma”, Alcon Dinner, October 24, 2013, Vancouver, BC.
- **A Crichton**, “Postoperative Course and Midterm Follow-up of FP8 (Pediatric) Ahmed Glaucoma Valves in Advanced Age”, American Academy of Ophthalmology, November 17, 2013, New Orleans, Louisiana.
- **A Crichton**, “Special Concerns in the Management of Glaucoma in Advanced Age”, 12th Annual Glaucoma Meeting, February 15, 2014, Scottsdale, Arizona.
- *A Muzychuk*, *J Grewal*, *E Oddon-Paolucci* and **A Crichton**. “Relationship of new tonometers with central corneal thickness: a comparative chart review of Goldmann Applanation Tonometry, Tonopen, Ocular Response Analyzer and PASCAL Dynamic Contour Tonometry”. Poster presentation at the Annual Scientific Meeting of the Canadian Ophthalmology Society, Montreal, Quebec, June 14-17, 2013.
- *A Muzychuk*, *J Grewal* and **A Crichton**. “S3 (Pediatric) Ahmed valves for the surgical management of glaucoma in advanced age”. Presentation at Ophthalmology and Vision Sciences Research Day, Calgary, May 13, 2013.
- *V Lekhi*, *D Kuzma*, *L Dragos*, **A Crichton** and **M Ashenhurst**. “Understanding the problem root cause analysis of the Rockyview General Hospital emergency eye clinic. Presentation at Ophthalmology and Vision Sciences Research Day, Calgary, May 13, 2013.
- *F Kassam*, *S Arora*, *C Rudnisky*, **G Douglas**, *M Edwards*, **K Verstraten**, *B Wong* and *K Damji*. “Stereo digital photography demonstrates excellent reproducibility with stereo slide film for the evaluation of glaucomatous optic disc features”. Presentation at Ophthalmology and Vision Sciences Research Day, Calgary, May 13, 2013.
- *K Sabri*, *K Whelan*, *V Viscardi*, *N Patel*, *W Seidlitz*, *F Farrokhyar*, *S Shivananda*, **A Ells** and *S Lee*. “Seminal Canadian recommendations for evidence-based examination of neonates for retinopathy of prematurity (SCREEN-ROP): provisional new guidelines”. Presentation at the Canadian Association of Pediatric Ophthalmology at the Annual Scientific Meeting of the Canadian Ophthalmological Society, Montreal, Quebec, June 16, 2013.
- *K Sabri*, *K Whelan*, *V Viscardi*, *N Patel*, *W Seidlitz*, *F Farrokhyar*, *S Shivananda*, **A Ells** and *S Lee*. “Seminal Canadian recommendations for evidence-based examination of neonates for retinopathy of prematurity (SCREEN-ROP): provisional new guidelines”. Presentation at the Canadian Retinal Society at the Annual Scientific Meeting of the Canadian Ophthalmological Society, Montreal, Quebec, June 16, 2013.

- **WA Fletcher**, How to Assess and Analyze Diplopia, Canadian Neurological Sciences Federation, Montreal, PQ, June 2013.
- **WA Fletcher**, Ocular Motor Anatomy. Canadian Neurological Sciences Federation, Banff, AB, June 2014.
- A Amritanand and **HV Gimbel**. “Risk factors for and incidence of cataract extraction and IOL placement after Copolymer Phakic IOL (pIOL) implantation. Presentation at Ophthalmology and Vision Sciences Research Day, Calgary, May 13, 2013.
- S Teja, **J Gohill**, *E Sanders* and **G Williams**. “Macular edema and toxicity secondary to cefuroxime use in cataract extraction”. Poster presentation at the Annual Scientific Meeting of the Canadian Ophthalmology Society, Montreal, Quebec, June 14-17, 2013. *JT Gonder* and **J Gohill**. “Do different methods for measuring corneal power and axis affect lens selection for toric IOL implantation?” Poster presentation at the Annual Scientific Meeting of the Canadian Ophthalmology Society, Montreal, Quebec, June 14-17, 2013.
- **P Gooi**. “Cataract Surgery in the Setting of Weak Zonules”. Presentation at the Technical Session of the Rocky Mountain Eye Conference of the Eye Physicians and Surgeons Association of Alberta, Banff, February 22, 2014.
- A Kaplan, **P Gooi**, and II Ahmed. “Evaluating the safety and efficacy of reverse optic capture for single piece acrylic intraocular lenses”. Presentation at the Canadian Retinal Society at the Annual Scientific Meeting of the Canadian Ophthalmological Society, Montreal, Quebec, June 17, 2013.
- JS Rayat, **C Hanson** and I MacDonald. “Cataract surgery and patient comprehension: assessing physician pre-operative communication”. Presentation at the Canadian Retinal Society at the Annual Scientific Meeting of the Canadian Ophthalmological Society, Montreal, Quebec, June 15, 2013.
- IIK Ahmed, S Gagne, **P Gooi** and SG Safran. Faculty for Canadian Ophthalmological Society-4 Surgical Teaching Series Presentation at the Annual Scientific Meeting of the Canadian Ophthalmological Society, Montreal, Quebec, June 15, 2013.
- S Verma, S Arora, *F Kassam*, M Edwards and KF Damji. “Tele-glaucoma clinical outcomes and referral pathway”. Poster presentation at the Annual Scientific Meeting of the Canadian Ophthalmology Society, Montreal, Quebec, June 14-17, 2013.
- **G Williams**. “Retinal Surgery Techniques and Complications”. Presentation at the Technical Session of the Rocky Mountain Eye Conference of the Eye Physicians and Surgeons Association of Alberta, Banff, February 22, 2014.
- ME Seamone, K Milton, MC Deschenes, M Fielden, **A Kherani** and **G Williams**. “A direct comparison of spectral domain optical coherence tomography (SD-OCT) and multifocal electroretinography (mERG) in hydroxychloroquine retinopathy”. Presentation at the Canadian Retina Society at the annual scientific meeting of the Canadian Ophthalmological Society, Montreal, Quebec, June 16, 2013.
- IN Kherani, *K Hammamji*, MC Deschenes and **A Kherani**. “A case of choroidal osteoma treated with photodynamic therapy and intravitreal bevacizumab”. Poster presentation at the Annual Scientific Meeting of the Canadian Ophthalmology Society, Montreal, Quebec, June 14-17, 2013.
- **A Kherani**. “Improving access, efficiency and communication using digital triage in a large group retina practice”. Presentation at the Annual Scientific Meeting of the Canadian Ophthalmological Society, Montreal, Quebec, June 17, 2013.
- I Kherani, *K Hammamji*, MC Deschênes and **A Kherani**. “A case of choroidal osteoma treated with photodynamic therapy and intravitreal bevacizumab”. Poster presentation at Ophthalmology and Vision Sciences Research Day, Calgary, May 13, 2013.
- **F Kherani**, O Ziouzas, **A Kherani** and A Oryshak. “A Case of Proptosis”. Presentation at the Canadian Ophthalmic Pathology Society at the Annual Scientific Meeting of the Canadian Ophthalmological Society, Montreal, Quebec, June 14, 2013.
- **F Kherani**. “Ankyloblepharon”. Presentation at the Canadian Society of Oculoplastics and

Reconstructive Surgery at the Annual Scientific Meeting of the Canadian Ophthalmological Society, Montreal, Quebec, June 15, 2013.

- **J McWhae**, *M Munro*, J Ruzicki, **K Romanchuk** and G Carter. "Spontaneous Formation of a Limbal Filtering Bleb: A Case Report". Poster presentation at Ophthalmology and Vision Sciences Research Day, Calgary, May 13, 2013.
- S Teja, A Oryschak, S Drews, S Rasmussen and **K Punja**. "Isolated tuberculous dacryoadenitis". Presentation at the Canadian Ophthalmic Pathology Society at the Annual Scientific Meeting of the Canadian Ophthalmological Society, Montreal, Quebec, June 14, 2013.
- **KG Romanchuk**. Studying the Sub-basal Nerve Fiber Layer by Corneal Confocal Microscopy in Diabetic Children and Matched Controls. 11th Annual Pediatric Ophthalmology Ludwig, Olga and Constance Kaye Lecture, Saskatoon, Saskatchewan, October 4, 2013.
- **KG Romanchuk**. Monofixation Syndrome. Interpreting Orthoptic Reports. Vertical Deviations. Saskatchewan Provincial Orthoptic "Seminar, Saskatoon, Saskatchewan, October 4, 2013.
- M Ferdosi, M Favakoli, C Berscheid, C Gougeon, **K Romanchuk**, D Pacaud and R Malik. No changes in Corneal Nerve Morphology despite an increase in Langerhans Cells in Children with Type 1 Diabetes. Oral presentation at the 23rd Neurodiab Meeting, Diabetic Neuropathy Study Group, Barcelona, Spain, September 21, 2013
- **KG Romanchuk**. Controversies in the Treatment of Intermittent Exotropia and My Experience. Visual Acuity, Strabismus and Binocularity in Children with High Hyperopia. Monofixation Syndrome. William E Scott Guest Lecturer, University of Iowa Hospitals and Clinics, Iowa City, Iowa, USA, September 9, 2013
- **KG Romanchuk**. Presenter Case 6: (Iris Cyst) and Co-Chair of Difficult Problems Non-Strabismus Symposium, Joint Meeting of the American Association for Pediatric Ophthalmology and Strabismus and the Singapore National Eye Centre, Singapore, July 14-16, 2013
- D Pacaud D, **K Romanchuk**, R Malik, A Nettel Aguire and J Mah. Acceptability of Corneal Confocal Microscopy for the Detection of Early Diabetic Neuropathy in Children. Poster presentation at the Canadian Diabetes Association Professional Conference and Annual Meeting, Montreal, Quebec, October 17, 2013.
- **KG Romanchuk**. Experience to date with corneal confocal microscopy in diabetic children and matched controls. Oral presentation at Corneal Biomarkers of Neuropathy Group Meeting, Barcelona, Spain, October 4, 2013
- **S Subramaniam**. "Anatomy and Physiology of Afferent Visual System" - Canadian Neurological Sciences Federation (CSNF) 49th Congress, Banff, Alberta, 2014.
- **S. Subramaniam**. "Vertigo and Balance Disorders" Course 5 Medical Students, Calgary, Alberta, October 2013.
- **S. Subramaniam**. "Approach to Vertigo in the Elderly" - Continuing Medical Education and Professional Development Course for Family Physicians, Faculty of Medicine, University of Calgary, November 2013.
- **S. Subramaniam**. "Idiopathic Intracranial Hypertension"- 20/20 Vision Conference, Calgary, Alberta, November 2013.
- **S. Subramaniam**. "Update on Optic Neuropathies" Southern Alberta Eye Clinic Research day, Calgary, Alberta, October, 2013.
- **S Subramaniam**. "Anterior Ischemic Optic Neuropathy". Alberta Association of Optometrist Annual Meeting, Calgary, Alberta, September 2013.
- **S Subramaniam**. Optic Neuropathies. Ophthalmology Technologists Seminar, Rocky View Eye Clinic, Calgary, Canada, January 16, 2013.
- **S Subramaniam** and *F. Kassam*. Vasospastic Amaurosis Fugax Secondary to Ophthalmic Artery Vasospasm. 40th Annual Meeting of the North American Neuro-Ophthalmology Society, March, 2014, Puerto Rico.
- **S Subramaniam, W Fletcher**. Reversing Vision Loss and Preventing Optic Atrophy in Leber's Hereditary

Optic Neuropathy. 39th Annual Meeting of the North American Neuro-Ophthalmology Society, February 9-14, 2013, Snowbird, Utah.

- D Rodriguez-Luna, **S Subramaniam** et al. Baseline Perihematomal Edema is Greater in the Presence of a CTA Spot Sign but Does Not Predict Hematoma Expansion Independent of ICH Volume. International Stroke Conference 2013, Honolulu, Hawaii.
- **S Arora, KF Damji and E Weis.** “The influence of power settings for SLT and ALT in the treatment of open angle glaucomas: a systematic review and meta-analysis”. Presentation at the Canadian Glaucoma Society at the Annual Scientific Meeting of the Canadian Ophthalmological Society, Montreal, Quebec, June 17, 2013.
- RD Bhui, *M Luong*, IN Kherani, MC Deschenes, M Fielden, **G Williams, A Kherani** and W-C Lam.
- **Geoff Williams**, MD Collaborate and E Referral, Canadian Retina Society Banff, Alberta Feb 20 2013
- Mark E. Seamone MSc, Katherine Milton MOA, OA, Micheline C. Deschênes PhD, **Amin Kherani** MD, FRCSC, ABO, Michael Fielden MD, FRCSC, ABO and R. **Geoff Williams** MD, FRCSC, ABO, A direct comparison of spectral domain optical coherence tomography (SD-OCT) and multifocal electroretinography (mfERG) findings in hydroxychloroquine retinopathy, Canadian Ophthalmological Society Meeting Montreal June 14, 2013
- James MacDonald **Geoff Williams F Adatia K Hammamji KJ Warrian** MC Deschenes A Kirker A Kherani Outcomes and complications of Densiron 68 intraocular tamponade for retinal detachment repairs: a retrospective chart review. , Canadian Ophthalmological Society Meeting Montreal June 14, 2013
- **RG Williams Amin Kherani, Kevin Warrian, Vikram Lekhi, Netan Choudhry**, Outpatient Retina Surgery in Canada, Canadian Ophthalmological Society Meeting Montreal June 14, 2013
- **RG Williams**, Endoscopic diagnosis of Bilateral Acute Retinal Necrosis (BARN) in an immunocompetent patient. Western Canada Retina Retreat , Oct 18 2013
- **RG Williams** and *KJ Warrian.* “Outpatient vitreoretinal surgery in the Canadian healthcare system”. Presentation at the Annual Scientific Meeting of the Canadian Ophthalmological Society, Montreal, Quebec, June 17, 2013.
- **RG Williams.** “Experiences with the dexamethasone intravitreal implant”. Presentation at the Canadian Retina Society at the Annual Scientific Meeting of the Canadian Ophthalmological Society, Montreal, Quebec, June 16, 2013.
- J MacDonald, **G Williams, F Adatia, KJ Warrian, K Hammamji**, MC Deschenes, A Kirker and **A Kherani.** “Outcomes and complications of Densiron 68 tamponade for retinal detachment repairs: a retrospective chart review”. Presentation at the Canadian Retina Society at the Annual Scientific Meeting of the Canadian Ophthalmological Society, Montreal, Quebec, June 16,
- J MacDonald, **RG Williams, F Adatia, KJ Warrian, K Hammamji**, MC Deschenes, A Kirker and **A Kherani.** “Outcomes and complications of Densiron 68 intraocular tamponade for retinal detachment repairs: a retrospective chart review. Presentation at the Annual Scientific Meeting of the Canadian Ophthalmology Society, Montreal, Quebec, June 16, 2013.
- *L Lagrou, K Hammamji, O Ziouzina, M Fielden, G Williams and A Kherani.* “Dexamethasone intravitreal implant (Ozurdex) in the treatment of sympathetic ophthalmia”. Poster presentation at the Annual Scientific Meeting of the Canadian Ophthalmology Society, Montreal, Quebec, June 14-17, 2013.
- *F Kassam, RG Williams, M Fielden, F Adatia, P Mitchell and A Kherani.* “Improving access, efficiency and communication using digital triage in a large group retinal practice”. Poster presentation at Ophthalmology and Vision Sciences Research Day, Calgary, May 13, 2013.
- J MacDonald, **RG Williams, F Adatia, K Hammamji, K Warrian**, M Deschênes, A Kirker

and **A Kherani**. “Outcomes and Complications of Densiron 68 Intraocular Tamponade for Retinal Detachment Repairs: A Retrospective Chart Review”. Presentation at Ophthalmology and Vision Sciences Research Day, Calgary, May 13, 2013.

- **L Lagrou, K Hammamji, O Ziouina, M Fielden, A Oryshak, RG Williams and A Kherani**. “Dexamethasone Intravitreal Implant (Ozurdex) in the Treatment of Sympathetic Ophthalmia. Poster presentation at Ophthalmology and Vision Sciences Research Day, Calgary, May 13, 2013.
- **M Munro and R Yau**. “Mafucci syndrome and intracranial Chondrosarcomas: a case report featuring spontaneous resolution of sixth nerve palsy”. Poster presentation at the Annual Scientific Meeting of the Canadian Ophthalmology Society, Montreal, Quebec, June 14-17, 2013.
- **R Yau**. “Corneal Lesions and Corneal Surgery”. Presentation to Alberta Optometric Association, Red Deer, Alberta, November 28, 2012.
- **J Wong**, “Challenging Case Presentations: Severe Asymmetric Unilateral Glaucoma in Young Adults” Calgary, Alberta, April 19, 2013.

Faculty Research Grants (April 1, 2013 – March 31, 2014)

- **Al-Ghoul, A Muzychuk, V Penner, G Rocha and M McCarthy**. Corneal Collagen Cross-Linking in Western Canada: A Review of Outcomes. 2007 to present.
- **A Al-Ghoul**. Novel Technique for Anterior Lamellar Keratoplasty. 2012 to present.
- **F Adatia (P-I), A Chandra, D Charteris, A Kherani, G Williams, P Savage, P Mitchell and K Hammamji**. The Genetic Associations of primary rhegmatogenous retinal detachment and related predisposing conditions. University Eye Foundation \$10,000 and Lions Foundation \$7,500. 2012-2014.
- **K Hammamji, N Premji, F Adatia, A Kherani, and RG Williams**. The visual prognosis of epiretinal membrane peeling on preoperative findings OCT features Sept 2011 to current.
- **F Adatia, M Modabber, S Arora and KF Damji**. Critical Review of High Quality Ophthalmology

Educational Web Resources Targeting Trainees. 2012 to present.

- **F Adatia, S Kletke, S Arora, and KF Damji**. Educational and vision-assistive smartphone apps for patients: quantitative evaluation. 2012 to present.
- **F Adatia, F Kassam, GR Williams, M Fielden, P Mitchell and A Kherani**. Improving access, efficiency and communication using digital triage in a large group retina practice. 2012 to present.
- **F Adatia, J MacDonald, RG Williams, MC Deschenes, A Kirker and A Kherani**. Outcomes and Complications of Densiron 68 Intraocular Tamponade for Retinal Detachment Repairs: A Retrospective Chart Review. 2011 to present.
- **F Adatia (P-I), M Fielden (P-I) and S Teja (Co-I)**. A Prospective Cohort Study of Intravitreal Ranibizumab in Chronic Central Serous Chorioretinopathy. Novartis. 2012 to present.
- **W Astle and LM Cooper**. HTS1: Glasses vs. observation for moderate hyperopia in young children. Pediatric Eye Disease Investigator’s Group. Funding per patient. 2012 to present.
- **W Astle and LM Cooper**. CITS: Convergence insufficiency treatment study, effectiveness of home-based therapy for symptomatic convergence insufficiency. Pediatric Eye Disease Investigator’s Group. Funding per patient. 2012 to present.
- **W Astle**. CO2: Pediatric cataract surgery Outcomes registry. Pediatric Eye Disease Investigator’s Group. Funding per patient. 2012 to present.
- **W Astle**. Outcomes of persistent fetal vasculature cataracts with primary intraocular lens implantation. 2012 to present.
- **W Astle (P-I)**. Laser-assisted sub-epithelial keratectomy (LASEK) for the treatment of infantile nystagmus syndrome. 2011 to present.
- **W Astle**. Quality assurance appraisal of postoperative glaucoma incidence following primary intraocular lens implantation in infants for congenital/developmental cataracts. 2011 to present.

- **W Astle, LM Cooper and K Romanchuk.** IXT2: A randomized clinical trial of observation vs. occlusion therapy. Pediatric Eye Disease Investigator's Group. Funding per patient. 2010-2015.
- **W Astle (P-I).** Laser-assisted epithelial keratectomy for the treatment of nystagmus associated with optic nerve hypoplasia. 2010 to present.
- **W Astle and P Huang.** Photorefractive keratoplasty (PRK) and laser-assisted subepithelial keratectomy (LASEK) for myopia and astigmatism following penetrating keratoplasty in adults. 2010 to present.
- **W Astle, LM Cooper and K Romanchuk.** ATS16: Augmenting atropine treatment for amblyopia. Pediatric Eye Disease Investigator's Group. Funding per patient. 2009 to present.
- **W Astle, LM Cooper and K Romanchuk.** X01: Correction of refractive error amblyopia. Pediatric Eye Disease Investigator's Group. Funding per patient. 2009 to present.
- **W Astle, LM Cooper and K Romanchuk.** ATS15: Increasing patching for amblyopia. Pediatric Eye Disease Investigator's Group. Funding per patient. 2009 to present.
- **W Astle (P-I).** Ahmed valve implants as a primary procedure in pediatric glaucoma patients. 2009 to present.
- **W Astle.** Intraocular lens database. 2009 to present.
- **W Astle and K Romanchuk.** Examining corneal hysteresis in diabetic vs. non-diabetic patients. 2007 to present.
- **W Astle (P-I), LM Cooper (P-I) and K Romanchuk K (P-I).** Down Syndrome Database. University Eye Foundation. \$5,000. 2007 to present.
- **W Astle (P-I), LM Cooper (P-I) and K Romanchuk (P-I).** Trial to establish normative pediatric ophthalmological reference values at Alberta Children's Hospital. 2007 to present.
- **W Astle and A Ells.** ATS1: Extended follow-up of occlusion vs. pharmacologic therapy for moderate amblyopia (in 15 year follow-up period). Pediatric Eye Disease Investigator's Group. Funding per patient. 2000 to present.
- **F Costello (P-I).** OCTiMS Study #CFTY720D2319: A 3-year, multi-center study to evaluate optical coherence tomography as an outcome measure in patients with multiple sclerosis. Novartis. \$50,000. 2012-2015.
- **F Costello (Local P-I).** A Randomized, Double-Blind, Parallel-Group, Placebo-Controlled Study to Assess the Efficacy, Safety, Tolerability and Pharmacokinetics of BIIB033 in Subjects with First Episode of Acute Optic Neuritis Protocol No. 215ON201. Biogen Idec. 2012-2015.
- **F Costello.** The Influence of Hormonal Contraceptive Use and Reproductive Hormone Levels on Optic Neuritis in Women. University Research Grants Committee (URGC). \$16,091. 2012-2015
- **J Mah (P-I) and F Costello (C-I).** A Multicenter Collaborative Study on the Clinical Features, Expression Profiling and Quality of Life in Pediatric Fascioscapulohumeral Muscular Dystrophy (EID 24052). US FSH-Society and Muscular Dystrophy Canada. USD\$96,600. 2011-2013.
- **S Furtado (P-I), F Costello (P-I), A Lange (Co-I), J Barton (Co-I) and J Stoessl (Co-I).** Use of optical coherence tomography (OCT) in the study of Parkinson's disease and other parkinsonian syndromes. Hotchkiss Brain Institute, \$80,000.00 (\$20,000/year), 2010 – 2014.
- **F Costello (P-I), S Furtado (PI-), J Barton (C-I), A Lange (C-I) Aand J Stoessl (C-I).** Use of optical coherence tomography in the study of Parkinson disease and other parkinsonian syndromes. Hotchkiss Brain Institute. \$80,000. 2010-2014
- **Mah J (P-I), Costello F (Co-I), Romanchuk K (Co-I), Astle W (Co-I), Slick D (Co-I), AbouReslan W (Co-I), Wei, X-C (Co-I), Burton J (Co-I), Tellier R (Co-I), and Metz L (Co-I).** The clinical-demographic, epidemiology, pathobiology, neuroimaging features and outcome of acute demyelination in Canadian children. Multiple Sclerosis Research Foundation \$454,709, 2010 to present.
- **F Costello, Dr. Alexandr Klistorner, (P-1),** Investigating the Mechanisms of axonal degeneration in Multiple Sclerosis National Multiple Sclerosis Society \$1,124,000.00 2013-2018

- **F Costello (P-I)**, Using the Afferent Visual Pathway to Establish Evidence of Primary Retinal Involvement Neuronal Loss in Multiple Sclerosis Subtypes. CIHR Health Professional Student Research Award. \$4,251.00 2013-2014
- **A Crichton and B Ford**. **APOLLO**: A Multicenter, Paired-Eye Comparison, Dose-Escalation, Single Dose, 24-month Study of Safety and Efficacy and Bimatoprost Preservative Free Intracameral Drug Delivery System (Bimatoprost PF 1C DDS) in Patients with Open-Angle Glaucoma. Allergan Inc., \$222,428. February 2012 to present.
- **A Crichton, B Ford and G Douglas**. **ILLUMINATE**: A 12-week Evaluation of Bimatoprost 0.01% (Lumigan RC) or Fixed-Combination Travoprost 0.004%-Timolol 0.05% (Duo Trav) in Patients Switched from Travoprost 0.004% (Travatan Z) Monotherapy Requiring Further IOP Reduction. Allergan Inc. \$523,000. December 2011 to present.
- C Hutnik, C Birt, Damji, M Nicoleta and **A Crichton**. A randomized clinical trial of selective laser trabeculoplasty (SLT) in medically uncontrolled open angle glaucoma who have been previously treated with complete SLT. Canadian Institute for Health Research. \$756,474. October 2012 to present.
- **A Muzychuk** and **A Crichton**. Clinical; Utility of Tonometers: A comparative chart review of Goldmann applanation tonometry, the Tonopen, the Ocular Response Analyzer and the Pascal tonometer. June 2012 to present.
- **A Muzychuk** and **A Crichton**. S3 Ahmed Valves for the Surgical Management of glaucoma in advanced age. July 2012 to present.
- **T Demong**. Extension to Cachet study. Alcon Research. \$2,840. 2012 ongoing.
- **A Ells** and K Sabri. The First National Retinopathy of Prematurity Survey Formulating Evidence-Based Screening Guidelines. CIHR/PHSI. \$349,982. 2010-2014.
- G Quinn, M Repka, **A Ells** and **P Mitchell**. Telemedicine Approaches to Evaluating Acute Phase Retinopathy of Prematurity – eROP. EY017014. National Institute of Health/National Eye Institute. \$15,000,000. July 2010 – June 2014.
- A Lodha (P-I), **A Ells** (Co-I), **P Mitchell** (Co-I) and **A Kherani** (Co-I). **SCREEN-ROP** Study. Canadian Institute of Health Research, Ontario Ministry of Health and Long-Term Care, and Department of Surgery, McMaster University. \$600,000. 2012-2015.
- **W Fletcher, F Costello and S Subramaniam**. **NORDIC I2HT2**: A multicenter, double-blind, randomized, placebo-controlled study of weight-reduction and/or low-sodium diet plus acetazolamide vs. diet plus placebo in subjects with idiopathic intracranial hypertension with mild visual loss. NORDIC Network Sites/National Institute of Health. 2011-2013.
- **W Fletcher**, Rosza Endowment for Hearing Research (co-investigator), 2013-14, Study of Vestibulo-Ocular Reflex in Normal Subjects and Patients with Vestibular Dysfunction, \$ 24, 600
- **J Gohill** and S Teja. A retrospective chart review of macular schisis in postoperative pseudophakia. \$500.00. January 21, 2011 to present.
- **J Gohill**. Manual versus automated keratometry for aligning toric intraocular lenses. March 2012 to present.
- **Kherani A** (P-I) and **Williams RG** (Co-I). A randomized, double masked active controlled Phase III study of the efficacy, safety and tolerability of repeated doses of intravitreal VEGF Trap in subjects with neovascular age-related macular degeneration (VIEW 1). Protocol #VGFT-OD 0605. Regeneron. \$84,000. 2007-2011 and 2012 to present (0910 Extension).
- **Kherani A** (Co-I), **Williams RG** (Co-I) and Fielden M. A multicenter study of the efficacy and safety of the human anti-TNF monoclonal antibody adalimumab as maintenance therapy in subjects requiring high dose corticosteroids for active non-infectious intermediate uveitis, posterior-uveitis, or pan-uveitis. Protocol M10-877. Abbott Laboratories. \$8,000. 2010 to present.
- **Kherani A** (Co-I), **Williams RG** (Co-I) and Fielden M. A multicenter study of the efficacy and safety of the human anti-TNF monoclonal antibody

- adalimumab in subjects with inactive non-infectious intermediate uveitis, posterior uveitis or pan-uveitis. Protocol M10-880. Abbott Laboratories. \$8,000. 2010 to present.
- **Kherani A** (Co-I), **Williams RG** (Co-I) and **Fielden M**. VISUAL III: A multicenter study of the efficacy and safety of the human anti-TNF monoclonal antibody adalimumab in subjects with non-infectious intermediate uveitis, posterior uveitis or pan-uveitis. Protocol M11-327. NCT01148225. Abbott Laboratories. \$8,000. 2010 to present.
 - **RG Williams and A Kherani**. VISUAL II: Efficacy and Safety of Adalimumab in Subjects with Inactive Uveitis. NCT01124838. Abbott Laboratories. 2012 to present.
 - **A Kherani, A Kirker, RG Williams, M Fielden F Adatia** and **N Premji**. Outcomes and Complications of Densiron 68 intraocular tamponade for retinal detachment repairs. April 2011 to present.
 - **A Kherani, M Fielden, RG Williams, F Adatia and P Mitchell**. Optical Coherence Tomography as a prognostic tool for age-related macular degeneration. Ongoing.
 - **A Kherani, M Fielden and F Adatia**. Geographic Atrophy Study. Pfizer. 2012 to present.
 - **A Kherani, P Mitchell, RG Williams, M Fielden,** and **D Hardy**. Ophthalmic and gastrointestinal surgical outcomes of 2 patients on Pradaxa. December 2011 – present.
 - **A Kherani, RG Williams and M Fielden**. Ozurdex Case Series. February 2012 to present.
 - **M Fielden, A Kherani, RG Williams, F Adatia and P Mitchell**. A 24-month, Phase IIIb, open-label, single arm, multicenter study assessing the efficacy and safety of an individualized, stabilization criteria-driven prn dosing regimen with 0.5-mg ranibizumab intravitreal injections applied as monotherapy in patients with visual impairment due to macular edema secondary to central retinal vein occlusion (CRVO). CRFB002E2401. Novartis. 2012 to present.
 - **M Fielden, A Kherani, RG Williams, F Adatia and P Mitchell**. A 24-month, Phase IIIb, open-label, randomized, active-controlled, 3-arm, multicenter study assessing the efficacy and safety of an individualized, stabilization criteria-driven prn dosing regimen with 0.5mg ranibizumab intravitreal injections applied as monotherapy or with adjunctive laser photocoagulation in comparison to laser photocoagulation in patients with visual impairment due to macular edema secondary to branch retinal occlusion (BRVO). CRFB002E2402. Novartis. 2012 to present.
 - **L Lagrou, A Kherani and RG Williams**. Macular Hole Development following Vitrectomy for Retinal Detachments: A Retrospective Study. University Eye Foundation. October 2010 – present.
 - **F Kherani** (P-I) and **J Katowitz**. Gene screening for micro-ophthalmia and anophthalmia. University Eye Foundation. 2005 to present.
 - **R Mitchell and V Lekhi**. Glaucoma control with the “gold shunt”. March 2011 to present.
 - **R Mitchell, R Yau and N Premji**. Contrast sensitivity study with intraocular lenses. June 2011 to present.
 - **K Punja, C Archibald and A Oryshak**. Oro-facial Granulomatosis – A Spectrum of Disease. August 2011 to present.
 - **K Punja, S Teja and S Rasmussen**. Isolated lacrimal gland tuberculosis. January 2011 to present.
 - **D Pacaud** (PI/PD), **J Mah** Co-PI/PD), **R Malik** (Co-PI/PD), **D Zochodne, KG Romanchuk** (Co-PI/PD), **WF Astle** (Co-PI-PD) and **A Nettle-Aguirre** (Co-PI/PD). Corneal confocal microscopy to detect diabetic neuropathy in children. Juvenile Diabetes Research Foundation. \$362,358.00. 2011 to present.
 - **KG Romanchuk** (PI). Intermittent Exotropia Study 1 (IXT1): A randomized trial of Bilateral lateral Rectus Recession Versus Unilateral lateral Rectus Recession with Medial Rectus Resection for Intermittent Exotropia; Pediatric Eye Disease Investigator’s Group. Funding per patient. 2011 to present.

- C Toth, P Podgorny, D Wile, S Furtada, R Ranawaya, O Suychowsky and **K Romanchuk**. “Is Peripheral Neuropathy occurring in association with Idiopathic Parkinson’s Disease, or an Iatrogenic Complication? HBI CRU award and Parkinson Society Canada award. \$53,212. 2012 to present.
- K Damji (P-I), **K Verstraten** (Co-I), **G Douglas** (Co-I) and M Edwards (Co-I). Comparison stereo slide/2D/stereo digital photography to evaluate the optic nerve head in patients with glaucoma.
- **Williams RG** (P-I), **Kherani A** (Co-I) and Fielden M. A multicenter, double-masked, parallel group, placebo-controlled study to assess the efficacy and safety of voclosporin as therapy in subjects with active non-infectious intermediate, posterior and pan-uveitis. NCT01243983. Lux Biosciences Inc. 2010 to present.
- **RG Williams (P-I)**, **A Kherani** (Co-I) and *Fielden M* (Co-I). A Canadian 12-month prospective, randomized, open label, multicenter, laser controlled Phase IIIb study assessing the efficacy, safety and cost-efficacy of ranibizumab (monotherapy or combination with laser) in the treatment of diabetic macular edema (DME). NCT01135914 (RESPOND study), (Lucentis in DME). Novartis. \$60,000. 2010 to present.
- **RG Williams**, *M Fielden* and **A Kherani**. CRYSTAL: Ranibizumab Intravitreal Injections in Patients with Visual Impairment due to Macular Edema Secondary to Central Retinal Vein Occlusion. NCT01535261. Novartis. 2012 to present.
- **RG Williams**, *M Fielden* and **A Kherani**. BRIGHTER: Efficacy and Safety of Ranibizumab with or without Laser in Comparison to Laser in Branch Retinal Vein Occlusion. NCT01599650. Novartis. 2012 to present.
- **RG Williams**, **A Kherani** and *M Fielden*. A direct comparison of high speed ultra-high resolution optical coherence tomography (SD-OCT) and multifocal electroretinography findings in early stage hydroxychloroquine retinopathy. January 2012 to present.
- **RG Williams**, **A Kherani** and *M Fielden*. Choroidal neovascularization (CNV) secondary to pathological high myopia – burden of illness study. Syreon and Novartis. November 2011 to present.
- *M Fielden*, **RG Williams**, **A Kherani** and **F Adatia**. Vogt-Koyanagi-Harada Disease in Southern Alberta population, a retrospective chart review. Ongoing.
- **J Wong**, M Leite, RN Wenreb, C Girkin, J Liebmann and FA Medeiros. Confirmation of “Likely Progression” in Standard Automated Perimetry using Guided Progression Analysis. January 2011 to present.
- *E Kaisra*, *S Wood*, **JY Wong**, **A Crichton** and **A Kherani**. Safety and Efficacy of Phacotrabeculectomy in Uveitic Glaucoma. 2011-2012.
- Dr Almeida, **JY Wong**, M Belliveau, J Rayat and J Gale. Anatomical and Visual Outcomes of Macular Hole Surgery with Short-Duration 3 day Face-Down Positioning. 2010-2012.

Workforce Planning

Goals and Strategies

- Regular survey of the section of ophthalmology for recruitment needs.
- Recruitment is advertised, with an established open process by the recruitment Subcommittee of our section of ophthalmology.

Impact on other departments and zonal resources

- Recruitment is designed to provide more timely access for patients requiring ophthalmological care.
- Additional resources are required for new recruits, as the retiring ophthalmologists tend to use fewer resources than those incoming.

Quality Assurance, Quality Improvement, and Innovation

General

- Continued Morbidity and Mortality rounds.
- Investigation of patient concerns brought to the attention of Section Chief by the Office of Patient Concerns, Calgary Zone, Alberta Health Services.
- Regular submissions by members of the section to the Health Technology Assessment Committee of the Department of Surgery.
- Continuing initiative for coverage of retinal eye examinations for retinopathy of prematurity now at all five existing neonatal intensive care units, including the South Health Campus and the expansion at Alberta Children's Hospital.
- We received an "uplift" for corneal surgery which saw corneal tissue being purchased from the USA to reduce wait times for corneal grafting.

Access of Family Physicians to specialists

- This has been improved through recruitment to positions in comprehensive ophthalmology, changes in RAAPID and Dr. C Hanson in the Urgent Eye Clinic.

Patient flow through the Emergency Department

- There has been continued positive feedback from emergency room physicians by allowing direct booking into the Urgent Eye Clinic by emergency room physicians after regular office hours, and also by continued running of the Urgent Eye clinic on weekends and statutory holidays in the Eye Clinic at Rockyview General Hospital.

Future Directions and Initiatives

- Our section requires additional space at Rockyview General Hospital to accommodate expanding clinical, teaching and research needs.
- We are still working towards creating our first endowed chair in ophthalmology.

Section of Oral & Maxillofacial Surgery

MEMBERSHIP

The section of Oral and Maxillofacial surgery (OMFS) has sixteen members and is consolidated at the Peter Lougheed hospital. Dr. S. Bureau, Dr. G. Cobb, Dr. R. Edwards, Dr. R. Goos, Dr. B. Habijanac, Dr. S. Higashi, Dr. L. Kroetsch, Dr. M. Smith, Dr. S. Touchan, Dr. D. Vincelli and Dr. C. Young provide call coverage. Dr. T. Fairbanks has surgical assisting privileges. Dr. T. Summers, Dr. D. Wakeham, Dr. B. Whitestone and Dr. H. Williams are senior surgeons. The section provides call coverage to the Calgary zone (all five hospitals and urgent care centres) as well as southern Alberta and the Crowsnest Pass area.

CURRENT OMFS COMMITTEES

- The non-hospital surgery committee (NHSF) which manages outpatient oral and maxillofacial surgery in non-hospital surgical facilities.
- Search and selection committee regarding OMFS manpower issues.
- Hyperbaric oxygen committee for oral and maxillofacial surgery HBOT requirements.
- Alberta head and neck cancer committee.
- Calgary zone new cancer centre committee.
- Peter Lougheed hospital surgical suite committee

CLINICS

The OMFS Section provides OMFS services at the Foothills hospital through the Foothills hospital dental clinic. The OMFS division provides coverage to the cleft palate clinic at the Alberta Children's Hospital. The Section also has a sleep apnea clinic at the Children's hospital. The section is collaborating with ENT, Plastic surgery and the Foothills hospital dental clinic in the treatment of head and neck cancer patients through the Tom Baker head and neck cancer clinic. The division

also has members that teach and cover clinics at the University of Alberta Dental School.

EDUCATION

The general practice residents from the Foothills hospital dental clinic (Dr. Ben Rogala, Dr. Jocelyn Yang and Dr. Isher Shergill) rotated through our service (hospital and office). Plastic surgery residents (Dr. Danielle Dumestree and Dr. Valerie Hurdle) also did a two week rotation through our service this year.

QUALITY ASSURANCE

The OMFS surgeons meet every two months to discuss clinical issues and have morbidity and mortality rounds.

GOALS

The goals of the Section of Oral and Maxillofacial Surgery is to continue to provide excellent OMFS surgical care to southern Alberta patients and work towards more involvement in treating head and neck cancer patients, sleep apnea patients and craniofacial deformity patients.



*Dr. Richard Edwards, Oral and Maxillofacial Surgery Section Chief
Photo provided by Colin McHattie*

Section of Orthopaedic Surgery

Section Structure and Organization

Current Committees

- OSRTC
 - Five meetings were held between April 1-2013 and March 31, 2014.
 - Education Committee (see Education Section)
- Research Portfolio Committee
 - The Faculty Research Symposium took place on Monday, June 10, 2013. This event was combined with the Anica Bitenc Travelling Fellow dinner. There were 14 research presentations, including one from Steve Boyd about the Mobility and Joint Health Facility at the McCaig Institute.
- Fellowship Committee
 - The annual symposium was held May 1, 2013 at the Winter Club with Dr. Mohit Bhandari from McMaster as guest adjudicator. Dr. J. Matyas and Dr. P. Lewkonja were the evening local adjudicators. Dr. R. Korley moderated the evening events.
 - Dr. S Hunt (Trauma Fellow) received the Norman Schachar Research Award for his 1st place presentation. Dr. M. Spiess (combined Spine Fellow) was 2nd and Dr. M. Alshehri (Hip Fellow) placed 3rd.



Dr. Kevin Hildebrand, Orthopaedic Surgery Section Chief

Programs

Membership

The membership count on March 31, 2014 was 58.

- Dr. Ed Rendell, Replaced Dr. J. Stewart as RGH Ortho Site Chief, July 1, 2013
- Dr. David Parsons ACH Ortho Site Chief, November 1, 2013 replaced Dr. Elaine Joughin.
- Dr. Jason Werle, Director, Residency Program Orthopaedics effective September 1, 2013
- Dr. Raul Kuchinad, appointed Orthopaedic Fellowship Director March 2013
- Dr. Marlis Sabo, Started as a locum May 24, 2013 at South Health Campus then will be full time July 1, 2014
- Dr. Christine Hiscox, started July, 2013 at South Health Campus
- Dr. Eldridge Batuyong, started August 2013 at South Health Campus
- Dr. Stephen French, started August 2013 at South Health Campus
- Dr. Raj Sharma and Dr. Stephen Hunt will start in the summer of 2014.
- Drs. Michael Monument, Jeremy LaMothe, Ryan Martin, and Alex Soroceanu will start in the fall of 2014.

ACCOMPLISHMENTS AND HIGHLIGHTS

Clinical Service

- Dr. Cy Frank, Order of the University of Calgary May 9, 2013 Convocation
- Dr. Richard Buckley, Recipient COA Merit Award, June 2013
- Dr. Norman Schachar, Distinguished Services Award, Department of Surgery June 2013
- Dr. Shannon Puloski, Educator of the Year 2013, Department of Surgery
- Dr. Fabio Ferri-de-Barros, Successful MSc. Thesis defense 2013.
- Dr. Ian Le, Promotion to Clinical Assistant Professor, July 1, 2013
- Dr. Ken Thomas, Promotion to Clinical Associate Professor July 1, 2013
- Dr. Cy Frank, AMA Medal for Distinguished Service 2013

Non-Clinical Service

- Dr. Benno Nigg, Killam Graduate Supervision & Mentoring Award 2013
- Dr. Walter Herzog, Killam Memorial Chair 2013

Education

UME

- MSK
 - 2013 MSK achieved a 100% pass rate for the third year in a row, with an overall score of 3.3 out a possible 5 points.

Medical Students

PGME

- Residents
 - The Orthopaedic Surgery Residency Program enjoyed the following Visiting Professors in the 2013 academic year, enhancing the resident learning experience:
 - Dr. Eric Bohm from the University of Winnipeg in conjunction with the 1st Annual Calgary Orthopaedic Resident Research Day
 - Dr. Allan Gross from the Mount Sinai Hospital in Toronto, Ontario

- 2013 Canadian Orthopaedic Resident Forum (CORF) was held April 5th- 8th at the Fairmont Palliser Hotel. CORF was attended by 79 final year Orthopaedic Residents and 1 auditor. Educational and oral examination sessions were facilitated by 36 Faculty members from across the Nation. 2014 Canadian Orthopaedic Residents Forum (CORF) is scheduled for April 4th – 7th at the Fairmont Palliser Hotel.

GME

- Dr. Raul Kuchinad became orthopaedic fellowship Program Director in March 2013, and has 8 active fellowship programs.
- Arthroplasty Case Rounds are held every Wednesday of the month with the 3rd Wednesday of each month being dedicated to Arthroplasty Fellowship Rounds. These rounds take place in room 0467B of the McCaig Tower and are telehealthed to the PLC, RGH, ACH and SHC.

- Fellows in the orthopaedic fellowship program from April 1st, 2013 – March 31st, 2014 were as follows:

Catherine O'Brien	Banff Sport Medicine
Farid Bouhouf	Combined Spine
Jacob Oh	Combined Spine
Kate Campbell	Combined Spine
Kristine Huago	Combined Spine
Michael Spiess	Combined Spine
Rohit Amritanand	Combined Spine
Sean Suttor	Combined Spine
Sung Yuh	Combined Spine
Steven Hunt	Foot & Ankle
Sebastian Gunkel	Hand & Wrist
Joby John	Joint Reconstruction
Mohammed Alsherhri	Joint Reconstruction
Kamal Bali	Joint Reconstruction
Mohammed Alsherhri	Joint Reconstruction/Conservative Hip
Olanrewanju Okusanya	Paediatric Spine
Pablo Krainz	Paediatric Spine
Rajpal Bhandal	Paediatrics
Samir Alsayegh	Paediatrics
Jonathan Sharr	Trauma
Martin Mangupli	Trauma
Stephen Hunt	Trauma

CME

- The 16th Annual Glen Edwards Day: May 24th, 2013 at the Health Sciences Centre; hosted by the Trauma Division. 2013 Glen Edwards Day had 128 attendees. 2014 will be hosted by the Spine Division.
- Afternoon in Arthroplasty: Monday, September 23, 2013, at the Radisson Hotel. This public Education course for patients waiting for or curious about Hip and Knee Replacement Surgery was well attended.
- The 41st Annual Paediatric Orthopaedic Seminar and Townsend Lecture: Friday, October 25th, 2013 at the Calgary Winter Club with guest speakers Dr. Brian Black (Winnipeg) and Dr. Alvin Crawford (Cincinnati) and local speaker Dr. Sukhdeep Dulai giving the RD Dewar Lecture.
- Citywide Orthopaedic Surgery Rounds are held the third Friday of every month except July and August.

Research Highlights

- In 2013 the Research Portfolio awarded a total of 10 - \$5,000 COREF research grant applications. A total of \$42,358 was awarded.

Research Awards

- Dr. Herman Johal
1st Place Presentation
Calgary Orthopaedic Resident Research Day
“Climbing the Hierarchy of Evidence at the Orthopaedic Trauma Association Annual Meetings: Assessing the Reliability of an Online Level of Evidence Evaluation Tool”
- Dr. Andrew Dodd
2nd Place Presentation
Calgary Orthopaedic Resident Research Day
“The Effect of Three-Dimensional Computed Tomography Reconstruction on Preoperative Planning of Tibial Plateau Fractures”
- Dr. John Esposito
Best Junior Presentation
Calgary Orthopaedic Resident Research Day
“External Fixation Versus Open Reduction with Plate Fixation for Distal Radius Fractures: A Meta-

Analysis of Randomized Controlled Trials”

- Dr. Rachel Schachar
Honorable Mention
Calgary Orthopaedic Resident Research Day
“Sensitivity and Specificity of a New Clinical Test for Intra-Articular Long Head Biceps Pathology”
- Dr. Matthew Furey
Honorable Mention
Calgary Orthopaedic Resident Research Day
“A Retrospective Cohort Study of Displaced Segmental Radial Head Fractures: Is 2 mm of Articular Displacement an Indication for Surgery?”
- Dr. Richard Ng
2013 COREF Grant Award, \$5,000
“The Load and Shift Test: Is it better than the Radiographic Stress View for Diagnosing Instability in Supination External Rotation Ankle Injuries?”
- Dr. Mohammed Alshehri
2013 COREF Grant Award, \$5,000
“Stem Cell and Inflammatory Biomarker Profiles in Hip Disorders of Young Adults”
- Dr. Ed Schwartzberger
2013 COREF Grant Award, \$4,150
“What are the Sleep Patterns of Surgical Residents?”
Dr. Nick Romatowski
2013 COREF Grant Award, \$2,281
“Positional Changes in Global Sagittal Balance of the Spine – Effect of Thoracolumbar Fusions”
- Dr. Natalie Rollick
2013 COREF Grant Award, \$5,000
“Randomized Controlled Trial on the use of Low-Intensity Pulsed Ultrasound in the Healing of Scaphoid Non-Unions Treated with Surgical Fixation”
- Dr. Chris Nielsen
2013 COREF Grant Award, \$2,800
“What is the Diagnostic Value of the Pain Diagram Compared to MRI and Surgical Findings in the Evaluation of Sciatica”
- Dr. Natalie Rollick
2013 COREF Grant Award, \$4,140
“Assessing Osteoporosis Management in Fragility Fracture Patients in the Cast Clinic”

- Dr. Marcia Clark
2013 COREF Grant Award, \$4,487
“Establishing a Culture of Mindful Practice in Surgery at a New Orthopaedic Centre”
- Dr. Stephen Hunt
2013 COREF Grant Award, \$5,000
“Hardware Removal in the Treatment of Lisfranc Injuries: A Multicenter Prospective Randomized Control Trial”
- Dr. Michaela Kopka
2013 COREF Grant Award, \$4,500
“Tryptase as a Biomarker of Post-Traumatic Joint Contracture”

CHALLENGES

Response to Issues

- On call support for Surgeons

Ongoing Matters and Plan of Action

- Increasing reliance on orthopaedic extenders to cover gaps in resident calls. Continual recruitment of new extenders to fill calls.
- Participation in the development of the Clinical Assistants and Surgical Assistants Program

Future Risks

- Decreasing numbers of Residents
- Extender Program – human resources, funding

WORKFORCE PLANNING

Future Needs

- All areas of Orthopaedics have long waits for patients to access services

- Expanding Clinical Research and Education / Simulation opportunities

Goals and Strategies

- Recruitment efforts in the fall of 2014 for 3 positions: 2 at the PLC and 1 at the FMC
- New recruits are encouraged to become members of the McCaig Institute and collaborate in research
- Recent recruits have Simulation experience
- Research Coordinator/Manager in trauma, arthroplasty

Impact on other departments and zonal resources

- Spine recruitment in conjunction with Department of Neurosciences
- Musculoskeletal oncology recruit in conjunction with Tom Baker Cancer Centre

QUALITY ASSURANCE, QUALITY IMPROVEMENT, AND INNOVATION

General

- Pathway Development in Arthroplasty, Hip fractures
- Collaboration with Bone and Joint Strategic Clinical Network on Spine Care, Soft-tissue Knee Injury, Prevention of Subsequent fractures / Osteoporosis

Access of Family Physicians to specialists

- Spine and Soft-tissue knee Injury pathways will engage many practitioners to deliver more efficient and effective care

Patient flow through the Emergency Department

- Hip Fracture Order sets

Section of Otolaryngology Head and Neck Surgery

SECTION STRUCTURE AND ORGANIZATION

Current Committees

- Section Executive Committee –
Chair Dr. TW Matthews
 - Membership – Drs P Park (SHC Head), JC Dort (FMC Site Head), JD Bosch (PLC Site Head), J Warshawski (RGH Site Head) and D Drummond (ACH Site Head)

- Resident Training Committee – Chair Dr. JD Bosch
 - Members – Drs. SP Chandarana, J Warshawski, J Brookes, J Chau, A HuiTW Matthews (ex officio)
- Undergraduate Director – Dr. M Hoy
 - Members - Drs. SP Chandarana , JD Bosch, TW Matthews (ex officio)
- CME Director – Dr. J Warshawski
- Research Director – Dr. D Drummond, Co-Director Dr. L Rudmik
- Simulation Committee – Chair Dr. J Brookes
 - Membership Drs. J Chau, P Park



*Dr. Wayne Matthews, Otolaryngology Section Chief
Photo provided by Colin McHattie*

Programs

- Resident Training Program – the program currently accepts one and two residents on alternating years through the CaRMS process.
- Head and Neck Surgical Oncology Program, Director Dr. JC Dort
- Bone Anchored Hearing Aid Program, Drs. J Chau and E. Lange
- Cochlear Implant Program (Adult and Children), Dr. P Park

ACCOMPLISHMENTS AND HIGHLIGHTS

Highlights

Dr. M Hoy completed her residency and joined our faculty at the PLC and ACH. Dr. Hoy received an award from the Department of Surgery Scientist Program. Dr. Hoy is also completing her Masters in Medical Education at the University of Calgary Health Region.

Dr. L Rudmik graduated MSc – Health Economics and Policy (with Merit)
London School of Economics (LSE) London, England, UK

Dr. Jason Chau joined the Section at the PLC and ACH. Dr. Chau has a practice focus in general otolaryngology and sleep medicine and surgery.

Otolaryngology has established a strong presence at the SHC including an on-site ambulatory clinic, a dedicated operating room and relocation of a state of the art neurovestibular laboratory and clinic.

Dr. J. Warshawski did an outstanding job as the local arrangements chair for the annual meeting of the Canadian Society of Otolaryngology – Head and Neck Surgery in Banff June 2013.

University, Zone, Provincial and National Professional Service

Dr. TW Matthews:

- Vice-Chair Royal College of Physicians and Surgeons Specialty Committee (Otolaryngology – Head and Neck Surgery)

Chair Canadian Society of Otolaryngology - Head and Neck Surgery Physician Resource Committee

Dr. JC Dort

- Director of Ohlson Research Initiative, Ohlson Professor of Head and Neck Surgery
- RCPS Examiner (Otolaryngology - Head and Neck Surgery)
- Co-Chair AHS Provincial Head and Neck Oncology Team

Dr. JD Bosch

- President Alberta Society of Otolaryngology

Dr. E. Lange

- Site Lead, Department of Surgery SHC

Dr. LR Rudmik

- UCMG eScripton Project Physician Advisory Group - Member
- Health Technology Assessment Committee – Member AHS
- UCMG non-GFT Executive Committee – Member
- Canadian National In-Training Exam Committee – Rhinology Chair

- Canadian Society of Otolaryngology – Head and Neck Surgery
- Research Committee for American Rhinologic Society – Member
- American Academy of Otolaryngology – Head and Neck Surgery

Dr. R Burke

- Past President - Canadian Society of Otolaryngology - Head and Neck Surgery

Dr. SP Chandarana

- UCMG non-GFT Executive Committee – Chair

Education

Residents

- Michael Deutschmann (PGY5) graduated June 2014
- Drs. Derek Randall (PGY4)
- Dr. Dieter Fritz (PGY4)
- Dr. Jon Dautremont (PGY3)
- Dr. Kristine Smith (PGY2)
- Dr. Carrie Liu (PGY2)
- Dr. Devon Livingstone (PGY1)

Medical Students

The following medical students completed clinical electives in Otolaryngology – Head and Neck Surgery at the University of Calgary

- Alexander Theilmann Manitoba
- Jillian Walsh U of Calgary
- Andrew Jun U of Calgary
- Paul Watson U of Calgary
- Joshua DeSerres U of Alberta
- Justin Lui U of Calgary
- Harmon Parhar BC
- Madison Young U of Manitoba
- James Ardell U of Saskatchewan
- Horace Cheng U of Western Ontario
- Chad Petton Memorial University
- Talia Brennan U of Dalhousie
- Christopher Dwyer Memorial
- Julie Luming U of Ottawa
- Nick Janusz U of Manitoba
- Natalie Cho U of Saskatchewan
- Alex Dyck U of Saskatchewan
- Francisco Lee U of Calgary

- Jonathan Yip U of Toronto
- Harshdeep Mangat U of A

Research

- The Ohlson Research Initiative (ORI) under Dr. JC Dort has continued to establish itself a leading research program in head and neck oncology. Several national and international research partnerships have been developed leading to an increasing number of publications and presentations.
- Dr. Rudmik and collaborators have been remarkably productive in the field of outcomes and cost effectiveness research in sinonasal disease. The University of Calgary is quickly becoming a leader in this area of research.
- The SHC Neurovestibular Clinic has resulted in an expanded scope of clinical research in vestibular medicine.

The academic activity of the Section faculty and residents is broadly based at all hospital sites and subspecialty areas. Research output continues to improve in quantity and quality due to the efforts of the established and newly recruited faculty.

SECTION GRANTS, AWARDS APRIL 1 2013- MARCH 31 2014

Dr. Kristine Smith

Awards

- **Best Presentation – Alberta Society of Otolaryngology, Mar 2013**
 - Title: Economic Evaluation of positron emission tomography-computed tomography in the evaluation of unknown primary squamous cell carcinoma of the head and neck

Dr. Devon Livingstone

Dr. Devon Livingstone received a CSRDF grant for \$4000 this year for his LAMP project.

CHALLENGES

Response to Issues

- Improved access to general otolaryngology care in adults and children has been addressed through recruitment of a Drs. Monica Hoy and Jason Chau to the PLC and ACH.
- The SHC has provided the Section with much needed clinic space, operating room access and provided the opportunity to recruit new faculty.

Ongoing Matters and Plan of Action

Access for clinic consultations and surgery remain issues in Otolaryngology. Rhinology is currently a particularly stressed practice area. Future recruitment of new and replacement faculty over the next few years will address access issues. Clinic access is likely to remain a barrier to recruiting hospital-based surgeons.

WORKFORCE PLANNING

Future Needs

- An Otolaryngology Section physician resource plan 2012 – 2017 has been submitted to the Department of Surgery. This includes:

Recruitment of an additional otolaryngologist to the SHC.

Recruitment of an additional surgeon to each of FMC and RGH in 2016 as part of the succession of existing senior surgeons and to serve anticipated population needs. The order of the recruitment is dependent on the operating room resources at each site. The new otolaryngologists' skill sets will complement the subspecialty focus of the site (see below) as well as the current clinical and academic priorities.

Recruitment of 1-2 additional otolaryngologists to the adult hospitals in 2016 -2017.

Goals and Strategies

The section will transition to a subspecialty program-based site organization:

- ACH – pediatric otolaryngology
- FMC – head and neck oncology and skull base surgery
- PLC – laryngology, sleep medicine and surgery and facial plastic surgery
- RGH – rhinology and less complex head and neck surgery
- SHC – otology and neurotology
- General otolaryngology services will be provided at all sites

Impact on other departments and regional resources

- Future recruitment will proceed with input of related surgical and medical sections to promote clinical and academic collaboration.

QUALITY ASSURANCE, QUALITY IMPROVEMENT, AND INNOVATION

- Significant adverse events are reviewed quarterly at Morbidity and Mortality Rounds with the goal of minimizing repetition of similar occurrences in the future.
- Quality improvement initiatives remain priorities for the Section. Current projects include appropriateness and cost effectiveness in the management of sinonasal disease (Dr. L Rudmik) and post-operative in hospital and post-discharge clinical pathways in head and neck oncology.
- The establishment of the Neurovestibular Clinic at SHC (Drs. E. Lange and Wm. Fletcher) has improved access, diagnostic testing as well as research and recruitment opportunities.

FUTURE DIRECTIONS AND INITIATIVES

Ongoing focused recruitment and geographic concentration of subspecialty programs should allow for improvement in clinical care, medical education and research output at all sites.

Section of Paediatric Surgery

SECTION STRUCTURE AND ORGANIZATION

Zone Clinical Section Chief and ACH Site Chief:
Dr. Frankie O.G. Fraulin

Pediatric Surgery Division Heads

- **Dentistry:** Dr. Marie-Claude Cholette
- **General Surgery:** Dr. Mary Brindle
- **Gynecology:** Dr. Phillipa Brain
- **Neurosurgery:** Dr. Walter Hader
- **Ophthalmology:** Dr. William Astle
- **Orthopedic Surgery:** Dr. Dave Parsons
- **Otolaryngology:** Dr. Derek Drummond
- **Plastic Surgery:** Dr. Donald McPhalen
- **Urology:** Dr. Anthony Cook

OVERVIEW AND HIGHLIGHTS

This fiscal year saw a “Changing of the Guard” as Dr. Hyndman completed his term as Section Chief of Pediatric Surgery. He led during a period of significant growth in Pediatric Surgery in Calgary. There was an increase in the numbers of Pediatric Surgeons and there was an even greater increase in the number of patients seen at the Alberta Children’s Hospital. In 2010, the pediatric population had already exceeded the 2020 projection by over 13,000 children (4.2 % greater than 2020 projection). Inpatient visits to the hospital in 2013-14 (7834) were 15.8% higher than in 2007-08 (6762). The entire hospital has been struggling with overcapacity issues as the population of Calgary continues to outgrow previous predictions. With this increased use, the “demand” for the operating room has also increased, although the “capacity”, or room to do more operations, has not changed over the last 5 years. Dr. Hyndman had a calming influence as our leader and he was well respected by all groups – surgeons,



Dr. Frankie Fraulin, Paediatric Section Chief

anesthesiologists, nursing, and management. He was able to balance the needs of patients with the availability of the operating room. He served our section and the hospital in a tremendous way. Thank you, Bill!

Our section has 9 divisions and 30 full time members. There are also community members that have their offices off site and often do a significant amount of adult work as well. Most members of the Section of Pediatric Surgery have cross appointments in their Royal College Specialty in the adult world. They are all involved in residency training programs in those specialties as well as committees and research in their respective areas. We also have Fellows in 4 of our divisions. Despite being separated by their different specialties, our members

are united by the common goal of caring for children. They are passionate about what they do and I am very pleased to have been selected to lead them.

As you read below, you will see that our members are active in clinical areas, education and research. The struggles for each division are very similar – difficulty keeping up with the clinical load with no new resources, the need for more manpower, and the need for more OR time. The lack of an urgent room at ACH affects many divisions. We are looking at options to manage the workload – use of the induction room with the acute pain service team, use of the minor surgery clinic, and developing pediatric surgical clinics at the new South Health Campus. Despite these challenges, the future looks bright for Pediatric Surgery in Calgary. Our members are leaders in their field and I know that they will continue to be successful. Let's read a bit about their accomplishments and highlights!

Frankie Fraulin

DIVISION OF PEDIATRIC DENTISTRY

Division Structure and Organization

Interim Division Head and Clinical Director,
ACH Dental Clinic: Dr. Marie-Claude Cholette

Members

- 17 Pediatric Dentists in Calgary, 14 have AHS clinical privileges
- 2 Hospital Based Pediatric Dentists: Dr. Cholette and Dr. Christine Bell
- 12 Community Based Pediatric Dentists: Drs. Robert Barsky, Sarah Hulland, J. Bradley Krusky, Orest Pilopowicz, Warren Loeppky, Farida Saher, Kari Stein, Sandra Schwann, Timothy Seto, Shirin Sheiny, Michele Thal and Rory Vinsky

Current Committees

Dr. Marie-Claude Cholette

- Zone Division Chief and Director ACH Dental Clinic

- Member ACH O.R. Committee
- Member ACH Pediatric Surgery Executive Committee

Examiner, Royal College of Dentists of Canada
Dr. Christine Bell

- Member of the Zone Dental CE Committee

Dr. Kari Badwi

- Children's tooth fairy foundation board member

Dr. Robert Barsky

- Examiner for the Royal College of Dentists of Canada
- Member of the ADA&C Hospital Committee.
- President, Canadian Dental Specialist Association (CDSA)
- Board Member CDSA for the Canadian Academy of Pediatric Dentists

Dr. Sarah Hulland

- President of Alberta Academy of Pediatric Dentistry
- Alberta representative to the Western Society of Pediatric Dentistry (WSPD)
- Director of the Oral Health initiative for the Calgary Backpack Program through the CBE
- Chair of the Sponsorship Committee - Calgary and District Dental Society

Dr. Bradley Krusky

- Executive Director of Dentistry For All

Dr. Warren Loeppky

- Examiner, Royal College of Dentists of Canada
- Executive Committee, Canadian Academy of Pediatric Dentistry
- Immediate Past President, Canadian Academy of Pediatric Dentistry
- Expert Panel of Reviewers and Advisors, Journal of The Canadian Dental Association

Dr. Farida Saher

- President of the Alberta Academy of Pediatric Dentists
- President Elect, Calgary and District Dental Society

Dr. Sandra Schwann

- Secretary/Treasurer, Alberta Academy of Pediatric Dentistry

Programs

The outpatient pediatric dental clinic at the Alberta Children's Hospital offers care to infants, children, and

adolescents who present unique dental/oral challenges, behavioral issues and/or more complex special care needs. Treatment modalities include communicative behavior guidance/ non-pharmacological behavior modification, minimal/moderate oral sedation or general anesthesia in the Alberta Children's Hospital operating room. Community pediatric dentists with privileges also provide dental care for children under general anesthesia at AHS contracted Non-Hospital Surgical Facilities and participate in after-hour call services.

ACH Dental Clinic 2013-2014 Workforce (2.2 FTE):

- Dr. Christine Bell (1.0 FTE).
- Dr. Marie-Claude Cholette (0.8 FTE)
- Casuals:
 - Dr. Sarah Hulland (0.1 FTE)
 - Farida Saher (0.1 FTE) - March 2014
 - Dr. Tim Seto (0.1 FTE)
 - Dr. Michele Thal (0.1 FTE) - Maternity leave
- Staff orthodontist: Dr. Darrell Kemp (1/2 day q 2 months)
- Staff Oral & Maxillofacial Surgeon: Dr. Miller Smith (1/2 day q 2 months)

Cleft Palate Clinic: Dental Consultants

- Orthodontists: Drs. Michael Bindman and Tarun Mehra
- Oral & Maxillofacial Surgeons: Drs. Doug Vincelli and Miller Smith
- Pediatric Dentists: Drs. Christine Bell, Marie-Claude Cholette and Sarah Hulland

Accomplishments and Highlights

Clinical

- ACH Dental Clinic: comprehensive primary care
- Dental specialty multi-disciplinary clinic: Orthodontics, oral & maxillofacial surgery and pediatric dentistry
- New in 2013: in-hospital delivery VPI speech appliance
- The ACH Dental Clinic continues to offer nasoalveolar molding (NAM) therapy for babies

with cleft lip and palate deformities (2005- present).

- Accreditation by the Commission on Dental Accreditation of Canada (CDAC).
- The AHS Dentist Compensation Review was completed in March 2014. New compensation grid was introduced for all AHS employed Zone general dentists and dental specialists.

Education

- The ACH staff pediatric dentists continue to welcome FMC General Practice Residency (GPR) residents for 4 weeks per year and Family Medicine, Pediatric Residents and University of Alberta Dental students as requested on a weekly basis. They also participate in half-day academic teaching to Family Medicine and Pediatric Residents.

Research

- Dr. Cholette is part of the Canadian Dental Sleep Apnea Network and is collaborating on a research project: "Incidence of Altered Craniofacial Morphology and Malocclusion in Children and Youth with Obstructive Sleep Apnea". [SickKids Foundation New Investigator Grant program (NI14-012)]

Challenges, Workforce planning

The greatest challenge continues to be the Division's inability to hire a third full time pediatric dentist position for the ACH Dental Clinic due to lack of global funding for our service. There is an acute need to recruit a 1.0 FTE Pediatric dentist in 2014-2015. The ACH Dental Clinic is unable to maintain self-sufficiency caring for the most compromised, challenging and vulnerable children.

Our hospital-based dental service receives fee for services for uninsured dental services provided. The Clinic must however accept significantly reduced fees for patients covered by provincial Social Services, Child Health Benefits and Indian Affairs. The Hospital Dentists of Alberta have made recommendations to the ADA&C to support further negotiation with ADSC for an increase in fees.

The major consequences with lack of funding for adequate staffing for our service are tremendous pressure put on current clinic staff, increased wait times (longest ever) and inability to deliver optimal care within our target times.

At the community level:

The limited AHS Non-Hospital Surgical Facility funding to support the delivery of dental treatment under general anesthesia by a greater number of community-based Pediatric Dentists is restricting recruitment of much needed community-based pediatric dentists.

Future Directions and Initiatives

- Recruitment of 3rd full-time hospital-based pediatric dentist
- Reduction of wait times at ACH Dental Clinic.
- Development of a one-year post-graduate Pediatric Dentistry residency program (GPR or Fellowship)
- Possible development of other pediatric dentistry services including:
 - Comprehensive Orthodontic Clinic for Special Needs patients
 - Saliva/Drooling Clinic

DIVISION OF PEDIATRIC GENERAL SURGERY

Division Structure and Organization

Division Head- Dr. Mary Brindle (also Associate Head, Department of Surgery)

Members

- Dr. Paul Beaudry
- Dr. Robin Eccles
- Dr. Steve Lopushinsky (Associate Residency Program Director)
- Dr. Andrew Wong (Residency Program Director)

Current Committees

Division members sit on countless committees locally, nationally and internationally.

Locally, our service has representation and leadership in Clinical Care Committees with representation on the ACH mortality committee as well as the complex patient care group (Dr. Eccles), trauma quality committee (Dr. Lopushinsky), the Alternate Level of Care Committee and the Hygiene Committee (Dr. Brindle-co-chair).

Nationally and internationally, we are members of many organizations including the Children's Oncology Group, American Pediatric Surgery Association, Canadian

Association of Pediatric Surgery and Pacific Association of Pediatric Surgeons among many others. Of particular note, this year, Dr. Eccles was host of the international Pacific Association of Pediatric Surgeons meeting in Banff, which had record attendance!

Accomplishments and Highlights

Clinical

Efficient use of resources and optimal delivery of quality care to improve patient outcomes has been a recent, strong focus of the division with creation of care pathways in the fields of oncology (Beaudry), complex medical patients and appendicitis (Eccles), Trauma (Lopushinsky), Complex neonatal surgery (Brindle), Intestinal rehabilitation (Brindle) and Anorectal dysfunction (Lopushinsky and Wong)

Our Service has also helped to develop and run the ECLS/ECMO Program at ACH with leadership in program development and education (Brindle and Lopushinsky)

Education

- UME Multiple members of the group have received The Associate Dean's Letter of Excellence and Distinguished Service Awards (Wong, Lopushinsky and Brindle) with Dr. Lopushinsky and Wong receiving multiple awards for their contributions in

many areas of medical education. Dr. Lopushinsky has been placed on the UME teaching Honour Roll and is a Master Teacher.

- PGME: Multiple educational sessions including a formative and summative series of exams are run by Dr. Eccles and account for the reputation of the section for excellence in the area of resident education. This is in addition to resident-run educational sessions and half-day lectures.
- Fellows: Dr. Wong has created, and is piloting, a Competency Based Medical Education Training Program which is to act as a blueprint for Canadian Pediatric Surgery Education. Dr. Lopushinsky has developed a Pediatric Surgery Boot-camp; this innovative national program is to be implemented this July. Dr. Lopushinsky has been working to evaluate the innovative educational program developed for ECLS/ECMO at ACH - the results of which will be presented at a national conference in the fall.

Research

- Our division has had multiple publications between May 2013 and May 2014 as well as national and international presentations
- Dr. Beaudry runs a lab and acts as supervisor to graduate students. This year he is the recipient of a prestigious CRIO grant (250,000) and a recipient of the Peleton65/James Fund (60,000); both grants support his research in immunotherapy and oncolytic virotherapy. He is preparing to undertake a sabbatical to further his work in this area. Dr. Beaudry has presented his research in North America and Europe
- Dr. Brindle is finishing up work on a recent CIHR Grant for complex neonatal surgical conditions. She has published 6 papers in peer reviewed Journals in the last year and has had a paper accepted for publication in the high impact journal Pediatrics. She continues to work in a leadership role on international research collaborations and acts as a co-investigator in national randomized controlled trials. She acts as a co-supervisor for Sarah Lai, a CIP Master's Student in Pediatric Surgery. In this next year, Dr. Brindle will be undertaking research

in quality improvement initiatives in partnership with The Harvard School of Public Health.

- Dr. Lopushinsky acts as a supervisor and mentor for our current fellow as well as graduate students pursuing research in education. His research has been presented at National and International Forums. He currently has a meta-analysis investigating the impact of surgical boot-camps pending publication in the Journal of Graduate Medical Education.
- Resident trainees supervised by Dr. Lopushinsky and Brindle have received awards for their research work.

Challenges, Workforce Planning

We recently lost a valuable member of our division, Dr. David Sigalet who moved to Qatar and with whom we continue to collaborate in research. The increasing research and educational commitments of our group, as well as the increase in the complexity of our surgical patients, continues to be a strain on our division. We need to replace Dr. Sigalet and we would likely benefit from expanding our workforce, as another member is likely to retire in the next 2 years. Our goals are to maintain a balance between the clinical, research and educational priorities of our division as well as providing a balance of experience to provide ongoing mentorship and development of the division.

A locum, Dr. Anna Shawyer, will be covering Dr. Beaudry's clinical work while he is away on sabbatical. She has an interest in clinical research which she will develop while at ACH.

Future Directions and Initiatives

We plan to continue quality Improvement projects in surgery including care pathways, novel structural changes, and I.T. solutions.

We are showing educational leadership in Canada with the development of flagship training programs

in competency based education in pediatric surgery as well as a surgical boot-camp in surgery. Both of these programs are anticipated to have potential impact on a national and international level.

A strong focus this year will be on achieving research funding, as well as publishing completed research in high impact journals. In addition, we aim to provide leadership in international research collaborations including trial development.

DIVISION OF PEDIATRIC GYNECOLOGY

Division Head: Dr. Philippa Brain

Members

- Dr. Jaelene Mannerfeldt

DIVISION OF PEDIATRIC NEUROSURGERY

Division Structure and Organization

Division Head – Dr. Walter Hader

Members

- Dr. Clare Gallagher
- Dr. Mark Hamilton

Dr Mark Hamilton, after two decades of exemplary service to paediatric neurosurgery at the Alberta Children's Hospital, is transitioning to full time adult practice.

Accomplishments and Highlights

Clinical

- Prospective quality assurance protocols for shunt insertions instituted last year have resulted in a dramatic reduction in CSF infection. Many thanks go out to the OR staff who have been diligent in helping to follow new protocols for infection control.

- Dr. Hamilton has devoted great energy to the development of a thriving adult Hydrocephalus clinic and an international adult Hydrocephalus network.

Education

The Pediatric Neurosurgery team continues to teach fellows each year. The quality is exemplified by offering a locum to our current fellow, Dr. Mahmood Benour, to start in June 2014, filling in for Dr. Mark Hamilton. Dr. Benour will eventually be relocating to Sidra Hospital in Doha, Qatar upon completion of his one year appointment.

Research

- Dr. Hamilton continues to participate extensively in Clinical Neuro-Oncology research.
- Dr. Walter Hader was promoted to Associate Professor in 2014.
- Dr Gallagher continues to participate in a multi-centre study with colleagues in Cambridge assessing cerebral energy metabolism in the injured and uninjured brain. Development of a local 3T MR spectroscopy program as part of the research platform is planned for 2014.

Challenges, Workforce Planning

- Clinical activity has increased dramatically in the last year and the trend continues in 2014. Cases come up suddenly and the lack of an urgent room leaves us searching for OR time.
- Recruitment for a full time academic paediatric neurosurgeon is ongoing for July 2015.

DIVISION OPHTHALMOLOGY

PEDIATRIC

Birthmark Team who assess and treat children with various lesions that could affect a child's vision. These children come from Southern Alberta, British Columbia and Saskatchewan.

Division Structure and Organization

Division Head: Dr. William F. Astle

Members

Onsite:

- Dr. Linda Cooper
- Dr. Ken Romanchuk

Offsite:

- Dr. Michael Ashenhurst
- Dr. Anna Ells
- Dr. Fermida Kherani
- Dr. Vivian Hill
- Dr. Carolyn Skov

Current Committees

Dr. William F Astle

- Working with international committees such as The International Joint Commission on Allied Health Personnel in Ophthalmology and The Colin Glassco Foundation
- Director – Pediatric Ophthalmology and Strabismus Fellowship Program

Dr. Ken Romanchuk

- Chair- Ophthalmology recruitment & retention committee
- Credentials committee, Royal College of Physicians & surgeons of Canada.

Dr. Linda L. Cooper

- Residency Program Director, Section of Ophthalmology
- Clinical & surgical teaching of ophthalmology residents as well as sitting on the Resident Selection Committee.

Accomplishments and Highlights

Clinical

- 13,272 visits to ophthalmologists in 2013.
- Pediatric Ophthalmology is part of the Vascular

- Pediatric Ophthalmology, as a team, evaluate all at-risk children for Retinopathy of Prematurity at all NICU's in Calgary.
- The Vision clinic has numerous specialty clinics including Vascular Birthmark evaluations, ROP follow-up, and Ophthalmic plastics clinics, to augment the more general on-going Ophthalmologic and Optometric clinics
- A new Vitrectomy / Cataract machine has been purchased for the OR, and a new Retcam for the Vision Clinic has recently been approved. These two new instruments will help assess and treat our patients more effectively.
- Dr Astle is part of a travelling low vision clinic team that evaluates and treats children with low vision needs throughout southern Alberta, on a quarterly basis.

Education

- Residents
 - Ongoing teaching of 5 ophthalmology residents
 - Ongoing shadowing by pediatric residents
- Fellows
 - None at this time – One scheduled to start July 1, 2014
- Medical Students
 - Ongoing electives of medical students

Research

Dr Astle:

- Ongoing research with the Pediatric Eye Disease Investigator Group (Multicenter amblyopia and strabismus studies)
- Pediatric Cataract Surgery and Intraocular lenses
- Refractive surgery in children
- Pediatric Glaucoma Surgery

Dr Romanchuk:

- Corneal Confocal Microscopy. Juvenile Diabetes Research

- Canadian Pediatric Acute Demyelinating disease Study
- Is peripheral neuropathy occurring in association with idiopathic Parkinson's Disease or an Iatrogenic Complication?
- Ongoing research with the Pediatric Eye Disease Investigator Group
- Dr. Cooper:
- Ongoing research with the Pediatric Eye Disease Investigator Group
- Corneal Confocal Microscopy. Juvenile Diabetes Research.

Strategies to overcome these issues in the long term deserve further discussion.

DIVISION OF PEDIATRIC ORTHOPEDICS

Division Structure and Organization

Division Head – Dr. David Parsons

Members

- Dr. Carmen Brauer
- Dr. Fabio Ferri-de-Barros
- Dr. Simon Goldstein
- Dr. James Harder
- Dr. Elaine Joughin
- Dr. Gerhard Kiefer

DIVISION OF PEDIATRIC OTOLARYNGOLOGY

Division Structure and Organization

Division Head – Dr. Derek Drummond

Members :

On site

- Dr. James Brookes
- Dr. Warren Yunker

Off site

- Dr. Jason Chow
- Dr. Monica Hoy
- Dr. Ian Huang
- Dr. Anita Hui
- Dr. Beth Lange
- Dr. Phil Park
- Dr. Bud Shandro

Dr. Monica Hoy is the newest addition to the Pediatric Otolaryngology team. She is a recent graduate from the Calgary program and is presently obtaining a Master's degree in Education from the University of Calgary.

Challenges, Workforce Planning

- Access for urgent referrals and in-patient consults remains an on-going challenge, with wait times for non-urgent referrals longer than one year.
- Access to the OR remains a challenge as Pediatric Ophthalmologists could use more OR time. A fourth full time Pediatric Ophthalmologist is also required, with corresponding OR time.
- Our Pediatric Ophthalmology staff is challenged by the increasingly large numbers of ROP (retinopathy of prematurity) evaluations required at all NICU sites in the city – we are short of manpower to adequately cover all hospital sites. Retcams at all NICU hospital sites would help with our manpower issues and would allow for tele ROP evaluations, thus reducing manpower strains.
- In addition, a Full-Time Nurse Coordinator for ROP and other urgent consults would be helpful.

Future Directions and Initiatives

- Ophthalmology is technology driven and is a fast paced, constantly changing field. Our ability to adapt and change quickly, with improved surgical instrumentation and surgical techniques, is hampered by a system that does not keep up with the constant advances in our specialty. This limits our ability to deliver the most up-to-date surgical care that our patients/families deserve and desire.

*Current Committees***Dr. Yunker**

- Committee Member, Review Committee for University of Calgary, Department of Surgery, Surgery Prizes and the Surgeon Scientist Program, 2013
- Vice-President Alberta Children's Hospital Medical Staff Association, 2014 – 2015
- Board member – Alberta Society of Otolaryngology, 2013 – present
- Alberta Society of Otolaryngology Representative to the Alberta Medical Association, 2013 – present
- Reviewer for the Canadian Journal of Medical Education, 2013

Accomplishments and Highlights*Clinical*

- Dr. Drummond leads several clinics including Pediatric Voice Clinic, Pediatric Dysphagia Clinic and Pediatric Tracheostomy Clinic.
- Dr. Brookes leads the Pediatric Hearing Clinic at ACH.

Teaching

- Our staff are all involved in the ENT Residency training program at the U of C, which involves residents rotating through ACH, teaching at academic half-day, and participating in journal club and weekly rounds. We also take elective Residents from the Family Practice and Pediatric programs. We also routinely teach medical students in our ENT clinics and operating rooms.
- Dr. Drummond won the Teacher of the Year award for 2013- 2014, as voted on by the ENT Residents.
- Dr. Brookes teaches at the annual ENT update course in Halifax.
- Dr. Yunker is the Family Medicine Resident Elective Co-ordinator.

Research

- Dr. Drummond is The Otolaryngology Research Director for The University of Calgary.
- Dr. Yunker

Grants

- Characterization of the Pediatric Upper Airway Microbiome
- 2012 University of Calgary, Faculty of Medicine, Department of Surgery Research Prize
- Principle Investigator \$75,000
- Overnight Oximetry in Children Undergoing Adenotonsillectomy: Does It Predict Peri-Operative Complications?
- 2010 Alberta Children's Hospital Foundation Grant Co-Investigator \$22,100

In Review

- Thornton CS, Andisi VF, Moore R, Sakamaki R, Nguyen BD, McKeon S, Davidson C, Surette MG, Schryvers AB, Yunker WK. Characterization of the pediatric adenoid microbiome: Efficacy of tissue swab versus biopsy. *International Journal of Pediatric Otorhinolaryngology*. Submitted June 18, 2014. Manuscript number IJPORL-D-14-00475.
- Liu CC, Yunker WK. 2014. The Role of Bone Conduction Hearing Aids in Congenital Unilateral and Bilateral Conductive Hearing Loss. *OA Otolaryngology*. Submitted January 19, 2014. Manuscript number 1390193023.
- Dautremont J, Yunker WK, Bosch JD. Intra-lesional cidofovir injection in recurrent laryngeal papillomatosis. *International Journal of Otolaryngology*. Submitted March 3, 2014. Manuscript number 364617.

DIVISION OF PEDIATRIC PLASTIC SURGERY**Division Structure and Organization**

Division Head: Dr. Donald McPhalen

Members

- Dr. Jocelyn Dilay
- Dr. Ryan Frank
- Dr. Frankie Fraulin (Section Chief of Pediatric Surgery; ACH Site Chief of Surgery)
- Dr. A. Robertson Harrop (Section Chief of Plastic Surgery)

Current Committees

- Dr. Dilay was part of the 2013 Canadian Society of Plastic Surgery organizing committee for the Calgary meeting.
- Dr. Fraulin continues to serve as the Surgical Undergraduate Education Committee representative for Plastic Surgery and as a member of the Plastic Surgery Executive Committee. He is also the Secretary Treasurer of the Alberta Society of Plastic Surgeons. As site chief, he sits on multiple committees including chairing the ACH OR committee and member of the ACH Site Leadership committee, ACH Quality Assurance Committee, the Zone Pediatric Executive Committee, the Surgical Executive committee and the Surgical Services Operations Committee.
- Dr. McPhalen is the resident ombudsman for the Section of Plastic Surgery.
- Dr. Harrop is the Chief of the Section of Plastic Surgery. He is also a member of the Canadian Society of Plastic Surgery Education Foundation and served as the editor of the grant review panel. As Section Head of Plastic Surgery for the Calgary Zone, he chairs the Plastic Surgery Executive Committee and is a member of multiple committees including the Surgical Executive Committee and the Residency Training Committee.
- Dr. Ryan Frank is our new ACH representative on the Residency Training Committee and has taken on the challenge of managing the medical students and residents that rotate through ACH, coordinating practice exams and evaluations. Dr. Frank is also the residency program Journal club coordinator.
- Complex Upper Extremity Clinic – Dr. Rob Harrop and Dr. Carmen Brauer
- Brachial Plexus Clinic – Dr. Rob Harrop – Director
- Craniofacial Clinic – Dr. Ryan Frank – Director
- Microtia Clinic – Dr. Ryan Frank – Director
- In January 2014, Drs. Fraulin and McPhalen travelled to Peru for their third burn mission with Project Outreach helping children with burn scars. Dr. McPhalen also travelled to Kabul, Afghanistan in August 2013 for a site visit with members of the Alberta government. Dr. McPhalen also serves as the Medical Director of the Kananaskis Public Safety Program and a member of the Canadian Mountain Parks Medical Council.

Teaching

- The Pediatric Plastic Surgery program saw a steady increase in the number of medical students, off service residents and plastic surgery residents rotating through our service.
- UME: Dr. McPhalen is a Master Teacher and was involved in 180+ hours of teaching in the undergrad curriculum and received teaching awards in Communications, Integrative and Course 3.
- PGME: All staff are involved in teaching in the Plastic Surgery Residency Training Program.
- Drs. Fraulin and McPhalen taught in the PGY-1 surgical skills course.
- Dr. Rob Harrop continues teaching in the PGY-1 critical thinking course as well as in the Spine and Peripheral Nerve Course. Dr. Harrop also presented at the AAPS workshop in Aspen and the AAPS meeting in New Orleans.
- Dr. Ryan Frank taught at the Plastic Surgery National Review Course in Feb 2014.
- Dr. Don McPhalen continued as an examiner for the Royal College.

Accomplishments and Highlights*Clinical*

- Plastic Surgery Clinic – continues to see increasing volumes of both emergency and elective referrals.
- Cleft Palate Clinic – Dr. D. McPhalen – Director ; there has also been an increase in babies born with cleft lip and palate. The clinic has seen the addition of another Oral and Maxillofacial surgeon.
- Vascular Birthmark Clinic – Dr. F. Fraulin – Director

Research

- Staff are involved in research projects with medical students and residents.
- Drs. Harrop and McPhalen oversee PhD candidate J. Larson. Dr. Harrop also served as an examiner for the PhD defense of B. Singh.

Challenges, Workforce Planning

Our main challenge as a section continues to be our increasing clinical workload. This is causing a strain on resources in our clinic areas and has increased wait lists for our referrals. For example we have had over 50 new cleft babies referred this year – over twice our numbers from 10 years ago, with no increase in Cleft Clinic space time or staffing over the past 10 years.

There is also an increasing number of urgent referrals and their assessment can be delayed, especially on weekends. At ACH (unlike our adult sites) we are unable to see urgent referrals on weekends since Emergency cannot accommodate these cases and we have no access to clinic or minor surgery space on weekends. This causes further strain on weekday clinics and unnecessarily delays urgent patient assessments.

We are looking to add a new Pediatric Plastic Surgeon in the next 5 years and possibly 2 more members over the next 10 years.

DIVISION OF PEDIATRIC UROLOGY

Division Structure and Organization

Division Head - Dr. Anthony Cook

Members

- Dr. Bryce Weber
- Dr. William Hyndman

Accomplishments and Highlights

Clinical

Drs. Hyndman, Cook and Weber assess and treat a number of tertiary and quaternary urological conditions for the children of Southern Alberta, Saskatchewan and British Columbia. The recent addition of the Pediatric Urology Clinic at the South Health Campus has enabled more efficient and effective patient assessments for children living in the southern part of the city, as well as southern Alberta.

Teaching

The Pediatric Urology Division was the first subspecialty division within Urology to offer a post-graduate Fellowship training program. Our current Fellow, Dr. Carolina Fermin-Risso, continues to excel in her Fellowship, both clinically and from a research perspective.

Research

From the research perspective, the Pediatric Urology Division is the first surgical division to be involved with a placebo-controlled randomized surgical trial. Patients are being actively recruited for this randomized trial assessing the efficacy of intravesical Botulinum Toxin for neurogenic and overactive bladder. Data acquisition is also ongoing for a number of other trials, including vesicoureteral reflux and renal trauma.

Future Directions and Initiatives

Our plans for the next year are to continue the efficient and timely care of children with urological needs across Southern Alberta, Saskatchewan and British Columbia, as well as expand our research focus, and continue to present our findings at both national and international meetings.

Sincerely,

F. Fraulin
Frankie O.G. Fraulin MD FRCSC

Section of Plastic Surgery

SECTION STRUCTURE AND ORGANIZATION

Current Committees

Plastic Surgery Executive

- Section Head – Rob Harrop
- Resident Training Program Director
David McKenzie
- Research Director – Claire Temple-Oberle
- CME Director – Earl Campbell
- Undergraduate Medicine Director –
Frankie Fraulin
- Rounds Coordinator – Christiaan Schrag
- FMC Site Chief – William de Haas
- RGH Site Chief – Mark Haugrud
- PLC Site Chief – Alan Lin
- ACH Site Chief – Don McPhalen
- SHC Site Chief – Ramon Grover
- Burn Director – Duncan Nickerson

Plastic Surgery Resident Training Committee

- David McKenzie (Program Director)
- Duncan Nickerson
- Claire Temple-Oberle
- Rob Harrop
- Frankie Fraulin
- Christiaan Schrag
- Alan Lin
- Paul Whidden
- Ramon Grover
- Resident Representatives

Membership

The Section of Plastic Surgery currently has 26 members; one member (Dr Claire Temple-Oberle) is a Geographic Full-time faculty with cross-appointment to Oncology.



Dr. Rob Harrop, Plastic Surgery Section Chief

ACCOMPLISHMENTS AND HIGHLIGHTS

Clinical Service

- **Dr. C. Shrag** continues to work on the development of a Hand and Face Composite Tissue Transplantation Program; Institutional ethics approval has been obtained to begin to collect data on potential recipients for face and hand transplants; cadaver simulations for hand and face transplantation have been carried out.
- **Dr. C. Temple-Oberle** hosted the Alberta Breast Reconstruction Awareness Day on October 16, 2013. Over 200 patients considering breast reconstruction attended the event where they had the opportunity to hear formal presentations, and meet individually and in groups with others who had been through breast

reconstruction, partners of reconstruction patients and surgeons performing reconstruction. A formal Quality Improvement session was held following the event to suggest improvements for future events.

- New additions to our faculty are **Dr. Ramon Grover** and **Dr. Fred Loiselle**, both located at the South Health Campus. Dr. Grover completed his plastic surgery residency at the University of Alberta and craniomaxillofacial fellowships at the University of Toronto, Mexico City and South Africa. He practices at the SHC. Dr. Loiselle completed his plastic surgery training at the University of Calgary and a fellowship in hand and upper extremity surgery at the University of British Columbia.

Education

Residents

- 2 residents are accepted to the plastic surgery training program each year.
- **Drs. Kim Sass and Justin Yeung** successfully completed their FRCSC specialty examinations in plastic surgery. Dr. Sass is embarking on a craniofacial plastic surgery fellowship in Australia. Dr. Yeung is beginning a hand surgery fellowship in New York
- **Dr. C. Schrag**, with the assistance of other plastic surgery faculty again oversaw the Microsurgical Skills Simulation Course on April 15-19, 2013 for the plastic surgery residents
- **Drs. C. Schrag and R. Harrop** (in collaboration with faculty from Clinical Neurosciences) served with other faculty in the Spine and Peripheral Nerve Course held on January 7, 2014
- **Dr. R. Harrop** served as faculty for the Faculty of Medicine Clinical Investigator Program lecture series
- **Plastic Surgery Resident Research Day** held on November 15, 2013; Dr Peter Neligan from the University of Washington in Seattle served as guest judge and Birdsell lecturer

Fellows/Graduate Students

- **Drs. D. McPhalen and R. Harrop** continue to serve on the PhD Committee for Ms. Jacinda Larsen whose research is entitled “Analysis of Midfacial Shape and Craniofacial Growth Patterns Following Cleft Lip and Palate Reparative Surgery”
- **Dr. C. Temple-Oberle** has established an oncologic reconstruction fellowship; her first fellow has been Dr. Aaron Grant who trained in plastic surgery at Western University

Medical Students

- **Dr. D. McPhalen** is an active member of the University of Calgary Master Teacher Program
- **Dr. F. Fraulin** was on the “Hellbender” Honour Role as chosen by the U of C Medicine Class of 2014

National and International Representation

- **Dr. E. Campbell** is presently the Chairman of the Membership Committee and Chairman of the Accreditation Committee for the American Society of Plastic Surgeons, serves as the President of the Alberta Society of Plastic Surgeons, serves on the Public Affairs Committee for the Royal College of Physicians and Surgeons of Canada, and served as the Chairman of the Local Host Committee for the Canadian Society of Plastic Surgeons 2013 Annual Meeting
- **Dr. Alan Lin** serves presently as the Chairman of the Joint Alberta Medical Association/Workers Compensation Board Contract Negotiation Team
- **Dr. G. Waslen** is presently the President of the Canadian Society of Aesthetic Plastic Surgeons
- **Dr. D. Nickerson** is serving as Co-Chairman of the Royal College of Physicians and Surgeons Plastic Surgery Exam Development Committee and is a lecturer for the Canadian Forces Health Services Advanced Military Trauma Resuscitation Program
- **Drs. D. Nickerson and D. McPhalen** serve as Oral Examiners for the Royal College of Physicians and Surgeons Plastic Surgery Exam Committee
- **Dr. D. McPhalen** is Medical Director for the Kananaskis Public Safety and Mountain Rescue Program

- **Dr. F. Fraulin** served as faculty for the 2013 Canadian Plastic Surgery Resident Review Course and serves as Secretary-Treasurer of the Alberta Society of Plastic Surgeons
- **Drs. F. Fraulin** and **D. McPhalen** continue to participate in the “Project Outreach International Charity Program” an annual mission which provides burn reconstruction surgery to children in an underserved area in Peru. The 4th year plastic surgery residents from the University of Calgary accompanied the team this year
- **Dr. C. Schrag** participated in a medical mission to Zimbabwe
- **Dr. R. Harrop** serves as Secretary-Treasurer for the Canadian Society of Plastic Surgeons Education Foundation and head of the Membership Committee for the Canadian Society of Plastic Surgeons
- Providing resident education in the area of aesthetic plastic surgery remains challenging for a variety of reasons. **Drs. M. Haugrud, P. Whidden, D. McKenzie, R. Frank** and **R. Harrop** continue to explore the concept of developing a Resident Aesthetic Surgery Clinic whereby residents, under the supervision of a staff plastic surgeon, would assess potential patients, participate in their surgery and manage their postoperative care.
- A funding uplift for oncologic surgery is anticipated. We expect that this will in turn result in an increased need for oncologic reconstructive services from plastic surgeons at all of the acute care adult sites.

RESEARCH

Grants

- **Dr. C. Temple-Oberle** holds a research operating grant from the Canadian Breast Cancer Foundation - Ontario Chapter for the study “The use of human acellular dermal matrix in one-stage implant breast reconstruction: a multicentre, randomized, controlled trial (\$58,000 - 2012-2015)

CHALLENGES

- Utilization of time in the Main Operating room at the SHC has been incomplete. We believe this is largely due to lack of awareness by referring doctors about the presence of the plastic surgery service at the SHC. We are implementing strategies to improve this awareness.
- Increasing the number of academic plastic surgery faculty is a high priority for the Section, however this currently remains difficult due to unavailability of new Geographic Full-Time positions or Alternate Relationship Plans.

WORKFORCE PLANNING

Future Needs

- We plan to begin recruitment of an additional plastic surgeon at the FMC with additional expertise in the full spectrum of oncologic reconstruction.

Goals and Strategies

- We continue to look at various means of increasing the number of academic plastic surgery faculty
- We continue to monitor the retirement plans of our senior members and plan to recruit accordingly to replace these members

QUALITY ASSURANCE, QUALITY IMPROVEMENT, AND INNOVATION

- A variety of clinical databases have been established to review delivery of care to certain large subsets of patients. These include:
 - The ACH Vascular Birthmark Clinic database
 - The Head and Neck Cancer Database (in collaboration with ENT)
 - The Burn Database
- A Breast Reconstruction Database is in the development phase

- A standardized clinical care pathway has been established in collaboration with our ENT colleagues for patients undergoing major head and neck cancer resection and immediate reconstruction. This pathway standardizes the postoperative care of these patients and has reduced their rate of complications and length of stay in hospital.
- Videoconferencing of plastic surgery and hand surgery academic rounds to all of the acute care sites has been introduced. This has resulted in greater participation staff and resident participation in academic activities.
- In collaboration with our oncologic colleagues we continue to work on more efficient processes for referral of oncologic patients requiring immediate reconstruction following cancer resection.

FUTURE DIRECTIONS AND INITIATIVES

The Section of Plastic Surgery provides excellence in clinical care across the entire spectrum of plastic surgery, excellence in resident education and exhibits excellent collegiality amongst our members and members of other surgical specialties. We recognize however the need to increase our academic profile nationally and internationally. In this regards, and in the face of continually increasing volumes of complex patients, we feel that it is essential to increase our complement of academic plastic surgery faculty and also to examine novel models of clinical care which in turn would protect our members' abilities to pursue their academic interests in a more predictable manner.

Section of Surgical Oncology

SECTION HEAD

J. Gregory McKinnon MD FRCSC
Professor of Surgery and Oncology

SECTION HIGHLIGHTS

Recruitment

The section is pleased to report the successful recruitment of a new general surgical oncologist to step into a role of leading breast and advanced gastrointestinal cancer. This was the culmination of a long search process with several international applicants. The new position will be appointed to the Department of Surgery with a cross-appointment to the Department of Oncology. Although this individual will be located in the Foothills Hospital we hope and expect to eventually attract full participation in the Cancer Centre. In addition, the Department of Surgery has recruited Dr. Michael Monument, a researcher and expert in soft tissue sarcoma, to begin working at the Tom Baker Cancer Centre (TBCC) in the fall of 2014. Dr. Monument is an outstanding individual who will eventually help fill the gap in sarcoma care left by the retirement of Dr. Norman Schachar.

Programs

The development of a world class program in breast cancer suffered a setback due to the cancellation of plans to develop a freestanding facility. However plans to develop a multidisciplinary unit in the new cancer center are proceeding and will hopefully lead to a national regional program in the next five to seven years.

Events

An International Symposium on Cancer Surgery Honoring Dr. Walley Temple was held in November 2013 in the TBCC. This attracted international attention

with participants from many different countries. Dr. Temple-Oberle hosted Breast Reconstruction Awareness day (BRA day) which attracted hundreds of lay and media participants to the TBCC. This will become an annual event.

The section hosted the annual Department of Surgery Retreat. The subject was new strategies to deliver cancer care and included participation of representatives from CancerControl Alberta.

STRATEGIC PLANNING

The most important strategic initiative of the section is to attract surgical leaders in cancer care to participate in the Department of Oncology and the provincial cancer control program. Constrained resources and competing interests present a challenge to this aim. Strategic planning with new resources from the new Cancer Center, along with new provincial resources, will hopefully promote this goal and ultimately bring a huge benefit to the welfare of Alberta cancer patients.

RESEARCH HIGHLIGHTS

Section members continue to be active in publishing and speaking on their various areas of clinical expertise. Dr. Temple holds several large grants to continue his work in Cancer Surgery Alberta and synoptic operative reports. An important new project in patient reported outcome was successfully completed. Dr. Quan was the recipient of a three million dollar grant to study breast cancer in young women. Dr. Dort was awarded the prestigious Janes Visiting Professorship in Surgery by the Royal College of Physicians and Surgeons of Canada. He also, along with colleagues Drs. Karl Riabowol and Don Morris, was successful in the 2014 AIHS Cancer CRIO competition.

PROGRAM

Surgical Oncology is providing leadership of the following clinical programs: breast, advanced gastrointestinal, soft tissue sarcoma, cutaneous and hepatobiliary.

The Peritoneal Surgery program remains a national leader in the provision of this treatment.

Cancer Surgery Alberta was created by Dr. Temple and the Section of Surgical Oncology and although it has expanded to a national program, its center will remain at the TBCC. There are now over 30,000 patients in the database.

Dr. Bathe is now the Provincial Tumor Group Leader for G.I. and Dr. Mack of the Provincial Sarcoma Tumor Group. Dr. Temple-Oberle assumed leadership of the Cutaneous Clinic.

U of C PROFESSORSHIP/ENDOWED CHAIRS

The section is actively fundraising for a Chair in Surgical Oncology.

AWARDS

Dr. Quan received the 2013 award for Researcher of the Year in the Department of Oncology. Dr. Mack received the award for Teacher of the Year in the Department of Surgery.

EDUCATION PROGRAMS

Training Programs:

Graduate: Dr. Lloyd Mack continues as Program Director for the Section of General Surgery.

Postgraduate: Dr. Temple assumed the role of Program Director for the Section of Surgical Oncology. The Surgical Oncology program is certified by both the

Society of Surgical Oncology as well as the Royal College. One Fellow graduated in 2014 and has taken a position at the University of Manitoba. The program remains in the international match for approved programs and continues to receive large numbers of Canadian and international applicants.

Dr. Temple-Oberle initiated a fellowship in oncologic reconstruction and successfully graduated Dr. A. Grant in June 2014. This will be an ongoing training program expanded to one year.

Dr. Arlette continues the Mohs surgery program and had a successful graduate in 2014.



*Dr. Gregory McKinnon, Surgical Oncology Section Chief
Photo provided by Dr. Gregory McKinnon*

Section of Thoracic Surgery

SECTION STRUCTURE AND ORGANIZATION

- **Current Committees:** Section meeting monthly; Quality Assurance meeting monthly; Morbidity and Mortality meeting monthly; Thoracic Surgery Residency Training Committee quarterly.
- **Programs:** Thoracic Surgery Residency Training Program (Dr S Grondin, Program Director)
- **Membership:** **Fellows-** Drs Janet Edwards, Wiley Chung; **Nurse Practitioners-** Dina Sotiropoulos, Anthony Falvi; **Staff Assistants-** Marylin Devlin, Ashley Bielisch, Carol Smith, Teresa Moseley. **Data Analyst-** Raman Sevytra. **Surgeons:** Drs Sean Grondin, Andrew Graham, Sean McFadden and Gary Gelfand
- **Fellows-** Dr Julius Poon has completed his clinical rotations and awaits his exams this fall, we are confident of his success. Dr Janet Edwards enters her senior thoracic rotations and we are very pleased to welcome Dr Wiley Chung, from Vancouver, who trained in General Surgery in Toronto. We look forward to a busy but rewarding experience for all.
- **Medical Students-** Thoracic Surgery has had the pleasure of numerous medical students over the last year. They provide a stimulating, unique and interesting educational environment for the surgeons.
- **Research-** A main focus of the research efforts from the Section under the guidance of Dr Grondin has been manpower planning and study for Thoracic Surgery in Canada.

ACCOMPLISHMENTS AND HIGHLIGHTS

- **Clinical Service:** Thoracic surgery has maintained a very high performance rate for effective use of resources achieving 94 % usage of allotted time in the OR. The group saw over 800 new consults and 2400 patient follow-ups this past year. Clinical indicators of care have remained stable despite the huge increase in patient care provided.
- **Education**
 - **Residents-** Trainees from General surgery, Ear, Nose and Throat Surgery, Pulmonary Medicine, Radiation Oncology and Trauma Surgery have all rotated through Thoracic Surgery participating in our teaching and education opportunities. This varied group of specialists has provided incredible insight and stimulus to the surgeons to continue their educational efforts, thanks. We hope the numerous seminars, small group and and practical teaching sessions in their education half days have also been helpful.



*Dr. Sean McFadden, Thoracic Surgery Section Chief
Photo provided by Nicolle Amyotte*

- **Administration-** All members of the Section are active in administrative roles the highlights of which include: Dr Gelfand is the head of the AMA Section of Thoracic Surgeons; Dr Graham has worked diligently to develop an SCM discharge summary now in use by Thoracic Surgery; Dr Grondin is active in UCMC as Co-Chair; Dr McFadden is involved with ATOP as Calgary Zone Co-Lead.
- **Goals and Strategies-** Thoracic Surgery is hopeful to meet the cancer surgery uplift targets of 90% of patients within guidelines for access to consultation and definitive surgery.
- **Impact on other departments and zonal resources-** meeting these goals will significantly impact our ward capacity shared with our pulmonary colleagues. Active planning of a Thoracic Surgery-Pulmonary Medicine program approach to care is in the preliminary stages

CHALLENGES

- **Response to Issues-** Thoracic Surgery has had a significant increase in referrals straining access to clinics and operating rooms. Specific to this Thoracic Outlet syndrome has become a very significant issue with respect to access for patients.
- **Ongoing Matters and Plan of Action-** The Section has been actively planning with administration and nursing staff how to accommodate this significant increase in care; manpower planning and allied resources included.
- **Future Risks-** recruitment and retention of surgeons without which access will suffer.

WORKFORCE PLANNING

- **Future Needs-** as outlined in the Department plan, 2 new surgeons in the next 2 years are required to maintain access levels. Succession planning requires a total of 8 surgeons in the region by 2020.

QUALITY ASSURANCE, QUALITY IMPROVEMENT, AND INNOVATION

- **General-** the section of Thoracic Surgery maintains its very active and important role in the Unit 61 Quality Assurance Committee. Monthly and Quarterly Summaries of quality indicators and access information are reviewed by the Section as available. Dr Grondin has taken on the site leadership role for quality Assurance for the FMC

FUTURE DIRECTIONS AND INITIATIVES

- Thoracic-Pulmonary Program based on Unit 61
- Alberta Thoracic Oncology Program, continued involvement and development
- E-Referral programs for TBCC and Provincial Thoracic Surgery

Section of Transplant Surgery

SECTION STRUCTURE AND ORGANIZATION

Current Committees

1. Policy and Procedure Committee
2. Multidisciplinary Transplant Organ Allocation Committee
3. Transplant Research rounds
4. Multidisciplinary Living donor Committee
5. High Risk Transplant committee
6. OR Committee

Programs

- Live Donor Program.
- Abdominal Multi-organ Transplantation Fellowship Program.

Membership

- None

ACCOMPLISHMENTS AND HIGHLIGHTS

Clinical Service

- For the 2nd year, we have achieved an increase in the number of transplants performed which proves that the previous year's increase was not due to an accumulated surgical list but rather a true enhancement in our surgical activity.
- Two highly sensitized positive cross-match transplants were successfully performed.
- We performed the first two ABO incompatible transplants and this is now an established practice.
- The number of Good Samaritan donation continues to grow and we perform local and national pair exchange Transplants.
- Successfully utilized therapeutic nephrectomy kidney from one of our recipients with co-ordination with the Department of Urology.

- This year, we started to utilize ambulatory surgery for peritoneal dialysis catheter exteriorization which releases pressure on our OR time, allowing more bookings for more complex cases, hence, saving time for patients and doctors as well as saving on our resources. This strategy also allows the service to be provided on an emergency and semi-emergency basis with very short waiting times in the order of a week.
- Dr. Yilmaz is collaborating in the establishment of a transplant program in Guyana.
- The changes introduced in the re-organization of the booking process for our non-transplant surgeries in collaboration with the Department of Nephrology has led to a sensible increase in our surgical activity and an optimal utilization of our OR time with a decrease in cancellation rate.



Dr. Anastasio Salazar, Transplant Surgery Section Chief
Photo provided by Nicolle Amyotte

Education

Residents

- Continue rotation of General surgery residents as well as nephrology residents on a regular basis.

Fellows

- Dr. Kishore Persaud, surgical fellow from Guyana, started training in December 2013.
- Dr. Al Abadi, Nephrology fellow, completed his training in February 2014.

Medical Students

- Shadow on a regular basis from the IMG Program as well as seasonal students.
- Support also for training Nurse students in the OR on a regular basis.

Research

- The three members of the section are actively involved in clinical, theoretical and basic science research projects as well as some Pharmaceutical industry- sponsored ones

CHALLENGES

Response to Issues

- Continually trying to optimize our utilization of live donors as well as kidneys for therapeutic use to compensate for the shortage on cadaver donors. At the same time, we are waiting for the implementation of non-heart-beating donation to be implemented in Calgary.

Ongoing Matters And Plan Of Action

- Pursuing to organize a group of dedicated OR staff for Transplant, Vascular access, and Peritoneal Dialysis surgeries in order to enhance the expertise of the OR staff who are involved in these cases. This will lead to a more comfortable operating room experience for everybody involved including surgeons and support staff.

Future Risks

- With the growth of population in Southern Alberta, we ambition a need to increase our materials and human resources to provide professional medical care in an expeditious and high quality fashion.

WORKFORCE PLANNING

Future Needs

- If we continue our trend of increasing transplants and vascular access activity, we will be in need of more manpower force. In the case of surgeons we should increase the efficiency of each surgeon in the section by making the process less cumbersome so that surgeons' time is efficiently occupied in clinic and OR duties. Once we reach maximum efficiency and the work load continues to increase, we will require a fourth surgeon. This requirement is dependent on the increase or decrease of demand in our surgical activity. The same also applies to the administrative support staff as we have already increased their work load. Since this section works with \$0 Budget, we relied exclusively on what is given to each member by UCMG and the Department of surgery. If any support is required at this time, it is in this area.

Goals and Strategies

- Our Goal is to provide our patient population with access to transplantation and dialysis access surgery at the highest professional level possible with the best possible technology available in a safe and expeditious manner. In order to accomplish this goal, we need to work toward more professionalization in the way we conduct our duties. We need to decrease the bureaucracy and at the same time increase our efficiency, economy and patient satisfaction. Our strategy is to review all the processes and without radical changes improve what is possible and proper, and implement changes where needed.

- Bringing simplicity to the whole process, which should be compatible with other sections and departments practice and in line with legal and professional regulations dictated by the CPSA.

Impact on other departments and zonal resources

- Unknown.

QUALITY ASSURANCE, QUALITY IMPROVEMENT, AND INNOVATION

General

- We have enhanced our surgery booking process.
- We continue to improve our Live Donor Program.
- We continue to provide 24 hours a day service throughout the year for emergencies through our pager # 11858 which is answered by the surgeon on call in our section at all times.

Access of Family Physicians to specialists

- Our referrals are seldom from Family physicians since our patients are referred to us by nephrologists and live donors need to refer themselves directly to our program to avoid pressure to donate.

Patient flow through the Emergency Department

- We have 24 hours all year round coverage for emergencies related to transplant patients as well as vascular and PD catheters. Consultations by Emergency Department are attended to on a call basis in the more expeditious manner.

FUTURE DIRECTIONS AND INITIATIVES

Our Direction is to continue improvement in the clinical setting. We wish to implement more research and educational activities in the near future once clinical services work at optimum.

Pending are: - Donation after Cardiac death (DIC)
- Isolated Pancreas Transplants

Section of Urology

SECTION STRUCTURE AND ORGANIZATION

Section Chief: Dr. Kevin Carlson
QA Director: Dr. Geoffrey Gotto
CME Director: Dr. Martin Duffy
Undergraduate Education Lead: Dr. Jay Lee
Postgraduate Education Lead: Dr. Bryce Weber
Fellowship Director, Pediatrics: Dr. Bryce Weber
Fellowship Director, Functional and Reconstructive Urology: Dr. Kevin Carlson/Dr. Richard Baverstock
HTA Lead: Dr. Gregory Kozak

PROGRAMS

Prostate Cancer Centre (PCC) - 12568 visits in 2013

Rapid Access Clinics (RAC) for Prostate Cancer

- RAC I: screening, diagnosis: 1,606 patient visits.
- RAC II: education for newly diagnosed patients: 310 patient visits.
- RAC III: early post-treatment follow-up and support: 626 patient visits
- RAC IV: sexual and urinary function post-treatment: 485 patient visits.
- RAC V: active surveillance: 255 patient visits.
- RAC VI: Clinic for Advanced and Metastatic Prostate Cancer (CAMP) established July 2014.

Rapid Access 4 (RAC IV), is a new program that offers follow-up support for patients impacted by sexual and urinary dysfunction after prostate cancer treatment. Patients are scheduled for a nursing assessment 3 months post-op to assess incontinence and bladder function, sexual health, and overall wellbeing. Patients may be offered RAC 4 programs to assist in their recovery such as pelvic physiotherapy, incontinence information sessions, couples intimacy workshops, or intracavernous injection teaching clinics for erectile

dysfunction. Patients have a final nursing assessment 9 months after surgery. With patient consent, information is collected pre-operatively and at each follow-up visit to track patient progress. This data will be compiled for statistics on patient-reported outcomes.

Since December 2013, the Prostate Cancer Centre has seen 500 patient visits for RAC 4 programs. 2015 will be the first year RAC 4 will be fully operational and 1000 patient visits are estimated.

Alberta Bladder Centre (vesia)

Diagnostic testing, and medical and surgical management of male and female lower urinary tract disorders such as neurogenic bladder, urinary incontinence, pelvic floor dysfunction and many others. Multidisciplinary collaborative care model with urology, urogynecology, family medicine, nursing, physiotherapy.

Urology Clinic South Health Campus

The Urology Clinic at South Health Campus provides a follow up service for its emergency department and inpatient population. Since its inception in February 2014, over 350 patients have been seen at the South Health Campus. The urology presence at South Health is led by a Nurse Practitioner whom is fully supported by the Urology team consisting of an urologist on site usually on a weekly basis as well as needed. The urology team's presence at South Health Campus is proving to strengthen the quality and efficacy of patient care. The team provides timely urological consults and minimizes hospital transfers and emergency visits resulting in a mutually beneficial solution for patients and their collaborative medical/surgical team.

Alberta Prostate Cancer Research Initiative APCaRI

The Alberta Prostate Cancer Research Initiative (APCaRI) brings together a multi-disciplinary team of prostate cancer scientists, physicians, patients, healthcare employees and an international collaborative network to positively impact the outcomes and quality of life of those living with prostate cancer by accelerating the translation of new research ideas from the laboratory to the clinic.

Membership

The section of urology has a total of 17 urologists, 14 adult, and 3 pediatric. The section is preparing for the retirement of two members in 2014.

AWARDS AND PERSONAL ACHIEVEMENTS

- Dr. Eric Hyndman was awarded the CRIO Alberta Innovates Cancer Research Project Grant for: Innovative Diagnostics to Improve the Management of Urothelial Carcinoma.
- Dr. Geoffrey Gotto received the Canadian Urological Association (CUA) Scholarship for 2013-14.
- Dr. Eric Hyndman was awarded the Mike Wilson Active Surveillance Honorarium 2014.
- Dr. Kevin Carlson and Dr. Richard Baverstock were awarded the CUA Incontinence Grant.
- Dr. Jay Lee received Gold Star Teaching Award 2014 from the Faculty of Medicine, University of Calgary
- Dr. Richard Baverstock was awarded the Honor Roll Award – “Great Teaching to Class of 2014”
- Dr. Geoffrey Gotto Received Faculty of Medicine, University of Calgary Teaching Award
- Medical Student (Heena Singh) won the Peter Cruse award for urology research (supervised by Dr. Bryce Weber)
- Number 1 article cited by the Canadian Urological Association Journal 2013: Bettez M, Bailly G, **Carlson K** et al. Guidelines for Adult Urinary Incontinence Collaborative Consensus Document for the Canadian Urological Association. Can Urol Assoc J 2012;6(5).

- Number 6 article cited by the Canadian Urological Association Journal 2013: Hill TC, **Baverstock RJ**, **Carlson KV** et al. Best practices for the treatment and prevention of urinary tract infection in the spinal cord injured population. Can Urol Assoc J 2013;7(3-4).

SECTION HIGHLIGHTS

Clinical Service

- 55,000 + patient visits to the Southern Alberta Institute of Urology (SAIU) (Includes the Alberta Bladder Centre and Prostate Cancer Centre).
- 3,000+ new referrals per month.
- 12,684 outpatient urology procedures.
- 6,389 surgical procedures .
- 12,568 patients visits to the Prostate Cancer Centre (includes Rapid Access Clinics).

The section has successfully recruited two urology-specific Nurse Practitioners into our practice and one Physician Assistant.



*Dr. Kevin Carlson, Urology Section Chief
Photo provided by Dr. Kevin Carlson*

Research

- Research studies are conducted through the research office of the Prostate Cancer Centre under the direction of Dr. Bryan Donnelly. Trials are also being run out of the Alberta Bladder Centre (Dr.'s Baverstock and Carlson) and the Alberta Children's Hospital (Dr.'s Cook and Weber). Independent research is being conducted by Dr.'s Baverstock, Carlson, Kawakami, Gotto, Hyndman, Cook and Weber.
- Research grants and awards are listed above.

Active Research Studies

A randomized double blind, Phase II, efficacy and safety study of MDV3100 (ASP9785) vs. Bicalutamide in castrate men with metastatic prostate cancer

- Principal Investigator: Dr. Bryan Donnelly*

A Double-blind, Randomized, Placebo-Controlled Study Evaluating the Safety and Effectiveness of Cook MyoSite Incorporated AMDC in Female Patients with Stress Urinary Incontinence

- Principal Investigator: Dr. Kevin Carlson*

A Randomized, Double-Blind, Placebo-Controlled Parallel Study with an Open-Label Extension to Assess the Impact of Testosterone Solution on Total Testosterone, Sex Drive and Energy in Hypogonadal Men

- Principal Investigator: Dr. Jay Lee*

Multi-Center trial of high-resolution transrectal ultrasound versus standard low-resolution transrectal ultrasound for the identification of clinically significant prostate cancer (2013-UHR-002)

- Principal Investigator: Dr. Eric Hyndman*

The LEADERSHIP Study: A Phase II Study to Evaluate The Efficacy and Safety of AQX-1125 in Subjects With Interstitial Cystitis/Bladder Pain Syndrome Mediated By the SHIP1 Pathway

- Principal Investigator: Dr. Kevin Carlson*

OnabotulinumtoxinA for the Treatment of Urinary Incontinence Due to Overactive Bladder in Pediatric Patients

- Principal Investigator: Dr. Bryce Weber*

Development of an Overactive Bladder Registry

- Principal Investigator: Dr. Richard Baverstock*

OnabotulinumtoxinA for the Treatment of Urinary Incontinence Due to Overactive Bladder in Pediatric Patients

- Principal Investigator: Dr. Bryce Weber*

CHALLENGES**Response to Issues, Ongoing Matters and Plan of Action**

This section is continually challenged in managing the volume of patients in each practice, access needs, resource allocation and workforce requirements.

- Increasing numbers of new cancer cases diagnosed each year place increasing demands on fixed operating resources, creating access bottlenecks. The provincial aCATS pilot that the Urology Section is involved in demonstrates our struggle to meet targeted access times, and a one-time cancer uplift in the spring was heavily utilized by the Section.
- As the demand for Urology services expands, one of our biggest challenges is to maintain an adequate workforce. As Urology delivers a high volume of non-operative care versus other surgical sections, operating room utilization and aCATS data tell only part of the story of our manpower challenge. Super-specialization and semi-retirement of Section members further add to this challenge. Data collection regarding referral wait-times and distribution etc. as promised by programs such as the provincial e-Referral Program will be critical to our success going forward. In the meantime we have met the challenge in some areas through the development of unique multidisciplinary models such as the Alberta Bladder Centre (vesia) and the utilization of physician extenders such as NP's. We will be recruiting at least two new urologists in 2015, and have secured a one-year locum for 2014/15.
- In order to support the Section and its stakeholders, and assist us in our goals in clinical programming, research, education and management of an effective manpower strategy, the Section independently

recruited an Executive Director in 2011. When this position turned over in 2012, we were supported by our partners in AHS and the Rockyview Site who allowed us to second an experienced manager to fill the position.

An ongoing challenge in 2014 will be the provision of coverage of the South Health Campus in addition to the other 3 adult sites. The addition of two Urology-specific NP's and a Physician Assistant (PA) have significantly enhanced our service delivery; however, our efforts must continue to meet demand.

Working closely with Unit 82 and the Emergency Department at the RGH, the section continues to develop and revise clinical pathways to ensure efficiency and patient flow is maintained.

In December 19, 2013, the Health Quality Council of Alberta (HQCA) released its Continuity of Patient Care study, which highlighted opportunities to improve Albertans' experience when receiving specialized healthcare services. In response, the Section has implemented policy changes and continues to work to improve its service delivery.

- The section is working closely with the Alberta Health Services e-Referral to implement a provincial standardized referral system.
- The section has instituted a standardized telephone and messaging policy.
- We have overhauled the content and functionality of the Section's website.
- We have implemented policy change regarding weekend on-call coverage to enhance continuity of care.

The Urology Section holds an annual retreat to discuss and address current and future challenges, and to refine its mission and direction.

Future Risks

- The lack of increase by way of Operating Room access and ambulatory clinic resources is continuously a

struggle for our section. This severely impacts our recruitment strategy. If the section is successful in the recruitment of additional Urologist, there may be no limited OR time available for them. Furthermore, outpatient facilities are at capacity and over 12000 outpatient procedures were performed, demonstrating a steady growth. This matches the Alberta population, which grew by 3.3% from 2013, which is the highest among all provinces in terms of population growth rate.

- The cost of service delivery continues to increase with the rapid development of new technologies in our field, particularly robotics and cryosurgery. The section is appreciative of our partners at Calgary Health Trust and their Great Gatsby Big Band Gala held on February 8, 2014. The funds raised at the event went towards our section and RGH.
- Advancing sub-specialization in the section makes us strong from research, education and a recruitment standpoint, however creates a challenge to ensure that the general urology needs of the population are met.

Workforce Planning

- As discussed in this report, a labor force strategy is a key issue for our section. A recent manpower study by the Canadian Urological Association suggests that we have the second highest ratio of population to urologist in Canada, highlighting a need for new growth. We will be challenged in achieving this growth without expansion of surgical resources; however, in the short-term will need to recruit 2 new urologists to fill positions opening up through retirement.
- Meeting the general urology needs of the community is a potential challenge with the increasing sub-specialization of fellowship-trained recruits.
- Important short-term growth sub-specialty areas include endo-urology and female pelvic medicine and reconstructive surgery (FPMRS).

GOALS AND STRATEGIES

- Our section continuously strives to provide excellence in urological care. Our section is the largest and most comprehensive Urological Centre in Canada and we offer programs highlighting multidisciplinary patient-centered urological care that are a model for the country. Our key partnerships include the Prostate Cancer Center, vesia [Alberta Bladder center], Rockyview Hospital, and Alberta Health Services. In order to continue to meet the needs of the growing Albertan population, our section will be focused on four pillars for the upcoming year, which are 1) recruitment 2) innovation 3) collaboration, and 4) education that also includes programs regarding prevention and aftercare. We would like to build on the success of our current successful models to offer comprehensive programs in renal stone disease and various urological malignancies, and we would like to grow our offerings of post-graduate fellowships.

QUALITY ASSURANCE, QUALITY IMPROVEMENT, AND INNOVATION

General

- Dr. Geoffrey Gotto has taken over as the Quality Assurance Lead for the Section. Formal QA rounds are held at least quarterly.
- Dr. Gregory Kozak is the Physician Lead for HTA for the Section.
- The Section is represented on the provincial working group to assess robotic technology.
- The Section is participating in the aCATS pilot project, starting July 2014.
- The Section will also participate in the NSQUIP pilot proposed at Rockyview Hospital.
- Dr. R. Baverstock was lead urologist for Towards Optimized Practice (TOP) Guidelines – Multiple Sclerosis and Urinary Tract Infection (released online November 2013).
- Results of our Physician Learning Project (PLP) were published in 2013:
 - Lawson KA, Rudzinski JK, Vicas I, **Carlson KV**. Assessment of antibiotic prophylaxis prescribing patterns for TURP: A need for Canadian guidelines? Can Urol Assoc J. 2013;7(7-8).
- Other major QA projects published and presented in 2013/2014 include:
 - Rudzinski JK, **Kawakami J**. Incidence of infectious complications following transrectal ultrasound-guided prostate biopsy in Calgary, Alberta, Canada: A retrospective population-based analysis. Can Urol Assoc J. 2014;8(5-6).
 - Hill TC, **Baverstock RJ**, **Carlson KV** et al. Best practices for the treatment and prevention of urinary tract infection in the spinal cord injured population. Can Urol Assoc J 2013;7(3-4).
 - Flannigan RK, **Gotto GT**, **Donnelly B**, **Carlson KV**. Standardized follow-up program may reduce emergency room and urgent care visits for patients undergoing radical prostatectomy. Can Urol Assoc J. 2014;8(7-8).

Patient flow through the Emergency Department

- Having the urology program based at RGH allows for a strong partnership with our colleagues in the emergency department
- The presence of an on-site NP and PA, along with an urgent urology room dedicated to emergency cases every afternoon, allows expedited throughput from the ER to surgery and discharge.
- Patients arriving at ER's of the other adult sites require transfer to RGH. While most of these cases can be expedited through a direct admission process, inpatient bed capacity at RGH can be a challenge.
- New models of care, especially the Rapid Access Clinic 3 and the Alberta Bladder Centre models are saving numerous patient visits to the Emergency Departments

- The Urology Clinic at South Health Campus provides a follow up service for our emergency and in patient population. The section provides timely urological results consults and decreases emergency visits.

FUTURE DIRECTIONS AND INITIATIVES

The section has had another challenging and successful year. The year ahead will be focused on developing a strategic plan to recruit and develop a sustainable workforce for the future. We anticipate several changes in the upcoming year, specifically in the areas of workforce, standardize provincial processes and innovations in providing patient care. Our section members will continue to be focused and unified to meet the rapid growth and evolution that is to come.

Committees

Dr. R. Barr

- Prostate Cancer Centre Medical Advisory Board

Dr. R. Baverstock

- Director of Quality Assurance, Department of Surgery, Division of Urology 2005 -2013
- Director, vesia [Alberta Bladder Centre]
- Prostate Cancer Centre Medical Advisory Board
- Fellowship Co-Director, Functional and Reconstructive Urology, Section of Urology, Department of Surgery

Dr. K. Carlson

- Rockyview Hospital O.R. Committee Member: Jan 2011 – Present
- Department of Surgery Executive Committee: Jan 2011 – Present
- Fellowship Co-Director, Functional and Reconstructive Urology, Section of Urology, Department of Surgery
- Prostate Cancer Centre, Medical Advisory Board Prostate Cancer Foundation, Board Member
- Continuing Professional Development Committee, Canadian Urological Association: 2007-2013.
- Director, vesia [Alberta Bladder Centre]

- International Continence Society 2015 Annual Meeting Organizing Committee

Dr. A. Cook

- OR Committee, ACH Urology
- Prostate Cancer Centre Medical Advisory Board

Dr. B. Donnelly

- Department of Surgery Research Committee
- Prostate Cancer Centre operating committee member
- Prostate Cancer Centre - Board Member
- Doc Seaman Research Chair- Prostate Cancer Centre
- Prostate Cancer Centre Medical Advisory Board
- Co chair of The Alberta Prostate Cancer Research Initiative (APCaRI)

Dr. M. Duffy

- Alberta Section of Urology - Secretary
- Prostate Cancer Centre Medical Advisory Board
- Physician Lead for CME, Section of Urology, Department of Surgery

Dr. J. Dushinski

- Prostate Cancer Foundation Board Member
- Prostate Cancer Centre Board Member
- Prostate Cancer Centre Medical Advisory Board
- Calgary Zone Laser Safety Committee
- Canadian Urological Association Guidelines Committee
- World Congress of Endo Urology organizing committee 2017

Dr. G. Gotto

- Director of Quality Assurance, Section of Urology, Department of Surgery
- GU Chair for the Canadian Partnership Against Cancer (CPAC)
- Cancer Care Clinical Network
- Alberta Provincial GU Tumor Team Executive Board and Guidelines Committee
- Medical Advisory Board for Kidney Cancer Canada
- Medical Director of the Clinic for Advanced and Metastatic Prostate Cancer (CAMP)

Dr. E. Hyndman

- Prostate Cancer Centre - Medical Advisory Board
- Bladder Cancer Canada Board Member
- Prairie Urological Association – President

- Prostate Cancer Active Surveillance Program Director
- Kidney Cancer research network of Canada
- Urology physician assistant primary adviser
- The Alberta Prostate Cancer Research Initiative (APCaRI) committee member
- International Urology Society - Local Organizing Committee 2013
- Prostate Cancer Centre Medical Advisory Board
- Dr. G. Kozak
- AMA rep forum representative
- Surgical Robotics Program - Chair

Dr. C. W. Hyndman

- Block Booking Committee
- Department of Surgery Research Committee
- Residency Training Committee
- OR Committee ACH
- ACH Surgical Executive Committee Chair
- Department head for pediatric surgery term ending April 2014
- Surgeon's Day Outstanding Contribution Award 2014
- Surgical Executive Committee Member
- Alberta Children's Hospital Foundation Committee
- Child Health Advisory Council
- Child Health Safety Committee
- Canadian Pediatric Surgical Wait Time Project Steering Committee
- Child & Women's Health Joint Portfolio Committee
- Child & Women's Health Quality Council
- Family Centered Care Committee Joint Pediatric/Adult Committee
- PCIS Committee Member
- Remax-ACHF Fellowship Committee

Dr. J. Kawakami

- Canadian Urologic Association Scholarship Committee

- Prostate Cancer Centre Medical Advisory Board
- Director of HTA, Section of Urology and Southern Alberta Institute of Urology

Dr. J. Lee

- Canadian Male Sexual Health Council
- Canadian Society for the Study of the Aging Male
- Patient Information Committee, Canadian Urological Association (CUA)
- CUA Continuing Professional Development
- CUA Astellas Grant Awards Committee
- Prostate Cancer Centre Medical Advisory Board
- Surgical Undergraduate Education Committee, Department of Surgery, Faculty of Medicine

Dr. J. Leong

- Prostate Cancer Centre Medical Advisory Board

Dr. D. Metcalfe

- Prostate Cancer Centre Medical Advisory Board

Dr. B. Weber

- Prostate Cancer Centre Medical Advisory Board
- Fellowship Director, Pediatric Urology Fellowship, Section of Urology, Department of Surgery
- Physician Lead, Postgraduate Education, Section of Urology, Department of Surgery

Dr. R. P. Wilkin

- Prostate Cancer Centre Medical Advisory Board

Vascular Surgery

The Section of Vascular Surgery welcomed Dr. Jeffery Clark as its seventh member, in 2014. Dr. Clark graduated from the University of Calgary medical school, completed his general surgery residency at the University of Saskatchewan and then returned to Calgary for his vascular fellowship. He then sought additional training at the Cleveland Clinic and Harbor-UCLA Medical Center, in advanced endovascular techniques and intravascular ultrasound. Jeff's skill in these areas strengthens further the endovascular expertise in Calgary, which has the most surgeons with post-fellowship endovascular training of any group in Canada. Calgary's seven vascular surgeons now make PLC the largest vascular service of any single hospital in Canada.

The Section's other significant news is the progress towards completion of a major capital project that is bringing significant expansion and improvement to our facilities at PLC. Two new state-of-the-art hybrid endovascular operating theatres are being built, along with an integrated inpatient unit and ambulatory care facility, all in the new East Wing of PLC. The physical integration of our inpatient and ambulatory units will

be a first in Canada. It will facilitate sharing nursing and allied staff (pharmacists, OT/PT, Internal Medicine consultants and Podiatric Surgery), as part of a plan to create a "medical home" for vascular patients. This will provide seamless surgical care, risk factor assessment and modification and on-site Podiatric surgery, in the ambulatory facility. We expect the entire project to be completed in Q3 of 2015, with commissioning of the OR and occupation of the inpatient/outpatient facility by Q4.

Lastly, but by no means least, vascular surgery welcomed our first direct-entry resident in 2014. In 2013, the RCPSC accredited the University of Calgary for the new direct-entry (PGY 1-5) vascular residency, in addition to our longstanding PGY 6-7 Fellowship program. In July, we welcomed Dr. Andrea Devrome (a 2014 U of C medical school grad) as our first PGY 1 resident, joining Dr. Nick Peti, our PGY7 vascular fellow, who is completing his training in June 2015. In July 2015, we will welcome Dr. Michael Kwan (currently a U of C general surgery resident) as our newest Fellowship trainee.



*Dr. Paul Petrsek, Vascular Surgery Section Chief
Photo provided by Matthew Hayhurst*

Appendices

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2.0 Activity Reports

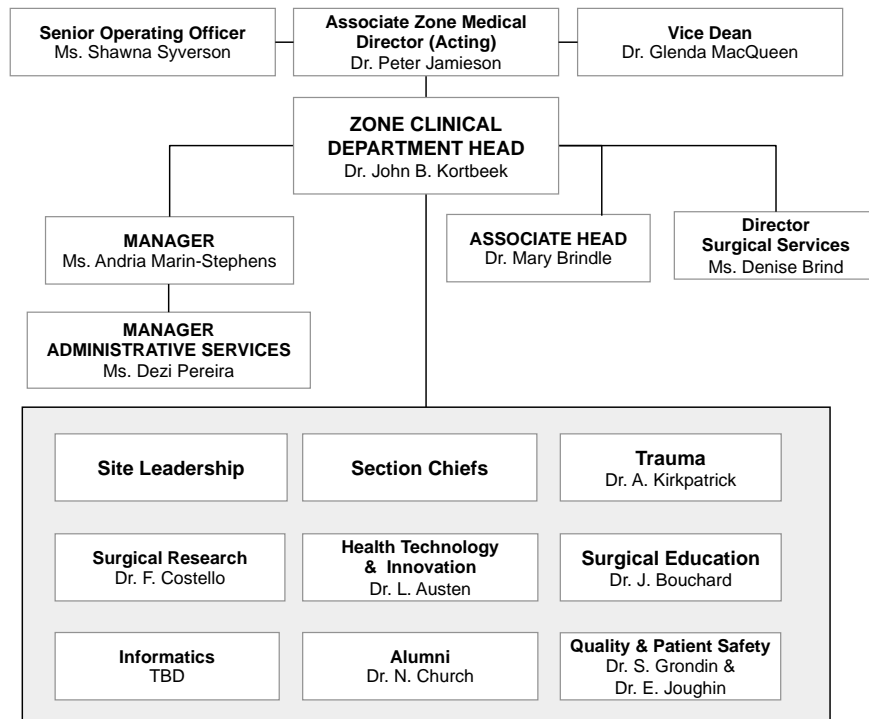
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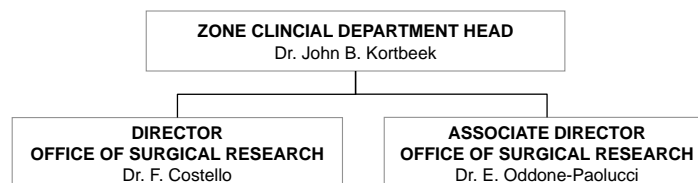
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1.1 Governance

Leadership – Department of Surgery

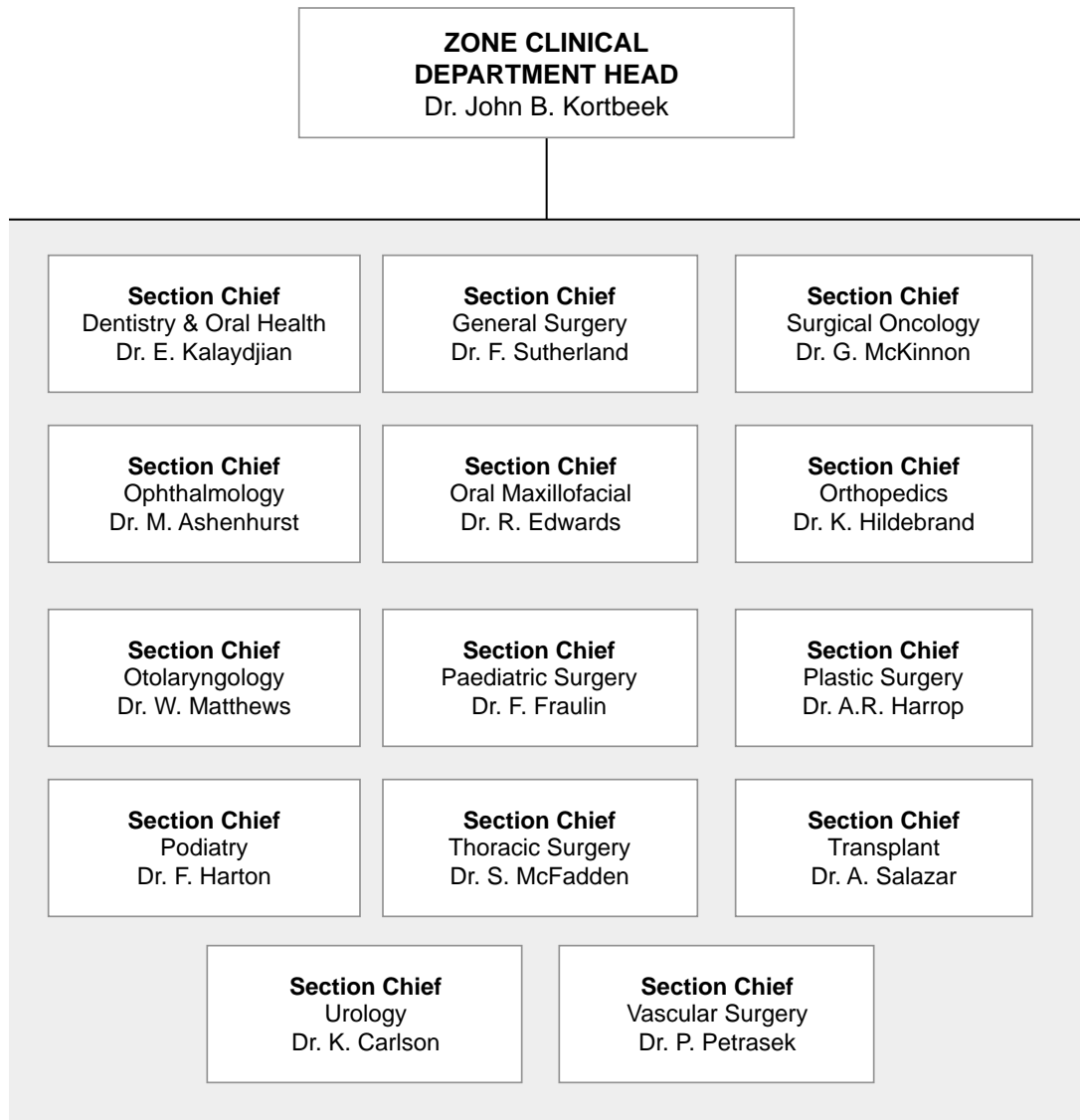


Surgical Research Department of Surgery



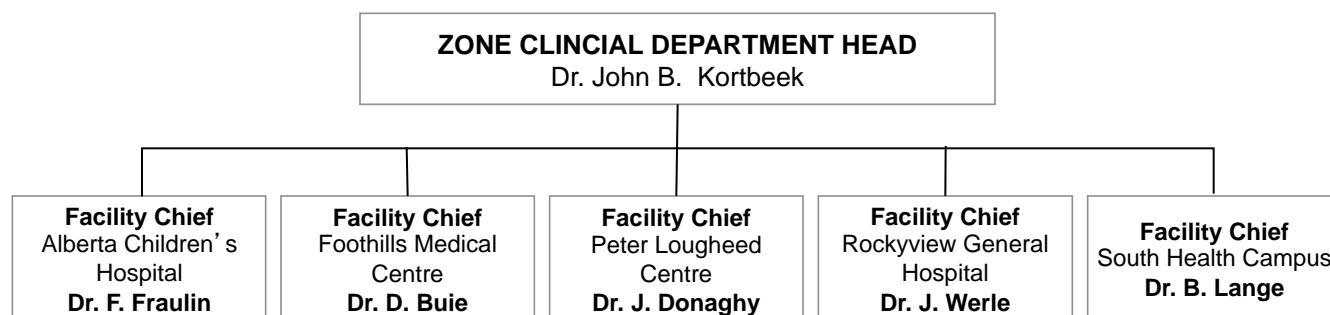
Section Chiefs

Department of Surgery



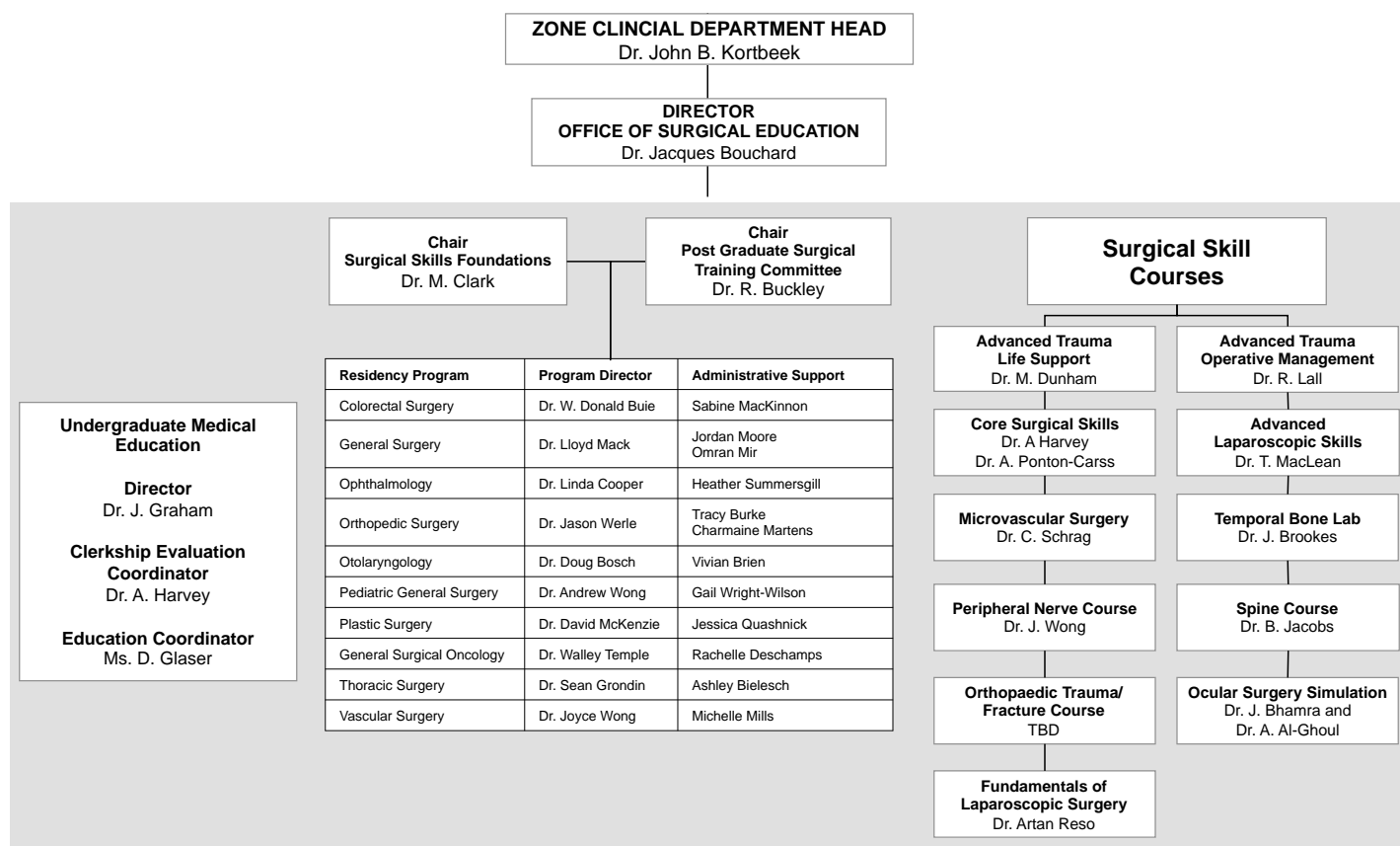
Site Leadership

Department of Surgery



Alberta Children's Hospital <ul style="list-style-type: none"> • Dr. Frankie Fraulin, Facility Chief and Chair OR Committee • Dr. Jeremy Luntley, Chief, Anesthesia • Ms. Deb Harris, OR Manager • Ms. Jill Woodward, Director 	Foothills Medical Centre <ul style="list-style-type: none"> • Dr. Donald Buie, Facility Chief and Chair OR Committee • Dr. Duc Ha, Chief, Anesthesia • Ms. Kelly Chapman, OR Manager • Ms. Denise Brind, Director
Peter Lougheed Centre <ul style="list-style-type: none"> • Dr. John Donaghy, Facility Chief and Chair OR Committee • Dr. Craig Pearce, Chief, Anesthesia • Ms. Danielle Assad, OR Manager • Ms. Val Marsten, Director 	
Rockyview General Hospital <ul style="list-style-type: none"> • Dr. Jason Werle, Facility Chief and Chair OR Committee • Dr. Chris Sims, Chief, Anesthesia • Ms. Susan Reader, OR Manager • Ms. Janice Stewart, Director 	South Health Campus <ul style="list-style-type: none"> • Dr. Beth Lange, Facility Chief and Chair OR Committee • Dr. Keith Drader, Chief, Anesthesia • Ms. Lori Gervais, OR Manager • Ms. Joanne Cabrera, Director

Surgical Education Department of Surgery



1.2 Department Members 2013/2014

Section of Dentistry and Oral Health

Name	Title/Rank	Section	Primary Appointment
Kalaydjian, Eduardo	Section Chief & Clinical Associate Professor	Dentistry and Oral Health	
Abougoush, Joel		Dentistry and Oral Health	
Abougoush, Tallel		Dentistry and Oral Health	
Badwi (Stein), Kari		Dentistry and Oral Health	Pediatric Surgery
Barsky, Robert		Dentistry and Oral Health	Pediatric Surgery
Bell, Christine		Dentistry and Oral Health	Pediatric Surgery
Bindman, Michael		Dentistry and Oral Health	Pediatric Surgery
Brown, Duncan		Dentistry and Oral Health	
Choi, Susan		Dentistry and Oral Health	
Cholette, Marie-Claude		Dentistry and Oral Health	Pediatric Surgery
Chow, Kuen A.		Dentistry and Oral Health	
Dabagh, Shatha		Dentistry and Oral Health	
Dalla Lana, Eugene		Dentistry and Oral Health	
David, Dionysius		Dentistry and Oral Health	
Dyck, Willy		Dentistry and Oral Health	
Houghton, Alan		Dentistry and Oral Health	
Hulland, Sarah		Dentistry and Oral Health	Pediatric Surgery
Hussein, Jabeen		Dentistry and Oral Health	
Kemp, Darrel		Dentistry and Oral Health	
Kopce, Perry		Dentistry and Oral Health	
Krusky, J. Bradley		Dentistry and Oral Health	
Kuruliak, Russell		Dentistry and Oral Health	
Lakhani, Moez		Dentistry and Oral Health	
Lawton, David		Dentistry and Oral Health	
Lee, Morley		Dentistry and Oral Health	
Loepky, Warren		Dentistry and Oral Health	Pediatric Surgery
Lovick, David		Dentistry and Oral Health	Pediatric Surgery
Mehra, Tarun		Dentistry and Oral Health	Pediatric Surgery
Olowe, Adebayo		Dentistry and Oral Health	
Paladino, Antonietta	Clinical Lecturer	Dentistry and Oral Health	
Pilipowicz, Orest		Dentistry and Oral Health	Pediatric Surgery
Quach, Quoc		Dentistry and Oral Health	
Rabie, Heidi		Dentistry and Oral Health	
Saher, Farida	Clinical Lecturer	Dentistry and Oral Health	Pediatric Surgery
Schwann, Sandra		Dentistry and Oral Health	
Seto, Timothy		Dentistry and Oral Health	
Shariff, Galib		Dentistry and Oral Health	
Shwart, E. Luke		Dentistry and Oral Health	
Skaria, Sylla		Dentistry and Oral Health	
Smith, Leonard		Dentistry and Oral Health	Pediatric Surgery
Suri, Amreek (Ricky)	Clinical Lecturer	Dentistry and Oral Health	
Switzer, Samuel	Clinical Lecturer	Dentistry and Oral Health	
Tamminen, John		Dentistry and Oral Health	
Tetteh-Wayoe, Mercy		Dentistry and Oral Health	
Thal, Michelle		Dentistry and Oral Health	
Tung, Albert		Dentistry and Oral Health	
Varshney, Sheila		Dentistry and Oral Health	
Vinsky, Rory		Dentistry and Oral Health	

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Wierzbicki, Tom	Clinical Lecturer	Dentistry and Oral Health
Yaholnitsky, Stephen		Dentistry and Oral Health
Yates, Gregory		Dentistry and Oral Health
Yu, Thomas	Clinical Lecturer	Dentistry and Oral Health

Section of General Surgery

Name	Title/Rank	Section	Primary Appointment
Sutherland, Francis R.	Section Chief & Professor	General Surgery	
Anderson, Ian B.	Clinical Assistant Professor	General Surgery	
Armstrong, C. Paul	Clinical Lecturer	General Surgery	
Austen, Lea	Clinical Assistant Professor	General Surgery	
Ball, Chad	Clinical Assistant Professor	General Surgery	
Bathe, Oliver F.	Professor	General Surgery	
Brzezinski, Wojciech	Clinical Lecturer (Medicine Hat)	General Surgery	
Buie, W. Donald	Associate Professor	General Surgery	
Buie, William	Honorary Clinical Associate Professor	General Surgery	
Church, Neal G.	Clinical Assistant Professor	General Surgery	
Datta, Indraneel	Clinical Assistant Professor	General Surgery	
Debru, Estifanos	Clinical Assistant Professor	General Surgery	
Dixon, Elijah	Associate Professor	General Surgery	
Dunham, Michael B.	Clinical Assistant Professor	General Surgery	
Graham, John S.	Clinical Assistant Professor	General Surgery	
Hagerman, Neil		General Surgery	
Harvey, Adrian	Clinical Assistant Professor	General Surgery	
Heine, John A.	Clinical Assistant Professor	General Surgery	
Hollaar, Gwendolyn	Associate Professor	General Surgery	
Ibbottson, Geoff	Clinical Lecturer (Grande Prairie)	General Surgery	
Jenken, Daryl		General Surgery	
Johnson, Douglas R.E.	Clinical Assistant Professor	General Surgery	
Kanashiro, Jeanie	Clinical Assistant Professor	General Surgery	
Kirkpatrick, Andrew W.	Professor	General Surgery	
Kortbeek, John B.	Zone Clinical Department Head Surgery & Professor	General Surgery	
Lafreniere, Rene	Professor	General Surgery	
Lall, Rohan N.	Clinical Assistant Professor	General Surgery	
Lewkonja, Peter	Clinical Assistant Professor	General Surgery	Pediatric Surgery
Lopushinsky, Steven	Clinical Assistant Professor	General Surgery	Pediatric Surgery
Lui, Robert C.K.	Clinical Assistant Professor	General Surgery	
Mack, Lloyd	Assistant Professor	General Surgery	
MacLean, Anthony R.	Clinical Associate Professor	General Surgery	
Manouchehri, Namdar	Clinical Lecturer	General Surgery	
Martin, Steven		General Surgery	
McKinnon, J. Gregory	Professor	General Surgery	
Mew, Daphne J.Y.	Clinical Assistant Professor	General Surgery	
Mitchell, Philip C.	Clinical Assistant Professor	General Surgery	
Mulloy, Robert H.	Clinical Associate Professor	General Surgery	
Nixon, James A.	Clinical Assistant Professor	General Surgery	
Papenkopf, Cort W.		General Surgery	Rural Medicine
Pasieka, Janice	Clinical Professor	General Surgery	
Quan, May Lynn	Associate Professor	General Surgery	
Reso, Artan	Clinical Lecturer	General Surgery	
Rosen, Wayne S.	Clinical Assistant Professor	General Surgery	

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Rothwell, Bruce C.	Clinical Assistant Professor	General Surgery	
Selman, William			
Temple, Walley J.	Professor	General Surgery	
Topstad, Dawnelle R.	Clinical Lecturer	General Surgery	
Way, Jeffrey C.E.	Clinical Assistant Professor	General Surgery	
Wong, Andrew L.	Clinical Associate Professor	General Surgery	Pediatric Surgery

Section of Ophthalmology

Name	Title/Rank	Section	Primary Appointment
Ashenhurst, Michael E.	Section Chief & Clinical Associate Professor	Ophthalmology	
Adatia, Feisal	Clinical Assistant Professor	Ophthalmology	
Al-Ghoul, Ahmed R.	Clinical Lecturer	Ophthalmology	
Anand, Jag	Clinical Lecturer	Ophthalmology	
Astle, William F.	Professor	Ophthalmology	Pediatric Surgery
Ball, Arlene E.	Clinical Lecturer	Ophthalmology	
Bhamra, Jamie	Clinical Lecturer	Ophthalmology	
Chow, Bill	Clinical Assistant Professor	Ophthalmology	
Cooper, Linda	Associate Professor	Ophthalmology	Pediatric Surgery
Crichton, Andrew C.S.	Clinical Professor	Ophthalmology	
Culver, Ronald L.	Clinical Assistant Professor	Ophthalmology	
Demong, Thaddeus T.	Clinical Lecturer	Ophthalmology	
Dotchin, Stephanie	Clinical Lecturer	Ophthalmology	
Douglas, Gordon	Clinical Assistant Professor	Ophthalmology	
Ells, Anna	Clinical Professor	Ophthalmology	
Ford, Bryce	Clinical Assistant Professor	Ophthalmology	
Gibson, Peter F.	Clinical Assistant Professor	Ophthalmology	
Gimbel, Howard V.	Clinical Professor	Ophthalmology	
Goel, Nand K.	Clinical Assistant Professor	Ophthalmology	
Gohill, Jitendra	Clinical Assistant Professor	Ophthalmology	
Gooi, Patrick	Clinical Lecturer	Ophthalmology	
Gordon, Robert	Clinical Assistant Professor	Ophthalmology	
Hanson, Christopher	Clinical Lecturer	Ophthalmology	
Hill, Vivian E.	Clinical Assistant Professor	Ophthalmology	
Huang, John T.	Clinical Associate Professor	Ophthalmology	
Huang, Peter T.;	Clinical Professor	Ophthalmology	
Kassab, Jacinthe	Clinical Lecturer	Ophthalmology	
Kherani, Amin	Clinical Associate Professor	Ophthalmology	
Kherani, Femida	Clinical Assistant Professor	Ophthalmology	
Kirk, Angus		Ophthalmology	
Kirker, G.E. Mervyn	Clinical Associate Professor	Ophthalmology	
Lang, Robert M.	Clinical Assistant Professor	Ophthalmology	
McWhae, John A.	Clinical Associate Professor	Ophthalmology	
Mitchell, Patrick	Clinical Assistant Professor	Ophthalmology	
Mitchell, Robert J.	Clinical Assistant Professor	Ophthalmology	
Punja, Karim	Clinical Assistant Professor	Ophthalmology	
Romanchuk, Kenneth G.;	Professor	Ophthalmology	Pediatric Surgery
Savage, Paul R.G.	Clinical Assistant Professor	Ophthalmology	
Skov, Carolyn M.B.;	Clinical Lecturer	Ophthalmology	Pediatric Surgery
Smith, Stanley S.;	Clinical Assistant Professor	Ophthalmology	
Van Westenbrugge, John A.	Clinical Lecturer	Ophthalmology	
Verstraten, Karin L.	Clinical Assistant Professor	Ophthalmology	

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Weis, Ezekiel	Clinical Assistant Professor	Ophthalmology
Williams, R. Geoff	Clinical Associate Professor	Ophthalmology
Wong, Jonathan;	Clinical Lecturer	Ophthalmology
Wyse, J. Patrick	Clinical Associate Professor	Ophthalmology
Yau, Ryan	Clinical Assistant Professor	Ophthalmology

Section of Oral & Maxillofacial Surgery

Name	Title/Rank	Section	Primary Appointment
Edwards, Richard	Section Chief & Clinical Assistant Professor	Oral & Maxillofacial Surgery	
Bureau, Stephen		Oral & Maxillofacial Surgery	
Cobb, Graham	Clinical Assistant Professor	Oral & Maxillofacial Surgery	
Goos, Ryan		Oral & Maxillofacial Surgery	
Habijanac, Brett		Oral & Maxillofacial Surgery	
Higashi, Shawn	Clinical Lecturer	Oral & Maxillofacial Surgery	
Kroetsch, Lorne		Oral & Maxillofacial Surgery	
Smith, Miller	Clinical Assistant Professor	Oral & Maxillofacial Surgery	
Touchan, Simon	Clinical Lecturer	Oral & Maxillofacial Surgery	
Vincelli, Douglas J.;	Clinical Assistant Professor	Oral & Maxillofacial Surgery	
Whitestone, Brian	Clinical Lecturer	Oral & Maxillofacial Surgery	
Young, Carl Wayne		Oral & Maxillofacial Surgery	

Section of Orthopaedic Surgery

Name	Title/Rank	Section	Primary Appointment
Hildebrand, Kevin A.	Section Chief & Professor	Orthopaedic Surgery	
Abelseth, Gregory A.	Clinical Assistant Professor	Orthopaedic Surgery	
Batuyong, Eldridge	Clinical Lecturer	Orthopaedic Surgery	
Bauman, John	Clinical Assistant Professor	Orthopaedic Surgery	
Bazant, Francis J.	Clinical Assistant Professor	Orthopaedic Surgery	
Bell, Douglas	Clinical Associate Professor	Orthopaedic Surgery	
Bering, Michael P.	Clinical Lecturer (Medicine Hat)	Orthopaedic Surgery	
Bois, Aaron	Clinical Lecturer	Orthopaedic Surgery	
Boorman, Richard S.	Assistant Professor	Orthopaedic Surgery	
Bouchard, Jacques A.	Clinical Professor	Orthopaedic Surgery	
Bowen, Vaughan	Clinical Professor	Orthopaedic Surgery	
Brauer, Carmen	Assistant Professor	Orthopaedic Surgery	Pediatric Surgery
Bray, Robert C.	Professor	Orthopaedic Surgery	
Buchko, Gregory		Orthopaedic Surgery	
Buckley, Richard E.	Clinical Professor	Orthopaedic Surgery	Rural Medicine
Burkart, Brian C.	Clinical Assistant Professor	Orthopaedic Surgery	
Cho, Roger K.N.	Clinical Assistant Professor	Orthopaedic Surgery	
Clark, Marcia	Clinical Associate Professor	Orthopaedic Surgery	
Cundal, Cory S.	Clinical Lecturer	Orthopaedic Surgery	
Dhaliwal, Gurpreet Singh	Clinical Lecturer	Orthopaedic Surgery	
De Souza, F. Kelley	Clinical Assistant Professor	Orthopaedic Surgery	
Donaghy, John J.	Clinical Assistant Professor	Orthopaedic Surgery	
Dougall, Hugh R	Clinical Associate Professor	Orthopaedic Surgery	
Duffy, Paul J.	Clinical Assistant Professor	Orthopaedic Surgery	
Edwards, Glen E.	Clinical Professor	Orthopaedic Surgery	
Ferri de Barros, Fabio	Clinical Assistant Professor	Orthopaedic Surgery	Pediatric Surgery

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Frank, Cyril B.	Professor	Orthopaedic Surgery	
French, Stephen	Clinical Lecturer	Orthopaedic Surgery	
Goldstein, Simon G.	Clinical Assistant Professor	Orthopaedic Surgery	Pediatric Surgery
Harder, James A.	Clinical Associate Professor	Orthopaedic Surgery	Pediatric Surgery
Hart, David A.	Professor	Orthopaedic Surgery	Rural Medicine
Heard, S. Mark	Clinical Lecturer	Orthopaedic Surgery	
Hiemstra, Laurie A.		Orthopaedic Surgery	Rural Medicine
Hiscox, Christina	Clinical Lecturer	Orthopaedic Surgery	
Hollinshead, Robert M.	Clinical Professor	Orthopaedic Surgery	
Hu, Richard W-C	Clinical Professor	Orthopaedic Surgery	
Hunt, Stephen	Clinical Lecturer	Orthopaedic Surgery	
Hutchison, Carolyn R.	Associate Professor	Orthopaedic Surgery	
Johnston, Kelly D.	Clinical Lecturer	Orthopaedic Surgery	
Joughin, V. Elaine	Clinical Assistant Professor	Orthopaedic Surgery	Pediatric Surgery
Kennedy, James	Clinical Lecturer	Orthopaedic Surgery	
Kiefer, Gerhard N.	Clinical Associate Professor	Orthopaedic Surgery	Pediatric Surgery
Korley, Robert	Clinical Lecturer	Orthopaedic Surgery	
Kuchinad, Raul	Clinical Lecturer	Orthopaedic Surgery	
Lamothe, Jeremy	Clinical Lecturer	Orthopaedic Surgery	
Le, Ian	Clinical Assistant Professor	Orthopaedic Surgery	
Leblanc, Justin	Clinical Lecturer	Orthopaedic Surgery	
Lo, Ian K.Y.	Assistant Professor	Orthopaedic Surgery	
Longino, David	Clinical Assistant Professor	Orthopaedic Surgery	
Mackenzie, James R.	Clinical Lecturer	Orthopaedic Surgery	
Martin, Ryan	Clinical Lecturer	Orthopaedic Surgery	
Miller, Stephen D.	Clinical Associate Professor	Orthopaedic Surgery	
Mohtadi, Nicholas G.H.	Clinical Professor	Orthopaedic Surgery	
Mrkonjic, Linda A.	Clinical Assistant Professor	Orthopaedic Surgery	
O'Brien, Maureen	Clinical Lecturer	Orthopaedic Surgery	
Parsons, David L.	Clinical Associate Professor	Orthopaedic Surgery	Pediatric Surgery
Penner, Darrell A.	Clinical Lecturer	Orthopaedic Surgery	
Powell, James N.	Clinical Associate Professor	Orthopaedic Surgery	
Puloski, Shannon K.T.	Clinical Lecturer	Orthopaedic Surgery	
Rendall, Edward	Clinical Lecturer	Orthopaedic Surgery	
Russell, Iain S.	Clinical Assistant Professor	Orthopaedic Surgery	
Sabo, Marlis	Clinical Assistant Professor	Orthopaedic Surgery	
Salo, Paul T.	Professor	Orthopaedic Surgery	
Sharma, Rajrishi	Clinical Assistant Professor	Orthopaedic Surgery	
Schachar, Norman S.	Professor	Orthopaedic Surgery	
Soroceanu, Alex	Clinical Assistant Professor	Orthopaedic Surgery	
Stewart, James I.	Clinical Lecturer	Orthopaedic Surgery	
Swamy, Ganesh	Clinical Assistant Professor	Orthopaedic Surgery	
Thomas, Kenneth C.	Clinical Associate Professor	Orthopaedic Surgery	
Timmermann, Scott	Clinical Assistant Professor	Orthopaedic Surgery	
Van Zuiden, Lowell J.	Clinical Assistant Professor	Orthopaedic Surgery	
Werle, Jason R.	Clinical Associate Professor	Orthopaedic Surgery	
White, Neil	Clinical Lecturer	Orthopaedic Surgery	

Section of Otolaryngology – Head and Neck Surgery

Name	Title/Rank	Section	Primary Appointment
Matthews, T. Wayne	Section Chief & Associate Professor	Otolaryngology – Head and Neck Surgery	
Bosch, J. Douglas	Clinical Assistant Professor	Otolaryngology – Head and Neck Surgery	
Brookes, James	Clinical Assistant Professor	Otolaryngology – Head and Neck Surgery	Pediatric Surgery
Burke, Robert	Clinical Associate Professor	Otolaryngology – Head and Neck Surgery	
Chau, Jason K.	Clinical Assistant Professor	Otolaryngology – Head and Neck Surgery	
Chau, Justin K.	Clinical Assistant Professor	Otolaryngology – Head and Neck Surgery	
Chandarana, Shamir	Clinical Assistant Professor	Otolaryngology – Head and Neck Surgery	
Dort, Joseph C.	Professor	Otolaryngology – Head and Neck Surgery	
Drummond, Derek S.	Clinical Assistant Professor	Otolaryngology – Head and Neck Surgery	Pediatric Surgery
Gillis, Thomas M.	Clinical Assistant Professor	Otolaryngology – Head and Neck Surgery	
Hoshowsky, Borys O.	Clinical Lecturer	Otolaryngology – Head and Neck Surgery	
Hoy, Monica	Clinical Lecturer	Otolaryngology – Head and Neck Surgery	
Huang, Ian T.		Otolaryngology – Head and Neck Surgery	
Hui, Anita	Clinical Assistant Professor	Otolaryngology – Head and Neck Surgery	
Lange, Elizabeth J.	Clinical Associate Professor	Otolaryngology – Head and Neck Surgery	
Marck, Paul A.	Clinical Associate Professor	Otolaryngology – Head and Neck Surgery	
Mechor, Brad	Clinical Assistant Professor	Otolaryngology – Head and Neck Surgery	
Park, Phillip S.	Clinical Assistant Professor	Otolaryngology – Head and Neck Surgery	
Rudmik, Luke	Clinical Assistant Professor	Otolaryngology – Head and Neck Surgery	
Shandro, W.G. (Bud)		Otolaryngology – Head and Neck Surgery	
Wagner, Garth A.L.	Clinical Associate Professor	Otolaryngology – Head and Neck Surgery	
Warshawski, S. Joseph	Clinical Assistant	Otolaryngology – Head and Neck Surgery	
Yunker, Warren	Clinical Assistant Professor	Otolaryngology – Head and Neck Surgery	Pediatric Surgery
Zakhary, Kristina	Clinical Assistant Professor	Otolaryngology – Head and Neck Surgery	

Section of Pediatric Surgery

Name	Title/Rank	Section	Primary Appointment
Fraulín, Frankie;	Section Chief & Clinical Associate Professor	Pediatric Surgery	
Ashenhurst, Michael E.	Clinical Associate Professor	Pediatric Surgery	Ophthalmology
Astle, William F.	Professor	Pediatric Surgery	
Badwi (Stein), Kari		Pediatric Surgery	
Barr, Richard		Pediatric Surgery	Urology
Baverstock, Richard	Clinical Assistant Professor	Pediatric Surgery	Urology
Beaudry, Paul	Clinical Assistant Professor	Pediatric Surgery	
Bell, Christine		Pediatric Surgery	
Bosch, J. Douglas	Clinical Assistant Professor	Pediatric Surgery	Otolaryngology
Brauer, Carmen	Assistant Professor	Pediatric Surgery	
Brindle, Mary E.	Associate Head, Surgery & Associate Professor	Pediatric Surgery	
Brookes, James	Clinical Assistant Professor	Pediatric Surgery	
Burke, Robert	Clinical Associate Professor	Pediatric Surgery	Otolaryngology
Campbell, Earl A.D.	Clinical Assistant Professor	Pediatric Surgery	Plastic Surgery
Carlson, Kevin	Clinical Assistant Professor	Pediatric Surgery	Urology
Cholette, Marie-Claude	Clinical Assistant Professor	Pediatric Surgery	
Cook, Anthony J.	Clinical Assistant Professor	Pediatric Surgery	
Cooper, Linda	Associate Professor	Pediatric Surgery	
Dilay, Jocelyn E.		Pediatric Surgery	
Donnelly, Bryan J.	Clinical Assistant Professor	Pediatric Surgery	Urology
Dotchin, Stephanie	Clinical Lecturer	Pediatric Surgery	Ophthalmology

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Drummond, Derek S.	Clinical Assistant Professor	Pediatric Surgery	
Dushinski, John W.	Clinical Assistant Professor	Pediatric Surgery	Urology
Duffy, Martin	Clinical Lecturer	Pediatric Surgery	Urology
Eccles, Robin C.	Clinical Assistant Professor	Pediatric Surgery	
Ferri de Barros, Fabio	Clinical Assistant Professor	Pediatric Surgery	
Frank, Ryan	Clinical Lecturer	Pediatric Surgery	
Ford, Bryce	Clinical Assistant Professor	Pediatric Surgery	Ophthalmology
Fraulín, Frankie	Clinical Assistant Professor	Pediatric Surgery	
Gelfand, Gary A.J.	Clinical Assistant Professor	Pediatric Surgery	Thoracic Surgery
Gillis, Thomas M.	Clinical Assistant Professor	Pediatric Surgery	Otolaryngology
Goldstein, Simon G.	Clinical Assistant Professor	Pediatric Surgery	
Harder, James A.	Clinical Associate Professor	Pediatric Surgery	
Hoshowsky, Borys O.;	Clinical Lecturer	Pediatric Surgery	Otolaryngology
Huang, Ian T.		Pediatric Surgery	Otolaryngology
Hui, Anita	Clinical Assistant Professor	Pediatric Surgery	Otolaryngology
Harrop, A. Robertson	Clinical Associate Professor	Pediatric Surgery	
Hulland, Sarah		Pediatric Surgery	
Humphreys, Douglas		Pediatric Surgery	Plastic Surgery
Joughin, V. Elaine	Clinical Assistant Professor	Pediatric Surgery	
Kiefer, Gerhard N.	Clinical Associate Professor	Pediatric Surgery	
Kherani, Femida	Clinical Assistant Professor	Pediatric Surgery	Ophthalmology
Kirk, Angus	Clinical Associate Professor	Pediatric Surgery	Ophthalmology
Kirker, G.E. Mervyn	Clinical Associate Professor	Pediatric Surgery	Ophthalmology
Kozak, Gregory N.	Clinical Assistant Professor	Pediatric Surgery	Urology
Lange, Elizabeth J.	Clinical Associate Professor	Pediatric Surgery	Otolaryngology
Lau, Henry	Clinical Lecturer	Pediatric Surgery	
Lee, Jay	Clinical Assistant Professor	Pediatric Surgery	Urology
Leong, James		Pediatric Surgery	Urology
Loepky, Warren		Pediatric Surgery	
Lewkonía, Peter	Clinical Assistant Professor	Pediatric Surgery	
Lopushinsky, Steven	Clinical Assistant Professor	Pediatric Surgery	
McKenzie, C. David	Clinical Assistant Professor	Pediatric Surgery	Plastic Surgery
McPhalen, Donald F.	Clinical Assistant Professor	Pediatric Surgery	
Mehra, Tarun		Pediatric Surgery	
Metcalfe, Donald G.	Clinical Assistant Professor	Pediatric Surgery	Urology
Park, Phillip S.	Clinical Assistant Professor	Pediatric Surgery	Otolaryngology
Parsons, David L.	Clinical Associate Professor	Pediatric Surgery	
Pilipowicz, Orest		Pediatric Surgery	
Romanchuk, Kenneth G.	Professor	Pediatric Surgery	
Savage, Paul R.G.	Clinical Assistant Professor	Pediatric Surgery	Ophthalmology
Schwann, Sandra		Pediatric Surgery	
Skov, Carolyn M.B.	Clinical Lecturer	Pediatric Surgery	
Shandro, W.G. (Bud)		Pediatric Surgery	Otolaryngology
Smith, Leonard		Pediatric Surgery	
Vinsky, Rory		Pediatric Surgery	
Wagner, Garth A.L.	Clinical Associate Professor	Pediatric Surgery	Otolaryngology
Warshawski, S. Joseph	Clinical Lecturer	Pediatric Surgery	Otolaryngology
Weber, Bryce	Clinical Assistant Professor	Pediatric Surgery	
Wong, Andrew L.	Clinical Associate Professor	Pediatric Surgery	
Yunker, Warren	Clinical Assistant Professor	Pediatric Surgery	

Section of Plastic Surgery

Name	Title/Rank	Section	Primary Appointment
Harrop, A. Robertson	Section Chief & Clinical Associate Professor	Plastic Surgery	Pediatric Surgery
Beveridge, John A.	Clinical Lecturer	Plastic Surgery	
Birdsell, Dale C.	Clinical Professor	Plastic Surgery	
Campbell, Earl A.D.	Clinical Assistant Professor	Plastic Surgery	
Dawes, Jeffrey	Clinical Lecturer	Plastic Surgery	
De Haas, William G.	Clinical Assistant Professor	Plastic Surgery	
Dilay, Jocelyn		Plastic Surgery	Pediatric Surgery
Frank, Ryan	Clinical Lecturer	Plastic Surgery	Pediatric Surgery
Fraulín, Frankie	Clinical Assistant Professor	Plastic Surgery	Pediatric Surgery
Grover, Ramon	Clinical Lecturer	Plastic Surgery	
Hall-Findlay, Elizabeth		Plastic Surgery	Rural Medicine
Hamilton, George D.	Clinical Assistant Professor	Plastic Surgery	
Haugrud, Mark J.	Clinical Assistant Professor	Plastic Surgery	
Humphreys, Douglas		Plastic Surgery	
Lee, Jonathan	Clinical Lecturer	Plastic Surgery	
Lin, Alan	Clinical Assistant Professor	Plastic Surgery	
Lindsay, Robert L.	Clinical Associate Professor	Plastic Surgery	
Loiselle, Frederick	Clinical Lecturer	Plastic Surgery	
Magi, Enzo	Clinical Associate Professor	Plastic Surgery	
McKenzie, C. David	Clinical Assistant Professor	Plastic Surgery	
McPhalen, Donald F.	Clinical Assistant Professor	Plastic Surgery	Pediatric Surgery
Nickerson, Duncan A.	Clinical Assistant Professor	Plastic Surgery	
Perron, Wayne		Plastic Surgery	
Schrag, Christiaan	Clinical Assistant Professor	Plastic Surgery	
Sinclair, Thomas M.		Plastic Surgery	Rural Medicine
Sutton, Frank		Plastic Surgery	
Waslen, Gregory D.	Clinical Assistant Professor	Plastic Surgery	
Whidden, Paul G.R.	Clinical Lecturer	Plastic Surgery	
Yau, Farrah	Clinical Lecturer	Plastic Surgery	

Section of Podiatric Surgery

Name	Title/Rank	Section	Primary Appointment
Harton, Francois	Section Chief & Clinical Lecturer	Podiatric Surgery	
Bulanda, Catherine S.	Clinical Lecturer	Podiatric Surgery	
Feldman, Ziv S.	Clinical Lecturer	Podiatric Surgery	
Gurevitch, Darryl	Clinical Lecturer	Podiatric Surgery	
Gurevitch, Jason	Clinical Lecturer	Podiatric Surgery	
Haverstock, Brent D.	Clinical Assistant Professor	Podiatric Surgery	
Humble, R. Neal	Clinical Assistant Professor	Podiatric Surgery	
Ledoux, Ronald G.	Clinical Lecturer	Podiatric Surgery	
Lelievre, Phillip M.	Clinical Lecturer	Podiatric Surgery	
Newsom, Russell		Podiatric Surgery	
Paul, Darrell		Podiatric Surgery	
Purych, Megan		Podiatric Surgery	
Somer, Gregory		Podiatric Surgery	
Unger, Kenneth		Podiatric Surgery	
Zivot, Mark L.	Clinical Assistant Professor	Podiatric Surgery	

Section of Surgical Oncology

Name	Title/Rank	Section	Primary Appointment
J. Gregory McKinnon	Section Chief & Professor	Surgical Oncology	
Arlette, John	Clinical Professor	Surgical Oncology	
Ball, Chad	Clinical Associate Professor	Surgical Oncology	General Surgery
Bathe, Oliver F.	Professor	Surgical Oncology	General Surgery
Buie, W. Donald	Associate Professor	Surgical Oncology	General Surgery
Bosch, J. Douglas	Clinical Assistant Professor	Surgical Oncology	Otolaryngology
Chandarana, Shamir	Clinical Assistant Professor	Surgical Oncology	Otolaryngology
Dawes, Jeffrey	Clinical Lecturer	Surgical Oncology	Plastic Surgery
Dixon, Elijah	Associate Professor	Surgical Oncology	General Surgery
Dort, Joseph C.	Professor	Surgical Oncology	Otolaryngology
Gelfand, Gary A.J.	Clinical Assistant Professor	Surgical Oncology	Thoracic Surgery
Graham, Andrew J.	Clinical Associate Professor	Surgical Oncology	Thoracic Surgery
Lafreniere, Rene	Professor	Surgical Oncology	General Surgery
Lindsay, Robert L.	Clinical Associate Professor	Surgical Oncology	Plastic Surgery
Mack, Lloyd	Assistant Professor	Surgical Oncology	General Surgery
MacLean, Anthony R.	Clinical Associate Professor	Surgical Oncology	General Surgery
Magi, Enzo	Clinical Associate Professor	Surgical Oncology	Plastic Surgery
Matthews, T. Wayne	Associate Professor	Surgical Oncology	Otolaryngology
McFadden, Sean	Clinical Assistant Professor	Surgical Oncology	Thoracic Surgery
Mew, Daphne J.Y.	Clinical Assistant Professor	Surgical Oncology	General Surgery
Pasieka, Janice	Clinical Professor	Surgical Oncology	General Surgery
Quan, May Lynn	Associate Professor	Surgical Oncology	General Surgery
Schachar, Norman S.	Professor	Surgical Oncology	Orthopedics
Sutherland, Francis R.	Professor	Surgical Oncology	General Surgery
Temple, Walley	Professor	Surgical Oncology	General Surgery
Temple-Oberle, Claire	Associate Professor	Surgical Oncology	Oncology

Section of Thoracic Surgery

Name	Title/Rank	Section	Primary Appointment
McFadden, Sean	Section Chief & Clinical Assistant Professor	Thoracic Surgery	
Gelfand, Gary A.J.	Clinical Assistant Professor	Thoracic Surgery	
Graham, Andrew J.	Clinical Associate Professor	Thoracic Surgery	
Grondin, Sean C.	Clinical Associate Professor	Thoracic Surgery	

Section of Transplant Surgery

Name	Title/Rank	Section	Primary Appointment
Salazar, Anastasio	Section Chief & Associate Professor	Transplant Surgery	
Monroy, F. Mauricio	Associate Professor	Transplant Surgery	
Yilmaz, Serdar	Associate Professor	Transplant Surgery	

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Section of Urology

Name	Title/Rank	Section	Primary Appointment
Carlson, Kevin	Section Chief & Clinical Assistant Professor	Urology	
Barr, Richard		Urology	
Baverstock, Richard	Clinical Assistant Professor	Urology	
Cook, Anthony J.	Clinical Assistant Professor	Urology	Pediatric Surgery
Donnelly, Bryan J.	Clinical Assistant Professor	Urology	
Duffy, Martin	Clinical Lecturer	Urology	
Dushinski, John W.	Clinical Assistant Professor	Urology	
Gotto, Geoffrey	Clinical Assistant Professor	Urology	
Hyndman, C. William	Clinical Assistant Professor	Urology	Pediatric Surgery
Hyndman, Matthew Eric	Clinical Assistant Professor	Urology	
Kawakami, Jun	Clinical Assistant Professor	Urology	
Kozak, Gregory N.	Clinical Assistant Professor	Urology	
Lee, Jay	Clinical Assistant Professor	Urology	
Leong, James		Urology	
Metcalfe, Donald G.;	Clinical Assistant Professor	Urology	
Shields, William R.		Urology (Lethbridge)	
Weber, Bryce	Clinical Assistant Professor	Urology	Pediatric Surgery
Wilkin, R. Peter	Clinical Assistant Professor	Urology	

Section of Vascular Surgery

Name	Title/Rank	Section	Primary Appointment
Petrasek, Paul F.	Section Chief & Associate Professor	Vascular Surgery	
Clark, Jeffrey	Clinical Lecturer	Vascular Surgery	
Guimond, Marie-France	Assistant Professor	Vascular Surgery	
Moore, Randy D.	Associate Professor	Vascular Surgery	
Nutley, Mark	Assistant Professor	Vascular Surgery	
Samis, Gregory A.	Assistant Professor	Vascular Surgery	
Wong, Joyce	Clinical Assistant Professor	Vascular Surgery	

Non Clinical

Name	Title/Rank	Non Clinical	Primary Appointment
Krawetz, Roman	Assistant Professor	Surgery and Cell Biology & Anatomy	
Oddone Paolucci, Elizabeth	Assistant Professor	Department of Surgery	
Thornton, Gail M.	Associate Professor	Department of Surgery	Civil Engineering

Joint Appointments

Name	Title/Rank	Joint Appointments	Primary Appointment
Appoo, Jehangir	Clinical Assistant Professor	Cardiac Sciences	
Bayes, Alexander J.	Clinical Associate Professor	Cardiac Sciences	
Biernaskie, Jeffrey A.	Assistant Professor	Veterinary Medicine	
Bech-Hansen, N. Torben	Professor	Medical Genetics	
Burgess, John J.	Clinical Associate Professor	Cardiac Sciences	
Casha, Steven	Assistant Professor	Clinical Neurosciences	

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Clark, Andrea	Assistant Professor	Kinesiology
Costello, Fiona	Clinical Assistant Professor	Clinical Neurosciences
Dobson, Gary M.	Associate Professor	Anaesthesia
Duplessis, Stephan J.	Clinical Assistant Professor	Clinical Neurosciences
Fedak, Paul W. M.	Assistant Professor	Cardiac Sciences
Fletcher, William A.	Professor	Clinical Neurosciences
Gabriel, Vincent	Clinical Assistant Professor	Clinical Neurosciences
Gregg, Sean	Clinical Lecturer	General Surgery (Red Deer)
Hamilton, Mark	Associate Professor	Clinical Neurosciences
Hayry, Pekka	Clinical Professor	Pathology and Laboratory Medicine
Hurlbert, R. John	Associate Professor	Clinical Neurosciences
Kidd, William T.	Clinical Assistant Professor	Cardiac Sciences
Jena, Debakanta	Clinical Assistant Professor	Family Medicine
Kurwa, Habib	Clinical Associate Professor	Medicine/Oncology
MacEachern, Paul R.	Clinical Assistant Professor	Medicine/Oncology
McColl, Ryan	Clinical Lecturer	General Surgery (Lethbridge)
Lysack, John	Clinical Associate Professor	Radiology/Clinical Neurosciences
Maitland, Andrew	Associate Professor	Cardiac Sciences
Muldrew, Kenneth B.	Assistant Professor	Cell Biology & Anatomy
Prieur (Kieser), Teresa M.	Associate Professor	Cardiac Sciences
Rothschild, John	Clinical Associate Professor	Cardiac Sciences
Stell, William K.	Professor	Cell Biology & Anatomy
Subramaniam, Suresh	Clinical Assistant Professor	Clinical Neurosciences

Adjunct Appointments

Name	Title/Rank	Adjunct Appointments
Barabas, Arpad Z.	Adjunct Associate Professor	Department of Surgery
Bultz, Barry D.	Adjunct Professor	Surgery, Oncology & Psychiatry
Duncan, Neil A.	Adjunct Associate Professor	Department of Surgery
Herzog, Walter	Adjunct Associate Professor	Department of Surgery
McGann, Locksley E.	Adjunct Professor	Department of Surgery
Nigg, Benno M.	Adjunct Professor	Department of Surgery
Plaas, Anna H.K.	Adjunct Associate Professor	Department of Surgery
Ponton-Carss, Alicia	Adjunct Assistant Professor	Department of Surgery
Poulin, Paule	Adjunct Assistant Professor	Cell Biology & Anatomy and Surgery
Rangayyan, Rangaraj M.	Adjunct Professor	Radiology and Surgery
Shrive, Nigel G.	Adjunct Professor	Department of Surgery
Sigalet, David L.	Adjunct Professor	Department of Surgery
Wishart, Paul M.	Adjunct Assistant Professor	Department of Surgery
Zernicke, Ronald F.	Adjunct Professor	Surgery/Physiology & Pharmacology

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2.1 Surgical Activity Reports

Surgical Statistical Activity by Service All Hospitals (FMC, RGH, PLC, ACH, SHC)

Total Activity Cases

Current Year Activity 2013-2014																						
Service	10/11	11/12	12/13	Apr	May	Jun	Q1	Jul	Aug	Sep	Q2	Oct	Nov	Dec	Q3	Jan	Feb	Mar	Q4	YTD	change	Variance
*	234	14	17	2	3	0	5	0	0	0	0	1	0	0	1	0	1	0	1	7	-0.59	-10
ALL	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0.00	0
ANA	70	44	27	6	2	2	10	4	2	1	7	4	4	6	14	3	3	11	17	48	0.78	21
CAR	1232	1355	1360	111	127	113	351	97	99	121	317	140	117	97	354	127	97	90	314	1336	-0.02	-24
COH	1005	1029	1086	101	100	105	306	79	75	89	243	109	89	87	285	119	99	109	327	1161	0.07	75
DEN	963	870	794	65	76	64	205	30	47	80	157	63	61	57	181	68	56	64	188	731	-0.08	-63
ENT	5985	6158	6094	570	564	520	1654	421	386	525	1332	590	552	421	1563	554	476	558	1588	6222	0.02	128
GEN	13397	14275	13844	1188	1254	1227	3669	1166	1089	1272	3527	1361	1270	999	3630	1362	1169	1357	3888	14920	0.08	1,076
GI	642	658	607	65	58	61	184	39	35	54	128	57	48	38	143	51	56	49	156	611	0.01	4
GYN	9039	8844	9181	853	865	747	2465	668	683	846	2197	927	864	722	2513	933	855	952	2740	10033	0.09	852
MED	64	57	59	4	3	8	15	2	4	3	9	3	6	11	20	3	6	4	13	57	-0.03	-2
NEU	1857	1964	1919	182	176	153	511	165	122	176	463	177	168	149	494	164	162	185	511	1979	0.03	60
OBS	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	0
OPH	2364	2342	2490	239	267	204	710	171	173	241	585	267	227	217	711	239	234	265	738	2744	0.10	254
ORA	369	385	411	41	40	44	125	30	32	31	93	36	37	27	100	32	35	47	114	432	0.05	21
ORT	12791	13950	13743	1258	1308	1282	3848	1013	964	1276	3253	1300	1240	975	3515	1526	1258	1365	4149	15033	0.09	1,290
PLS	3230	3412	3223	287	318	303	908	247	246	354	847	352	332	224	908	315	330	290	935	3637	0.13	414
POD	473	410	276	20	35	13	68	21	22	26	69	23	27	24	74	20	23	13	56	267	-0.03	-9
PSY	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	0
RAD	431	481	549	56	34	45	135	63	50	47	160	46	57	36	139	43	35	36	114	548	0.00	-1
RES	84	88	97	6	14	18	38	12	2	6	20	17	7	4	28	4	4	10	18	104	0.07	7
SATP	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	0
THO	628	587	552	64	34	44	142	37	34	43	114	41	50	53	144	51	44	41	136	536	-0.03	-16
TRN	511	470	492	44	49	45	138	34	35	40	109	47	50	36	133	38	46	61	145	525	0.07	33
URO	6340	7049	7623	703	759	652	2114	613	584	646	1843	759	676	638	2073	727	672	720	2119	8149	0.07	526
VAS	761	816	951	68	96	64	228	75	80	72	227	82	71	59	212	89	80	71	240	907	-0.05	-44
Total	62502	65258	65395	5933	6182	5714	17829	4987	4764	5949	15700	6402	5953	4881	17236	6468	5741	6298	18507	69988		

Total Activity Cases by Hours

Current Year Hours 2013-2014																						
Service	10/11	11/12	12/13	Apr	May	Jun	Q1	Jul	Aug	Sep	Q2	Oct	Nov	Dec	Q3	Jan	Feb	Mar	Q4	YTD	change	Var
*	290	13	14	2	1	0	3	0	0	0	0	0	0	0	0	0	1	0	1	6	-0.58	-7.89
ALL	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0.00	0.00
ANA	62	46	29	5	1	3	10	5	3	2	9	4	3	6	14	2	3	14	20	56	0.92	26.98
CAR	2169	2366	2380	194	245	205	645	197	160	191	548	235	195	158	588	218	168	139	526	2309	-0.03	-70.76
COH	4472	4720	5266	491	497	462	1450	398	360	440	1198	485	446	455	1386	560	458	549	1568	5604	0.06	338.20
DEN	1322	1208	1161	113	113	110	336	48	69	116	233	117	100	85	303	117	94	104	316	1191	0.03	30.16
ENT	6235	6342	6586	638	625	591	1854	462	456	571	1490	650	562	551	1784	638	545	619	1802	6911	0.05	325.31
GEN	23345	24943	24419	2000	2188	2055	6244	2013	1860	2104	5978	2355	2204	2097	6657	2301	2023	2286	6610	25491	0.04	1071.66
GI	522	554	498	48	52	43	144	36	30	43	109	48	36	37	121	46	41	38	124	503	0.01	4.44
GYN	9550	9987	10630	1008	993	884	2885	767	803	1058	2629	1172	1105	991	3269	1158	997	1209	3365	12150	0.14	1519.14
MED	58	37	55	5	3	5	12	2	4	1	7	2	6	8	16	2	5	4	11	49	-0.11	-5.94
NEU	6949	7253	7110	709	650	581	1941	497	465	665	1627	612	592	546	1751	605	601	659	1866	7187	0.01	76.70
OBS	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	0.00
OPH	3048	3024	3129	274	317	244	836	222	205	261	688	307	265	265	838	280	268	285	834	3197	0.02	68.84
ORA	918	911	1001	87	93	97	277	79	63	75	217	79	73	57	209	77	68	94	239	946	-0.06	-55.78
ORT	24825	27387	26766	2440	2538	2503	7481	2058	2025	2524	6606	2636	2408	2346	7390	2929	2389	2662	7981	29461	0.10	2695.19
PLS	6839	7127	6844	623	700	677	2001	543	532	787	1862	760	773	588	2121	683	667	671	2021	8008	0.17	1164.21
POD	589	529	368	30	53	15	97	27	28	32	88	35	38	35	109	29	31	16	76	375	0.02	7.02
PSY	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	0.00
RAD	372	426	495	49	25	38	113	53	42	44	139	36	45	37	118	41	27	35	104	476	-0.04	-18.98
RES	169	183	211	16	28	38	83	30	3	8	42	29	18	12	59	13	3	19	35	221	0.05	10.25
SATP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	0.00
THO	1767	1784	1712	173	100	156	430	101	97	127	326	111	161	155	428	153	144	131	429	1615	-0.06	-97.68
TRN	972	868	1013	82	76	87	245	74	48	93	214	102	96	60	258	81	88	104	273	994	-0.02	-18.56
URO	6363	7406	7730	687	727	652	2067	611	584	641	1836	751	686	609	2047	734	663	744	2141	8094	0.05	364.16
VAS	2475	2547	2977	238	306	214	758	250	257	229	737	283	224	195	703	290	238	220	749	2949	-0.01	-28.36
Total	103362	109663	110395	9915	10333	9662	29911	8473	8096	10016	26584	10813	10041	9296	30150	10960	9525	10606	31090	117794		

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Total Activity Cases

Surgical Statistical Activity by Admit Type

All Hospitals (FMC, RGH, PLC, ACH, SHC)

Srv	Admit Type	10/11	11/12	12/13	Apr	May	Jun	Q1	Jul	Aug	Sep	Q2	Oct	Nov	Dec	Q3	Jan	Feb	Mar	Q4	YTD change	%
Current Year Activity 2013-2014																						
*	Elective	169	3	6	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	-83.33
	Emergency	43	5	9	1	2	0	3	0	0	0	0	1	0	0	1	0	1	0	1	5	-44.44
	Urgent	22	6	2	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	-50.00
	Total	234	14	17	2	3	0	5	0	0	0	0	1	0	0	1	0	1	0	1	7	
ALL	Elective	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0.00
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	
ANA	Elective	5	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	-66.67
	Emergency	58	41	23	6	0	1	7	4	2	1	7	2	4	4	10	3	1	9	13	37	60.87
	Urgent	7	3	1	0	2	1	3	0	0	0	0	2	0	2	4	0	2	1	3	10	900.00
	Total	70	44	27	6	2	2	10	4	2	1	7	4	4	6	14	3	3	11	17	48	
CAR	**	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
	Elective	647	717	729	64	63	49	176	36	49	61	146	76	73	47	196	62	55	47	164	682	-6.45
	Emergency	122	145	158	11	16	18	45	13	18	16	47	13	17	17	47	14	6	7	27	166	5.06
	Urgent	462	492	473	36	48	46	130	48	32	44	124	51	27	33	111	51	36	36	123	488	3.17
	Total	1232	1355	1360	111	127	113	351	97	99	121	317	140	117	97	354	127	97	90	314	1336	
COH	Elective	38	22	32	1	0	2	3	2	0	0	2	1	1	1	3	1	1	1	3	11	-65.63
	Emergency	222	214	234	17	22	30	69	25	18	19	62	25	22	19	66	33	26	17	76	273	16.67
	Urgent	745	793	820	83	78	73	234	52	57	70	179	83	66	67	216	85	72	91	248	877	6.95
	Total	1005	1029	1086	101	100	105	306	79	75	89	243	109	89	87	285	119	99	109	327	1161	
DEN	Elective	903	827	749	62	69	59	190	28	46	70	144	58	58	54	170	64	55	63	182	686	-8.41
	Emergency	27	16	16	0	3	1	4	2	1	3	6	2	1	0	3	1	0	0	1	14	-12.50
	Urgent	33	27	29	3	4	4	11	0	0	7	7	3	2	3	8	3	1	1	5	31	6.90
	Total	963	870	794	65	76	64	205	30	47	80	157	63	61	57	181	68	56	64	188	731	
ENT	**	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	0.00
	Elective	5225	5378	5258	501	492	462	1455	340	294	451	1085	512	489	421	1422	490	417	489	1396	5358	1.90
	Emergency	324	330	318	23	31	23	77	28	40	28	96	32	27	39	98	27	20	24	71	342	7.55
	Urgent	436	450	518	46	41	35	122	53	52	46	151	45	36	46	127	37	39	45	121	521	0.58
	Total	5985	6158	6094	570	564	520	1654	421	386	525	1332	590	552	506	1648	554	476	558	1588	6222	

Srv	Admit Type	10/11	11/12	12/13	Apr	May	Jun	Q1	Jul	Aug	Sep	Q2	Oct	Nov	Dec	Q3	Jan	Feb	Mar	Q4	YTD change	%
GEN	Elective	5598	5922	5484	516	494	490	1500	438	350	580	1368	589	546	471	1606	568	502	525	1595	6069	10.67
	Emergency	4785	5026	4415	345	375	395	1115	435	443	395	1273	391	359	408	1158	442	346	473	1261	4807	8.88
	Urgent	3014	3327	3945	327	385	342	1054	293	296	297	886	381	365	326	1072	352	321	359	1032	4044	2.51
	Total	13397	14275	13844	1188	1254	1227	3669	1166	1089	1272	3527	1361	1270	1205	3836	1362	1169	1357	3888	14920	
GI	Elective	542	545	485	57	47	50	154	28	24	47	99	51	37	26	114	44	50	35	129	496	2.27
	Emergency	62	71	74	6	8	8	22	7	11	7	25	3	9	7	19	7	6	8	21	87	17.57
	Urgent	38	42	48	2	3	3	8	4	0	0	4	3	2	5	10	0	0	6	6	28	-41.67
	Total	642	658	607	65	58	61	184	39	35	54	128	57	48	38	143	51	56	49	156	611	
GYN	**	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
	Elective	6323	6257	6520	614	628	535	1777	439	395	590	1424	640	614	538	1792	647	606	653	1906	6899	5.81
	Emergency	1705	1609	1331	132	126	107	365	123	176	149	448	167	140	188	495	174	133	187	494	1802	35.39
	Urgent	1011	977	1329	107	111	105	323	106	112	107	325	120	110	114	344	112	116	112	340	1332	0.23
	Total	9039	8844	9181	853	865	747	2465	668	683	846	2197	927	864	840	2631	933	855	952	2740	10033	
MED	**	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
	Elective	37	38	24	2	0	3	5	1	0	2	3	2	1	1	4	0	1	1	2	14	-41.67
	Emergency	17	13	13	2	1	3	6	0	2	1	3	0	3	4	7	1	2	2	5	21	61.54
	Urgent	9	6	22	0	2	2	4	1	2	0	3	1	2	6	9	2	3	1	6	22	0.00
	Total	64	57	59	4	3	8	15	2	4	3	9	3	6	11	20	3	6	4	13	57	
NEU	**	0	0	2	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	1	2	0.00
	Elective	812	878	852	76	79	57	212	50	45	57	152	74	79	67	220	68	68	78	214	798	-6.34
	Emergency	424	423	416	27	29	37	93	40	32	38	110	32	34	32	98	28	29	34	91	392	-5.77
	Urgent	621	663	649	79	68	59	206	75	45	80	200	71	55	50	176	67	65	73	205	787	21.26
	Total	1857	1964	1919	182	176	153	511	165	122	176	463	177	168	149	494	164	162	185	511	1979	
OBS	Elective	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
	Emergency	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
	Urgent	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
	Total	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
OPH	Elective	1484	1372	1387	141	165	107	413	66	69	133	268	145	113	112	370	141	138	149	428	1479	6.63
	Emergency	515	512	518	37	43	35	115	57	58	53	168	52	63	55	170	52	46	65	163	616	18.92
	Urgent	365	458	585	61	59	62	182	48	46	55	149	70	51	50	171	46	50	51	147	649	10.94

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Total Activity Cases
Surgical Statistical Activity by Admit Type
All Hospitals (FMC, RGH, PLC, ACH, SHC)
Continued

Srv	Admit Type	10/11	11/12	12/13	Apr	May	Jun	Q1	Jul	Aug	Sep	Q2	Oct	Nov	Dec	Q3	Jan	Feb	Mar	Q4	YTD	% change
	Total	2364	2342	2490	239	267	204	710	171	173	241	585	267	227	217	711	239	234	265	738	2744	
ORA	Elective	324	305	323	36	37	35	108	25	24	27	76	25	32	19	76	29	31	38	98	358	10.84
	Emergency	42	76	30	2	2	1	5	3	1	2	6	3	2	3	8	2	1	3	6	25	-16.67
	Urgent	3	4	58	3	1	8	12	2	7	2	11	8	3	5	16	1	3	6	10	49	-15.52
	Total	369	385	411	41	40	44	125	30	32	31	93	36	37	27	100	32	35	47	114	432	
ORT	**	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0.00
	Elective	7534	8561	8486	813	874	803	2490	520	493	800	1813	851	825	709	2385	885	796	877	2558	9246	8.96
	Emergency	3154	3105	2238	178	187	203	568	236	201	218	655	186	176	231	593	295	210	205	710	2526	12.87
	Urgent	2103	2283	3018	267	247	276	790	257	270	258	785	263	239	303	805	346	252	282	880	3260	8.02
	Total	12791	13950	13743	1258	1308	1282	3848	1013	964	1276	3253	1300	1240	1243	3783	1526	1258	1365	4149	15033	
PLS	Elective	2277	2276	2202	209	232	204	645	156	152	240	548	249	231	176	656	227	234	184	645	2494	13.26
	Emergency	515	539	425	33	40	51	124	33	39	52	124	29	46	35	110	29	46	32	107	465	9.41
	Urgent	438	597	596	45	46	48	139	58	55	62	175	74	55	52	181	59	50	74	183	678	13.76
	Total	3230	3412	3223	287	318	303	908	247	246	354	847	352	332	263	947	315	330	290	935	3637	
POD	Elective	263	248	157	14	25	7	46	10	12	22	44	15	21	11	47	10	17	5	32	169	7.64
	Emergency	193	148	30	1	1	1	3	3	3	1	7	3	0	3	6	3	2	3	8	24	-20.00
	Urgent	17	14	89	5	9	5	19	8	7	3	18	5	6	10	21	7	4	5	16	74	-16.85
	Total	473	410	276	20	35	13	68	21	22	26	69	23	27	24	74	20	23	13	56	267	
PSY	Elective	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
	Total	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
RAD	**	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	0.00
	Elective	107	113	143	18	9	16	43	14	18	14	46	15	17	16	48	12	19	20	51	188	31.47
	Emergency	291	354	379	38	19	25	82	40	28	29	97	25	34	14	73	30	14	15	59	311	-17.94
	Urgent	33	14	27	0	6	4	10	9	4	4	17	5	6	6	17	1	2	1	4	48	77.78
	Total	431	481	549	56	34	45	135	63	50	47	160	46	57	36	139	43	35	36	114	548	
RES	Elective	12	17	18	1	5	4	10	4	0	1	5	2	1	1	4	0	2	1	3	22	22.22
	Emergency	34	25	29	3	4	3	10	4	1	3	8	7	2	1	10	0	1	4	5	33	13.79
	Urgent	38	46	50	2	5	11	18	4	1	2	7	8	4	2	14	4	1	5	10	49	-2.00
	Total	84	88	97	6	14	18	38	12	2	6	20	17	7	4	28	4	4	10	18	104	
SATP	**	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00

Srv	Admit Type	10/11	11/12	12/13	Apr	May	Jun	Q1	Jul	Aug	Sep	Q2	Oct	Nov	Dec	Q3	Jan	Feb	Mar	Q4	YTD	% change
SATP	Emergency	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
	Total	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
THO	Elective	49	32	30	1	4	0	5	2	1	2	5	1	0	1	2	0	1	2	3	15	-50.00
	Emergency	58	40	23	2	0	1	3	4	2	1	7	1	4	7	12	6	2	1	9	31	34.78
	Urgent	521	515	499	61	30	43	134	31	31	40	102	39	46	45	130	45	41	38	124	490	-1.80
	Total	628	587	552	64	34	44	142	37	34	43	114	41	50	53	144	51	44	41	136	536	
TRN	Elective	94	96	344	33	37	36	106	23	30	27	80	33	37	29	99	34	28	42	104	389	13.08
	Emergency	92	69	90	7	7	5	19	9	4	10	23	14	12	6	32	3	14	17	34	108	20.00
	Urgent	325	305	58	4	5	4	13	2	1	3	6	0	1	1	2	1	4	2	7	28	-51.72
	Total	511	470	492	44	49	45	138	34	35	40	109	47	50	36	133	38	46	61	145	525	
URO	**	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
	Elective	3635	3549	3596	333	382	279	994	240	231	308	779	372	303	291	966	367	328	317	1012	3751	4.31
	Emergency	1927	2351	2624	223	254	237	714	269	243	232	744	228	254	234	716	241	217	262	720	2894	10.29
	Urgent	778	1148	1402	147	123	136	406	104	110	106	320	159	119	113	391	119	127	141	387	1504	7.28
	Total	6340	7049	7623	703	759	652	2114	613	584	646	1843	759	676	638	2073	727	672	720	2119	8149	
VAS	Elective	377	327	405	35	40	35	110	31	26	34	91	36	35	25	96	40	26	32	98	395	-2.47
	Emergency	207	241	203	11	16	14	41	22	10	12	44	15	7	15	37	24	18	6	48	170	-16.26
	Urgent	177	248	343	22	40	15	77	22	44	26	92	31	29	19	79	25	36	33	94	342	-0.29
	Total	761	816	951	68	96	64	228	75	80	72	227	82	71	59	212	89	80	71	240	907	

**	3	4	5	0	0	0	0	0	0	1	1	2	0	0	2	1	0	1	2	5
Elective	36475	37483	37233	3528	3682	3233	10443	2453	2289	3466	8178	3747	3513	3017	10277	3689	3375	3560	10624	39522
Emergency	14827	15353	13596	1105	1186	1199	3490	1357	1333	1270	3960	1231	1216	1322	3769	1415	1141	1374	3930	15149
Urgent	11197	12418	14561	1300	1314	1282	3896	1177	1172	1212	3561	1422	1224	1258	3904	1363	1225	1363	3951	15312
Summary	62502	65258	65395	5933	6182	5714	17829	4987	4764	5949	15700	6402	5953	5597	17952	6468	5741	6298	18507	69988

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Total Activity Cases
Surgical Statistical Activity by Patient Type
All Hospitals (FMC, RGH, PLC, ACH, SHC)

Srv	Patient Type	10/11	11/12	12/13	Apr	May	Jun	Q1	Jul	Aug	Sep	Q2	Oct	Nov	Dec	Q3	Jan	Feb	Mar	Q4	YTD
Current Year Activity 2013-2014																					
*	InPatient	77	10	13	1	3	0	4	0	0	0	0	1	0	0	1	0	1	0	1	6
	OutPatient	157	4	4	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	Subtotal	234	14	17	2	3	0	5	0	0	0	0	1	0	0	1	0	1	0	1	7
ALL	OutPatient	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
	Subtotal	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
ANA	InPatient	65	44	24	6	2	2	10	4	2	1	7	4	4	4	12	3	3	10	16	45
	OutPatient	5	0	3	0	0	0	0	0	0	0	0	0	0	2	2	0	0	1	1	3
	Subtotal	70	44	27	6	2	2	10	4	2	1	7	4	4	6	14	3	3	11	17	48
CAR	InPatient	827	914	877	70	86	69	225	64	68	91	223	89	74	63	226	85	63	47	195	869
	OutPatient	405	441	483	41	41	44	126	33	31	30	94	51	43	34	128	42	34	43	119	467
	Subtotal	1232	1355	1360	111	127	113	351	97	99	121	317	140	117	97	354	127	97	90	314	1336
COH	InPatient	1004	1028	1085	101	99	105	305	79	74	89	242	108	89	87	284	116	99	107	322	1153
	OutPatient	1	1	1	0	1	0	1	0	1	0	1	1	0	0	1	3	0	2	5	8
	Subtotal	1005	1029	1086	101	100	105	306	79	75	89	243	109	89	87	285	119	99	109	327	1161
DEN	InPatient	81	53	51	4	7	5	16	5	3	9	17	6	7	2	15	5	2	3	10	58
	OutPatient	882	817	743	61	69	59	189	25	44	71	140	57	54	55	166	63	54	61	178	673
	Subtotal	963	870	794	65	76	64	205	30	47	80	157	63	61	57	181	68	56	64	188	731
ENT	InPatient	1271	1285	1410	110	118	108	336	99	104	101	304	129	116	120	365	115	113	138	366	1371
	OutPatient	4714	4873	4684	460	446	412	1318	322	282	424	1028	461	436	386	1283	439	363	420	1222	4851
	Subtotal	5985	6158	6094	570	564	520	1654	421	386	525	1332	590	552	506	1648	554	476	558	1588	6222
GEN	InPatient	8579	9060	8898	720	801	752	2273	755	741	748	2244	806	728	750	2284	828	710	857	2395	9196
	OutPatient	4818	5215	4946	468	453	475	1396	411	348	524	1283	555	542	455	1552	534	459	500	1493	5724
	Subtotal	13397	14275	13844	1188	1254	1227	3669	1166	1089	1272	3527	1361	1270	1205	3836	1362	1169	1357	3888	14920
GI	InPatient	119	116	102	9	10	9	28	8	12	8	28	6	9	11	26	8	8	10	26	108
	OutPatient	523	542	505	56	48	52	156	31	23	46	100	51	39	27	117	43	48	39	130	503
	Subtotal	642	658	607	65	58	61	184	39	35	54	128	57	48	38	143	51	56	49	156	611
GYN	InPatient	4064	4045	4371	395	397	366	1158	342	364	473	1179	495	494	478	1467	484	417	499	1400	5204
	OutPatient	4975	4799	4810	458	468	381	1307	326	319	373	1018	432	370	362	1164	449	438	453	1340	4829
	Subtotal	9039	8844	9181	853	865	747	2465	668	683	846	2197	927	864	840	2631	933	855	952	2740	10033

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Total Activity Cases
Surgical Statistical Activity by Patient Type
All Hospitals (FMC, RGH, PLC, ACH, SHC)
Continued

Srv	Patient Type	10/11	11/12	12/13	Apr	May	Jun	Q1	Jul	Aug	Sep	Q2	Oct	Nov	Dec	Q3	Jan	Feb	Mar	Q4	YTD
MED	InPatient	33	22	18	3	1	5	9	0	2	1	3	1	3	5	9	2	4	3	9	30
	OutPatient	31	35	41	1	2	3	6	2	2	2	6	2	3	6	11	1	2	1	4	27
	Subtotal	64	57	59	4	3	8	15	2	4	3	9	3	6	11	20	3	6	4	13	57
NEU	InPatient	1659	1749	1704	166	161	132	459	158	112	158	428	158	148	131	437	151	139	166	456	1780
	OutPatient	198	215	215	16	15	21	52	7	10	18	35	19	20	18	57	13	23	19	55	199
	Subtotal	1857	1964	1919	182	176	153	511	165	122	176	463	177	168	149	494	164	162	185	511	1979
OBS	InPatient	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	OutPatient	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Subtotal	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OPH	InPatient	600	583	595	43	51	40	134	58	61	58	177	61	65	65	191	59	50	71	180	682
	OutPatient	1764	1759	1895	196	216	164	576	113	112	183	408	206	162	152	520	180	184	194	558	2062
	Subtotal	2364	2342	2490	239	267	204	710	171	173	241	585	267	227	217	711	239	234	265	738	2744
ORA	InPatient	302	316	327	33	28	32	93	25	25	23	73	24	20	20	64	22	20	29	71	301
	OutPatient	67	69	84	8	12	12	32	5	7	8	20	12	17	7	36	10	15	18	43	131
	Subtotal	369	385	411	41	40	44	125	30	32	31	93	36	37	27	100	32	35	47	114	432
ORT	InPatient	9123	10282	10172	925	1,004	935	2864	765	760	932	2457	908	883	894	2685	1113	891	974	2978	10984
	OutPatient	3668	3668	3571	333	304	347	984	248	204	344	796	392	357	349	1098	413	367	391	1171	4049
	Subtotal	12791	13950	13743	1258	1308	1282	3848	1013	964	1276	3253	1300	1240	1243	3783	1526	1258	1365	4149	15033
PLS	InPatient	1594	1815	1627	126	149	143	418	121	116	168	405	164	170	132	466	152	152	145	449	1738
	OutPatient	1636	1597	1596	161	169	160	490	126	130	186	442	188	162	131	481	163	178	145	486	1899
	Subtotal	3230	3412	3223	287	318	303	908	247	246	354	847	352	332	263	947	315	330	290	935	3637
POD	InPatient	323	267	182	9	24	8	41	13	12	12	37	13	15	16	44	13	12	9	34	156
	OutPatient	150	143	94	11	11	5	27	8	10	14	32	10	12	8	30	7	11	4	22	111
	Subtotal	473	410	276	20	35	13	68	21	22	26	69	23	27	24	74	20	23	13	56	267
PSY	InPatient	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	OutPatient	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Subtotal	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RAD	InPatient	333	395	440	42	25	30	97	49	35	35	119	33	42	24	99	33	18	18	69	384
	OutPatient	98	86	109	14	9	15	38	14	15	12	41	13	15	12	40	10	17	18	45	164
	Subtotal	431	481	549	56	34	45	135	63	50	47	160	46	57	36	139	43	35	36	114	548
RES	InPatient	71	68	78	5	9	15	29	8	2	6	16	14	5	3	22	3	2	9	14	81
	OutPatient	13	20	19	1	5	3	9	4	0	0	4	3	2	1	6	1	2	1	4	23
	Subtotal	84	88	97	6	14	18	38	12	2	6	20	17	7	4	28	4	4	10	18	104
SATP	InPatient	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	OutPatient	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Subtotal	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
THO	InPatient	599	537	486	56	33	41	130	35	32	40	107	31	45	47	123	46	40	36	122	482
	OutPatient	29	50	66	8	1	3	12	2	2	3	7	10	5	6	21	5	4	5	14	54
	Subtotal	628	587	552	64	34	44	142	37	34	43	114	41	50	53	144	51	44	41	136	536
TRN	InPatient	189	140	209	17	18	14	49	22	7	22	51	25	18	14	57	12	24	28	64	221
	OutPatient	322	330	283	27	31	31	89	12	28	18	58	22	32	22	76	26	22	33	81	304
	Subtotal	511	470	492	44	49	45	138	34	35	40	109	47	50	36	133	38	46	61	145	525
URO	InPatient	3771	4452	4878	419	466	432	1317	431	424	412	1267	461	447	412	1320	457	388	465	1310	5214
	OutPatient	2569	2597	2745	284	293	220	797	182	160	234	576	298	229	226	753	270	284	255	809	2935
	Subtotal	6340	7049	7623	703	759	652	2114	613	584	646	1843	759	676	638	2073	727	672	720	2119	8149
VAS	InPatient	625	703	765	53	82	46	181	64	66	55	185	77	65	53	195	78	69	53	200	761
	OutPatient	136	113	186	15	14	18	47	11	14	17	42	5	6	6	17	11	11	18	40	146
	Subtotal	761	816	951	68	96	64	228	75	80	72	227	82	71	59	212	89	80	71	240	907
Summary																					
InPatient		35328	37884	38312	3313	3574	3289	10176	3105	3022	3442	9569	3614	3447	3331	10392	3785	3225	3677	10687	40824
OutPatient		27174	27374	27083	2620	2608	2425	7653	1882	1742	2507	6131	2788	2506	2266	7560	2683	2516	2621	7820	29164
Total		62502	65258	65395	5933	6182	5714	17829	4987	4764	5949	15700	6402	5953	5597	17952	6468	5741	6298	18507	69988

2.2 NHSF Surgical Indicator Report

	Fiscal	Fiscal	Fiscal	Fiscal 2013-2014																	Fiscal
NHSF Activity	2010/11	2011/12	2012/13	Apr	May	June	1 QT	July	Aug	Sept	2 QT	Oct	Nov	Dec	3 QT	Jan	Feb	Mar *TD	4 QT	2013/14	
Cataracts	12,204	12,955	12,607	1,180	1,191	991	3,362	949	1,006	1,222	3,177	1,161	1,065	695	2,921	1,006	1,197	1576	3,779	13,239	
Non-Cataracts	2,331	3,681	3,965	339	372	321	1,032	256	237	268	761	333	301	236	870	331	292	373	996	3,659	
Ophthalmology Total	14,535	16,636	16,572	1,519	1,563	1,312	4,394	1,205	1,243	1,490	3,938	1,494	1,366	931	3,791	1,337	1,489	1,949	4,775	16,898	
Oral Maxillofacial Surgery	761	854	984	84	81	80	245	63	90	67	220	81	108	51	240	57	63	71	191	896	
Podiatry	823	860	947	100	110	100	310	48	71	105	224	115	106	70	291	127	95	144	366	1,191	
Restorative Dentistry	409	484	528	52	42	20	114	20	25	43	88	26	42	33	101	48	32	20	100	403	
Vestibular Testing	239	229	234	18	24	16	58	16	10	14	40	15	11	2	28	3	6	5	14	140	
NHSF Activity	17,389	19,063	19,265	1,773	1,820	1,528	5,121	1,352	1,439	1,719	4,510	1,731	1,633	1,087	4,451	1,572	1,685	2,189	5,446	19,528	
Kensington Clinic	4,667	4,913	5,015	428	453	370	1,251	441	414	369	1,224	448	429	362	1,239	479	415	437	1,331	5,045	
Total NHSF Activity	22,056	23,976	24,280	2,201	2,273	1,898	6,372	1,793	1,853	2,088	5,734	2,179	2,062	1,449	5,690	2,051	2,100	2,626	6,777	24,573	

(Note: Data is continuously & retrospectively updated & adjusted as information is received).

NHSF Waiting List	2010/11	2011/12	2012/13	Apr	May	June	1 QT	July	Aug	Sept	2 QT	Oct	Nov	Dec	3 QT	Jan	Feb	Mar	4 QT
Cataracts	6,515	5,723	5,409	5,580	5,434	5,502	5,502	5,673	5,708	5,603	5,603	5,886	6,117	6,585	6,585	6,451	6,445	6,294	6,294
Non-Cataracts	2,174	2,077	1,454	1,566	1,547	1,573	1,573	1,686	1,699	1,699	1,699	1,732	1,807	1,870	1,870	1,403	1,462	1,494	1,494
Ophthalmology Total	8,689	7,800	6,863	7,146	6,981	7,075	7,075	7,359	7,407	7,302	7,302	7,618	7,924	8,455	8,455	7,854	7,907	7,788	7,788
Oral Maxillofacial Surgery	219	318	536	576	578	581	581	494	477	513	513	568	564	578	578	423	462	468	468
Podiatry	1,075	1,344	976	977	1,039	985	985	1,094	1,107	1,129	1,129	1,188	1,181	1,257	1,257	863	913	894	894
Restorative Dentistry	96	169	174	179	204	198	198	224	239	231	231	268	277	274	274	183	206	221	221
Vestibular Testing	46	59	53	52	40	38	38	67	66	59	59	56	47	47	47	53	48	-	-
Total NHSF Wait List	10,125	9,690	8,602	8,930	8,842	8,877	8,877	9,238	9,296	9,234	9,234	9,698	9,993	10,611	10,611	9,376	9,536	9,371	9,371

Wait List is a snapshot taken at the end of each reporting period (e.g. month, quarter, year)

2.3 Rural Volumes Surgery Report (BMS, CGH, and HRH)

Information below depicts cummalative statistics from the fiscal year March 2013-February 2014

IP/OP	Surgeon Service	Number of Cases				Percent of Total Cases			
		BMS	CGH	HRH	Total	BMS	CGH	HRH	Total
Inpatient	Gen	0	52	1	53	0.00%	1.20%	0.02%	1.23%
	Gyn	0	97	55	152	0.00%	2.24%	1.27%	3.51%
	Med	33	102	0	135	0.76%	2.36%	0.00%	3.12%
	Obs	0	0	67	67	0.00%	0.00%	1.55%	1.55%
	Oph	0	0	0	0	0.00%	0.00%	0.00%	0.00%
	Ort	755	1	0	756	17.45%	0.02%	0.00%	0.00%
	Pls	304	9	0	313	7.03%	0.21%	0.00%	7.24%
	Uro	0	0	0	0	0.00%	0.00%	0.00%	0.00%
	Vas	0	0	0	0	0.00%	0.00%	0.00%	0.00%
	Total	1092	261	123	1476	25.24%	6.03%	2.84%	34.12%
Outpatient	Gen	0	131	885	1016	0.00%	3.03%	20.46%	23.48%
	Gyn	0	158	92	250	0.00%	3.65%	2.13%	5.77%
	Med	74	59	68	201	1.71%	1.36%	1.57%	4.65%
	Obs	0	0	122	122	0.00%	0.00%	2.82%	2.82%
	Oph	0	5	63	68	0.00%	0.12%	1.46%	1.57%
	Ort	554	0	0	554	12.81%	0.00%	0.00%	12.81%
	Pls	444	39	0	483	10.26%	0.90%	0.00%	11.17%
	Uro	0	0	25	25	0.00%	0.00%	0.58%	0.58%
	Vas	0	131	0	131	0.00%	3.03%	0.00%	3.03%
	Total	1072	523	1255	2850	24.78%	12.09%	29.01%	65.88%
Total	Gen	0	183	886	1069	0.00%	4.23%	20.48%	24.71%
	Gyn	0	255	147	402	0.00%	5.89%	3.40%	9.32%
	Med	107	161	68	336	2.47%	3.72%	1.57%	7.77%
	Obs	0	0	189	189	0.00%	0.00%	4.37%	4.37%
	Oph	0	5	63	68	0.00%	0.12%	1.46%	1.57%
	Ort	1309	1	0	1310	30.26%	0.02%	0.00%	30.28%
	Pls	748	48	0	796	17.29%	1.11%	0.00%	18.40%
	Uro	0	0	25	25	0.00%	0.00%	0.58%	0.58%
	Vas	0	131	0	131	0.00%	3.03%	0.00%	3.03%
	Total	2164	784	1378	4326	50.02%	18.12%	31.85%	100.00%

*Note:

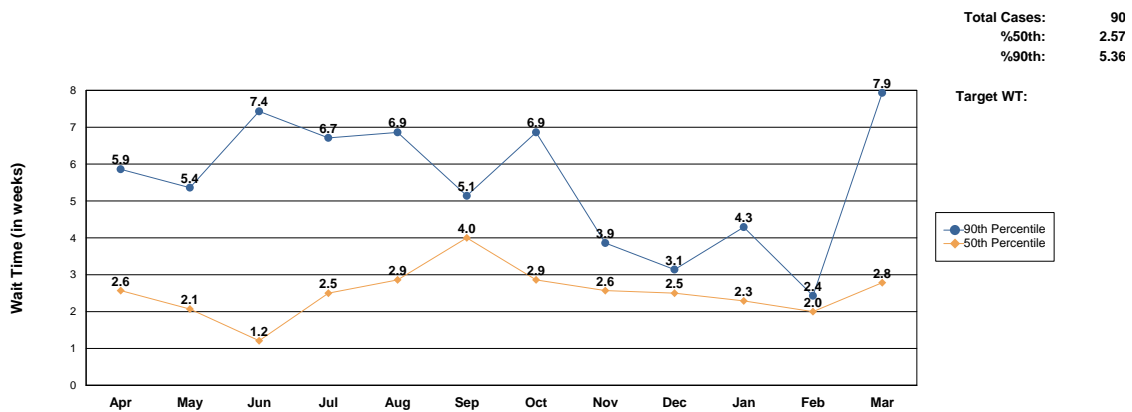
BMS - Banff Mineral Springs Hospital

CHG - Canmore General Hospital

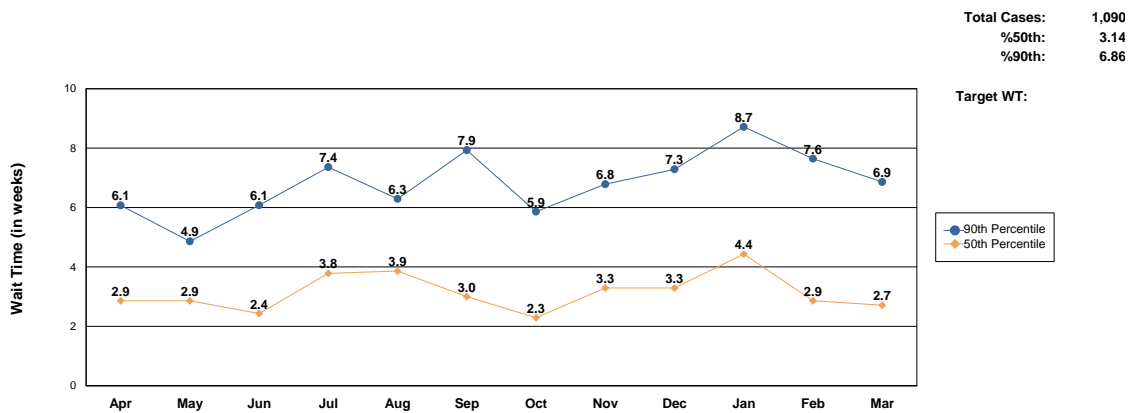
HRH - High River General Hospital

2.4 Wait Time Reports by Procedure Group

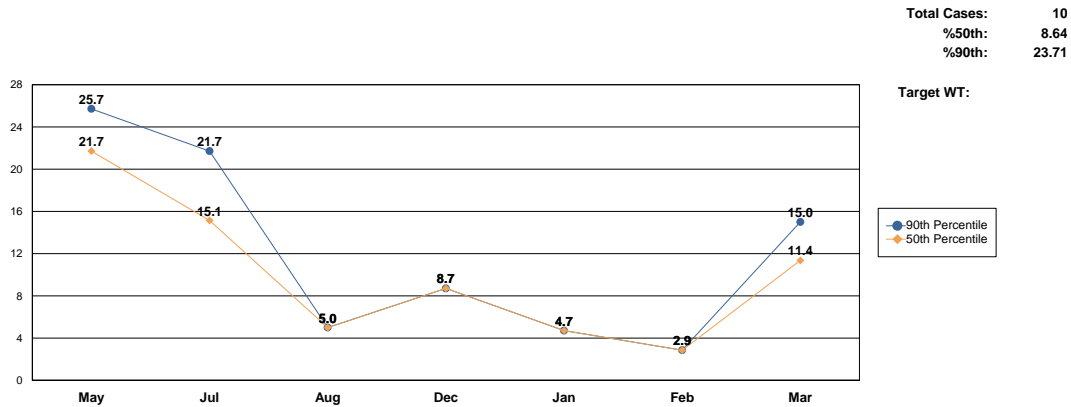
Ear, Nose, Throat - Otolaryngology Urgent Throat Endoscopy Wait Time



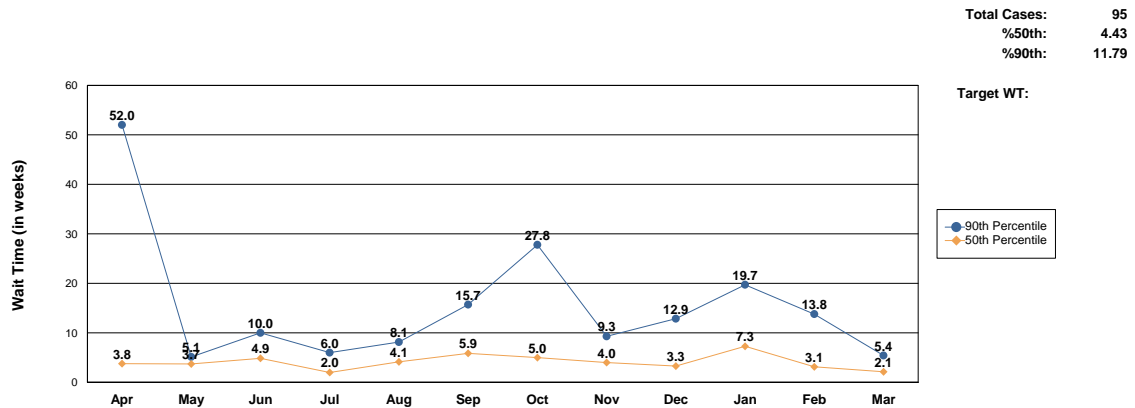
General Surgery Urgent Breast Mastectomy Wait Time



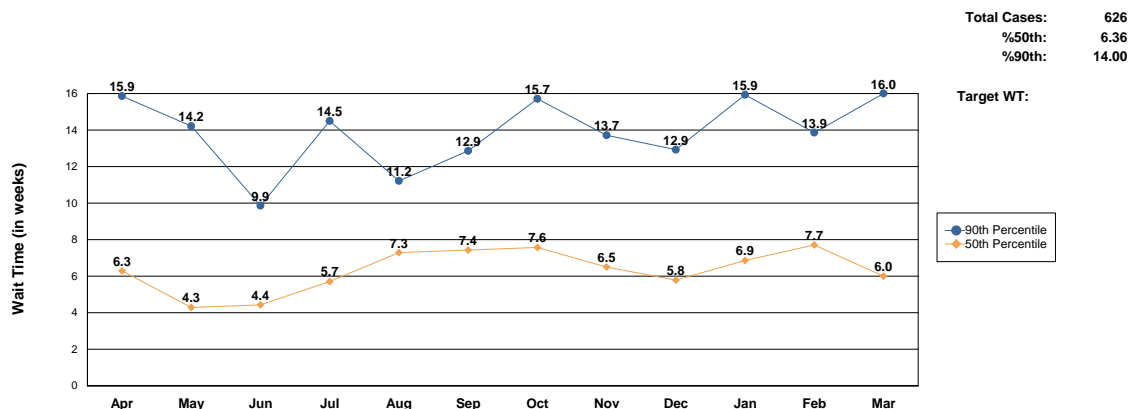
Neurosurgery/Orthopaedic Surgery Elective Spine Lumbar Wait Time



Gynecology/Obstetrics Surgery Urgent Hysterectomy Other Wait Time



Ophthalmology Elective Eye Retinal/Choroid/Vitreous Wait Time

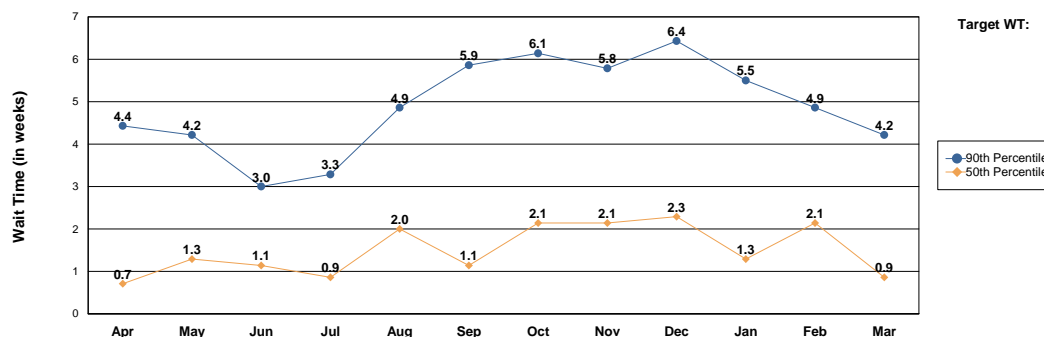


Opthalmology

Urgent Eye Retinal/Choroid/Vitreous Wait Time

Total Cases: 580
 %50th: 1.29
 %90th: 4.86

Target WT:

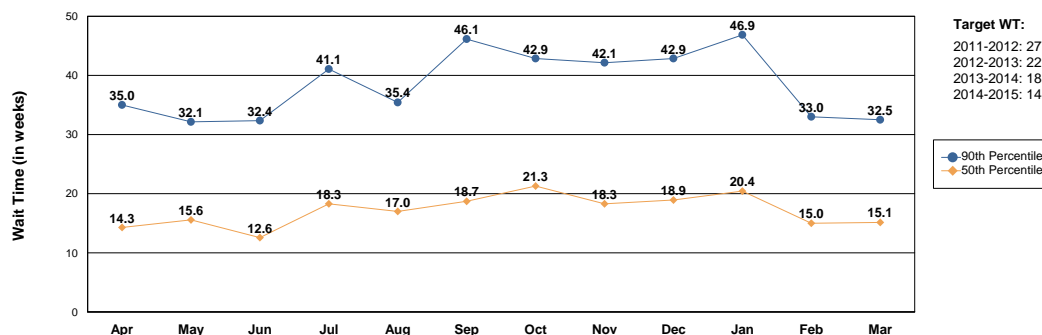


Orthopaedic Surgery Elective Hip Arthroplasty Wait Time

Total Cases: 1,368
 %50th: 16.71
 %90th: 37.86

Target WT:

2011-2012: 27 weeks
 2012-2013: 22 weeks
 2013-2014: 18 weeks
 2014-2015: 14 weeks

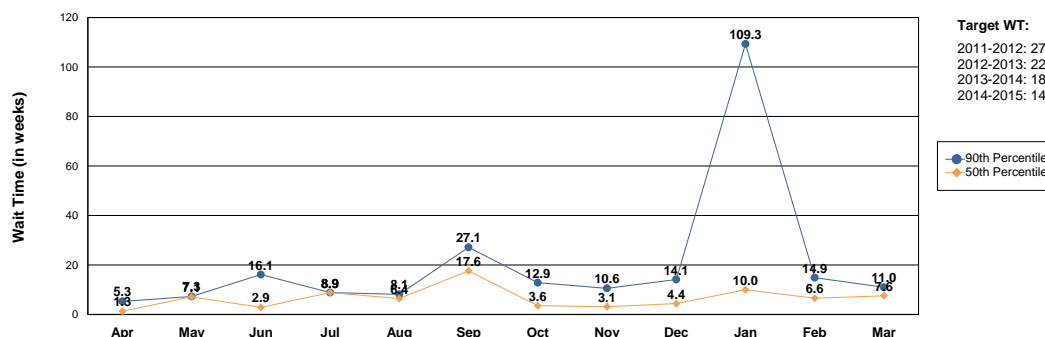


Orthopaedic Surgery Urgent Hip Arthroplasty Wait Time

Total Cases: 64
 %50th: 6.50
 %90th: 14.07

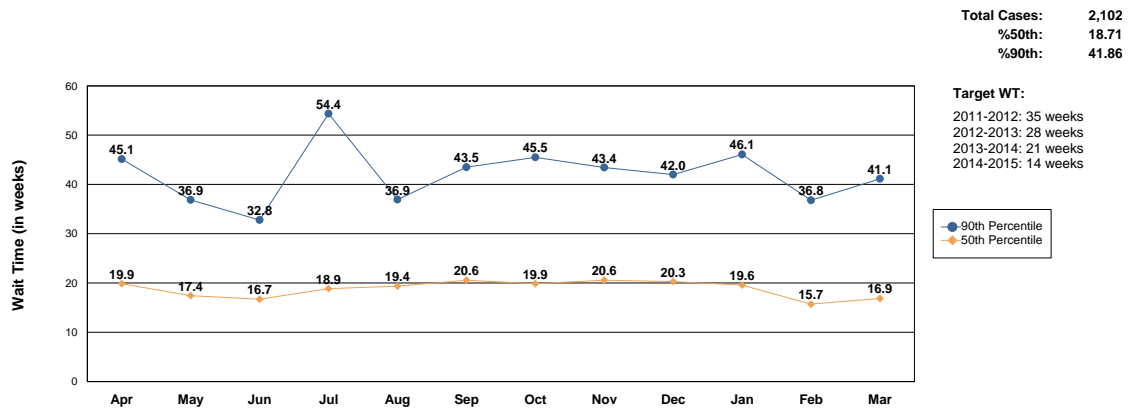
Target WT:

2011-2012: 27 weeks
 2012-2013: 22 weeks
 2013-2014: 18 weeks
 2014-2015: 14 weeks



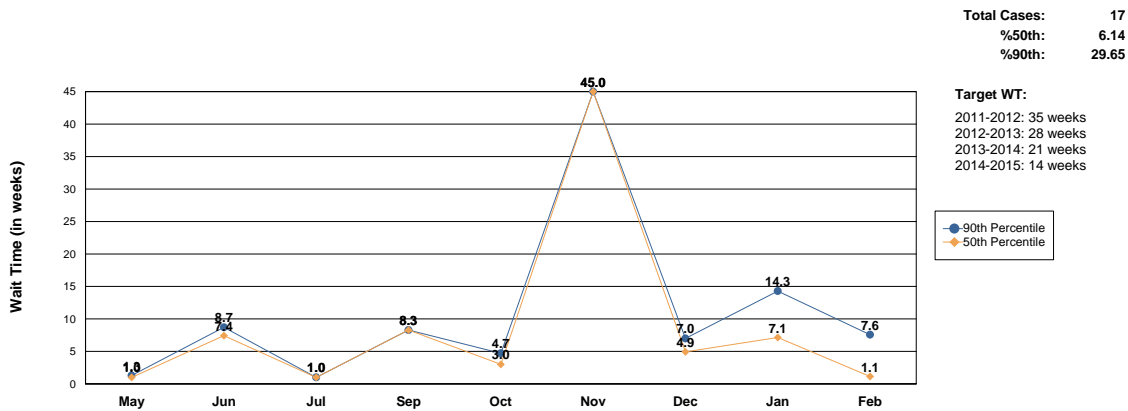
Orthopaedic Surgery

Elective Knee Arthroplasty Wait Time



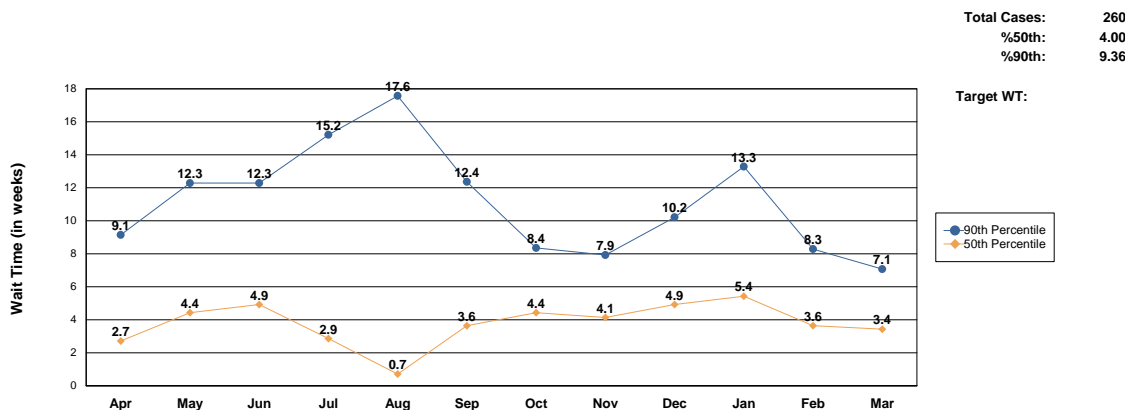
Orthopaedic Surgery

Urgent Knee Arthroplasty Wait Time

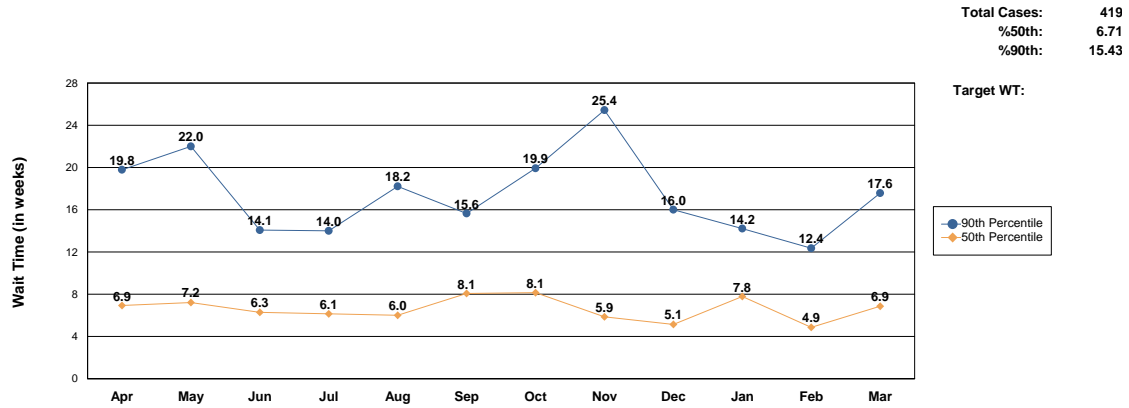


Thoracic Surgery

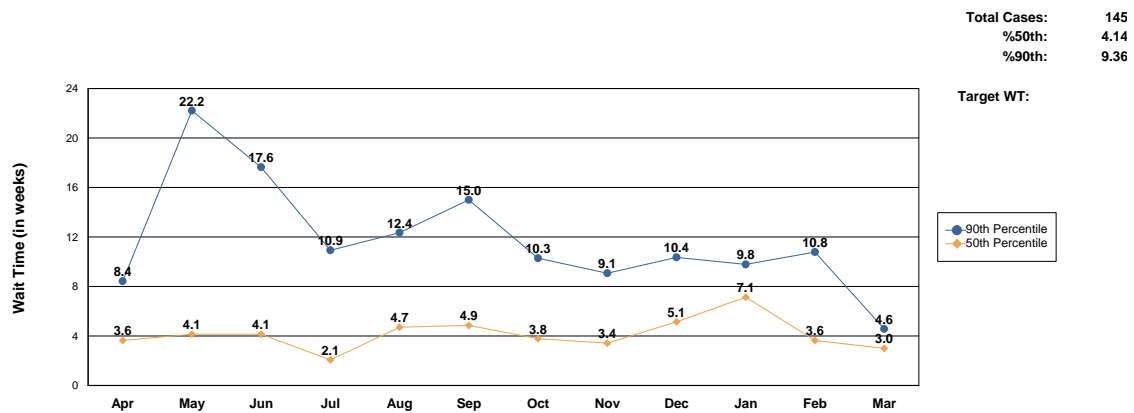
Urgent Lung Wait Time



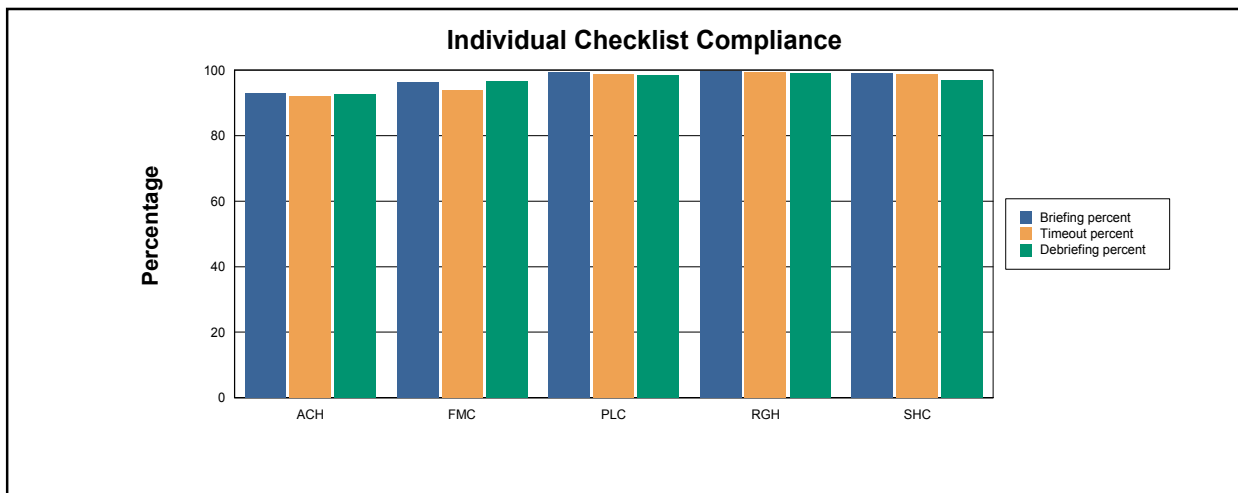
Urology Elective Prostate Other Wait Time



Urology Urgent Prostate Other Wait Time



2.5 Safe Surgery Checklist Compliance



Site	Total Case Counts	Briefing Yes	Briefing Percent	Timeout Yes	Timeout Percent	Debriefing Yes	Debriefing Percent
ACH	857	796	93	788	92	794	93
FMC	1560	1503	96	1467	94	1509	97
PLC	1167	1159	99	1152	99	1151	99
RGH	1497	1491	100	1487	99	1482	99
SHC	716	710	99	708	99	694	97

3.1 Peer-Reviewed Journal Articles

Section of General Surgery

1. Coolbaugh CL; **Anderson IB**; Wilson MD; Hawkins DA; Amsterdam EA. (2014). Evaluation of an exercise field test using heart rate monitors to assess cardiorespiratory fitness and heart rate recovery in an asymptomatic population [In Process Citation]. PLoS One. 2014 9(5):e07704
2. **Anderson IB**; Sudhakar S; Keenan CR; Srinivasan M. (2013). The elusive SIRS diagnosis. J Gen Intern Med. 2013 March 28(3):470-4
3. **Ball CG**; Ouellet JF; **Anderson IB**; **Kirkpatrick AW**. (2013). Avoidance of total abdominal wall loss despite torso soft tissue clostridial myonecrosis: a case report. J Med Case Rep 2013 7:5.
4. **Poulin P**; **Austen L**; Scott CM; Poulin M; Gall N; Seidel J; **Lafreniere R**. (2013). Introduction of new technologies and decision making processes: a framework to adapt a Local Health Technology Decision Support Program for other local settings. Med Devices (Auckl) 2013 (6):185-93.
5. **Poulin P**; **Austen L**; Scott CM; Waddell CD; **Dixon E**; Poulin M; **Lafreniere R**. (2013). Multi-criteria development and incorporation into decision tools for health technology adoption. J Health Organ Manag 2013 27(2):246-65
6. Wei AC; Devitt KS; Wiebe M; **Bathe OF**; McLeod RS; Urbach DR. Surgical process improvement tools: defining quality gaps and priority areas in gastrointestinal cancer surgery. Curr Oncol 2014 Apr;21(2):e195-202
7. Hamilton TD; Leugner D; Kopciuk K; **Dixon E**; **Sutherland FR**; **Bathe OF**. Identification of prognostic inflammatory factors in colorectal liver metastases [In Process Citation] BMC Cancer 2014;14:542
8. Wei AC; Urbach DR; Devitt KS; Wiebe M; **Bathe OF**; McLeod RS; Kennedy ED; Baxter NN. Improving quality through process change: a scoping review of process improvement tools in cancer surgery [In Process Citation] BMC Surg 2014;14(1):45
9. **Bathe OF**; Farshidfar F. From genotype to functional phenotype: unraveling the metabolomic features of colorectal cancer. Genes (Basel) 2014;5(3):536-60
10. Davis VW; Schiller DE; Eurich D; **Bathe OF**; Sawyer MB. Pancreatic ductal adenocarcinoma is associated with a distinct urinary metabolomic signature. Surg Oncol 2013 Dec;20 Suppl 3:S415-23
11. Stretch C; Khan S; Asgarian N; Eisner R; Vaisipour S; Damaraju S; Graham K; **Bathe OF**; Steed H; Greiner R; Baracos VE. Effects of sample size on differential gene expression, rank order and prediction accuracy of a gene signature [In Process Citation] PLoS One 2013;8(6):e65380
12. McLean SR; Karsanji D; Wilson J; **Dixon E**; **Sutherland FR**; **Pasieka J**; **Ball C**; **Bathe OF**. The effect of wait times on oncological outcomes from periampullary adenocarcinomas. J Surg Oncol 2013 Jun;107(8):853-8
13. Lieffers JR; **Bathe OF**; Fassbender K; Winget M; Baracos VE. Sarcopenia is associated with postoperative infection and delayed recovery from colorectal cancer resection surgery. Br J Cancer 2012 Sep 4;107(6):931-6
14. Munene G; Francis W; Garland SN; Pelletier G; **Mack LA**; **Bathe OF**. The quality of life trajectory of resected gastric cancer. J Surg Oncol 2012 Mar 15;105(4):337-41
15. Noble C; **Church N**; Shand A; Lees C; Brodie H; Greenhill G; Kennedy N. (2014). PTH-028<Analysis Of Quality Outcomes Following Changing Bowel Preparation For Colonoscopy From Picolax To Moviprep In Nhs Lothian [In Process Citation]. Gut 2014 June 63(1):A220-1.
16. Zhang Z; **Church N**; Harrison RJ; Howard CJ; Carpenter MA. (2013). Elastic and anelastic relaxations accompanying magnetic ordering and spin-flop transitions in hematite, Fe₂O₃. J Phys Condens Matter 2013 March 20;25(11):116006.
17. Hamilton LE; Jones K; **Church N**; Medlicott S. (2013). Synchronous appendiceal and intramucosal

- gastric signet ring cell carcinomas in an individual with CDH1-associated hereditary diffuse gastric carcinoma: a case report of a novel association and review of the literature. *BMC Gastroenterol* 2013 (13):114.
18. Lees JS; **Church N**; Langdale-Brown B; Bellamy C; Gibson P; Watson S. (2013). IgG4-related disease: a novel, important but easily missed condition. *J R Coll Physicians Edinb* 2013 43(2):126-33.
 19. Brasel KJ; Birnbaum EH; **Datta I**. (2014). Canadian association of general surgeons, the american college of surgeons, the canadian society of colorectal surgeons and the american society of colorectal surgeons evidence based reviews in surgery - colorectal surgery [In Process Citation]. *Dis Colon Rectum* September 2014 57(9):1149-51.
 20. Edwards JP; **Datta I**; Hunt JD; Stefan K; **Ball CG**; **Dixon E**; **Grondin SC**. (2014). The impact of computed tomographic screening for lung cancer on the thoracic surgery workforce [In Process Citation]. *Ann Thorac Surg* 2014 August 98(2):447-52
 21. Edwards JP; **Datta I**; Hunt JD; Stefan K; **Ball CG**; **Dixon E**; **Grondin SC**. (2014). A novel approach for the accurate prediction of thoracic surgery workforce requirements in Canada. *J Thorac Cardiovasc Surg* July 2014 148(1):7-12.
 22. Edwards JP; **Datta I**; Hunt JD; Stefan K; **Ball CG**; **Dixon E**; **Grondin SC**. (2014). The impact of computed tomographic screening for lung cancer on the thoracic surgery workforce [In Process Citation]. *Ann Thorac Surg*. 2014 August 98(2):447-52 .
 23. Edwards JP; **Datta I**; Hunt JD; Stefan K; **Ball CG**; **Dixon E**; **Grondin SC**. (2014). A novel approach for the accurate prediction of thoracic surgery workforce requirements in Canada. *J Thorac Cardiovasc Surg*. 2014 July 148(1):7-12.
 24. Granader Y; Wallace GL; Hardy KK; Yerys BE; Lawson RA; Rosenthal M; Wills MC; **Dixon E**; Pandey J; Penna R; Schultz RT; Kenworthy L. (2014). Characterizing the Factor Structure of Parent Reported Executive Function in Autism Spectrum Disorders: The Impact of Cognitive Inflexibility [epub ahead of print] [Record Supplied By Publisher]. *J Autism Dev Disord*. 2014 June 28; p
 25. Hurdle V; Ouellet JF; **Dixon E**; Howard TJ; Lillemoe KD; Vollmer CM; **Sutherland FR**; **Ball CG**. (2014). Does regional variation impact decision-making in the management and palliation of pancreatic head adenocarcinoma? Results from an international survey. *Can J Surg* 2014 June 57(3):E69-74.
 26. Roberts DJ; Ouellet JF; McBeth PB; **Kirkpatrick AW**; **Dixon E**; **Ball CG**. (2014). The “weekend warrior”: fact or fiction for major trauma? *Can J Surg*. 2014 June 57(3):E62-8.
 27. **Ball CG**; **Dixon E**; **MacLean AR**; Kaplan GG; Nicholson L; **Sutherland FR**. (2014). The impact of an acute care surgery clinical care pathway for suspected appendicitis on the use of CT in the emergency department. *Can J Surg* . 2014 June 57(3):194-8.
 28. Primrose J; Falk S; Finch-Jones M; Valle J; O'Reilly D; Siriwardena A; Hornbuckle J; Peterson M; Rees M; Iveson T; Hickish T; Butler R; Stanton L; **Dixon E**; Little L; Bowers M; Pugh S; Garden OJ; Cunningham D; Maughan T; Bridgewater J. (2014). Systemic chemotherapy with or without cetuximab in patients with resectable colorectal liver metastasis: the New EPOC randomised controlled trial. *Lancet Oncol*. 2014 May 15(6):601-11.
 29. Edwards JP; Schofield A; **Paolucci EO**; Schieman C; Kelly E; Servatyari R; **Dixon E**; **Ball CG**; **Grondin SC**. (2014). Identifying areas of weakness in thoracic surgery residency training: a comparison of the perceptions of residents and program directors [In Process Citation]. *J Surg Educ*. 2014 May-June 71(3):360-6.
 30. Khodyakov D; Pulido E; Ramos A; **Dixon E**. (2014). Community-partnered research conference model: the experience of Community Partners in Care study. *Prog Community Health Partnersh*. 2014 Spring;8(1):83-97.
 31. Grendar J; Grendarova P; Sinha R; **Dixon E**. (2014). Neoadjuvant therapy for downstaging of locally advanced hilar cholangiocarcinoma: a systematic

- review [In Process Citation]. HPB (Oxford) 2014 April 16(4):297-303.
32. **Dixon E; Buie WD; Heise CP.** (2014). What is the preferred surgery for perforated left-sided diverticulitis?. J Am Coll Surg 2014 March 218(3):495-7.
 33. **Karanicolas PJ; Metrakos P; Chan K; Asmis T; Chen E; Kingham TP; Kemeny N; Porter G; Fields RC; Pingpank J; Dixon E; Wei A; Cleary S; Zogopoulos G; Dey C; D'Angelica M; Fong Y; Dowden S; Ko YJ.** (2014). Hepatic arterial infusion pump chemotherapy in the management of colorectal liver metastases: expert consensus statement. Curr Oncol 2014 February 21(1):e129-36.
 34. **Pasioka JL; Longman RS; Chambers AJ; Rorstad O; Rach-Longman K; Dixon E.** (2014). Cognitive impairment associated with carcinoid syndrome [In Process Citation] Ann Surg. 2014 February 259(2):355-9.
 35. **Bressan AK; Roberts DJ; Edwards JP; Bhatti SU; Dixon E; Sutherland FR; Bathe O; Ball CG.** (2014). Efficacy of a dual-ring wound protector for prevention of incisional surgical site infection after Whipple's procedure (pancreaticoduodenectomy) with preoperatively-placed intrabiliary stents: protocol for a randomised controlled trial [In Process Citation]. BMJ Open 2014;4(8):e005577.
 36. **Hamilton TD; Leugner D; Kopciuk K; Dixon E; Sutherland FR; Bathe OF.** (2014). Identification of prognostic inflammatory factors in colorectal liver metastases [In Process Citation]. BMC Cancer 2014 (14):542.
 37. **Ball CG; Grondin SC; Schieman C; Feliciano DV; Dixon E; Kirkpatrick AW; Ivatury RR; Salomone JP; Reed LR.** (2014). Trauma surgery associations and societies: which organizations match your goals?. J Trauma Manag Outcomes 2014 8:6.
 38. **Dixon E; Shapiro A; Lu ZL.** (2014). Scale-invariance in brightness illusions implicates object-level visual processing [In Process Citation]. Sci Rep 2014 (4):3900.
 39. **Oh S; Harvey A; Zimbric J; Wang Y; Nguyen T; Jackson PJ; Hendrickson EA.** (2014). DNA ligase III and DNA ligase IV carry out genetically distinct forms of end joining in human somatic cells [In Process Citation]. DNA Repair (Amst) 2014 September 21:97-110.
 40. **Causer J; Harvey A; Snelgrove R; Arsenault G; Vickers JN,** (2014). Quiet eye training improves surgical knot tying more than traditional technical training: a randomized controlled study [In Process Citation]. Am J Surg 2014 August;208(2):171-7.
 41. **Marbiah MM; Harvey A; West BT; Louzolo A; Banerjee P; Alden J; Grigoriadis A; Hummerich H; Kan HM; Cai Y; Bloom GS; Jat P; Collinge J; Kohn PC.** (2014). Identification of a gene regulatory network associated with prion replication [In Process Citation]. EMBO J 2014 July 17;33(14):1527-47.
 42. **Kline GA; Pasioka JL; Harvey A; So B; Dias VC.** (2014). High-probability features of primary aldosteronism may obviate the need for confirmatory testing without increasing false-positive diagnoses [In Process Citation]. J Clin Hypertens (Greenwich) 2014 July 16(7):488-96
 43. **Stuart HC; Harvey A; Pasioka JL.** Normocalcemic hyperparathyroidism: preoperatively a disease, postoperatively cured? Am J Surg 2014 May 207(5):673-80; discussion 680-1.
 44. **Kline GA; Pasioka JL; Harvey A; So B; Dias VC.** (2014). A marked proportional rise in IVC aldosterone following cosyntropin administration during AVS is a signal to the presence of adrenal hyperplasia in primary aldosteronism [In Process Citation]. J Hum Hypertens. 2014 May 28(5):298-302.
 45. **Kline GA; Pasioka JL; Harvey A; So B; Dias VC.** (2013). Medical or surgical therapy for primary aldosteronism: post-treatment follow-up as a surrogate measure of comparative outcomes. Ann Surg Oncol 2013 July 20(7):2274-8
 46. **Gerwe DR; Harvey A; Gehm ME.** (2013). Computational optical sensing and imaging: introduction to feature issue. Appl Opt 2013 April 1;52(10):COSI1-2
 47. **Yamine K; Harvey A.** (2013). Efficacy of preparation solutions and cleansing techniques on contamination of the skin in foot and ankle surgery:

- A systematic review and meta-analysis. *Bone Joint J* 2013 Apr;95-B(4):498-503
48. St-Onge C; Martineau B; **Harvey A**; Bergeron L; Mamede S; Rikers R. (2013). From see one do one, to see a good one do a better one: learning physical examination skills through peer observation. *Teach Learn Med* 2013 25(3):195-200
 49. **Kirkpatrick AW**; Vis C; Dube M; Biesbroek S; **Ball CG**; Laberge J; Shultz J; Rea K; Sadler D; Holcomb JB; **Kortbeek J**. (2014). The evolution of a purpose designed hybrid trauma operating room from the trauma service perspective: The RAPTOR (resuscitation with angiography percutaneous treatments and operative resuscitations) [In Process Citation]. *Injury* 2014 September 45(9):1413-21.
 50. **Kirkpatrick AW**; Roberts DJ; De Waele J. (2014). High versus low blood-pressure target in septic shock. *N Engl J Med* 2014 July 17;371(3):282-3
 51. Zeiler FA; Unger B; Zhu Q; Xiao J; **Kirkpatrick AW**; Kramer AH; Aleassa EM; Gillman LM. (2014). A Unique Model for ONSD Part II: Inter/Intra-operator Variability [In Process Citation]. *Can J Neurol Sci* 2014 July 41(4):430-5.
 52. Roberts DJ; Ouellet JF; McBeth PB; **Kirkpatrick AW**; **Dixon E**; **Ball CG**. (2014). The “weekend warrior”: fact or fiction for major trauma?. *Can J Surg* 2014 June 57(3):E62-8
 53. Roberts DJ; Das D; Mercado M; Vis C; **Kortbeek JB**; **Kirkpatrick AW**; **Ball CG**. A booming economy means a bursting trauma system: association between hospital admission for major injury and indicators of economic activity in a large Canadian health region. *Am J Surg* 2014 May 207(5):653-7; discussion 657-8
 54. Blackmore C; Ouellet JF; Niven D; **Kirkpatrick AW**; **Ball CG**. (2014). Prevention of delirium in trauma patients: are we giving thiamine prophylaxis a fair chance? *Can J Surg* 2014 April 57(2):78-8.
 55. Holcomb JB; Fox EE; Scalea TM; Napolitano LM; Albarado R; Gill B; Dunkin BJ; **Kirkpatrick AW**; Cotton BA; Inaba K; Du Bose JJ; Cohen AM; Azizzadeh A; Brenner M; Cohen MJ; Wade CE; Lumsden AB; Andrassy R; Rhee PM; Bass BL; Mattox KL; Britt LD; Eastman AB; Hoyt DB; Rasmussen TE. (2014). Current opinion on catheter-based hemorrhage control in trauma patients. *J Trauma Acute Care Surg* 2014 March 76(3):888-93
 56. Niven DJ; Stelfox HT; **Ball CG**; **Kirkpatrick AW**. (2014). Prehospital intravenous fluid administration is associated with higher mortality in trauma patients: a national trauma data bank analysis [In Process Citation]. *Ann Surg* 2014 February 259(2):e16.
 57. McBeth PB; Sass K; **Nickerson D**; **Ball CG**; **Kirkpatrick AW**. (2014). A necessary evil? Intra-abdominal hypertension complicating burn patient resuscitation. *J Trauma Manag Outcomes* 2014;8:12
 58. **Kirkpatrick AW**; Roberts DJ; De Waele J; Laupland K. (2014). Is intra-abdominal hypertension a missing factor that drives multiple organ dysfunction syndrome? [In Process Citation]. *Crit Care* 2014;18(2):124
 59. Roberts DJ; Zygun DA; **Kirkpatrick AW**; **Ball CG**; Faris PD; Bobrovitz N; Robertson HL; Stelfox HT. (2014). A protocol for a scoping and qualitative study to identify and evaluate indications for damage control surgery and damage control interventions in civilian trauma patients. *BMJ Open* 2014 4(7):e005634
 60. **Ball CG**; **Grondin SC**; Schieman C; Feliciano DV; Dixon E; Kirkpatrick AW; Ivatury RR; Salomone JP; Reed LR. (2014). Trauma surgery associations and societies: which organizations match your goals? *J Trauma Manag Outcomes* 2014;8:6
 61. Lee AJ; Wells BJ; Chun R; **Ball CG**; **Kirkpatrick AW**. (2014). The abdomen in “thoracoabdominal” cannot be ignored: abdominal compartment syndrome complicating extracorporeal life support. *Case Rep Crit Care* 2014 ;2014:351340.
 62. **Kirkpatrick AW**; Vis C; Dube M; Biesbroek S; **Ball CG**; Laberge J; Shultz J; Rea K; Sadler D; Holcomb JB; **Kortbeek J**. (2014). The evolution of a purpose designed hybrid trauma operating room from the trauma service perspective: The RAPTOR (resuscitation with angiography percutaneous treatments and operative resuscitations) [In Process Citation]. *Injury* 2014 September ;45(9):1413-21.

63. **Ponton-Carss AC**; Donnon T; **Kortbeek JB**. (2014). Two for One: Surgical Skills and CanMEDS Roles-A Combined Course for Surgical Residents [In Process Citation]. *J Surg Educ* 2014 May-June;71(3):419-25.
64. Roberts DJ; Das D; Mercado M; Vis C; **Kortbeek JB**; **Kirkpatrick AW**; **Ball CG**. (2014). A booming economy means a bursting trauma system: association between hospital admission for major injury and indicators of economic activity in a large Canadian health region. *Am J Surg* 2014 May ;207(5):653-7; discussion 657-8
65. Roberts DJ; Leigh-Smith S; Faris PD; **Ball CG**; Robertson HL; Blackmore C; **Dixon E**; **Kirkpatrick AW**; **Kortbeek JB**; Stelfox HT. (2014). Clinical manifestations of tension pneumothorax: protocol for a systematic review and meta-analysis [In Process Citation]. *Syst Rev* 2014;3(1):3.
66. Mastracci TM; Greenberg CC; **Kortbeek JB**. (2013). What are the effects of introducing the WHO "surgical safety checklist" on in-hospital mortality? *J Am Coll Surg* 2013 December ;217(6):1151-3.
67. Ziesmann MT; Widder S; Park J; **Kortbeek JB**; Brindley P; Hameed M; Paton-Gay JD; Engels PT; Hicks C; Fata P; **Ball CG**; Gillman LM. (2013). S.T.A.R.T.T.: development of a national, multidisciplinary trauma crisis resource management curriculum-results from the pilot course. *J Trauma Acute Care Surg* 2013 November ;75(5):753-8.
68. Lee TH; Ouellet JF; Cook M; Schreiber MA; **Kortbeek JB**. (2013). Pericardiocentesis in trauma: a systematic review. *J Trauma Acute Care Surg* 2013 Oct;75(4):543-9
69. Ali J; Sorvari A; Henry S; **Kortbeek J**; Tremblay L. (2013). The Advanced Trauma Operative Management course--a two student to one faculty model. *J Surg Res* 2013 September ;184(1):551-5
70. Rados A; Tiruta C; Xiao Z; **Kortbeek JB**; Tourigny P; **Ball CG**; **Kirkpatrick AW**. (2013.) Does trauma team activation associate with the time to CT scan for those suspected of serious head injuries? : *World J Emerg Surg* 2013;8(1):48
71. Bobrovitz N; Santana M; Kline T; **Kortbeek J**; Stelfox HT. (2013). Prospective cohort study protocol to evaluate the validity and reliability of the Quality of Trauma Care Patient-Reported Experience Measure (QTAC-PREM). *BMC Health Serv Res* 2013;13:98.
72. Barabas AZ; Cole CD; **Lafreniere R**; Weir DM. (2013). Regaining tolerance to a self-antigen by the modified vaccination technique. *Clin Rev Allergy Immunol* 2013 October ;45(2):193-201
73. **Poulin P**; **Austen L**; Scott CM; Poulin M; Gall N; Seidel J; **Lafreniere R**. (2013). Introduction of new technologies and decision making processes: a framework to adapt a Local Health Technology Decision Support Program for other local settings. *Med Devices (Auckl)* 2013;6:185-93
74. **Poulin P**; **Austen L**; Scott CM; Waddell CD; **Dixon E**; Poulin M; **Lafreniere R**. (2013). Multi-criteria development and incorporation into decision tools for health technology adoption. *J Health Organ Manag* 2013;27(2):246-65
75. **Mack LA**; Lay DC; Eicher SD; Johnson AK; Richert BT; Pajor EA. (2014). Group space allowance has little effect on sow health, productivity, or welfare in a free-access stall system [In Process Citation]. *J Anim Sci* 2014 June 92(6):2554-67
76. McConnell YJ; **Mack LA**; Gui X; Carr NJ; Sideris L; **Temple WJ**; Dube P; Chandrakumaran K; Moran BJ; Cecil TD. (2014). Cytorreductive surgery with hyperthermic intraperitoneal chemotherapy: an emerging treatment option for advanced goblet cell tumors of the appendix [In Process Citation]. *Ann Surg Oncol* 2014 June 21(6):1975-82
77. Kumar S; **Sutherland F**; Lee JM; Robinson T; Heck PM; Wong MC; Kelland NF; Garg ML; Sparks PB. (2013). Effects of high dose intravenous fish oil on human atrial electrophysiology: implications for possible anti- and pro-arrhythmic mechanisms in atrial fibrillation [In Process Citation] *Int J Cardiol* 2013 October 3;168(3): 2754-60.
78. Kumar S; **Sutherland F**; Stevenson I; Lee JM; Garg ML; Sparks PB. (2013). Effects of long-term v-3 polyunsaturated fatty acid supplementation on paroxysmal atrial tachyarrhythmia burden in patients with implanted pacemakers: results from

- a prospective randomised study. *Int J Cardiol* 2013 Oct 9;168(4): 3812-7.
79. Roberts DJ; Ouellet JF; **Sutherland FR; Kirkpatrick AW; Lall RN; Ball CG.** (2013). Severe street and mountain bicycling injuries in adults: a comparison of the incidence, risk factors and injury patterns over 14 years. *Can J Surg* 2013 Jun 56(3): E32-8.
 80. Rivard JD; **Temple WJ;** McConnell YJ; Sultan H; **Mack LA.** (2014). Preoperative computed tomography does not predict resectability in peritoneal carcinomatosis. *Am J Surg* 2014 May 207(5):760-4; discussion 764-5
 81. **Temple WJ;** Chin-Lenn L; **Mack LA.** (2014). Evaluating population-based breast cancer surgical practice in real time with a web-based synoptic operative reporting system. *Am J Surg* 2014 May 207(5):693-6; discussion 696-7
 82. Ng D; Falck V; McConnell YJ; **Mack LA; Temple WJ;** Gui X. (2014). Appendiceal goblet cell carcinoid and mucinous neoplasms are closely associated tumors: lessons from their coexistence in primary tumors and concurrence in peritoneal dissemination. *J Surg Oncol* 2014 May 109(6):548-55
 83. **Mack LA;** Lay DC; Eicher SD; Johnson AK; Richert BT; Pajor EA. (2014). Growth and reproductive development of male piglets are more vulnerable to midgestation maternal stress than that of female piglets [In Process Citation]. *J Anim Sci* 2014 Feb;92(2):530-48
 84. Rivard JD; McConnell YJ; **Temple WJ; Mack LA.** (2014). Cytoreduction and heated intraperitoneal chemotherapy for colorectal cancer: are we excluding patients who may benefit? *J Surg Oncol* 2014 February 109(2):104-9
 85. Chin-Lenn L; **Mack LA; Temple W;** Cherniak W; Quinn RR; Ravani P; Lewin AM; Quan ML. (2014). Predictors of Treatment with Mastectomy, Use of Sentinel Lymph Node Biopsy and Upstaging to Invasive Cancer in Patients Diagnosed with Breast Ductal Carcinoma In situ (DCIS) on Core Biopsy [In Process Citation]. *Ann Surg Oncol* 2014 January 21(1):66-73
 86. Chin-Lenn L; Craighead P; Bryant HE; **Mack L; Temple W;** Ghali W; **Quan ML.** (2013). Quality indicators for ductal carcinoma in situ (DCIS) of the breast: development using a multidisciplinary delphi process and its use in monitoring population-based treatment. *J Surg Oncol* 2013 November 108(6):348-51
 87. McConnell YJ; **Mack LA;** Francis WP; Ho T; **Temple WJ.** (2013). HIPECv+vEPIC versus HIPEC-alone: differences in major complications following cytoreduction surgery for peritoneal malignancy. *J Surg Oncol* 2013 May 107(6):591-6
 88. **Mack LA;** Felver-Gant JN; Dennis RL; Cheng HW. (2013). Genetic variations alter production and behavioral responses following heat stress in 2 strains of laying hens. *Poult Sci* 2013 February 92(2):285-94
 89. Yeung R; McConnell Y; Roxin G; Banerjee R; Urgoiti GB; **MacLean AR; Buie WD;** Mulder KE; Vickers MM; Joseph KJ; Doll CM. (2014). One compared with two cycles of mitomycin C in chemoradiotherapy for anal cancer: analysis of outcomes and toxicity. *Curr Oncol* 2014 June 21(3):e449-56
 90. **Ball CG; Dixon E; MacLean AR;** Kaplan GG; Nicholson L; **Sutherland FR.** (2014). The impact of an acute care surgery clinical care pathway for suspected appendicitis on the use of CT in the emergency department. *Can J Surg* 2014 June 57(3):194-816
 91. **MacLean AR; Dixon E; Ball CG.** (2013). Effect of noise on auditory processing in the operating room. *J Am Coll Surg* 2013 December 217(6):1154
 92. Brar MS; Roxin G; Yaffe PB; Stanger J; MacLean AR; Buie WD. (2013). Colonoscopy following nonoperative management of uncomplicated diverticulitis may not be warranted. *Dis Colon Rectum* 2013 November 56(11):1259-64
 93. Banerjee R; Roxin G; Eliasziw M; Joseph K; **Maclean A; Buie WD;** Doll C. (2013). The prognostic significance of pretreatment leukocytosis in patients with anal cancer treated with radical chemoradiotherapy or radiotherapy. *Dis Colon Rectum* 2013 September 56(9):1036-42
 94. Nessim C; Law C; McConnell Y; **Shachar S;**

- McKinnon G**; Wright F. (2013). How often do level III nodes bear melanoma metastases and does it affect patient outcomes? *Ann Surg Oncol* 2013 June 20(6):2056-64
95. Palfreeman A; Nyatsanza F; Farn H; **McKinnon G**; Schober P; McNally P. (2013). HIV testing for acute medical admissions: evaluation of a pilot study in Leicester, England. *Sex Transm Infect* 2013 June 89(4):308-10
96. Hancu I; Lee SK; Dixon WT; Sacolick L; Becerra R; Zhang Z; **McKinnon G**; Alagappan V. (2013). Field shaping arrays: a means to address shading in high field breast MRI. *J Magn Reson Imaging* 2012 October 36(4):865-72
97. Kline GA; **Pasioka JL**; **Harvey A**; So B; Dias VC. (2014). High-probability features of primary aldosteronism may obviate the need for confirmatory testing without increasing false-positive diagnoses [In Process Citation]. *J Clin Hypertens (Greenwich)* 2014 July 6(7):488-96
98. Stuart HC; **Harvey A**; **Pasioka JL**. (2014). Normocalcemic hyperparathyroidism: preoperatively a disease, postoperatively cured? *Am J Surg* 2014 May 207(5):673-80; discussion 680-1
99. Kline GA; **Pasioka JL**; **Harvey A**; So B; Dias VC. (2014). A marked proportional rise in IVC aldosterone following cosyntropin administration during AVS is a signal to the presence of adrenal hyperplasia in primary aldosteronism [In Process Citation]. *J Hum Hypertens* 2014 May 28(5):298-302
100. Wang TS; **Pasioka JL**; Carty SE. (2014). Techniques of parathyroid exploration at North American endocrine surgery fellowship programs: what the next generation is being taught. *Am J Surg* 2014 Apr;207(4):527-32
101. **Pasioka JL**; Longman RS; Chambers AJ; Rorstad O; Rach-Longman K; Dixon E. (2014). Cognitive impairment associated with carcinoid syndrome [In Process Citation]. *Ann Surg* 2014 February 259(2):355-9
102. Edwards JP; Stuart HC; Urbanski SJ; **Pasioka JL**. (2014). A rare cavernous hemangioma of the adrenal gland. *Int J Surg Case Rep* 2014 5(2):52-5
103. Kline GA; So B; Dias VC; **Harvey A**; **Pasioka JL**. (2013). Catheterization during adrenal vein sampling for primary aldosteronism: failure to use (1-24) ACTH may increase apparent failure rate. *J Clin Hypertens (Greenwich)* 2013 July 15(7):480-4
104. Kline GA; **Pasioka JL**; **Harvey A**; So B; Dias VC. (2013). Medical or surgical therapy for primary aldosteronism: post-treatment follow-up as a surrogate measure of comparative outcomes. *Ann Surg Oncol* 2013 July 20(7):2274-8
105. McLean SR; Karsanji D; Wilson J; **Dixon E**; **Sutherland FR**; **Pasioka J**; **Ball C**; **Bathe OF**. (2013). The effect of wait times on oncological outcomes from periampullary adenocarcinomas. *J Surg Oncol* 2013 Jun;107(8):853-8
106. Alex G; Morris L; **Pasioka J**; Perrier N. (2013). Nonclassical symptoms of primary hyperparathyroidism and their response to parathyroidectomy. *Am Surg* 2013 April 79(4):337-43
107. **Pasioka JL**. (2013). The time has come to redefine the classic symptoms of primary hyperparathyroidism: comment on [parathyroidectomy, elevated depression scores, and suicidal ideation in patients with primary hyperparathyroidism]. *JAMA Surg*. 2013 February 148(2):115-6
108. Parvez E; Hodgson N; Cornacchi SD; Ramsaroop A; Gordon M; Farrokhyar F; Porter G; **Quan ML**; Wright F; Lovrics PJ. Survey of american and canadian general surgeons' perceptions of margin status and practice patterns for breast conserving surgery [In Process Citation]
109. Shea-Budgell M; **Quan ML**; Mehling B; **Temple-Oberle C**. (2014). Breast reconstruction following prophylactic or therapeutic mastectomy for breast cancer: Recommendations from an evidence-based provincial guideline. *Can J Plast Surg* 2014 Summer;22(2):103-11
110. **Quan ML**; Wong PC; Wang C; Woerner F; Smallheer JM; Barbera FA; Bozarth JM; Brown RL; Harpel MR; Luetgten JM; Morin PE; Peterson T; Ramamurthy V; Rendina AR; Rossi KA; Watson CA; Wei A; Zhang G; Seiffert D; Wexler RR. (2014).

- Tetrahydroquinoline derivatives as potent and selective factor XIa inhibitors. *J Med Chem* 2014 Feb 13;57(3):955-69
111. **Quan ML**; Osman F; McCready D; Fernandes K; Sutradhar R; Paszat L. (2014). Postmastectomy radiation and recurrence patterns in breast cancer patients younger than age 35years: a population-based cohort *Ann Surg Oncol* 2014 Feb;21(2):395-400 [In Process Citation]
 112. Chin-Lenn L; **Mack LA**; **Temple W**; Cherniak W; Quinn RR; Ravani P; Lewin AM; **Quan ML**. (2014). Predictors of treatment with mastectomy, use of sentinel lymph node biopsy and upstaging to invasive cancer in patients diagnosed with breast ductal carcinoma in situ (DCIS) on core biopsy. *Ann Surg Oncol* 2014 Jan;21(1):66-73
 113. Wells BJ; **Quan ML**; Coyte PC. (2013). The ever-diminishing role of axillary lymph node dissection in breast cancer. *Breast J* 2013 Nov-Dec;19(6):691-2
 114. Chin-Lenn L; Craighead P; Bryant HE; **Mack L**; **Temple W**; Ghali W; **Quan ML**. (2013). Quality indicators for ductal carcinoma in situ (DCIS) of the breast: development using a multidisciplinary delphi process and its use in monitoring population-based treatment. *J Surg Oncol* 2013 Nov;108(6):348-51
 115. Munene G; Parker RD; Shaheen AA; Myers RP; **Quan ML**; **Ball CG**; **Dixon E**. (2013). Disparities in the surgical treatment of colorectal liver metastases. *J Natl Med Assoc* 2013 Summer;105(2):128-37
 116. Metcalfe KA; **Quan ML**; Eisen A; Cil T; Sun P; Narod SA. (2013). The impact of having a sister diagnosed with breast cancer on cancer-related distress and breast cancer risk perception. *Cancer* 2013 May 1;119(9):1722-8
 117. Wells B; Saskin R; Wright F; McCready D; **Quan ML**. (2013). Measuring the quality of sentinel lymph node biopsy (SLNB) for breast cancer: a population-based evaluation. *Ann Surg Oncol* 2013 Feb;20(2):615-9
 118. McConnell YJ; **Mack LA**; Gui X; Carr NJ; Sideris L; **Temple WJ**; Dube P; Chandrakumaran K; Moran BJ; Cecil TD. (2014). Cytoreductive surgery with hyperthermic intraperitoneal chemotherapy: an emerging treatment option for advanced goblet cell tumors of the appendix [In Process Citation]. *Ann Surg Oncol* 2014 June 21(6):1975-82
 119. Rivard JD; **Temple WJ**; McConnell YJ; Sultan H; **Mack LA**. (2014). Preoperative computed tomography does not predict resectability in peritoneal carcinomatosis. *Am J Surg* 2014 May;207(5):760-4; discussion 764-5
 120. **Temple WJ**; Chin-Lenn L; **Mack LA**. (2014). Evaluating population-based breast cancer surgical practice in real time with a web-based synoptic operative reporting system. *Am J Surg* 2014 May 207(5):693-6; discussion 696-7
 121. Ng D; Falck V; McConnell YJ; **Mack LA**; **Temple WJ**; Gui X. (2014). Appendiceal goblet cell carcinoid and mucinous neoplasms are closely associated tumors: lessons from their coexistence in primary tumors and concurrence in peritoneal dissemination. *J Surg Oncol* 2014 May 109(6):548-55
 122. Rivard JD; McConnell YJ; **Temple WJ**; **Mack LA**. (2014). Cytoreduction and heated intraperitoneal chemotherapy for colorectal cancer: are we excluding patients who may benefit? *J Surg Oncol* 2014 February 109(2):104-9
 123. Chin-Lenn L; **Mack LA**; **Temple W**; Cherniak W; Quinn RR; Ravani P; Lewin AM; **Quan ML**. (2014). Predictors of treatment with mastectomy, use of sentinel lymph node biopsy and upstaging to invasive cancer in patients diagnosed with breast ductal carcinoma in situ (DCIS) on core biopsy. *Ann Surg Oncol* 2014 January 21(1):66-73
 124. Chin-Lenn L; Craighead P; Bryant HE; **Mack L**; **Temple W**; Ghali W; **Quan ML**. (2013). Quality indicators for ductal carcinoma in situ (DCIS) of the breast: development using a multidisciplinary delphi process and its use in monitoring population-based treatment. *J Surg Oncol* 2013 November 108(6):348-51
 125. McConnell YJ; **Mack LA**; Francis WP; Ho T; **Temple WJ**. (2013). HIPECv+vEPIC versus HIPEC-alone: differences in major complications following cytoreduction surgery for peritoneal malignancy. *J Surg Oncol* 2013 May 107(6):591-6

Ophthalmology

1. **Adiatia F**, Munro M, Jivraj I, AjaniA, Braga-Mele R. (2014). Documenting the Subjective Patient Experience of the First versus Second Cataract Surgery. Accepted, 2014. Journal of Cataract and Refractive Surgery.
2. Le TD, Liu ES, **Adatia FA**, et al. (2014). The effect of adding orbital computed tomography findings to the Chandler criteria for classifying pediatric orbital cellulitis in predicting which patients will require surgical intervention [In Process Citation] J AAPOS, Jun 2014, 18(3) p271-7
3. Dathatri S, Gruberg L, **Anand J**, et al. (2014). Informed consent for cardiac procedures: deficiencies in patient comprehension with current methods. Ann Thorac Surg, May 2014, 97(5) p1505-11; discussion 1511-2
4. **Al-Ghoul A**, Kim G, Dhaliwal D. (2013). Book Chapter XX: Ocular Cicatricial Pemphigoid in Ophthalmology, 4th Edition, Yanoff M and Duker J, eds. 2013.
5. **Al-Ghoul A**. (2013). Book Chapter Corneal Complications of Glaucoma Surgery, in Complication of Glaucoma Surgery, RM Feldman and NP Bell, eds. 2013.
6. Hao J, Liebeke M, **Astle W**, et al. (2014). Bayesian deconvolution and quantification of metabolites in complex 1D NMR spectra using BATMAN [In Process Citation] Nat Protoc, Jun 2014, 9(6) p1416-27
7. **Astle WF**, Heede S, Chua C. (2013). Primary Ahmed Valve Implantation: A Surgical Option for Congenital and Developmental Glaucoma. Clin Surg Ophthalmol. 2013;31(2):42-47.
8. **Astle W, Cooper L, Romanchuk K** contributed to the published study reported by Weise KK, Kaminski B, Melia M, Repka MX, Bradfield YS, Davitt BV, Johnson DA, Kraker RT, Manny RE, Matta NS and Schloff S on behalf of the Pediatric Eye disease Investigator Group. (2013). Intraobserver reliability of contact pachymetry in children. J AAPOS 2013 17:144-148.
9. Iachini AL, Beets MW, **Ball A**, et al. (2014). Process evaluation of “Girls on the Run”: Exploring implementation in a physical activity-based positive youth development program [In Process Citation] Eval Program Plann, Oct 2014, 46 p1-9
10. Radhakumari M, **Ball A**, Bhargava SK, et al. (2014). Optimization of glucose formation in karanja biomass hydrolysis using Taguchi robust method [In Process Citation] Bioresour Technol, Aug 2014, 166 p534-40
11. Brown MT, Gikas PD, **Bhamra JS**, et al. (2014). How safe is curettage of low-grade cartilaginous neoplasms diagnosed by imaging with or without pre-operative needle biopsy? [In Process Citation] Bone Joint J, Aug 2014, 96-B(8) p1098-105
12. Cuschier L, Fielden J, Miller P, **Bhamra J**. Stop or Go? (2014). Assessing the blood flow in lower leg vascular assessment when ankle brachial pressure index (ABPI).
13. Burton JM, **Costello F**; (2014). “A Review of the Visual Pathway Model and the Study of Vitamin D in Demyelinating Disease,” Multiple Sclerosis and Related Disorders, Volume 3, Issue 1, January 2014, Pages 22–27.
14. Mancini GB, Gosselin G, **Chow B**, et al. (2014). Canadian cardiovascular society guidelines for the diagnosis and management of stable ischemic heartdisease [In Process Citation] Can J Cardiol, Aug 2014, 30(8) p837-49
15. Trufyn J, Hill MD, Scott JN, Modi J, Ciura V, Frayne R, Goyal M, Lautner D, Bhayana D, Davenport WJ, Mah JK, Burton JM, **Costello F**. (2014). The prevalence of incidental findings in multiple sclerosis patients. Can J Neurol Sci. 2014 Jan;41(1):49-52. PMID: 24384337
16. Zhang Y, Metz LM, Scott JN, Trufyn J, Fick GH, **Costello F**. (2014). MRI texture heterogeneity in the optic nerve predicts visual recovery after acute optic neuritis. Neuroimage Clin. 2014 Jan 14;4:302-7. doi: 10.1016/j.nicl.2014.01.003. eCollection 2014. PMID:25061567.
17. Buys Y, Ya-Ping J, and the Canadian Glaucoma Risk Factor Study Group (**Crichton A**, et al.). (2013). Socioeconomic status as a risk factor for late presentation of glaucoma in Canada. Canadian

Journal of Ophthalmology, 2013; 48:83-87.

18. **Crichton A**, Nixon D, Simonyi S, Bhogal M, Sigouin C, Discepolo M, Hutnik C, Baptiste D, Yan D. (2014). An observational study of bimatoprost 0.01% in patients on prior intraocular pressure-lowering therapy: the Canadian Lumigan RC Early Analysis Review (CLEAR) trial. *Clinical Ophthalmology*, 2014, pending.
19. Kent S, Hutnik C, Birt C, Damji K, Harasymowycz P, Si F, Hodge W, Pan I, **Crichton A**. (2013). A Randomized Clinical Trial of Selective Laser Trabeculoplasty Versus Argon Laser Trabeculoplasty in Patients with Pseudoexfoliation. *Journal of Glaucoma*, 2013, pending.
20. Thomas RE, **Crichton A**, Thomas BC. (2014). Antimetabolites in cataract surgery to prevent failure of a previous trabeculectomy [In Process Citation] *Cochrane Database Syst Rev*, 2014, 7 pCD010627
21. Fan LM, **Douglas G**, Bendall JK, et al. (2014). Endothelial cell-specific reactive oxygen species production increases susceptibility to aortic dissection. *Circulation*, Jun 24 2014, 129(25) p2661-72
22. Chuaiphichai S, McNeill E, **Douglas G**, et al. (2014). Cell-autonomous role of endothelial GTP cyclohydrolase 1 and tetrahydrobiopterin in blood pressure regulation [In Process Citation] *Hypertension*, Sep 2014, 64(3) p530-40
23. Oloumi F, Rangayyan RM, **Ells AL**. (2013). Computer-aided diagnosis of proliferative diabetic retinopathy via modeling of the major temporal arcade in retinal fundus images. *J Digit Imaging*, Dec 2013, 26(6) p1124-30
24. Franks LN, **Ford BM**, Madadi NR, et al. (2014). Characterization of the intrinsic activity for a novel class of cannabinoid receptor ligands: Indole quinuclidine analogs [In Process Citation] *Eur J Pharmacol*, Aug 15 2014, 737 p140-8
25. Snell L, Frank JR, Stoneham G, De Rossi S, **Fletcher WA**, Gillis K, Stewart J, Allen T, Wasserman S, Yiu VW-Y, Harris K. (2014). Competency-based Medical Education, In Frank J.R., Harris K.A., Competence by Design: Reshaping Canadian Medical Education. Royal College of Physicians and Surgeons of Canada, 2014.
26. **Gimbel HV**, Amritanand A. (2013). Suture refixation and recentration of a subluxated capsular tension ring-capsular bag-intraocular lens complex. *J Cataract Refract Surg*. 2013 (Dec);39(12):1798-802. doi: 10.1016/j.jcrs.2013.10.002. 24286838 [PubMed - in process]. Related citations Select item 24163682.
27. **Gimbel HV**, Amritanand A. Reverse optic capture to stabilize a toric intraocular lens. (2013). *Case Rep Ophthalmol* 2013 Sep 26;4(3):138-43. doi: 10.1159/000355415. eCollection 2013. PMID:24163682[PubMed] Free PMC Article. Related citations Select item 24088060.
28. Lowenstein E, Ottesen B, **Gimbel H**. (2014). Incidence and lifetime risk of pelvic organ prolapse surgery in Denmark from 1977 to 2009 [epub ahead of print] [Record Supplied By Publisher] *Int Urogynecol J*, May 20 2014, p
29. Tay E, Li X, **Gimbel HV**, Kaye G. (2013). Assessment of axial length before and after myopic LASIK with the IOLMaster. *J Refract Surg* 2013 Dec;29(12):838-41. doi: 10.3928/1081597X-20130924-01. Epub 2013 Oct 4. PMID:24088060[PubMed - indexed for MEDLINE].
30. Rabade NR, **Goel NA**. (2014). Clear cell myoepithelial carcinoma ex pleomorphic adenoma [In Process Citation] *Indian J Pathol Microbiol*, Jul-Sep 2014, 57(3) p456-9
31. **Gordon RD**. (2014). Saccade latency reveals episodic representation of object color [In Process Citation] *Atten Percept Psychophys*, Aug 2014, 76(6) p1765-77
32. Schlaier JR, **Hanson C**, Janzen A, et al. (2014). Deep brain stimulation in Parkinson's disease: motor effects relative to the MRI-defined STN [In Process Citation] *Neurosurg Rev*, Jul 2014, 37(3) p461-71
33. Call TG, Norman AD, **Hanson CA**, et al. (2014). Incidence of chronic lymphocytic leukemia and high-count monoclonal B-cell lymphocytosis using the 2008 guidelines. *Cancer*, Jul 1 2014, 120(13) p2000-5
34. Katz LS, Turnsek M, Kahler A, **Hill VR**, et al. (2014).

- Draft Genome Sequence of Environmental *Vibrio cholerae* 2012EL-1759 with Similarities to the *V. cholerae* O1 Classical Biotype. *Genome Announc*, 2014, 2(4) p
35. **Huang J**, Lekhi V, Huang P, **Huang P**. (2014). Glaucoma Screening by Primary Care Physicians in Alberta: Methods, patterns, and deficiencies. In writing for CMAJ – check if published in 2013-14(to be submitted).
 36. Huang PYC, **Huang PT**, **Astle WF**, **Huang J**. Comparison of results with and without intraoperative Mitomycin-C in LASEK surgery after cornea transplantation. In writing for J Cat Refractive Surg (submitted).
 37. Huang PYC, Mardinger C, **Huang P**, **Huang J**. Perceptions of Ophthalmologists and Optometrists in Canada (in writing for CMAJ (to be submitted).
 38. Munro M, McWhae J, **Romanchuk K**, et al. (2014). Two cases of spontaneous filtering blebs, one idiopathic and one associated with terrien marginal degeneration [In Process Citation] *Cornea*, Jul 2014, 33(7) p752-4
 39. Stankovic B, Moderator. Farzavani S, Hwang JM, Mohny BG, **Romanchuk KG**, Sloper JJ and Steffen H. Round Table Discussion: Management of Intermittent Exotropia. Transactions of the 35th Meeting of the European Strabismological Association, O.H. Haugen, Editor.
 40. Pacaud D, **Romanchuk K**, Malik R, Nettel-Aguire A and Mah J. (2013). Acceptability of Corneal Confocal Microscopy for the Detection of Early Diabetic Neuropathy in Children. *Canadian Juvenile of Diabetes*. 2013;37(Suppl 4):S72 DOI:10.1016/j.jcjd.2013.08.220.
 41. Gong QH, Smith SS. (2014). Characterization of neurosteroid effects on hyperpolarizing current at (+or-)4(sup)2(acute) GABAA receptors [In Process Citation] *Psychopharmacology*, Sep 2014, 231(17) p3525-35
 42. Goldberg SB, Manley AR, **Smith SS**, et al. (2014). Hair cortisol as a biomarker of stress in mindfulness training for smokers [In Process Citation] *J Altern Complement Med*, Aug 2014, 20(8) p630-4
 43. Thomson QP, Patil S, Ahn SH, **Subramaniam S**, Demchuck AM, Boyd SK, Mikulik R, Barber PA, Mitchell JR. (2014). Computer Aided Detection of Acute Ischemic Stroke Improves Identification of Early Ischemic Changes on CT Images. Submitted to *Stroke* 2014.
 44. Rodríguez-Luna D, Kase CS, Gubitz G, Bhatia R, Padma V, Roy J, **Subramaniam S**, Hill MD, Demchuck AM, for the PREDICT/Sunnybrook ICH CTA study group. (2014). Perihematomal edema is greater in the presence of a CTA spot sign but does not predict intracerebral hematoma expansion. Submitted to *Stroke* 2014.
 45. Adatia S, Alseraya A, Nambiar V, **Subramaniam S**. (2013). Idiopathic Hypereosinophilia Syndrome with Loeffler Endocarditis and Bilateral Embolic Border Zone Infarcts – A Rabbit from the Hat? Submitted to *Neurology* in April 2013.
 46. Adatia S, Nambiar V, Apel S, Eesa M, **Subramaniam S**, Menon B. (2013). Acute ischemic stroke caused by paradoxical air embolism following injection sclerotherapy for varicose veins. *Neurology India* 2013. Jul-Aug;61(4):431-3.
 47. Rajapakse T, Mineyko A, Chee C, **Subramaniam S**, Dicke F, Bernier F, Kirton A. (2013). Baroreflex failure, sympathetic storm, and cerebral vasospasm in fibulin-4 cutis laxa. *Pediatrics* 2013.
 48. Retschnig G, Neumann P, **Williams GR**. (2014). Thiacloprid-Nosema ceranae interactions in honey bees: host survivorship but not parasite reproduction is dependent on pesticide dose [In Process Citation] *J Invertebr Pathol*, May 2014, 118 p18-9
 49. **Wong JY**, Choi AW, Fong DY, et al. (2014). Patterns, aetiology and risk factors of intimate partner violence-related injuries to head, neck and face in Chinese women [In Process Citation] *BMC Womens Health*, 2014, 14(1) p6
 50. **Yau RG**, Peng Y, Valiathan RR, et al. (2014). Release from myosin V via regulated recruitment of an E3 ubiquitin ligase controls organelle localization. *Dev Cell*, Mar 10 2014, 28(5) p520-33

Section of Orthopaedic Surgery

1. **Hildebrand KA**, Zhang M, Befus AD, **Hart D**, et al. (2014). A myofibroblast-mast cell-neuropeptide axis of fibrosis in post-traumatic joint contractures: An in vitro analysis of mechanistic components [In Process Citation] *J Orthop Res*, Oct 2014, 32(10) p1290-6
2. Poole JL, Chandrasekaran A, **Hildebrand K**, et al. (2014). Participation in life situations by persons with systemic sclerosis [epub ahead of print] [Record Supplied By Publisher] *Disabil Rehabil*, Jul 23 2014, p1-4
3. Carroll MJ, Da Cambra MP, **Hildebrand KA**. (2014). Neurologic complications of distal biceps tendon repair with 1-incision endobutton fixation [In Process Citation] *Am J Orthop (Belle Mead NJ)*, Jul 2014, 43(7) pE159-62
4. **Hildebrand KA**. (2013). Posttraumatic elbow joint contractures: defining pathologic capsular mechanisms and potential future treatment paradigms. *J Hand Surg Am*, Nov 2013, 38(11) p2227-33
5. Dacambra MP, Walker RE, **Hildebrand KA**. (2013). Simultaneous bilateral distal biceps tendon ruptures repaired using an endobutton technique: a case report. *J Med Case Rep*, 2013, 7 p213
6. **Batuyong ED**, Brock HS, Thiruvengadam N, et al. (2014). Outcome of porous tantalum acetabular components for Paprosky type 3 and 4 acetabular defects. *J Arthroplasty*, Jun 2014, 29(6) p1318-22
7. **Batuyong ED**, Jowett AJ, Wickramasinghe N, et al. (2014). Using multimedia to enhance the consent process for bunion correction surgery [In Process Citation] *ANZ J Surg*, Apr 2014, 84(4) p249-54
8. Nshimyumukiza L, **Bois A**, Daigneault P, et al. (2014). Cost effectiveness of newborn screening for cystic fibrosis: A simulation study [In Process Citation] *J Cyst Fibros*, May 2014, 13(3) p267-74
9. **Bois AJ**, Walker RE, Kodali P, et al. (2013). Imaging instability in the athlete: the right modality for the right diagnosis. *Clin Sports Med*, Oct 2013, 32(4) p653-84
10. **Bois AJ**, Wirth MA. (2013). Revision open capsular shift for atraumatic and multidirectional instability of the shoulder. *Instr Course Lect*, 2013, 62 p95-103
11. **Mohtadi NG**, Chan DS, **Hollinshead RM**, **Boorman RS**, **Lo IK**, et al. (2014). A randomized clinical trial comparing open and arthroscopic stabilization for recurrent traumatic anterior shoulder instability: two-year follow-up with disease-specific quality-of-life outcomes. *J Bone Joint Surg Am*, Mar 5 2014, 96(5) p353-60
12. Duquette A, Brais B, **Bouchard JP**, et al. (2014). Clinical presentation and early evolution of spastic ataxia of Charlevoix-Saguenay. *Mov Disord*, Dec 2013, 28(14) p2011-4
13. Bern SH, **Brauer C**, Moller KL, et al. (2013). Baggage handler seniority and musculoskeletal symptoms: is heavy lifting in awkward positions associated with the risk of pain? *BMJ Open*, 2013, 3(11) pe004055
14. **Buckley R**, Leighton R, Sanders D, et al. (2014). Open Reduction and Internal Fixation Compared with ORIF and Primary Subtalar Arthrodesis for Treatment of Sanders Type IV Calcaneal Fractures: A Randomized Multicenter* Trial [epub ahead of print] [Record Supplied By Publisher] *J Orthop Trauma*, Jun 30 2014, p
15. Arastu M, Sheehan B, **Buckley R**. (2014). Minimally invasive reduction and fixation of displaced calcaneal fractures: surgical technique and radiographic analysis [In Process Citation] *Int Orthop*, Mar 2014, 38(3) p539-45
16. McCormack R, Panagiotopolous K, **Buckley R**, et al. (2013). A multicentre, prospective, randomised comparison of the sliding hip screw with the Medoff sliding screw and side plate for unstable intertrochanteric hip fractures [In Process Citation] *Injury*, Dec 2013, 44(12) p1904-9
17. Hunt SB, **Buckley RE**. (2013). Locking plates: a current concepts review of technique and indications for use [In Process Citation] *Acta Chir Orthop Traumatol Cech*, 2013, 80(3) p185-91
18. Dusik CJ, **Buckley RE**, Robertson-More C. (2013). Orthopedic surgeon perspectives on appropriate referral of trauma patients to physical therapy (PT). *Arch Orthop Trauma Surg*, May 2013, 133(5) p603-

19. Suk M, Daigl M, **Buckley RE**, et al. (2013). TEFTOM: A Promising General Trauma Expectation/ Outcome Measure-Results of a Validation Study on Pan-American Ankle and Distal Tibia Trauma Patients. *ISRN Orthop*, 2013, 2013 p801784
20. Arastu MH, Kokke MC, **Duffy PJ**, et al. (2013). Coronal plane partial articular fractures of the distal femoral condyle: current concepts in management. *Bone Joint J*, Sep 2013, 95-B(9) p1165-71
21. Da Cambra MP, Gupta SK, **Ferri-de-Barros F**. (2014). Subungual exostosis of the toes: a systematic review. *Clin Orthop Relat Res*, Apr 2014, 472(4) p1251-9
22. Da Cambra MP, Gupta SK, **Ferri-de-Barros F**. (2013). A novel management strategy for subungual exostosis. *BMJ Case Rep*, 2013, 2013 p
23. Atarod M, Rosvold JM, **Frank CB**, et al. (2014). A novel testing platform for assessing knee joint mechanics: a parallel robotic system combined with an instrumented spatial linkage [In Process Citation] *Ann Biomed Eng*, May 2014, 42(5) p1121-32
24. Huebner KD, Shrive NG, **Frank CB**. (2014). Dexamethasone inhibits inflammation and cartilage damage in a new model of post-traumatic osteoarthritis. *J Orthop Res*, Apr 2014, 32(4) p566-72
25. Atarod M, **Frank CB**, Shrive NG. (2014). Kinematic and Kinetic Interactions During Normal and ACL-Deficient Gait: A Longitudinal In Vivo Study [In Process Citation] *Ann Biomed Eng*, Mar 2014, 42(3) p566-78
26. Atarod M, **Frank CB**, Shrive NG. (2014). Decreased posterior cruciate and altered collateral ligament loading following ACL transection: a longitudinal study in the ovine model. *J Orthop Res*, Mar 2014, 32(3) p431-8
27. Fyie K, **Frank C**, Noseworthy T, et al. (2014). Evaluating the primary-to-specialist referral system for elective hip and knee arthroplasty [In Process Citation] *J Eval Clin Pract*, Feb 2014, 20(1) p66-73
28. Huebner KD, Shrive NG, **Frank CB**. (2013). New surgical model of post-traumatic osteoarthritis: isolated intra-articular bone injury in the rabbit. *J Orthop Res*, Jun 2013, 31(6) p914-20
29. Bussieres A, Cote P, **French S**, et al. (2014). Creating a Chiropractic Practice-Based Research Network (PBRN): Enhancing the management of musculoskeletal care. *J Can Chiropr Assoc*, Mar 2014, 58(1) p8-15
30. **French S**, Werth P, Walker B. (2014). Approach to low back pain - Chiropractic [In Process Citation] *Aust Fam Physician*, Jan-Feb 2014, 43(1) p43-4
31. Dobson F, Hinman RS, **French S**, et al. (2014). Internet-mediated physiotherapy and pain coping skills training for people with persistent knee pain (IMPACT - knee pain): a randomised controlled trial protocol [In Process Citation] *BMC Musculoskelet Disord*, 2014, 15(1) p279
32. **French SD**, Charity MJ, Forsdike K, et al. (2013). Chiropractic Observation and Analysis Study (COAST): providing an understanding of current chiropractic practice. *Med J Aust*, Nov 18 2013, 199(10) p687-91
33. **French SD**, Densley K, Charity MJ, et al. (2013). Who uses Australian chiropractic services? *Chiropr Man Therap*, 2013, 21(1) p31
34. Mortimer D, **French SD**, McKenzie JE, et al. (2013). Economic evaluation of active implementation versus guideline dissemination for evidence-based care of acute low-back pain in a general practice setting. *PLoS One*, 2013, 8(10) pe75647
35. **French SD**, McKenzie JE, O'Connor DA, et al. (2013). Evaluation of a theory-informed implementation intervention for the management of acute low back pain in general medical practice: the IMPLEMENT cluster randomised trial. *PLoS One*, 2013, 8(6) pe65471
36. Charity MJ, **French SD**, Forsdike K, et al. (2013). Extending ICPC-2 PLUS terminology to develop a classification system specific for the study of chiropractic encounters. *Chiropr Man Therap*, 2013, 21(1) p4
37. Lewis SJ, **Goldstein S**, Bodrogi A, et al. (2014). Comparison of pedicle subtraction and Smith-Petersen osteotomies in correcting thoracic kyphosis when closed with a central hook-rod construct [In

- Process Citation] Spine (Phila Pa 1976), Jul 1 2014, 39(15) p1217-24
38. Fleischer GD, **Hart D**, Ferrara LA, et al. (2014). Biomechanical effect of transforaminal lumbar interbody fusion and axial interbody threaded rod on range of motion and s1 screw loading in a destabilized L5-s1 spondylolisthesis model [In Process Citation] Spine (Phila Pa 1976), Jan 15 2014, 39(2) pE82-8
 39. **Hart D**, Funk L. (2013). Serious shoulder injuries in professional soccer: return to participation after surgery [epub ahead of print] [Record Supplied By Publisher] Knee Surg Sports Traumatol Arthrosc, Dec 8 2013, p
 40. Monument MJ, **Hart DA**, **Salo PT**, et al. (2013). Posttraumatic elbow contractures: targeting neuroinflammatory fibrogenic mechanisms. J Orthop Sci, Nov 2013, 18(6) p869-77
 41. **Hart D**. (2013). The challenge of managing type II odontoid fractures. World Neurosurg, May-Jun 2013, 79(5-6) p664-5
 42. Fong G, Backman LJ, **Hart DA**, et al. (2013). Substance P enhances collagen remodeling and MMP-3 expression by human tenocytes. J Orthop Res, Jan 2013, 31(1) p91-8
 43. Boyan BD, **Hart DA**, Enoka RM, et al. (2013). Hormonal modulation of connective tissue homeostasis and sex differences in risk for osteoarthritis of the knee. Biol Sex Differ, 2013, 4(1) p3
 44. Macdonald SA, **Heard SM**, **Hiemstra LA**, et al. (2014). A comparison of pain scores and medication use in patients undergoing single-bundle or double-bundle anterior cruciate ligament reconstruction. Can J Surg, Jun 2014, 57(3) pE98-104
 45. **Hiemstra LA**, Kerslake S, Irving C. (2014). Anterior knee pain in the athlete [In Process Citation] Clin Sports Med, Jul 2014, 33(3) p437-59
 46. **Mohtadi NG**, Chan DS, **Hollinshead RM**, **Hiemstra LA**, et al. (2014). A randomized clinical trial comparing open and arthroscopic stabilization for recurrent traumatic anterior shoulder instability: two-year follow-up with disease-specific quality-of-life outcomes. J Bone Joint Surg Am, Mar 5 2014, 96(5) p353-60
 47. **Hiemstra LA**, Kerslake S, Lafave MR, et al. (2013). Initial validity and reliability of the Banff Patella Instability Instrument. Am J Sports Med, Jul 2013, 41(7) p1629-35
 48. **Hiscox C**, Lamothe C, **White N**, et al. (2013). Diagnosis of occult scaphoid fractures: a randomized, controlled trial comparing bone scans to radiographs for diagnosis [In Process Citation] CJEM, 2013, 15(0) p1-8
 49. **Mohtadi NG**, Chan DS, **Hollinshead RM**, et al. (2014). A randomized clinical trial comparing open and arthroscopic stabilization for recurrent traumatic anterior shoulder instability: two-year follow-up with disease-specific quality-of-life outcomes. J Bone Joint Surg Am, Mar 5 2014, 96(5) p353-60
 50. Carroll MJ, More KD, Sohmer S, **Hollinshead RM**, et al. (2013). The use of an intra-articular depth guide in the measurement of partial thickness rotator cuff tears. Adv Orthop, 2013, 2013 p959305
 51. Dusik CJ, **Hutchison C**, Langelier D. (2014). The merits of cell salvage in arthroplasty surgery: an overview. Can J Surg, Feb 2014, 57(1) p61-6
 52. **Le Blanc J**, Donnon T, **Hutchison C**, et al. (2014). Development of an orthopedic surgery trauma patient handover checklist. Can J Surg, Feb 2014, 57(1) p8-14
 53. **Le Blanc J**, **Hutchison C**, Hu Y, et al. (2013). Feasibility and fidelity of practising surgical fixation on a virtual ulna bone. Can J Surg, Aug 2013, 56(4) pE91-7
 54. **Le Blanc J**, **Hutchison C**, Hu Y, et al. (2013). A comparison of orthopaedic resident performance on surgical fixation of an ulnar fracture using virtual reality and synthetic models. J Bone Joint Surg Am, May 1 2013, 95(9) p601-6, S1-5
 55. Hui C, **Joughin E**, Nettel-Aguirre A, et al. (2014). Comparison of cast materials for the treatment of congenital idiopathic clubfoot using the Ponseti method: a prospective randomized controlled trial [In Process Citation] Can J Surg, Aug 2014, 57(4) p247-53
 56. Burke NG, **Kennedy J**, Cousins G, et al. (2014).

- Locking plate fixation with and without inferomedial screws for proximal humeral fractures: a biomechanical study [In Process Citation] *J Orthop Surg*, Aug 2014, 22(2) p190-4
57. **Kennedy J.** (2013). Addressing biceps rupture, at what price? [In Process Citation] *J Fam Pract*, Jun 2013, 62(6) p283
 58. **Kennedy J**, Molony D, Burke NG, et al. (2013). Effect of calcium triphosphate cement on proximal humeral fracture osteosynthesis: a cadaveric biomechanical study. *J Orthop Surg*, Aug 2013, 21(2) p173-7
 59. **Kennedy J**, Feerick E, McGarry P, et al. (2013). Effect of calcium triphosphate cement on proximal humeral fracture osteosynthesis: a finite element analysis. *J Orthop Surg*, Aug 2013, 21(2) p167-72
 60. **Kennedy J**, Noel J, O'Meara A, et al. (2013). Foot and ankle abnormalities in the Hurler syndrome: additions to the phenotype. *J Pediatr Orthop*, Jul-Aug 2013, 33(5) p558-62
 61. Murawski CD, **Kennedy JG.** (2013). Operative treatment of osteochondral lesions of the talus. *J Bone Joint Surg Am*, Jun 5 2013, 95(11) p1045-54
 62. **Kennedy JW**, Johnston L, Cochrane L, et al. (2013). Total knee arthroplasty in the elderly: does age affect pain, function or complications? *Clin Orthop Relat Res*, Jun 2013, 471(6) p1964-9
 63. **Kennedy J**, Cassidy N. (2013). Catastrophic spinal injury after minor fall in a patient with ankylosing spondylitis. *West J Emerg Med*, Mar 2013, 14(2) p146
 64. Arastu MH, Kokke MC, Duffy PJ, **Korley R**, et al. (2013). Coronal plane partial articular fractures of the distal femoral condyle: current concepts in management. *Bone Joint J*, Sep 2013, 95-B(9) p1165-71
 65. Halvorson JJ, **Lamothe J**, Martin CR, et al. (2014). Combined acetabulum and pelvic ring injuries. *J Am Acad Orthop Surg*, May 2014, 22(5) p304-14
 66. Woods TC, Carroll MJ, Nelson AA, **Lo IK**, et al. (2014). Transtendon rotator-cuff repair of partial-thickness articular surface tears can lead to medial rotator-cuff failure. *Open Access J Sports Med*, 2014, 5 p151-7
 67. **Lo IK**, Nelson AA, Burkhart SS. (2013). Lateral releases of the subscapularis tendon. *Int J Shoulder Surg*, Oct 2013, 7(4) p139-42
 68. Carroll MJ, More KD, Sohmer S, **Lo IK**, et al. (2013). The use of an intra-articular depth guide in the measurement of partial thickness rotator cuff tears. *Adv Orthop*, 2013, 2013 p959305
 69. Lee YK, Ha YC, **Martin RL**, et al. (2014). Transcultural adaptation of the Korean version of the Hip Outcome Score [epub ahead of print] [Record Supplied By Publisher] *Knee Surg Sports Traumatol Arthrosc*, Apr 19 2014, p
 70. Kaniki N, Willits K, **Mohtadi NG**, et al. (2014). A retrospective comparative study with historical control to determine the effectiveness of platelet-rich plasma as part of nonoperative treatment of acute achilles tendon rupture [In Process Citation] *Arthroscopy*, Sep 2014, 30(9) p1139-45
 71. Lau BH, Butterwick DJ, Lafave MR, **Mohtadi NG**, et al. (2013). Retrospective review of pectoralis major ruptures in rodeo steer wrestlers. *Adv Orthop*, 2013, 2013 p987910
 72. **O'Brien MJ**, Savoie FH. (2014). Arthroscopic and open management of posterolateral rotatory instability of the elbow [In Process Citation] *Sports Med Arthrosc*, Sep 2014, 22(3) p194-200
 73. Savoie FH, **O'Brien MJ.** (2014). Anterior instability in the throwing shoulder [In Process Citation] *Sports Med Arthrosc*, Jun 2014, 22(2) p117-9
 74. **O'Brien MJ.** (2013). Update on biologics in the treatment of rotator cuff disease. *J Am Acad Orthop Surg*, Oct 2013, 21(10) p642-3
 75. Mashayekhi K, **O'Brien M**, Zugun-Eloae F, et al. (2013). Novel approaches for treating musculoskeletal diseases: molecular orthopedics and systems medicine. *Open Orthop J*, 2013, 7 p144-51
 76. Dodd A, **Paolucci EO**, **Parsons D.** (2013). Paediatric femoral shaft fractures: what are the concomitant injuries? [In Process Citation] *Injury*, Nov 2013, 44(11) p1502-6
 77. **Sabo M.** (2013). Physical therapy rehabilitation strategies for dancers: a qualitative study. *J Dance Med Sci*, 2013, 17(1) p11-7

78. Pahwa S, Srivastava DN, **Sharma R**, et al. (2014). Comparison of conventional MRI and MR arthrography in the evaluation wrist ligament tears: A preliminary experience. *Indian J Radiol Imaging*, Jul 2014, 24(3) p259-67
79. Jain JK, Agarwal S, **Sharma RK**. (2014). Ligament reconstruction/advancement for management of instability due to ligament insufficiency during total knee arthroplasty: a viable alternative to constrained implant [In Process Citation] *J Orthop Sci*, Jul 2014, 19(4) p564-70
80. Vavrek DA, **Sharma R**, Haas M. (2014). Cost analysis related to dose-response of spinal manipulative therapy for chronic low back pain: outcomes from a randomized controlled trial [In Process Citation] *J Manipulative Physiol Ther*, Jun 2014, 37(5) p300-11
81. Agarwal S, **Sharma RK**, Jain JK. (2014). Periprosthetic fractures after total knee arthroplasty [In Process Citation] *J Orthop Surg*, Apr 2014, 22(1) p24-9
82. John JR, **Sharma RK**. (2014). Local perforator island flaps in post-traumatic reconstruction of middle third of the leg. *Strategies Trauma Limb Reconstr*, Apr 2014, 9(1) p59-61
83. **Soroceanu A**, Passias PG, Boniello A, et al. (2014). 147aRisk of Development of New Onset Postoperative Cervical Deformity in Thoracolumbar Adult Spinal Deformity and Effect on Clinical Outcomes at 2-year Follow-up [In Process Citation] *Neurosurgery*, Aug 2014, 61 Suppl 1 p208
84. Nanjayan SK, **Swamy GN**, Yellu S, et al. (2014). In-hospital complications following primary total hip and knee arthroplasty in octogenarian and nonagenarian patients [In Process Citation] *J Orthop Traumatol*, Mar 2014, 15(1) p29-33
85. Klezl Z, **Swamy GN**, Vyskocil T, et al. (2014). Incidence of vascular complications arising from anterior spinal surgery in the thoraco-lumbar spine. *Asian Spine J*, Feb 2014, 8(1) p59-63
86. **Swamy GN**, Quah C, Bagouri E, et al. (2014). Nontraumatic fracture of the femoral condylar prosthesis in a total knee arthroplasty leading to mechanical failure. *Case Rep Orthop*, 2014, 2014 p896348
87. Marshall DA, Pykerman K, **Werle J**, et al. (2014). Hip resurfacing versus total hip arthroplasty: a systematic review comparing standardized outcomes. *Clin Orthop Relat Res*, Jul 2014, 472(7) p2217-30
88. Gudena R, Pilambaraei MA, **Werle J**, et al. (2013). A safe overhang limit for unicompartmental knee arthroplasties based on medial collateral ligament strains: an in vitro study. *J Arthroplasty*, Feb 2013, 28(2) p227-33
89. **Hiscox C**, Lamothe C, **White N**, et al. (2013). Diagnosis of occult scaphoid fractures: a randomized, controlled trial comparing bone scans to radiographs for diagnosis [In Process Citation] *CJEM*, 2013, 15(0) p1-8

Section of Otolaryngology Head and Neck Surgery

1. Smith KA; **Matthews TW**; Dube M; Spence G; Dort JC. (2014). Changing practice and improving care using a low-risk tracheotomy clinical pathway [In Process Citation]. *JAMA Otolaryngol Head Neck Surg* 2014 Jul 1;140(7):630-4
2. Yeung JK; Dautremont JF; **Harrop AR**; Asante T; Hirani N; Nakoneshny SC; **de Haas V**; **Mckenzie D**; **Matthews TW**; **Chandarana SP**; **Schrag C**; **Dort JC**. (2014). Reduction of pulmonary complications and hospital length of stay with a clinical care pathway after head and neck reconstruction. *Plast Reconstr Surg* 2014 June 133(6):1477-84
3. Badenduck LA; **Matthews TW**; McDonough A; **Dort JC**; Wiens K; Kettner R; Crawford S; Kaplan BJ. (2014). Fiber-optic endoscopic evaluation of swallowing to assess swallowing outcomes as a function of head position in a normal population [In Process Citation]. *J Otolaryngol Head Neck Surg* 2014;43(1):9
4. Randall DR; Lysack JT; Hudon ME; Guggisberg K; Nakoneshny SC; **Matthews TW**; **Dort JC**; **Chandarana SP**. (2013). Diagnostic utility of central node necrosis in predicting extracapsular spread

- among oral cavity squamous cell carcinoma [epub ahead of print] [Record Supplied By Publisher]. *Head Neck* 2013 December 11; p
5. Yeung JK; **Harrop R**; McCreary O; Leung LT; Hirani N; **McKenzie D**; **de Haas V**; **Matthews TW**; **Nakoneshny S**; **Dort JC**; **Schrag C**. (2013). Delayed mobilization after microsurgical reconstruction: an independent risk factor for pneumonia. *Laryngoscope* 2013 December 123(12):2996-300
 6. **Matthews WJ**; Marsh-Matthews E; Cashner RC; Gelwick F. (2013). Disturbance and trajectory of change in a stream fish community over four decades. : *Oecologia* 2013 November 173(3):955-69
 7. Lui JT; Khalil MN; **Chandarana SP**. (2014). Primary squamous cell of the thyroid-an abbreviated clinical presentation [In Process Citation]. *J Otolaryngol Head Neck Surg* 2014 43(1):17
 8. **Chandarana SP**; Lee JS; Chanowski EJ; Sacco AG; Bradford CR; Wolf GT; Prince ME; Moyer JS; Eisbruch A; Worden FP; Giordano TJ; Kumar B; Cordell KG; Carey TE; Chepeha DB. (2013). Prevalence and predictive role of p16 and epidermal growth factor receptor in surgically treated oropharyngeal and oral cavity cancer. *Head Neck* 2013 August 35(8):1083-90
 9. Cho JJ; Taylor RC; Deutschmann MW; **Chandarana SP**; Marck PA. (2013). Polyethylene implants in nasal septal restoration. *JAMA Facial Plast Surg* 2013 July – August 15(4):275-9
 10. Deutschmann M; Khalil M; Bhayana S; **Chandarana S**. (2013). Occult multifocal papillary thyroid microcarcinoma presenting as a supraclavicular mass containing anaplastic thyroid carcinoma. *JAMA Otolaryngol Head Neck Surg* 2013 April 139(4):415-8
 11. **Chandarana SP**; Chanowski EJ; Casper KA; Wolf GT; Bradford CR; Worden FP; Eisbruch A; Chepeha DB. (2013). Osteocutaneous free tissue transplantation for mandibular osteoradionecrosis. *J Reconstr Microsurg* 2013 January 29(1):5-14
 12. Dautremont JF; **Rudmik LR**; Yeung J; Asante T; Nakoneshny SC; Hoy M; Lui A; **Chandarana SP**; **Matthews TW**; **Schrag C**; **Dort JC**. (2013). Cost-effectiveness analysis of a postoperative clinical care pathway in head and neck surgery with microvascular reconstruction. *J Otolaryngol Head Neck Surg* 2013 42:59
 13. Lysack JT; **Hoy M**; Hudon ME; Nakoneshny SC; **Chandarana SP**; **Matthews TW**; **Dort JC**. (2013). Impact of neuroradiologist second opinion on staging and management of head and neck cancer. *J Otolaryngol Head Neck Surg* 2013;42:39
 14. Chin CJ; Franklin JH; Turner B; Moukarbel RV; **Chandarana S**; Fung K; Yoo J; Doyle PC. (2012) A novel tool for the objective measurement of neck fibrosis: validation in clinical practice. *J Otolaryngol Head Neck Surg* 2012 October 41(5):320-6
 15. Klimowicz AC; Bose P; Nakoneshny SC; Dean M; Huang L; **Chandarana S**; Magliocco AM; Wayne Matthews T; Brockton NT; Dort JC. (2012) Basal Ki67 expression measured by digital image analysis is optimal for prognostication in oral squamous cell carcinoma. *Eur J Cancer* 2012 September 48(14):2166-74
 16. Brockton NT; Klimowicz AC; Bose P; Petrillo SK; Konno M; Rudmik L; Dean M; Nakoneshny SC; **Matthews TW**; **Chandarana S**; Lau HY; Magliocco AM; **Dort JC**. (2012) High stromal carbonic anhydrase IX expression is associated with nodal metastasis and decreased survival in patients with surgically-treated oral cavity squamous cell carcinoma. *Oral Oncol* 2012 July 48(7):615-22
 17. Bose P; Klimowicz AC; Kornaga E; Petrillo SK; **Matthews TW**; **Chandarana S**; Magliocco AM; Brockton NT; **Dort JC**. (2012) Bax expression measured by AQUAnalysis is an independent prognostic marker in oral squamous cell carcinoma. *BMC Cancer* 2012 12:332
 18. Smith KA; **Dort JC**; Hall SF; **Rudmik L**. (2013). Cost-effectiveness of Positron Emission Tomography-Computed Tomography in the Evaluation of Cancer Unknown Primary of the Head and Neck [epub ahead of print] [Record Supplied By Publisher]. *Head Neck* 2014 July 2
 19. Smith KA; **Matthews TW**; Dube M; Spence G; **Dort JC**. (2013). Changing practice and improving care using a low-risk tracheotomy clinical pathway [In Process Citation]. *JAMA Otolaryngol Head Neck Surg* 2014 July 1;140(7):630-4

20. Bose P; Thakur SS; Brockton NT; Klimowicz AC; Kornaga E; Nakoneshny SC; Riabowol KT; **Dort JC**. (2013). Tumor cell apoptosis mediated by cytoplasmic ING1 is associated with improved survival in oral squamous cell carcinoma patients [In Process Citation]. *Oncotarget* 2014 May 30;5(10):3210-9
21. Graling P; **Dort J**; Moynihan J. (2013). Crisis management of a hemorrhagic emergency in the or [In Process Citation]. *AORN J* 2014 April 99(4):510-6
22. Jensen IJ; **Dort J**; Eilertsen KE. (2013). Proximate composition, antihypertensive and antioxidative properties of the semimembranosus muscle from pork and beef after cooking and in vitro digestion. *Meat Sci* 2014 February 96(2 Pt A):916-21
23. Merglova V; Koberova-Ivancakova R; Broukal Z; **Dort J**. (2013). The presence of cariogenic and periodontal pathogens in the oral cavity of one-year-old infants delivered pre-term with very low birthweights: a case control study [In Process Citation]. *BMC Oral Health* 2014 14(1):109
24. Bose P; Brockton NT; **Dort JC**. (2013). Head and neck cancer: from anatomy to biology. *Int J Cancer* 2013 November 133(9):2013-23. *Int J Cancer* 2013 November 133(9):2013-23
25. Klimowicz AC; Bose P; Petrillo SK; Magliocco AM; **Dort JC**; Brockton NT. (2013). The prognostic impact of a combined carbonic anhydrase IX and Ki67 signature in oral squamous cell carcinoma. *Br J Cancer* 2013 October 1;109(7):1859-66
26. Li Y; Bai S; Carroll W; Dayan D; **Dort JC**; Heller K; Jour G; Lau H; Penner C; Prystowsky M; Rosenthal E; Schlecht NF; Smith RV; Urken M; Vered M; Wang B; Wenig B; Negassa A; Brandwein-Gensler M. (2013). Validation of the risk model: high-risk classification and tumor pattern of invasion predict outcome for patients with low-stage oral cavity squamous cell carcinoma. *Head Neck Pathol* 2013 September 7(3):211-23
27. Bose P; **Dort JC**; Brockton NT. (2013). Identifying the stromal cell type that contributes to tumor aggressiveness associated with carbonic anhydrase IX. *Cell Cycle* 2013 August 15;12(16):2535-6
28. **Deutschmann MW**; McDonough A; **Dort JC**; **Dort E**; Nakoneshny S; **Matthews TW**. (2013). Fiber-optic endoscopic evaluation of swallowing (FEES): predictor of swallowing-related complications in the head and neck cancer population. *Head Neck* 2013 Jul;35(7):974-9
29. Cho JJW, Taylor RC, **Deutschmann MW**, Chandarana SP, Marck PA. (2013). Nasal Septal Perforation Occult Multifocal Papillary Thyroid Microcarcinoma presenting as a supraclavicular mass containing Anaplastic Thyroid Carcinoma Repair Using Medpor® (Polyethylene) Implants. *JAMA Facial Plast Surg* 2013 Jul-Aug; 15(4):322-3
30. **Deutschmann MW**, McDonough A, **Dort JC**, **Dort E**, Nakoneshny S, **Matthews TW**. (2013). Assessing the Safety of FEES in the Head & Neck Cancer Population. *Head Neck* 2013 Jul; 35(7):974-9.
31. **Deutschmann MW**, **Yunker WK**, Cho J, Beveridge S, Andreassen M, Bosch JD. (2013). Use of Simulation Training to Improve Efficiency of Trans-Nasal Fiber-optic Flexible Laryngoscopy. *J Otolaryngol Head Neck Surg*. 2013; 42:35.
32. **Randall DR**, **Rudmik L**, **Call CG**, Bosch JD. (2013). "Airway Control and Operative Management of Traumatic External Laryngotracheal Injuries; Experience from a Large Canadian Centre." *The Laryngoscope* Oct 1, 2013. Doi: 10.1002/lary24432.
33. Lui JT, **Randall DR**, **Rudmik L**. (2013). "Healing with Green: the Impact of a Pre-Operative Recycling Program." *University of Calgary Surgeons Day*, Calgary, AB, June 21, 2013
34. **Rudmik L**; **Hoy M**; Schlosser RJ; Harvey RJ; Welch KC; Lund V; Smith TL. (2013). Topical therapies in the management of chronic rhinosinusitis: an evidence-based review with recommendations. *Int Forum Allergy Rhinol* 2013 April 3(4):281-98
35. Klingbeil K; **Lange E**; Teifke JP; Mettenleiter TC; Fuchs W. (2013). Immunization of pigs with an attenuated pseudorabies virus recombinant expressing the haemagglutinin of pandemic swine origin H1N1 influenza A virus [In Process Citation] *J Gen Virol* 2014 April 5(Pt 4):948-59
36. Cho JJ; **Yunker WK**; **Marck P**; Marck PA. (2011) Effectiveness of the heat-activated nitinol smart

- piston stapes prosthesis in stapedectomy surgery. *J Otolaryngol Head Neck Surg* 2011 February 40(1):8-13
37. Dautremont JF; **Mechor B**; **Rudmik L**. (2013). The role of immediate postoperative systemic corticosteroids when utilizing a steroid-eluting spacer following sinus surgery. *Otolaryngol Head Neck Surg* 2014 April ;150(4):689-95
 38. **Rudmik L**; Mace J; **Mechor B**. (2012) Effect of a dexamethasone Sinu-Foam(cent) middle meatal spacer on endoscopic sinus surgery outcomes: a randomized, double-blind, placebo-controlled trial. *Int Forum Allergy Rhinol* 2012 May-June 2(3):248-51
 39. Gan EC; Thamboo A; **Rudmik L**; Hwang PH; Ferguson BJ; Javer AR. (2013). Medical management of allergic fungal rhinosinusitis following endoscopic sinus surgery: an evidence-based review and recommendations [In Process Citation] :*Int Forum Allergy Rhinol* 2014 September 4(9):702-15
 40. **Rudmik L**; Smith TL; Schlosser RJ; Hwang PH; Mace JC; Soler ZM. (2013). Productivity costs in patients with refractory chronic rhinosinusitis [In Process Citation] *Laryngoscope* 2014 September ;124(9):2007-12
 41. Smith KA; **Dort JC**; Hall SF; **Rudmik L**. (2013). Cost-effectiveness of Positron Emission Tomography-Computed Tomography in the Evaluation of Cancer Unknown Primary of the Head and Neck [epub ahead of print] [Record Supplied By Publisher] *Head Neck* 2014 July 2
 42. Orlandi RR; Smith TL; Marple BF; Harvey RJ; Hwang PH; Kern RC; Kingdom TT; Luong A; **Rudmik L**; Senior BA; Toskala E; Kennedy DW. (2013). Update on evidence-based reviews with recommendations in adult chronic rhinosinusitis [In Process Citation] *Int Forum Allergy Rhinol* 2014 July 4 Suppl 1:S1-S15
 43. **Rudmik L**. Budesonide Sinonasal Irrigations: A Review of Safety and Effectiveness. *Adv Pharmacoepi Drug Safety* 2014;3:148.
 44. **Rudmik L**; Starreveld YP; Vandergrift WA; Banglawala SM; Soler ZM. (2013). Cost-effectiveness of the endoscopic versus microscopic approach for pituitary adenoma resection [epub ahead of print] [Record Supplied By Publisher]. *Laryngoscope* 2014 June 17
 45. **Rudmik L**; Smith TL. (2013). Economic Evaluation of a Steroid-Eluting Sinus Implant following Endoscopic Sinus Surgery for Chronic Rhinosinusitis [epub ahead of print] [Record Supplied By Publisher] *Otolaryngol Head Neck Surg* 2014 May 5
 46. Randall DR; **Rudmik LR**; Ball CG; Bosch JD. (2013). External laryngotracheal trauma: Incidence, airway control, and outcomes in a large Canadian center. : *Laryngoscope* 2014 April 124(4):E123-33
 47. Smith KA; **Rudmik L**. (2013). Impact of continued medical therapy in patients with refractory chronic rhinosinusitis [In Process Citation] *Int Forum Allergy Rhinol* 2014 January 4(1):34-8
 48. **Rudmik L**; Mace J; Soler ZM; Smith TL. (2013). Long-term utility outcomes in patients undergoing endoscopic sinus surgery. *Laryngoscope* 2014 January 124(1):19-23
 49. Sowerby LJ; De Serres JJ; **Rudmik L**; Wright ED. (2013). Role of season, temperature and humidity on the incidence of epistaxis in Alberta, Canada [In Process Citation] *J Otolaryngol Head Neck Surg* 2014 43(1):10
 50. Soler ZM; **Rudmik L**; Hwang PH; Mace JC; Schlosser RJ; Smith TL. (2013). Patient-centered decision making in the treatment of chronic rhinosinusitis. *Laryngoscope* 2013 October 123(10):2341-6
 51. Thomas WW; Harvey RJ; **Rudmik L**; Hwang PH; Schlosser RJ. (2013). Distribution of topical agents to the paranasal sinuses: an evidence-based review with recommendations. *Int Forum Allergy Rhinol* 2013 September 3(9):691-703
 52. Au J; **Rudmik L**. (2013). Cost of outpatient endoscopic sinus surgery from the perspective of the Canadian government: a time-driven activity-based costing approach. *Int Forum Allergy Rhinol* 2013 September 3(9):748-54
 53. Smith KA; **Rudmik L**. (2013). Cost collection and analysis for health economic evaluation. *Otolaryngology—head and neck surgery: official journal of American Academy of Otolaryngology-*

- Head and Neck Surgery. Aug 2013;149(2):192-199.
54. **Rudmik L**; Drummond M. (2013). Health economic evaluation: important principles and methodology. *Laryngoscope* 2013 June 123(6):1341-7
 55. Deutschmann MW; Yeung J; Bosch M; Lysack JT; Kingstone M; Kilty SJ; **Rudmik LR**. (2013). Radiologic reporting for paranasal sinus computed tomography: a multi-institutional review of content and consistency. *Laryngoscope* 2013 May 123(5):1100-5
 56. Soler ZM; Poetker DA; **Rudmik L**; Psaltis AJ; Clinger JD; Mace JC; Smith TL. (2012) Multi-institutional evaluation of a sinus surgery checklist. *Laryngoscope* 2012 October 122(10):2132-6
 57. Smith KA; **Yunker WK**. (2013). Kawasaki disease is associated with sensorineural hearing loss: a systematic review [In Process Citation] *Int J Pediatr Otorhinolaryngol* 2014 August 78(8):1216-20
 58. **Yunker WK**; Hassan SF; Ferrell LB; Hicks MJ; Giannoni CM; Wesson DE; Cassady CI; Hernandez JA; Brandt ML; Lopez ME. (2013). Needle core biopsy in the diagnosis of pediatric thyroid neoplasms: a single institution retrospective review. *Pediatr Surg Int* 2013 May 29(5):437-43
 59. Cho JJ; **Yunker WK**; Marck P; **Marck PA**. (2011) Effectiveness of the heat-activated nitinol smart piston stapes prosthesis in stapedectomy surgery. *J Otolaryngol Head Neck Surg* 2011 February 40(1):8-13
- incontinence: reviewing the procedure [In Process Citation] *Int J Clin Pract*, Jun 2014, 68(6) p731-42
4. Hill TC, **Baverstock R**, **Carlson KV**, et al. (2013). Best practices for the treatment and prevention of urinary tract infection in the spinal cord injured population: The Alberta context. *Can Urol Assoc J*, Mar-Apr 2013, 7(3-4) p122-30
 5. **Brindle ME**, Cook EF, Tibboel D, et al. (2014). A clinical prediction rule for the severity of congenital diaphragmatic hernias in newborns [In Process Citation] *Pediatrics*, Aug 2014, 134(2) pe413-9
 6. Ma IW, Zalunardo N, **Brindle ME**, et al. (2014). Notes from the Field: Direct Observation Versus Rating by Videos for the Assessment of Central Venous Catheterization Skills [epub ahead of print] [Record Supplied By Publisher] *Eval Health Prof*, Jan 12 2014, p
 7. Beres AL, Puligandla PS, **Brindle ME** (2013). Stability prior to surgery in Congenital Diaphragmatic Hernia: is it necessary? *J Pediatr Surg*, May 2013, 48(5) p919-23
 8. Johnston EW, Rowe LM, **Brookes J**, et al. (2014). A novel technique for inferior vena cava filter extraction [In Process Citation] *Cardiovasc Intervent Radiol*, Feb 2014, 37(1) p231-4
 9. Sondekoppam RV, **Brookes J**, Terlecki M, et al. (2013). Intracatheter air in continuous thoracic paravertebral block: distraction or assistance? *Can J Anaesth*, Aug 2013, 60(8) p824-5
 10. Duron V, **Burke RV**, Bliss D, et al. (2014). Survival of pediatric blunt trauma patients presenting with no signs of life in the field [In Process Citation] *J Trauma Acute Care Surg*, Sep 2014, 77(3) p422-6
 11. Yang Y, **Burke RV**, Jeon CY, et al. (2014). Polymorphisms of peroxisome proliferator-activated receptors and survival of lung cancer and upper aero-digestive tract cancers [In Process Citation] *Lung Cancer*, Sep 2014, 85(3) p449-56
 12. Short SS, Pierce JR, **Burke RV**, et al. (2014). Is routine preoperative screening echocardiogram indicated in all children with congenital duodenal obstruction? [In Process Citation] *Pediatr Surg Int*, Jun 2014, 30(6) p609-14
 13. Arbogast H, **Burke RV**, Muller V, et al. (2014). Randomized controlled trial to evaluate the

Section of Pediatric Surgery

1. **Sharma VK**, **Fraulin FO**, **Dumestre DO**, et al. (2013). Beta-blockers for the treatment of problematic hemangiomas. *Can J Plast Surg*, Spring 2013, 21(1) p23-8
2. Hao J, Liebeke M, **Astle W**, et al. (2014). Bayesian deconvolution and quantification of metabolites in complex 1D NMR spectra using BATMAN [In Process Citation] *Nat Protoc*, Jun 2014, 9(6) p1416-27
3. Karsenty G, **Baverstock R**, **Carlson K**, et al. (2014). Technical aspects of botulinum toxin type A injection in the bladder to treat urinary

- effectiveness of a video game as a child pedestrian educational tool. *J Trauma Acute Care Surg*, May 2014, 76(5) p1317-21
14. Muller VM, **Burke RV**, Arbogast H, et al. (2014). Evaluation of a child passenger safety class in increasing parental knowledge. *Accid Anal Prev*, Feb 2014, 63 p37-40
 15. Cazzulino F, **Burke RV**, Muller V, et al. (2014). Cell phones and young drivers: a systematic review regarding the association between psychological factors and prevention. *Traffic Inj Prev*, 2014, 15(3) p234-42
 16. Howard MR, **Burke RV**, Allen KD. (2013). An evaluation of the observer effect on treatment integrity in a day treatment center for children [In Process Citation] *Behav Modif*, Jul 2013, 37(4) p490-515
 17. Goodhue CJ, Lin AC, **Burke RV**, et al. (2013). Consider the children: pediatric disaster planning. *Nurs Manage*, Nov 2013, 44(11) p44-51
 18. Lin AC, **Burke RV**, Reynaldo S, et al. (2013). Pediatric Surge Pocket Guide: review of an easily accessible tool for managing an influx of pediatric patients. *Am J Disaster Med*, Winter 2013, 8(1) p75-82
 19. Bell AC, **Campbell E**, Francis JL, et al. (2014). Encouraging general practitioners to complete the four-year-old Healthy Kids Check and provide healthy eating and physical activity messages [In Process Citation] *Aust N Z J Public Health*, Jun 2014, 38(3) p253-7
 20. Wolfenden L, Wyse R, **Campbell E**, et al. (2014). Randomized controlled trial of a telephone-based intervention for child fruit and vegetable intake: long-term follow-up. *Am J Clin Nutr*, Mar 2014, 99(3) p543-50
 21. **Sutherland R**, **Campbell E**, Lubans DR, et al. (2013). A cluster randomised trial of a school-based intervention to prevent decline in adolescent physical activity levels: study protocol for the 'Physical Activity 4 Everyone' trial. *BMC Public Health*, 2013, 13 p57
 22. Chapin J, **Carlson K**, Christos PJ, et al. (2013). Risk Factors and Treatment Strategies in Patients With Retinal Vascular Occlusions [epub ahead of print] [Record Supplied By Publisher] *Clin Appl Thromb Hemost*, Dec 11 2013, p
 23. Thomas SP, Phillips K, **Carlson K**, et al. (2013). Childhood experiences of perpetrators of child sexual abuse. *Perspect Psychiatr Care*, Jul 2013, 49(3) p187-201
 24. Citer D, **Carlson K**, McClellan D, et al. (2013). "KYDS": an innovative service addressing the health needs of youth and families in an Australian community. *Australas Psychiatry*, Apr 2013, 21(2) p131-6
 25. Spaner SJ, Yu Y, **Cook AJ**, et al. (2014). Pediatric metanephric adenoma: case report and review of the literature [In Process Citation] *Int Urol Nephrol*, Apr 2014, 46(4) p677-80
 26. Green BB, Anderson ML, **Cook AJ**, et al. (2014). e-Care for Heart Wellness: A Feasibility Trial to Decrease Blood Pressure and Cardiovascular Risk [In Process Citation] *Am J Prev Med*, Apr 2014, 46(4) p368-77
 27. Sherman KJ, **Cook AJ**, Wellman RD, et al. (2014). Five-week outcomes from a dosing trial of therapeutic massage for chronic neck pain [In Process Citation] *Ann Fam Med*, Mar-Apr 2014, 12(2) p112-20
 28. Aggarwal A, Monsivais P, **Cook AJ**, et al. (2014). Positive attitude toward healthy eating predicts higher diet quality at all cost levels of supermarkets. *J Acad Nutr Diet*, Feb 2014, 114(2) p266-72
 29. **Drummond D**. (2013). [Six-month training in Aweil (South-Sudan)] *Arch Pediatr*, Oct 2013, 20(10) p1069-71
 30. Bathala S, **Eccles R**. (2013). A review on the mechanism of sore throat in tonsillitis. *J Laryngol Otol*, Mar 2013, 127(3) p227-32
 31. **Eccles R**. (2013). Is the common cold a clinical entity or a cultural concept? *Rhinology*, Mar 2013, 51(1) p3-8
 32. **Grondin SC**, Schieman C, Kelly E, **Gelfand G**, et al. (2013). A look at the thoracic surgery workforce in Canada: how demographics and scope of practice may impact future workforce needs. *Can J Surg*, Aug 2013, 56(4) pE75-81
 33. Dumoulin E, Stather DR, **Gelfand G**, et al. (2013). Idiopathic subglottic stenosis: a familial

- predisposition. *Ann Thorac Surg*, Mar 2013, 95(3) p1084-6
34. Lewis SJ, **Goldstein S**, Bodrogi A, et al. (2014). Comparison of pedicle subtraction and Smith-Petersen osteotomies in correcting thoracic kyphosis when closed with a central hook-rod construct [In Process Citation] *Spine (Phila Pa 1976)*, Jul 1 2014, 39(15) p1217-24
 35. **Goldstein S**. (2013). The agitated patient [In Process Citation] *J Spec Oper Med*, Fall 2013, 13(3) p87-91
 36. Xiao N, Tandon A, **Goldstein S**, et al. (2013). Cardiogenic shock as the initial presentation of neonatal systemic hypertension. *J Neonatal Perinatal Med*, 2013, 6(3) p267-72
 37. MacMillan F, **Kirk A**, Mutrie N, et al. (2014). A systematic review of physical activity and sedentary behavior intervention studies in youth with type 1 diabetes: study characteristics, intervention design, and efficacy [In Process Citation] *Pediatr Diabetes*, May 2014, 15(3) p175-89
 38. Connelly J, **Kirk A**, Masthoff J, et al. (2013). The use of technology to promote physical activity in Type 2 diabetes management: a systematic review. *Diabet Med*, Dec 2013, 30(12) p1420-32
 39. Munro M, McWhae J, **Romanchuk K**, et al. (2014). Two cases of spontaneous filtering blebs, one idiopathic and one associated with terrien marginal degeneration [In Process Citation] *Cornea*, Jul 2014, 33(7) p752-4
 40. Nair V, Hasan SU, **Romanchuk K**, et al. (2013). Bilateral cataracts associated with glucose-6-phosphate dehydrogenase deficiency. *J Perinatol*, Jul 2013, 33(7) p574-5
 41. **Weber B**, Hoerstrup SP. (2014). Human bioengineered artery models for in vitro atherosclerosis research: Fact or fiction? [In Process Citation] *Altern Lab Anim*, Jun 2014, 42(3) pP28-32
 42. **Weber B**, Robert J, Ksiazek A, et al. (2014). Living-engineered valves for transcatheter venous valve repair [In Process Citation] *Tissue Eng Part C Methods*, Jun 2014, 20(6) p451-63
 43. Romao RL, **Weber B**, Gerstle JT, et al. (2014). Comparison between laparoscopic and open radical nephrectomy for the treatment of primary renal tumors in children: Single-center experience over a 5-year period [In Process Citation] *J Pediatr Urol*, Jun 2014, 10(3) p488-94
 44. Pujade-Lauraine E, Hilpert F, **Weber B**, et al. (2014). Bevacizumab combined with chemotherapy for platinum-resistant recurrent ovarian cancer: The AURELIA open-label randomized phase III trial. *J Clin Oncol*, May 1 2014, 32(13) p1302-8
 45. Emmert MY, **Weber B**, Falk V, et al. (2014). Transcatheter tissue engineered heart valves [In Process Citation] *Expert Rev Med Devices*, Jan 2014, 11(1) p15-21
 46. Emmert MY, **Weber B**, Behr L, et al. (2014). Transcatheter aortic valve implantation using anatomically oriented, marrow stromal cell-based, stented, tissue-engineered heart valves: technical considerations and implications for translational cell-based heart valve concepts [In Process Citation] *Eur J Cardiothorac Surg*, Jan 2014, 45(1) p61-8
 47. **Weber B**, Meldgaard P, Hager H, et al. (2014). Detection of EGFR mutations in plasma and biopsies from non-small cell lung cancer patients by allele-specific PCR assays [In Process Citation] *BMC Cancer*, 2014, 14(1) p294
 48. Miguez M, **Weber B**, Debbane M, et al. (2013). Screening for bipolar disorder in adolescents with the mood disorder questionnaire-adolescent version (MDQ-A) and the child bipolar questionnaire (CBQ). *Early Interv Psychiatry*, Aug 2013, 7(3) p270-7
 49. Rudzinski JK, **Weber B**, Wildgoose P, et al. (2013). Does routine ultrasound change management in the follow-up of patients with vesicoureteral reflux? *Can Urol Assoc J*, Jul-Aug 2013, 7(7-8) pE467-9
 50. Robert J, **Weber B**, Frese L, et al. (2013). A three-dimensional engineered artery model for in vitro atherosclerosis research. *PLoS One*, 2013, 8(11) pe79821
 51. Sloka S, Metz L, Hader W, Starreveld Y, Yong V W. (2013). Reduction of microglia activity in a model of multiple sclerosis of dipyrindamole. *J Neuroinflammation* Jul 18;10:89, 2013
 52. Wiens C, Goodyear BG, Goel A, Federico P, Hader W, Goyal M. (2013). Presurgical language fMRI and postsurgical deficits: a single centre experience. *Can*

- J of Neurol Sci Nov 40(6), 819-23, 2013
53. Lafay-Cousin L , Hader W , Wei X , Nordal R , Strother D, Hawkins C , Chan J. (2013). A Post-chemotherapy maturation in supratentorial primitive neuroectodermal tumors. *Brain Pathology* Aug 30 Epub ahead of print, 2013
 54. Sarkar S, Döring A, Zemp FJ, Silva C, Lun X, Wang X, Kelly J, Hader W, Hamilton M, Mercier P, Dunn JF, Kinniburgh D, van Rooijen N, Robbins S, Forsyth P, Cairncross G, Weiss S, Yong VW. Therapeutic activation of macrophages/microglia to suppress brain tumor-initiating cells. *Nature Neurosci* Jan 17(1): 46-55, 2014
 55. Carlson H, Laliberte C, Brooks B, Hodge J, Kirton A, Bello-Espinosa L, Hader W, Sherman EM. Reliability and variability of diffusion tensor imaging (DTI) tractography in paediatric epilepsy. *Epilepsy Behav* (In Press)
 56. Jalloh I, Helmy A, Shannon RJ, Gallagher CN, Menon DK, Carpenter KL, Hutchinson PJ. (2013). Lactate uptake by the injured human brain: evidence from an arteriovenous gradient and cerebral microdialysis study. *J Neurotrauma*. 2013 Dec 17;30(24):2031-7
 57. Roberts DJ, Jenne CN, Leger C, Kramer AH, Gallagher CN, Todd S, Parney IF, Doig CJ, Yong VW, Kubes P, Zygun DA. (2013). Association between the cerebral inflammatory and matrix metalloproteinase response after severe traumatic brain injury in humans. *J Neurotrauma* 2013 Oct 17;30(20):1727-36
 58. Roberts DJ, Jenne CN, Leger C, Kramer AH, Gallagher CN, Todd S, Parney IF, Doig CJ, Yong VW, Kubes P, Zygun DA. (2013). A prospective evaluation of the temporal matrix metalloproteinase response after severe traumatic brain injury in humans. *J Neurotrauma*. 2013 Oct 17;30(20):1717-26
 59. Zemp FJ, Lun, X, Zemp FJ, Zhou H, Sun B, Kelly JJP, Stechishin O , Weiss S, Cairncross JG, Hamilton MG, Rabinovich BA, Rahman MM, Smallwood S, Senger DL, Bell J , McFadden G and Peter A. Forsyth. (2013). Targeting Brain Tumor Initiating Cells using a Combination of Myxoma Virus and Rapamycin". *Neuro Oncol*. 2013 Jul;15(7):904-20. doi: 10.1093/neuonc/not035. Epub 2013 Apr 12.
 60. Hamilton M, Genge A, Johnston M, Lam D, Mobach T, Marriott J, Steeves T, Donner E, Wysocki J, Barlow K, Shevell M, Marrie RA, Casha S, Mackean G, Casselman L, Korngut L, Pringsheim T, Jette N. (2013). Patient recruitment by neurological registries. *Can J Neurol Sci*. 2013 Jul;40(4 Suppl 2):S23-6.
 61. Jette N, Atwood K, Hamilton M, Hayward R, Day L, Mobach T, Maxwell C, Fortin CM, Fiebelkorn G, Barlow K, Shevell M, Kapral MK, Casha S, Johnston M, Wiebe S, Korngut L, Pringsheim T. (2013). Linkage between neurological registry data and administrative data. *Can J Neurol Sci*. 2013 Jul;40(4 Suppl 2):S32-4.
 62. Sarkar S, Döring A, Zemp FJ, Silva C, Lun X, Wang X, Kelly J, Hader W, Hamilton M, Mercier P, Dunn JF, Kinniburgh D, van Rooijen N, Robbins S, Forsyth P, Cairncross G, Weiss S, Yong VW. (2013). Therapeutic activation of macrophages and microglia to suppress brain tumor-initiating cells. *Nat Neurosci*. 2014 Jan;17(1):46-55. doi: 10.1038/nn.3597. Epub 2013 Dec 8. PubMed PMID: 24316889.
 63. Deutschmann MW, Livingstone D, Cho JJ, Vanderkooi OG, Brookes JT. (2013). The Significance of Streptococcus anginosus Group in Intracranial Complications of Pediatric Rhinosinusitis. *JAMA Otolaryngol Head Neck Surg*. 2013 Feb; 139(2):157-60.
 64. Smith KA, **Yunker WK**. Kawasaki disease is associated with sensorineural hearing loss: A systematic review. *International Journal of Pediatric Otorhinolaryngology*. In Press. Manuscript number IJPORL-D-14-00266R1.
 65. Deutschmann MW, **Yunker WK**, Beveridge S, Andreassen M, Bosch JD. (2013). Use of a low-fidelity simulator to improve trans-nasal fiberoptic flexible laryngoscopy in the clinical setting: A randomized, single-blinded, prospective study. *Journal of Otolaryngology – Head & Neck Surgery*, 42(1), 35.
 66. **Yunker WK**, Hassan SF, Ferrell LB, Hicks MJ, Giannoni CM, Wesson DE, Cassady, CI, Hernandez, JA, Brandt, ML, Lopez, ME. (2013). Needle

core biopsy in the diagnosis of pediatric thyroid neoplasms: A single institution retrospective review. *Pediatric Surgery International*, 29(5), 437-443.

67. Thornton CS, Andisi VF, Moore R, Sakamaki R, Nguyen BD, McKeon S, Davidson C, Surette MG, Schryvers AB, **Yunker WK**. (2014). Characterization of the pediatric adenoid microbiome: Efficacy of tissue swab versus biopsy. *International Journal of Pediatric Otorhinolaryngology*. Submitted June 18, 2014. Manuscript number IJPORL-D-14-00475.
68. Liu CC, **Yunker WK**. (2014). The Role of Bone Conduction Hearing Aids in Congenital Unilateral and Bilateral Conductive Hearing Loss. *OA Otolaryngology*. Submitted January 19, 2014. Manuscript number 1390193023.
69. Dautremont J, **Yunker WK**, Bosch JD. (2014). Intra-lesional cidofovir injection in recurrent laryngeal papillomatosis. *International Journal of Otolaryngology*. Submitted March 3, 2014. Manuscript number 364617.
- AR**, et al. (2013). Beta-blockers for the treatment of problematic hemangiomas. *Can J Plast Surg*, Spring 2013, 21(1) p23-8
6. Nelson JA, Fischer JP, **Grover R**, et al. (2014). The impact of anemia on microsurgical breast reconstruction complications and outcomes [In Process Citation] *Microsurgery*, May 2014, 34(4) p261-70
7. **Grover R**, Nelson JA, Fischer JP, et al. (2014). The impact of perforator number on deep inferior epigastric perforator flap breast reconstruction. *Arch Plast Surg*, Jan 2014, 41(1) p63-70
8. **Grover R**, Padula WV, Van Vliet M, et al. (2013). Comparing five alternative methods of breast reconstruction surgery: a cost-effectiveness analysis. *Plast Reconstr Surg*, Nov 2013, 132(5) p709e-723e
9. Monahan J, **Kennedy J**, Nguyen G, Schooler WG, Wong AK. (2013). Determination of a perfusion threshold in experimental perforator flap surgery using indocyanine green angiography. *Annals of Plastic Surgery* 2013
10. Chen JL, Espinosa I, **Lin AY**, et al. (2013). Stromal responses among common carcinomas correlated with clinicopathologic features. *Clin Cancer Res*, Sep 15 2013, 19(18) p5127-35
11. Leitzen KP, Brietzke SE, **Lindsay RW**. (2014). Correlation between nasal anatomy and objective obstructive sleep apnea severity. *Otolaryngol Head Neck Surg*, Feb 2014, 150(2) p325-31
12. Deirdre Church, Ingrid Slaba, Brent Winston and **Robert Lindsay**. (2014). *Burn Wound Infections*. In *The Prokaryotes: The Prokaryotic Biology and Symbiotic Associations*, 4th Edition, 2014 (In press).
13. Courneya KS, Segal RJ, **McKenzie DC**, et al. (2014). Effects of Exercise during Adjuvant Chemotherapy on Breast Cancer Outcomes [In Process Citation] *Med Sci Sports Exerc*, Sep 2014, 46(9) p1744-51
14. Courneya KS, **McKenzie DC**, Gelmon K, et al. (2014). A multicenter randomized trial of the effects of exercise dose and type on psychosocial distress in breast cancer patients undergoing chemotherapy [In Process Citation] *Cancer Epidemiol Biomarkers Prev*, May 2014, 23(5) p857-64
15. Courneya KS, **McKenzie DC**, Mackey JR, et al.

Section of Plastic Surgery

1. **Matthews JL**, Oddone-Paolucci E, **Harrop RA**. (2014). The Epidemiology of Cleft Lip and Palate in Canada, 1998 to 2007 [epub ahead of print] [Record Supplied By Publisher] *Cleft Palate Craniofac J*, Jul 9 2014, p
2. **Yeung JK**, Dautremont JF, **Harrop AR**, de Haas W, **McKenzie D**, **Schrag C**, et al. (2014). Reduction of pulmonary complications and hospital length of stay with a clinical care pathway after head and neck reconstruction. *Plast Reconstr Surg*, Jun 2014, 133(6) p1477-84
3. **Yeung JK**, **Harrop R**, McCreary O, **McKenzie D**, de Haas W, **Schrag C**, et al. (2013). Delayed mobilization after microsurgical reconstruction: an independent risk factor for pneumonia. *Laryngoscope*, Dec 2013, 123(12) p2996-3000
4. Sibley CD, Brown HA, **Harrop AR**, et al. (2013). Exophytic nodule on the scalp. Superficial angiomyxoma. *JAMA Dermatol*, Jun 2013, 149(6) p751-6
5. **Sharma VK**, Fraulin FO, Dumestre D, **Harrop**

(2013). Effects of exercise dose and type during breast cancer chemotherapy: multicenter randomized trial. *J Natl Cancer Inst*, Dec 4 2013, 105(23) p1821-32

16. Kirkham AA, Campbell KL, **McKenzie DC**. (2013). Comparison of aerobic exercise intensity prescription methods in breast cancer. *Med Sci Sports Exerc*, Aug 2013, 45(8) p1443-50
17. **Dumestre D, Nickerson D**. (2014). Use of cyanide antidotes in burn patients with suspected inhalation injuries in north america: a cross-sectional survey [In Process Citation] *J Burn Care Res*, Mar-Apr 2014, 35(2) pe112-7
18. McBeth PB, Sass K, **Nickerson D**, et al. (2014). A necessary evil? Intra-abdominal hypertension complicating burn patient resuscitation. *J Trauma Manag Outcomes*, 2014, 8 p12
19. Bloch AM, **Schrag C**, Faessler E, et al. (2014). Classical skin lesions resembling infective endocarditis in a patient with an infected aortic composite graft. *Am J Respir Crit Care Med*, May 15 2014, 189(10) pe66-7
20. **Temple-Oberle CF**, Ayeni O, Cook EF, Bettger-Hahn M, Mychailyshyn N, Naeem H, Macdermid J. The Breast Reconstruction Satisfaction Questionnaire (BRECON 31): An Affirmative Analysis. *J Surg Oncol* 107(5): 451-5, 2013
21. Easson AM, Crosby R, McCready DR, **Temple-Oberle CF**, Petrella T, Wright F, and the Melanoma Disease Site Group. Surgical management of patients with lymph node metastases from cutaneous melanoma of the trunk or extremities: a systematic review and evidence-based recommendations. *Annals of Surgical Oncology*

Section of Surgical Oncology

1. Chin-Lenn L, Muryinka T, **McKinnon JG, Arlette JP**, et al. (2013) Comparison of outcomes for malignant melanoma of the face treated using Mohs micrographic surgery and wide local excision. *Dermatol Surg*, Nov 2013, 39(11) p1637-45

Section of Thoracic Surgery

1. **Grondin SC**; Schieman C; Kelly E; Darling G; Maziak D; Mackay MP; **Gelfand G**. (2013). A look at the thoracic surgery workforce in Canada: how demographics and scope of practice may impact future workforce needs. *Can J Surg* 2013 August 56(4):E75-81
2. Dumoulin E; Stather DR; **Gelfand G**; Maranda B; Maceachern P; Tremblay A. (2013). Idiopathic subglottic stenosis: a familial predisposition. : *Ann Thorac Surg* 2013 March 95(3):1084-6
3. Stather DR; Tremblay A; MacEachern P; Chee A; Dumoulin E; Tourin O; **Gelfand GA**; Mody CH. (2013). Bronchoscopic removal of a large intracavitary pulmonary aspergilloma. *Chest* 2013 January 143(1):238-41
4. Taylor JM; Allen AM; **Graham A**. (2014). Targeting mitochondrial 18 kDa translocator protein (TSPO) regulates macrophage cholesterol efflux and lipid phenotype [In Process Citation]. *Clin Sci (Lond)* 2014 November 1;127(10):603-13
5. Sawhney V; **Graham A**; Campbell N; Schilling R. (2014). Does modification to the approach to contacting potential participants improve recruitment to clinical trials? *J Clin Med Res* 2014 October 6(5):384-7
6. Stewart C; Kon T; Rojas M; **Graham A**; Martin D; Gilbertson R; Roye M. (2014). Mixed infection of *Sida jamaicensis* in Jamaica reveals the presence of three recombinant begomovirus DNA A components [In Process Citation]. *Arch Virol* 2014 September 59(9):2509-12
7. Kappler S; Ronan-Bentle S; Graham A. (2014). Thrombotic microangiopathies (TTP, HUS, HELLP) [In Process Citation]. *Emerg Med Clin North Am* 2014 August 32(3):649-71
8. Shiraev T; **Graham A**. (2014). Venous Thromboembolism Secondary to Penile Prosthesis [epub ahead of print] [Record Supplied By Publisher]. *Ann Vasc Surg* 2014 Jul 11
9. Edwards JP; **Datta I**; Hunt JD; Stefan K; **Ball CG; Dixon E; Grondin SC**. (2014). The impact of

- computed tomographic screening for lung cancer on the thoracic surgery workforce [In Process Citation] *Ann Thorac Surg* 2014 August 98(2):447-52
10. **Grondin S; Laflamme V; Gontier E.** (2014). Effect on perceived duration and sensitivity to time when observing disgusted faces and disgusting mutilation pictures [In Process Citation]. *Atten Percept Psychophys* 2014 August 76(6):1522-34
 11. Butte JM; Grendar J; **Bathe O; Sutherland F; Grondin S; Ball CG; Dixon E.** (2014). The role of peri-hepatic drain placement in liver surgery: a prospective analysis [epub ahead of print] [Record Supplied By Publisher]. *HPB (Oxford)* 2014 July 16
 12. Edwards JP; **Datta I; Hunt JD;** Stefan K; **Ball CG; Dixon E; Grondin SC.** (2014). A novel approach for the accurate prediction of thoracic surgery workforce requirements in Canada. *J Thorac Cardiovasc Surg* 2014 July 148(1):7-12
 13. Hurmic O; Grall N; Al Nakib M; Poyart C; **Grondin S; Ploy MC; Varon E; Raymond J.** (2014). Evidence of a clonal expansion of *Streptococcus pneumoniae* serotype 19A in adults as in children assessed by the DiversiLab system [epub ahead of print] [Record Supplied By Publisher]. *Eur J Clin Microbiol Infect Dis* 2014 Jun 15
 14. Kuroda T; Hasuo E; Labonte K; Laflamme V; **Grondin S.** (2014). Discrimination of two neighboring intra- and intermodal empty time intervals marked by three successive stimuli [In Process Citation]. *Acta Psychol (Amst)* 2014 June 149:134-41
 15. Gelberg J; **Grondin S;** Tremblay A. (2014). Mediastinal staging for lung cancer [In Process Citation] *Can Respir J* 2014 May -June 21(3):159-61
 16. Edwards JP; Schofield A; **Paolucci EO;** Schieman C; Kelly E; Servatyari R; **Dixon E; Ball CG; Grondin SC.** (2014). Identifying areas of weakness in thoracic surgery residency training: a comparison of the perceptions of residents and program directors [In Process Citation]. *J Surg Educ* 2014 May - June 71(3):360-6
 17. Mioni G; Stabulum F; McClintock SM; **Grondin S.** (2014). Different methods for reproducing time, different results. *Atten Percept Psychophys* 2014 April 76(3):675-81
 18. **Ball CG; Grondin SC;** Schieman C; Feliciano DV; **Dixon E; Kirkpatrick AW;** Ivatury RR; Salomone JP; Reed LR. (2014). Trauma surgery associations and societies: which organizations match your goals? *J Trauma Manag Outcomes* 2014 8:6
 19. **Grondin SC;** Schieman C; Kelly E; Darling G; Maziak D; Mackay MP; **Gelfand G.** (2013). A look at the thoracic surgery workforce in Canada: how demographics and scope of practice may impact future workforce needs. *Can J Surg* 2013 August 56(4):E75-81
 20. Rocco G; Allen MS; Altorki NK; Asamura H; Blum MG; Detterbeck FC; Dresler CM; Gossot D; **Grondin SC;** Jaklitsch MT; Mitchell JD; Newton JR; Van Schil PE; Waddell TK; Wood DE. (2013). Clinical statement on the role of the surgeon and surgical issues relating to computed tomography screening programs for lung cancer. *Ann Thorac Surg* 2013 July 96(1):357-60

Section of Transplant Surgery

1. Barnieh L; **Yilmaz S;** McLaughlin K; Hemmelgarn BR; Klarenbach S; Manns BJ; For The Alberta Kidney Disease Network. (2014). The cost of kidney transplant over time [In Process Citation] *Prog Transplant* 2014 September 24(3):257-62
2. Kabani R; Quinn RR; Palmer S; Lewin AM; **Yilmaz S;** Tibbles LA; Lorenzetti DL; Strippoli GF; McLaughlin K; Ravani P. (2014). Risk of death following kidney allograft failure: a systematic review and meta-analysis of cohort studies [In Process Citation]. *Nephrol Dial Transplant* 2014 September 29(9):1778-86

Section of Vascular Surgery

1. Lin J; Wang L; Guidoin R; **Nutley M**; Song G; Zhang Z; Du J; Douville Y. (2014). Stent fabric fatigue of grafts supported by Z-stents versus ringed stents: An in vitro buckling test [In Process Citation] J Biomater Appl 2014 March 28(7):965-77
2. Caldwell ST; Maclean C; Riehle M; Cooper A; **Nutley M**; Rabani G; Fitzpatrick B; Rotello VM; Smith BO; Khaled B; Woisel P; Cooke G. (2014). Protein-mediated dethreading of a biotin-functionalised pseudorotaxane [In Process Citation] Org Biomol Chem 2014 January 21 12(3):511-6
3. Wei D; Guidoin R; Marinov GR; Yin T; Zhang Z; Douville Y; Koebke J; How T; **Nutley M**; Knifka J; Lin J; Li B; **Samis G**; Wang L; Dionne G; Gilbert N. (2013). Absence of tissue ingrowth through the textile fabric in a series of explanted clinic stent-grafts. : J Long Term Eff Med Implants 2013 23(4):339-57
4. Lin J; Guidoin R; Wang L; Zhang Z; **Nutley M**; Paynter R; Wei D; How T; Crepeau H; Douville Y; **Samis G**; Dionne G; Gilbert N. (2013). Fatigue and/or failure phenomena observed in the fabric of stent-grafts explanted after adverse events. J Long Term Eff Med Implants 2013 23(1):67-86
5. Lin J; Guidoin R; Wang L; Zhang Z; Paynter R; How T; **Nutley M**; Wei D; Douville Y; **Samis G**; Dionne G; Gilbert N. (2013). Long-term resistance to fracture and/or corrosion of the nitinol wires of the talent stent-graft: observations from a series of explanted devices. J Long Term Eff Med Implants 2013 23(1):45-59
6. Wei D; Guidoin R; Marinov GR; Yin T; Zhang Z; Douville Y; Koebke J; How T; **Nutley M**; Knifka J; Lin J; Li B; **Samis G**; Wang L; Dionne G; Gilbert N. (2013). Absence of tissue ingrowth through the textile fabric in a series of explanted clinic stent-grafts. J Long Term Eff Med Implants 2013 23(4):339-57
7. Lin J; Guidoin R; Wang L; Zhang Z; **Nutley M**; Paynter R; Wei D; How T; Crepeau H; Douville Y; **Samis G**; Dionne G; Gilbert N. (2013). Fatigue and/or failure phenomena observed in the fabric of stent-grafts explanted after adverse events. J Long Term Eff Med Implants 2013 23(1):67-86
8. Lin J; Guidoin R; Wang L; Zhang Z; Paynter R; How T; **Nutley M**; Wei D; Douville Y; **Samis G**; Dionne G; Gilbert N. (2013). Long-term resistance to fracture and/or corrosion of the nitinol wires of the talent stent-graft: observations from a series of explanted devices. J Long Term Eff Med Implants 2013 23(1):45-59

Non Clinical

1. Ando W, Kutcher JJ, **Krawetz R**, et al. (2014). Clonal analysis of synovial fluid stem cells to characterize and identify stable mesenchymal stromal cell/mesenchymal progenitor cell phenotypes in a porcine model: a cell source with enhanced commitment to the chondrogenic lineage [In Process Citation] Cytotherapy, Jun 2014, 16(6) p776-88
2. Zhang B, **Krawetz R**, Rancourt DE. (2013). Would the real human embryonic stem cell please stand up? Bioessays, Jul 2013, 35(7) p632-8
3. Abusara Z, **Krawetz R**, Steele B, et al. (2013). Muscular loading of joints triggers cellular secretion of PRG4 into the joint fluid. J Biomech, Apr 26 2013, 46(7) p1225-30
4. Taiani JT, **Krawetz RJ**, Yamashita A, et al. (2013). Embryonic stem cells incorporate into newly formed bone and do not form tumors in an immunocompetent mouse fracture model. Cell Transplant, 2013, 22(8) p1453-62
5. Hiscox C, Lamothe C, White N, **Oddone Paolucci E**, et al. (2013). Diagnosis of occult scaphoid fractures: a randomized, controlled trial comparing bone scans to radiographs for diagnosis [In Process Citation] CJEM, 2013, 15(0) p1-8
6. **Thornton GM**, Bailey SJ. (2013). Healing ligaments have shorter lifetime and greater strain rate during fatigue than creep at functional stresses. J Biomech Eng, Sep 2013, 135(9) p91004

7. Pang CL, Lindsay R, **Thornton G.** (2013). Structure of clean and adsorbate-covered single-crystal rutile TiO₂ surfaces. *Chem Rev*, Jun 12 2013, 113(6) p3887-948

Joint Appointments

Anaesthesia

1. Brasher PM, **Dobson G.** (2014). Understanding non-inferiority trials: an introduction [In Process Citation] *Can J Anaesth*, May 2014, 61(5) p389-92
2. Gregory AJ, **Dobson G.** (2013). Proximal aortic compliance and diastolic function assessed by speckle tracking imaging. *Can J Anaesth*, Jul 2013, 60(7) p667-74

Cardiac Sciences

1. Nagendran J, Norris CM, **Appoo JJ**, et al. (2014). Left ventricular end-diastolic pressure predicts survival in coronary artery bypass graft surgery patients. *Ann Thorac Surg*, Apr 2014, 97(4) p1343-7
2. Martufi G, Gasser TC, **Appoo JJ**, et al. (2014). Mechano-biology in the thoracic aortic aneurysm: a review and case study [epub ahead of print] [Record Supplied By Publisher] *Biomech Model Mechanobiol*, Feb 15 2014, p
3. Kent WD, Toeg HD, **Appoo JJ.** (2014). Repair of bicuspid aortic valve in the presence of endocarditis and leaflet perforation [In Process Citation] *Tex Heart Inst J*, Feb 2014, 41(1) p67-9
4. **Appoo JJ**, Tse LW, Pozeg ZI, et al. (2014). Thoracic aortic frontier: review of current applications and directions of thoracic endovascular aortic repair (TEVAR). *Can J Cardiol*, Jan 2014, 30(1) p52-63
5. Yu W, Wright JR, **Appoo JJ.** (2013). Venous intimal hyperplasia with occlusion of the anastomosis between saphenous vein graft and carbo-seal dacron tube after a modified Bentall procedure. *J Heart Valve Dis*, Nov 2013, 22(6) p867-71
6. Mirakhur A, **Appoo JJ**, Kent W, et al. (2013). Delayed intimal blowout after endovascular repair

of aortic dissection. *J Vasc Interv Radiol*, Oct 2013, 24(10) p1471-5

7. **Appoo JJ**, Pozeg Z. (2013). Strategies in the surgical treatment of type A aortic arch dissection. *Ann Cardiothorac Surg*, Mar 2013, 2(2) p205-11
8. Sindreu C, **Bayes A**, Altafaj X, et al. (2014). Zinc transporter-1 concentrates at the postsynaptic density of hippocampal synapses [In Process Citation] *Mol Brain*, 2014, 7(1) p16
9. Morais Diane JM, **Burgess J.** (2014). Vitamin E nanoemulsions characterization and analysis [In Process Citation] *Int J Pharm*, Apr 25 2014, 465(1-2) p455-63
10. Meszaros D, **Burgess J**, Walters EH, et al. (2014). Domestic airborne pollutants and asthma and respiratory symptoms in middle age [In Process Citation] *Respirology*, Apr 2014, 19(3) p411-8
11. Tan J, Oh K, **Burgess J**, et al. (2014). PI4KIII(+or-) is required for cortical integrity and cell polarity during Drosophila oogenesis [In Process Citation] *J Cell Sci*, Mar 1 2014, 127(Pt 5) p954-66
12. Elkins P, Coleman D, **Burgess J**, et al. (2014). Characterization of the isomeric configuration and impurities of (Z)-endoxifen by 2D NMR, high resolution LC[MS, and quantitative HPLC analysis. *J Pharm Biomed Anal*, Jan 2014, 88 p174-9
13. Rizkallah J, **Burgess J**, Kuriachan V. (2014). Absent right and persistent left superior vena cava: troubleshooting during a challenging pacemaker implant: a case report [In Process Citation] *BMC Res Notes*, 2014, 7 p462
14. **Burgess J**, Davies M. (2014). Developing the use of digital recording of consultations to improve patient care [In Process Citation] *BMJ*, 2014, 348 pg2427
15. Krimmer D, Ichimaru Y, **Burgess J**, et al. (2013). Exposure to biomass smoke extract enhances fibronectin release from fibroblasts. *PLoS One*, 2013, 8(12) pe83938
16. Graham MA, Bethel PA, **Burgess J**, et al. (2013). Novel and versatile synthesis of disubstituted 1,2-dihydro-1,2,4-triazol-3-ones. *Org Lett*, Dec 6 2013, 15(23) p6078-81
17. Mahoney M, Baxter K, **Burgess J**, et al. (2013).

Procedure for obtaining a urine sample from a urostomy, ileal conduit, and colon conduit: a best practice guideline for clinicians. *J Wound Ostomy Continence Nurs*, May-Jun 2013, 40(3) p277-9; quiz E1-2

18. Green JA, Brown K, **Burgess J**, et al. (2013). Indigenous and immigrant populations' use and experience of community pharmacies in New Zealand. *J Immigr Minor Health*, Feb 2013, 15(1) p78-84
19. Tucker J, Boone K, **Fedak P**. (2013). Health technology assessments and innovation [In Process Citation] *Nat Biotechnol*, Nov 2013, 31(11) p970-1
20. **Fedak PW**, Verma S. (2013). The molecular fingerprint of bicuspid aortopathy. *J Thorac Cardiovasc Surg*, May 2013, 145(5) p1334
21. Moustafa S, Patton DJ, Balon Y, **Kidd W**, et al. (2013). Mitral valve surgery for marantic endocarditis and multiple cerebral embolisation. *Heart Lung Circ*, Jul 2013, 22(7) p545-7
22. Nagendran J, Norris CM, Graham MM, **Maitland A**, et al. (2013). Coronary revascularization for patients with severe left ventricular dysfunction. *Ann Thorac Surg*, Dec 2013, 96(6) p2038-44
23. **Kieser TM**, Rose MS, Aluthman U, et al. (2014). Quicker yet safe: skeletonization of 1640 internal mammary arteries with harmonic technology in 965 patients [In Process Citation] *Eur J Cardiothorac Surg*, May 2014, 45(5) pe142-50
24. **Kieser TM**, Rose MS, Aluthman U, et al. (2014). Toward zero: Deep sternal wound infection after 1001 consecutive coronary artery bypass procedures using arterial grafts: Implications for diabetic patients [epub ahead of print] [Record Supplied By Publisher] *J Thorac Cardiovasc Surg*, Feb 11 2014, p
25. **Kieser TM**, Curran HJ, Rose MS, et al. (2014). Arterial grafts balance survival between incomplete and complete revascularization: a series of 1000 consecutive coronary artery bypass graft patients with 98% arterial grafts. *J Thorac Cardiovasc Surg*, Jan 2014, 147(1) p75-83
26. **Kieser TM**. (2013). Bilateral internal mammary artery grafting in CABG surgery: an extra 20

minutes for an extra 20 yearsI [In Process Citation] *EuroIntervention*, Dec 23 2013, 9(8) p899-901

27. **Kieser TM**, Head SJ, Kappetein AP. (2013). Arterial grafting and complete revascularization: challenge or compromise? *Curr Opin Cardiol*, Nov 2013, 28(6) p646-53
28. Head SJ, **Kieser TM**, Falk V, et al. (2013). Coronary artery bypass grafting: Part 1--the evolution over the first 50 years. *Eur Heart J*, Oct 2013, 34(37) p2862-72
29. Frank SM, Resar LM, **Rothschild JA**, et al. (2013). A novel method of data analysis for utilization of red blood cell transfusion. *Transfusion*, Dec 2013, 53(12) p3052-9

Cell Biology and Anatomy

1. Muguruma K, **Stell WK**, Yamamoto N. (2014). A Morphological Classification of Retinal Ganglion Cells in the Japanese Catshark *Scyliorhinus torazame* [In Process Citation] *Brain Behav Evol*, 2014, 83 p199-215
2. McBrien NA, **Stell WK**, Carr B. (2013). How does atropine exert its anti-myopia effects? *Ophthalmic Physiol Opt*, May 2013, 33(3) p373-8
3. Shi Q, **Stell WK**. (2013). Die Fledermaus: regarding optokinetic contrast sensitivity and light-adaptation, chicks are mice with wings. *PLoS One*, 2013, 8(9) pe75375

Clinical Neurosciences

1. Pringsheim T, Lam D, Day L, **Casha S**, et al. (2013). Validation and interpretation of neurological registry data. *Can J Neurol Sci*, Jul 2013, 40(4 Suppl 2) pS51-3
2. Jette N, Atwood K, Hamilton M, **Casha S**, et al. (2013). Linkage between neurological registry data and administrative data. *Can J Neurol Sci*, Jul 2013, 40(4 Suppl 2) pS32-4
3. Hamilton M, Genge A, Johnston M, **Casha S**, et al. (2013). Patient recruitment by neurological registries. *Can J Neurol Sci*, Jul 2013, 40(4 Suppl 2) pS23-6
4. **Costello FE**. (2014). Optical coherence tomography

- technologies: which machine do you want to own? [In Process Citation] *J Neuroophthalmol*, Sep 2014, 34 Suppl pS3-9
5. **Costello F**, Modi J, Lautner D, et al. (2014). Validity of the diagnostic criteria for chronic cerebrospinal venous insufficiency and association with multiple sclerosis [In Process Citation] *CMAJ*, Aug 5 2014, 186(11) pE418-26
 6. Petzold A, Wattjes MP, **Costello F**, et al. (2014). The investigation of acute optic neuritis: a review and proposed protocol [In Process Citation] *Nat Rev Neurol*, Aug 2014, 10(8) p447-58
 7. **Costello F**, Watts P. (2014). Surprisingly rational: Probability theory plus noise explains biases in judgment [In Process Citation] *Psychol Rev*, Jul 2014, 121(3) p463-80
 8. Munro M, **Costello F**, Burrowes D, et al. (2014). Maffucci Syndrome and Intracranial Chondrosarcomas: A Case Report Featuring Spontaneous Resolution of Sixth Nerve Palsy [epub ahead of print] [Record Supplied By Publisher] *J Neuroophthalmol*, Jun 27 2014, p
 9. Chen JJ, **Costello F**, Kardon RH. (2014). Sex Disparities in Neuro-Ophthalmologic Disorders [epub ahead of print] [Record Supplied By Publisher] *Curr Eye Res*, Jun 9 2014, p1-19
 10. Lueck CJ, **Costello F**. (2013). Central adaptation after optic neuritis: is the whole greater than the sum of its parts? *Neurology*, Aug 20 2013, 81(8) p698-9
 11. **Costello F**. (2013). The afferent visual pathway: designing a structural-functional paradigm of multiple sclerosis. *ISRN Neurol*, 2013, 2013 p134858
 12. Petre B, Hacquard S, **Duplessis S**, et al. (2014). Genome analysis of poplar LRR-RLP gene clusters reveals RISP, a defense-related gene coding a candidate endogenous peptide elicitor. *Front Plant Sci*, 2014, 5 p111
 13. de Guzman P, **Hamilton M**, Khan A, et al. (2014). Moyamoya Syndrome Associated with Mucopolysaccharidosis-II [In Process Citation] *Can J Neurol Sci*, Jul 2014, 41(4) p522-4
 14. **Hamilton ML**, Haslam RP, Napier JA, et al. (2014). Metabolic engineering of *Phaeodactylum tricornutum* for the enhanced accumulation of omega-3 long chain polyunsaturated fatty acids [In Process Citation] *Metab Eng*, Mar 2014, 22 p3-9
 15. Bunnik EM, Chung DW, **Hamilton M**, et al. (2013). Polysome profiling reveals translational control of gene expression in the human malaria parasite *Plasmodium falciparum* [In Process Citation] *Genome Biol*, 2013, 14(11) pR128
 16. Cook JA, Jonikas JA, **Hamilton MM**, et al. (2013). Impact of Wellness Recovery Action Planning on service utilization and need in a randomized controlled trial. *Psychiatr Rehabil J*, Dec 2013, 36(4) p250-7
 17. Jette N, Atwood K, **Hamilton M**, et al. (2013). Linkage between neurological registry data and administrative data. *Can J Neurol Sci*, Jul 2013, 40(4 Suppl 2) pS32-4
 18. Rowland JE, **Hamilton MK**, Lino BJ, et al. (2013). Cognitive regulation of negative affect in schizophrenia and bipolar disorder. *Psychiatry Res*, Jun 30 2013, 208(1) p21-8
 19. **Hamilton M**, Baldachin J, Roose SP. (2013). Follow-up on the dropout rate of training cases: who and when. *J Am Psychoanal Assoc*, Jun 2013, 61(3) p569-73
 20. **Hurlbert RJ**. (2014). Methylprednisolone for the treatment of acute spinal cord injury: point [In Process Citation] *Neurosurgery*, Aug 2014, 61 Suppl 1 p32-5
 21. **Hurlbert RJ**, Alexander D, Bailey S, et al. (2014). Letters [In Process Citation] *Spine (Phila Pa 1976)*, Feb 15 2014, 39(4) p343-4
 22. **Hurlbert RJ**, Alexander D, Bailey S, et al. (2013). rhBMP-2 for posterolateral instrumented lumbar fusion: a multicenter prospective randomized controlled trial. *Spine (Phila Pa 1976)*, Dec 1 2013, 38(25) p2139-48
 23. Walters BC, Hadley MN, **Hurlbert RJ**, et al. (2013). Guidelines for the management of acute cervical spine and spinal cord injuries: 2013 update. *Neurosurgery*, Aug 2013, 60 Suppl 1 p82-91
 24. Shamji MF, **Hurlbert RJ**. (2013). Oops, I did it again... *World Neurosurg*, Mar-Apr 2013, 79(3-4) p448-50
 25. **Hurlbert RJ**, Hadley MN, Walters BC, et al. (2013).

- Pharmacological therapy for acute spinal cord injury. *Neurosurgery*, Mar 2013, 72 Suppl 2 p93-105
26. Ryken TC, **Hurlbert RJ**, Hadley MN, et al. (2013). The acute cardiopulmonary management of patients with cervical spinal cord injuries. *Neurosurgery*, Mar 2013, 72 Suppl 2 p84-92
 27. **Subramaniam SR**, Vergnes L, Franich NR, et al. (2014). Region specific mitochondrial impairment in mice with widespread overexpression of alpha-synuclein [In Process Citation] *Neurobiol Dis*, Oct 2014, 70 p204-13
 28. Kaushik A, **Subramaniam S**, Gupta D, (2014). In silico characterization and molecular dynamics simulation of Pfcyc-1, a cyclin homolog of *Plasmodium falciparum* [In Process Citation] *J Biomol Struct Dyn*, Oct 2014, 32(10) p1624-33
 29. **Subramaniam S**, Hui-Chan CW, Bhatt T. (2014). Effect of dual tasking on intentional vs. reactive balance control in people with hemiparetic stroke [In Process Citation] *J Neurophysiol*, Sep 1 2014, 112(5) p1152-8
 30. **Subramaniam S**. (2014). Drug discovery and the maze of biological complexity: an editorial essay [In Process Citation] *Wiley Interdiscip Rev Syst Biol Med*, May 2014, 6(3) p225-6
 31. Narayanan KL, **Subramaniam S**, Bengston CP, et al. (2014). Role of Transient Receptor Potential Channel 1 (TRPC1) in Glutamate-Induced Cell Death in the Hippocampal Cell Line HT22 [In Process Citation] *J Mol Neurosci*, Mar 2014, 52(3) p425-33
 32. Cao Z, **Subramaniam S**, Bulleid NJ. (2014). Lack of an efficient endoplasmic reticulum-localized recycling system protects peroxiredoxin IV from hyperoxidation. *J Biol Chem*, Feb 28 2014, 289(9) p5490-8
 33. Narayanan T, **Subramaniam S**. (2014). A newtonian framework for community detection in undirected biological networks [In Process Citation] *IEEE Trans Biomed Circuits Syst*, Feb 2014, 8(1) p65-73
 34. **Subramaniam SR**, Chesselet MF. (2013). Mitochondrial dysfunction and oxidative stress in Parkinson's disease. *Prog Neurobiol*, Jul-Aug 2013, 106-107 p17-32
 35. Mealer RG, **Subramaniam S**, Snyder SH. (2013). Rhes deletion is neuroprotective in the 3-nitropropionic acid model of Huntington's disease. *J Neurosci*, Feb 27 2013, 33(9) p4206-10
 36. **Subramaniam SR**, Ellis EM. (2013). Neuroprotective effects of umbelliferone and esculetin in a mouse model of Parkinson's disease. *J Neurosci Res*, Mar 2013, 91(3) p453-61

General Surgery

1. **Goel A, McColl R**, King KS, et al. (2014). Fully automated tool to identify the aorta and compute flow using phase-contrast MRI: Validation and application in a large population based study [In Process Citation] *J Magn Reson Imaging*, Jul 2014, 40(1) p221-8
2. **McColl RJ**, Shaheen AA, Brar B, et al. (2013). Survival after hepatic resection: impact of surgeon training on long-term outcome. *Can J Surg*, Aug 2013, 56(4) p256-62
3. Lucarelli RT, Peshock RM, **McColl R**, et al. (2013). MR imaging of hippocampal asymmetry at 3T in a multiethnic, population-based sample: results from the Dallas Heart Study. *AJNR Am J Neuroradiol*, Apr 2013, 34(4) p752-7

Kinesiology

1. Brooks F, **Clark A**, O'Neil R, et al. (2014). A multi-centred audit of secondary spinal assessments in a trauma setting: are we ATLS compliant? [In Process Citation] *Eur J Orthop Surg Traumatol*, Jul 2014, 24 Suppl 1 p215-9
2. Ingle L, Cleland JG, **Clark AL**. (2014). The relation between repeated 6-minute walk test performance and outcome in patients with chronic heart failure [In Process Citation] *Ann Phys Rehabil Med*, Jun 2014, 57(4) p244-53
3. **Clark AR**, Milne D, Wilsher M, et al. (2014). Lack of functional information explains the poor performance of 'clot load scores' at predicting outcome in acute pulmonary embolism. *Respir Physiol Neurobiol*, Jan 1 2014, 190 p1-13
4. Mares K, Cross J, **Clark A**, et al. (2014). Feasibility of a randomized controlled trial of functional strength training for people between six months and

five years after stroke: FeSTivaLS trial [In Process Citation] *Trials*, 2014, 15(1) p322

Medical Genetics

1. Barrett KT, Rodikova E, Weese-Mayer DE, **Bech-Hansen NT**, et al. (2013). Analysis of PAC1 receptor gene variants in Caucasian and African American infants dying of sudden infant death syndrome [In Process Citation] *Acta Paediatr*, Dec 2013, 102(12) pe546-52

Medicine/Oncology

1. Shoimer I, Warman L, **Kurwa HA**. (2013). Preparation of Mohs micrographic surgery frozen sections: three new pearls leading to a simplified, more-effective process. *Dermatol Surg*, Aug 2013, 39(8) p1279-82
2. Chen T, **Kurwa HA**, Trotter MJ, et al. (2013). Agminated blue nevi in a patient with dermatomyositis. *J Am Acad Dermatol*, Feb 2013, 68(2) pe52-3
3. Tremblay A, **MacEachern P**. (2014). Dr David Stather [In Process Citation] *J Bronchology Interv Pulmonol*, Apr 2014, 21(2) p181
4. **Maceachern PR**, Brazil A, Tremblay A, et al. (2013). Severe airway injury due to alendronate aspiration. *Can Respir J*, Nov-Dec 2013, 20(6) p410-2
5. Stather DR, Chee A, **Maceachern P**, et al. (2013). Evaluation of a novel method of teaching endobronchial ultrasound: physician- versus respiratory therapist-proctored simulation training. *Can Respir J*, Jul-Aug 2013, 20(4) p243-7
6. Chee A, Stather DR, **Maceachern P**, et al. (2013). Diagnostic utility of peripheral endobronchial ultrasound with electromagnetic navigation bronchoscopy in peripheral lung nodules. *Respirology*, Jul 2013, 18(5) p784-9
7. Stather DR, Tremblay A, **MacEachern P**, et al. (2013). Bronchoscopic removal of a large intracavitary pulmonary aspergilloma. *Chest*, Jan 2013, 143(1) p238-41
8. Stather DR, **MacEachern P**, Chee A, et al. (2013). Trainee impact on procedural complications: an

analysis of 967 consecutive flexible bronchoscopy procedures in an interventional pulmonology practice. *Respiration*, 2013, 85(5) p422-8

Veterinary Medicine

1. **Biernaskie JM**, Gardner A, West SA. (2013). Multicoloured greenbeards, bacteriocin diversity and the rock-paper-scissors game. *J Evol Biol*, Oct 2013, 26(10) p2081-94
2. Hagner A, **Biernaskie J**. (2013). Isolation and differentiation of hair follicle-derived dermal precursors. *Methods Mol Biol*, 2013, 989 p247-63

Adjunct Appointments

Cell Biology, Anatomy, and Surgery

1. Yuan J, **Poulin P**. (2014). Materials science. Fibers do the twist. *Science*, Feb 21 2014, 343(6173) p845-6
2. **Poulin P**, Haddad S. (2013). Hepatocyte composition-based model as a mechanistic tool for predicting the cell suspension: aqueous phase partition coefficient of drugs in in vitro metabolic studies [In Process Citation] *J Pharm Sci*, Aug 2013, 102(8) p2806-18
3. **Poulin P**, Dambach DM, Hartley DH, et al. (2013). An algorithm for evaluating potential tissue drug distribution in toxicology studies from readily available pharmacokinetic parameters. *J Pharm Sci*, Oct 2013, 102(10) p3816-29
4. **Poulin P**, Haddad S. (2013). Toward a new paradigm for the efficient in vitro-in vivo extrapolation of metabolic clearance in humans from hepatocyte data. *J Pharm Sci*, Sep 2013, 102(9) p3239-51
5. Harreither W, Trouillon R, Poulin P, et al. (2013). Carbon nanotube fiber microelectrodes show a higher resistance to dopamine fouling. *Anal Chem*, Aug 6 2013, 85(15) p7447-53
6. **Poulin P**. (2013). Prediction of total hepatic clearance by combining metabolism, transport, and permeability data in the in vitro-in vivo extrapolation methods: emphasis on an apparent

fraction unbound in liver for drugs. *J Pharm Sci*, Jul 2013, 102(7) p2085-95

7. Jones HM, Mayawala K, **Poulin P**. (2013). Dose selection based on physiologically based pharmacokinetic (PBPK) approaches. *AAPS J*, Apr 2013, 15(2) p377-87
8. **Poulin P**, Austen L, Scott CM, et al. (2013). Introduction of new technologies and decision making processes: a framework to adapt a Local Health Technology Decision Support Program for other local settings. *Med Devices*, 2013, 6 p185-93
9. **Poulin P**, Hop CE, Salphati L, et al. (2013). Correlation of tissue-plasma partition coefficients between normal tissues and subcutaneous xenografts of human tumor cell lines in mouse as a prediction tool of drug penetration in tumors. *J Pharm Sci*, Apr 2013, 102(4) p1355-69
10. **Poulin P**, Austen L, Scott CM, et al. (2013). Multi-criteria development and incorporation into decision tools for health technology adoption. *J Health Organ Manag*, 2013, 27(2) p246-65

Department of Surgery

1. **Barabas AZ**, Cole CD, Lafreniere R, et al. (2013). Regaining tolerance to a self-antigen by the modified vaccination technique. *Clin Rev Allergy Immunol*, Oct 2013, 45(2) p193-201
2. Arnander M, Teoh V, **Barabas A**, et al. (2013). Improved patient awareness and satisfaction using procedure specific consent forms in carpal tunnel decompression surgery. *Hand Surg*, 2013, 18(1) p53-7
3. Lock J, Raat H, **Duncan N**, et al. (2014). Adherence to treatment in a Western European paediatric population with haemophilia: reliability and validity of the VERITAS-Pro scale [In Process Citation] *Haemophilia*, Sep 2014, 20(5) p616-23
4. **Duncan N**, Roberson C, Lail A, et al. (2014). A haemophilia disease management programme targeting cost and utilization of specialty pharmaceuticals [In Process Citation] *Haemophilia*, Jul 2014, 20(4) p519-26
5. Hillock-Dunn A, Buss E, **Duncan N**, et al. (2014). Effects of nonlinear frequency compression on speech identification in children with hearing loss [In Process Citation] *Ear Hear*, May-Jun 2014, 35(3) p353-65
6. Lang S, **Duncan N**, Northoff G. (2014). Resting-state functional magnetic resonance imaging: review of neurosurgical applications [In Process Citation] *Neurosurgery*, May 2014, 74(5) p453-65
7. Desrochers J, **Duncan NA**. (2014). Intercellular communication via gap junctions affected by mechanical load in the bovine annulus fibrosus. *Comput Methods Biomech Biomed Eng*, 2014, 17(1) p64-71
8. El-Sherbini N, **Duncan N**, Hickson M, et al. (2013). Nutrition changes in conservatively treated patients with encapsulating peritoneal sclerosis. *Perit Dial Int*, Sep-Oct 2013, 33(5) p538-43
9. Leibold LJ, Hillock-Dunn A, **Duncan N**, et al. (2013). Influence of hearing loss on children's identification of spondee words in a speech-shaped noise or a two-talker masker. *Ear Hear (United States)*, Sep 2013, 34(5) p575-84
10. Dziunycz PJ, Lazarova Z, **Duncan N**, et al. (2013). EGFRvIII expression in squamous cell carcinoma of the skin. *JAMA Dermatol*, Oct 2013, 149(10) p1240-2
11. Shao XX, **Duncan NA**, Lin L, et al. (2013). Serum-free media for articular chondrocytes in vitro expansion. *Chin Med J*, Jul 2013, 126(13) p2523-9
12. Qin P, Duncan N, Northoff G. (2013). Why and How is the Self-Related to the Brain Midline Regions? *Front Hum Neurosci*, 2013, 7 p909
13. Joumaa V, **Herzog W**. (2014). Calcium sensitivity of residual force enhancement in rabbit skinned fibers [In Process Citation] *Am J Physiol Cell Physiol*, Aug 15 2014, 307(4) pC395-401
14. **Herzog W**. (2014). The role of titin in eccentric muscle contraction [In Process Citation] *J Exp Biol*, Aug 15 2014, 217(Pt 16) p2825-33
15. **Herzog W**. (2014). Mechanisms of enhanced force production in lengthening (eccentric) muscle contractions [In Process Citation] *J Appl Physiol* (1985), Jun 1 2014, 116(11) p1407-17

16. Hoppeler H, **Herzog W.** (2014). Eccentric Exercise: Many questions unanswered [In Process Citation] *J Appl Physiol* (1985), Jun 1 2014, 116(11) p1405-6
17. Lossnitzer N, Herzog W, Gelbrich G, et al. (2013). Reply to: Risk assessment of depression by questionnaire for patients with heart failure. *Int J Cardiol*, Oct 3 2013, 168(3) p3129
18. Lossnitzer N, **Herzog W**, Stork S, et al. (2013). Incidence rates and predictors of major and minor depression in patients with heart failure. *Int J Cardiol*, Jul 31 2013, 167(2) p502-7
19. Koppes RA, **Herzog W**, Corr DT. (2013). Force enhancement in lengthening contractions of cat soleus muscle in situ: transient and steady-state aspects. *Physiol Rep*, Jul 2013, 1(2) pe00017
20. Schiel RO, **Herzog W**, Hof H, et al. (2013). [Effect of systematic information about psychosocial support services during outpatient radiotherapy. A controlled trial] *Strahlenther Onkol*, Jul 2013, 189(7) p579-85
21. **Herzog W**, Leonard TR. (2013). Residual force enhancement: the neglected property of striated muscle contraction. *J Physiol*, Apr 15 2013, 591(Pt 8) p2221
22. **Herzog W**, Bronner C, Löffler S, et al. (2013). Electron transfer between hydrogen-bonded pyridylphenols and a photoexcited rhenium(I) complex. *Chemphyschem*, Apr 15 2013, 14(6) p1168-76
23. Joumaa V, **Herzog W.** (2013). Energy cost of force production is reduced after active stretch in skinned muscle fibres. *J Biomech*, Apr 5 2013, 46(6) p1135-9
24. Mohammadi H, Mequanint K, **Herzog W.** (2013). Computational aspects in mechanical modeling of the articular cartilage tissue. *Proc Inst Mech Eng H*, Apr 2013, 227(4) p402-20
25. Turunen SM, Han SK, **Herzog W**, et al. (2013). Cell deformation behavior in mechanically loaded rabbit articular cartilage 4weeks after anterior cruciate ligament transection. *Osteoarthritis Cartilage*, Mar 2013, 21(3) p505-13
26. Madden R, Han SK, **Herzog W.** (2013). Chondrocyte deformation under extreme tissue strain in two regions of the rabbit knee joint. *J Biomech*, Feb 1 2013, 46(3) p554-60
27. McGowan CP, Neptune RR, **Herzog W.** (2013). A phenomenological muscle model to assess history dependent effects in human movement. *J Biomech*, Jan 4 2013, 46(1) p151-
28. Reardon AJ, Elliott JA, **McGann LE.** (2014). Fluorescence as an alternative to light-scatter gating strategies to identify frozen-thawed cells with flow cytometry [In Process Citation] *Cryobiology*, Aug 2014, 69(1) p91-9
29. Zhurova M, **McGann LE**, Acker JP. (2014). Osmotic parameters of red blood cells from umbilical cord blood [In Process Citation] *Cryobiology*, Jun 2014, 68(3) p379-88
30. Baltich J, Whittaker J, **Nigg B**, et al. (2014). A preliminary analysis of the impact of previous knee injury on measures of balance and their implications for secondary prevention [In Process Citation] *Br J Sports Med*, Apr 2014, 48(7) p564-5
31. Enders H, von Tscharner V, **Nigg BM.** The effects of preferred and non-preferred running strike patterns on tissue vibration properties [In Process Citation] *J Sci Med Sport*, Mar 2014, 17(2) p218-22
32. von Tscharner V, Maurer C, **Nigg BM.** (2014). Correlations and coherence of monopolar EMG-currents of the medial gastrocnemius muscle in proximal and distal compartments. *Front Physiol*, 2014, 5 p22
33. Federolf P, Roos L, **Nigg BM.** (2013). Analysis of the multi-segmental postural movement strategies utilized in bipedal, tandem and one-leg stance as quantified by a principal component decomposition of marker coordinates. *J Biomech*, Oct 18 2013, 46(15) p2626-33
34. Maurer C, von Tscharner V, **Nigg BM.** (2013). Speed-dependent variation in the Piper rhythm. *J Electromyogr Kinesiol*, Jun 2013, 23(3) p673-8
35. Friesenbichler B, **Nigg BM**, Dunn JF. (2013). Local metabolic rate during whole body vibration. *J Appl Physiol* (1985), May 15 2013, 114(10) p1421-5
36. Suri M, Turner JM, **Sigale DL**, et al. (2014). Exogenous glucagon-like peptide-2 improves

outcomes of intestinal adaptation in a distal-intestinal resection neonatal piglet model of short bowel syndrome [epub ahead of print] [Record Supplied By Publisher] *Pediatr Res*, Jul 4 2014, p

37. **Sigalet DL**, de Heuvel E, Wallace L, et al. (2014). Effects of chronic glucagon-like peptide-2 therapy during weaning in neonatal pigs [In Process Citation] *Regul Pept*, Jan 10 2014, 188 p70-80
38. **Sigalet DL**, Kravarusic D, Butzner D, et al. (2013). A pilot study examining the relationship among Crohn disease activity, glucagon-like peptide-2 signalling and intestinal function in pediatric patients. *Can J Gastroenterol*, Oct 2013, 27(10) p587-92
39. **Sigalet D**, Lam V, Boctor D, et al. (2013). Nutritional support of infants with intestinal failure: something more than fishy is going on here! *Pediatr Surg Int*, Oct 2013, 29(10) p975-81
40. Hua Z, Turner JM, **Sigalet DL**, et al. (2013). Role of glucagon-like peptide-2 deficiency in neonatal short-bowel syndrome using neonatal piglets. *Pediatr Res*, Jun 2013, 73(6) p742-9

Surgery, Oncology, and Psychiatry

1. **Bultz BD**, Cummings GG, Grassi L, et al. (2014). 2013 President's plenary international psycho-oncology society: embracing the IPOS standards as a means of enhancing comprehensive cancer care [In Process Citation] *Psychooncology*, Sep 2014, 23(9) p1073-8
2. Breitbart W, **Bultz BD**, Dunn J, et al. (2013). 2012 President's Plenary International Psycho-Oncology Society: future directions in psycho-oncology. *Psychooncology*, Jul 2013, 22(7) p1439-43
3. **Bultz BD**, Carlson LE. (2013). A commentary on 'effects of screening for psychological distress on patient outcomes in cancer: a systematic review'. *J Psychosom Res*, Jul 2013, 75(1) p18-9

3.2 Research Grants

Astle, William – Ophthalmology					
Research with no funding or non-peer reviewed support					
Title	Role	Theme	Status	Funding Source	Award
Refractive Surgery in Children. Huang PT, Farran P, Paszuk A	principal investigator	clinical			
Trachoma. Wiafe B, Ingram AD, Mwanga M, Glassco BC	principal investigator	social, cultural, environmental and population			
The Clinical-Demographic, Epidemiology, Pathology, Neuroimaging Features and Outcome of Acute Demyelination in Canadian Children. Romanchuk K, Costello F, Slick D, AbouReslan W, Wei XC, Burton J, Tellier R, Metz L	co-investigator	clinical			
Research funded with peer-reviewed grant support					
Title	Role	Theme	Status	Funding Source	Award
ATS 1, & 10-16	co-investigator	clinical	Ongoing / Renewed	NIH	\$4,000.00
4 grants					\$4,000.00

Bathe, Oliver – General Surgery/Surgical Oncology					
Research funded with peer-reviewed grant support					
Title	Role	Theme	Status	Funding Source	Award
Cancer Cachexia: Phenotype Definition, Markers for Genetic Predisposition and Prognosis	co-investigator	basic/biomedical	Ongoing / Renewed	Canadian Institutes of Health Research	\$470,365.00
Development of a Metabolomic Response Biomarker	principal investigator	multi-themed	New	Breast Cancer Society of Canada	\$36,330.00
Tissue Procurement for The Cancer Genome Atlas Project - renewal	principal investigator	multi-themed	Ongoing / Renewed	National Cancer Institute (US)	\$243,681.00
Predicting and improving responses of colorectal cancer patients to anti-VEGF therapy	co-investigator	multi-themed	New	Canadian Cancer Research Society	\$199,498.00
Prospective, Randomized Controlled Trial of Early Enteral Feeding Via a New Gastrojejunostomy Tube in Patients Undergoing Laparotomy for Periapillary and Pancreatic Neoplasms	principal investigator	multi-themed	Ongoing / Renewed	Novartis	\$15,000.00
The Biological Role of TEM8 in Human Breast Cancer	principal investigator	multi-themed	Ongoing / Renewed	Breast Cancer Society of Canada	\$21,364.00
Metabolomic Biomarker Development for Metastatic Colorectal Cancer	principal investigator	multi-themed	New	NSERC	
Genetic and Molecular Basis of Severe Muscle Wasting (Sarcopenia)	co-investigator	multi-themed	Ongoing / Renewed	Canadian Institutes of Health Research	\$105,000.00
Vascular heterogeneity in colorectal cancer: regulation of VEGFR2 by TGF-beta	co-investigator	multi-themed	Ongoing / Renewed	National Cancer Institute of Canada (NCIC)	\$417,846.00
Randomized controlled trial of early enteral feeding via a new gastrojejunostomy tube in patients undergoing laparotomy for peripillary and pancreatic neoplasms	principal investigator	multi-themed	Ongoing / Renewed	Novartis Nutrition Corporation	\$15,000.00
Canadian-International Network for the Advancement of the Treatment of Cancer-Associated Cachexia	co-investigator	multi-themed	Ongoing / Renewed	Canadian Institutes of Health Research	\$381,000.00
The role of vitamin D and inflammation in colorectal cancer metastases, Alberta Cancer Research Institute	co-investigator	basic/biomedical	Ongoing / Renewed	Alberta Cancer Research Institute	\$543,247.00
12 grants					\$2,448,331.00

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Beaudry, Paul – General Surgery/Pediatric Surgery

Research funded with peer-reviewed grant support

Title	Role	Theme	Status	Funding Source	Award
Phage Display Study of Neuroblastoma	co-principal investigator	basic/biomedical	New	James Foundation	\$80,000.00
Characterization and Targeting of Neuroblastoma Cancer Stem Cells (KCCFA Grant)	principal investigator	basic/biomedical	Ongoing / Renewed	Kids Cancer Care Foundation of Alberta	\$300,000.00
Immunotherapy for Cancer - Repurposing Targeted Therapeutics with Oncolytic Viruses (CRIO Grant)	co-principal investigator	basic/biomedical	New	Alberta Innovates - Health Solutions (AIHS)	\$750,000.00
3 grants					\$1,130,000.00

Brauer, Carmen A. – General Surgery/Orthopedic Surgery

Research funded with peer-reviewed grant support

Title	Role	Theme	Status	Funding Source	Award
Treatment of medial epicondyle fractures in children: A systematic review	co-principal investigator	clinical	Ongoing / Renewed	Calgary Surgical Research Development Fund	\$1,750.00
An interdisciplinary collaboration to explore quality indicators in pediatric orthopaedics	co-principal investigator	social, cultural, environmental and population	Ongoing / Renewed	Canadian Institute for Health Research	\$14,360.00
Treatment of medial epicondyle fractures in children: A systematic review	co-principal investigator	clinical	Ongoing / Renewed	Canadian Orthopaedic Foundation	\$2,500.00
Quality Indicators in Cerebral Palsy: A Scoping Review	principal investigator	clinical	New	Alberta Innovates Health Solutions Knowledge Transfer/Innovation Research Grant	\$24,663.00
Quality indicators in pediatric orthopaedics: A literature review	co-principal investigator	health services (education)	Ongoing / Renewed	University of Calgary, COREF Research Grant	\$5,000.00
Quality indicators in pediatric orthopaedic surgery	principal investigator	clinical	Ongoing / Renewed	University of Calgary, Department of Surgery Research Prize	\$75,000.00
6 grants					\$123,273.00

Bray, Robert C. – Department of Surgery

Research funded with peer-reviewed grant support

Title	Role	Theme	Status	Funding Source	Award
Development Implementation and Testing of Temporary, Controllable Pseudobezoars for Reducing Excess Weight	co-investigator	clinical	Ongoing / Renewed	Development of Innovations by Startup Enterprises, Co-Financed by the EU	\$260,000.00
1 grant					\$260,000.00

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Brindle, Mary E. – General Surgery/Pediatric Surgery					
Research funded with peer-reviewed grant support					
Title	Role	Theme	Status	Funding Source	Award
Effects of Educational Strategies on Cognitive Load for Teaching Medical and Surgical Procedures: An Exploratory Study	co-principal investigator	health services (education)	Ongoing / Renewed	UCMG	\$10,000.00
The Canadian Pediatric Surgery Network (CAPSNet): Establishing Best Practices for Gastroschisis and Congenital Diaphragmatic Hernia	co-investigator	clinical	Ongoing / Renewed	Canadian Institutes of Health Research	\$100,000.00
The impact of maternal Serotonin Specific Re-uptake Inhibitors on neonatal pulmonary hypertension: An animal model	principal investigator	basic/biomedical	Ongoing / Renewed	ACH- Foundation	\$49,200.00
Overcoming surfactant inhibition in neonates and infants: a clinical prospective cohort study with an animal model correlate	co-principal investigator	basic/biomedical	Ongoing / Renewed	Alberta Children's Hospital Foundation	\$49,200.00
Improving outcomes for infants with Myelomeningocele: From fetus to child	principal investigator	health services	Ongoing / Renewed	Spinal Bifida Association	\$25,000.00
CIHR Secondary Analysis of Databases: Canadian Pediatric Surgery Network (CAPSNet)	co-principal investigator	multi-themed	Ongoing / Renewed	Canadian Institutes of Health Research	\$100,000.00
6 grants					\$333,400.00

Buie, W. Donald – General Surgery/Colorectal Surgery					
Research with no funding or non-peer reviewed support					
Title	Role	Theme	Status	Funding Source	Award
Long term oncologic outcomes for rectal cancer in the province of Alberta	principal investigator	clinical			\$0.00
Adenoma detection rate in screening colonoscopy	co-investigator	clinical			\$0.00
Long term outcomes for the treatment for rectal cancer in the Province of Alberta	principal investigator	clinical			\$12,000.00
Research funded with peer-reviewed grant support					
Title	Role	Theme	Status	Funding Source	Award
Timing of Rectal Cancer- response to chemoradiation	local principal investigator	clinical	Ongoing / Renewed	National Institutes of Health Research (NIH US)	\$38,000.00
Rectal Cancer Care Clinical Pathway	co-investigator	health services	New	Alberta Innovates - Health Solutions (AIHS)	\$750,000.00
5 grants					\$800,000.00

Cooper, Linda - Ophthalmology					
Research funded with peer-reviewed grant support					
Title	Role	Theme	Status	Funding Source	Award
ATS 1, 10-16	co-investigator	clinical	Ongoing / Renewed	NIH	\$4,000.00
Corneal Confocal Microscopy: A Rapid Noninvasive Approach to Detect Diabetic Neuropathy in Children with type 1 Diabetes	co-investigator	clinical	Ongoing / Renewed	Juvenile Diabetes Research Foundation	\$365.00
2 grants					\$4,365.00

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Dixon, Elijah – General Surgery/Surgical Oncology					
Research with no funding or non-peer reviewed support					
Title	Role	Theme	Status	Funding Source	Award
Resectable colonic hepatic metastases: type of initial referral, time to surgical intervention and disease free survival.	local principal investigator	clinical			\$0.00
Research funded with peer-reviewed grant support					
Title	Role	Theme	Status	Funding Source	Award
"Effect of Physician Alternative Payment Plans on the Completeness and Validity of Administrative Data."	co-investigator	health services	Ongoing / Renewed	Canadian Institutes of Health Research	\$230,492.00
"Improving safety in the operating room: Evaluating implementation of the Safe Surgery Checklist"	co-investigator	clinical	New	M.S.I. Foundation	\$98,000.00
"Rates and waits for cancer surgery in Canada: Mixed method assessment."	principal investigator	health services	Ongoing / Renewed	Canadian Institutes of Health Research	\$430,000.00
Tranexamic Acid Versus Placebo to Reduce Perioperative Blood Transfusion in Patients Undergoing Major Liver Resection: A Pilot Randomized Controlled Trial	co-investigator	clinical	New	Canadian Institutes of Health Research	\$248,319.00
"The Effects of Call and Call Scheduling on General Surgeons' and General Surgery Residents' Perceived Quality of Life."	principal investigator	health services	New	Calgary Surgical Research Development Fund	\$1,230.00
"Laparoscopic Cholecystectomy for Acute Calculous Cholecystitis: How Urgent is 'Urgent'?"	co-investigator	clinical	New	Calgary Surgical Research Development Fund	\$2,300.00
The Use of Wound Protectors to Prevent Surgical Site Infection in Patients Undergoing Pancreatoduodenectomy with Intrahepatic Stents: A Randomized Controlled Trial	co-investigator	clinical	Ongoing / Renewed	Calgary Surgical Research Development Fund	\$3,861.00
Establishment of the Hepatopancreaticobiliary Community of Surgical Oncologists: Clinical, Evaluative and Prospective.	co-investigator	health services	New	Canadian Institutes of Health Research	\$24,900.00
"Postoperative Outcomes Following Colectomy in Elderly Ulcerative Colitis Patients."	principal investigator	clinical	Ongoing / Renewed	M.S.I. Foundation	\$47,858.00
Predictors of Acute Kidney Injury after Major Surgical Procedures.	co-investigator	clinical	New	University of Calgary Department of Medicine and Department of Surgery Research Development Fund Award	\$12,500.00
11 grants					\$1,099,460.00

Dort, Joseph C. – Otolaryngology – Head and Neck Surgery					
Research funded with peer-reviewed grant support					
Title	Role	Theme	Status	Funding Source	Award
Machine learning and MR texture analysis to assess human papilloma virus (HPV) status in head and neck tumors	co-principal investigator	multi-themed	New	Alberta Ingenuity Centre for Machine Learning	
Developing and Testing a New Treatment for Oral Squamous Cell Carcinoma	co-principal investigator	basic/biomedical	New	Alberta Innovates - Health Solutions (AIHS)	\$0.00
Efficacy of optically-guided surgery in the management of early-stage oral cancer	local principal investigator	clinical	New	Terry Fox Research Institute	\$180,000.00
Post-operative pulmonary complications in patients undergoing head and neck reconstructive surgery at FMC	co-investigator	clinical	New	Calgary Surgical Research Development Fund	\$4,000.00
4 grants					\$184,000.00

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Frank, Cyril B. – Orthopedics**Research funded with peer-reviewed grant support**

Title	Role	Theme	Status	Funding Source	Award
The Mechanical Causes of Osteoarthritis	co-investigator	basic/biomedical	New	Canadian Institutes of Health Research	\$133,002.00
Training program for Biomedical Engineers for the 21st century	co-investigator	basic/biomedical	Ongoing / Renewed	NSERC	\$1,650,000.00
Total joint replacement: Strategic management for timely treatment	co-investigator	social, cultural, environmental and population	Ongoing / Renewed	Canadian Institutes of Health Research	\$1,478,500.00
CIHR Team in models of care in arthritis (MOCA)	co-investigator	health services	Ongoing / Renewed	Canadian Institutes of Health Research	\$1,486,095.00
4 grants					\$4,747,597.00

Hart, David A. - Departments of Surgery / Microbiology, Immunology & Infectious Diseases / Medicine**Research funded with peer-reviewed grant support**

Title	Role	Theme	Status	Funding Source	Award
Roll of Inflammation in Pseudotumor Development	co-investigator	basic/biomedical	Ongoing / Renewed	OREF	\$79,000.00
Stem Cells and Cartilage Repair	principal investigator	basic/biomedical	Ongoing / Renewed	Canadian Arthritis Network	\$50,000.00
Sex Differences in Nerve Involvement in OA	co-investigator	basic/biomedical	Ongoing / Renewed	ISIS MK Network Grant (Society for Women's Health Research (USA)	\$200,000.00
Stem Cells as Diagnostic Markers	co-principal investigator	basic/biomedical	Ongoing / Renewed	Alberta Innovates - Health Solutions (AIHS)	\$750,000.00
OA Team grant	co-investigator	basic/biomedical	Ongoing / Renewed	Alberta Innovates - Health Solutions (AIHS)	\$6,000,000.00
5 grants					\$7,079,000.00

Hildebrand, Kevin A. - Orthopedics**Research funded with peer-reviewed grant support**

Title	Role	Theme	Status	Funding Source	Award
Typtase as Biomarker of Post-traumatic Joint Contractures	co-principal investigator	basic/biomedical	New	Orthopaedic Research Portfolio Grant, Section of Orthopaedics	\$4,500.00
Randomized Controlled Trial on the use of Low-Intensity Pulsed Ultrasound in the Healing of Scaphoid Non-Unions Treated with Surgical Fixation	co-principal investigator	basic/biomedical	New	Orthopaedic Research Portfolio Grant, Section of Orthopaedics	\$5,000.00
Investigations of Mechanisms and Treatment in Post-traumatic Joint Contractures	principal investigator	basic/biomedical	New	Workers' Compensation Board Research Program Alberta	\$20,000.00
The Dose-response Effect of the Mast Cell Stabilizer, Ketotifen Fumarate, on Post-traumatic Joint Contractures	co-investigator	basic/biomedical	New	Orthopaedic Trauma Association	\$20,000.00
The Dose-response Effect of the Mast Cell Stabilizer, Ketotifen Fumarate on Post-traumatic Joint Contractures	co-investigator	basic/biomedical	New	2013 COREF Research Grant, Section of Orthopaedics	\$20,000.00

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Randomized Controlled Trial of Ketotifen to Prevent Post-traumatic Elbow Contractures	principal investigator	basic/biomedical	New	American Foundation for Surgery of the Hand	\$100,000.00
Post-Traumatic Joint Contractures: Correlation between the Human Condition and an Animal Model, and Identification of Potential Preventative Intervention.	principal investigator	basic/biomedical	New	Canadian Orthopaedic Foundation	\$10,000.00
Post-Traumatic Elbow Joint Contractures: Defining Pathologic Capsular Mechanisms and Potential Future Treatment Paradigms.	principal investigator	basic/biomedical	New	American Society for Surgery of the Hand	\$20,000.00
Feasibility of randomized controlled trial of ketotifen for lateral epicondylalgia	local sub-investigator	basic/biomedical	New	Canadian Institutes of Health Research	\$15,000.00
Tryptase as a Biomarker for Post-Traumatic Elbow Contracture	principal investigator	basic/biomedical	New	Calgary Surgical Research Development Fund	\$3,725.00
10 grants					\$218,225.00

Hollaar, Gwendolyn – General Surgery**Research with no funding or non-peer reviewed support**

Title	Role	Theme	Status	Funding Source	Award
Asian Academic Partnership	team grant investigator	health services (education)			\$15,280.00
1 grant					\$15,280.00

Hutchison, Carolyn R. - Orthopedics**Research with no funding or non-peer reviewed support**

Title	Role	Theme	Status	Funding Source	Award
Joint-Sparing Transplant with fresh osteochondral allografts. Schachar N, Timmerman S, Hutchison CR, Heard M, Miller S.	co-investigator	basic/biomedical			
Assessment of Communication, Professional and Surgical Skills in an OSPRE: A Psychometric Study. Ponton-Carss, Donnone T, Hutchison CR.	co-investigator	health services (education)			\$40,000.00

Research funded with peer-reviewed grant support

Title	Role	Theme	Status	Funding Source	Award
Medical Imaging of Knee Kinematics after Joint Replacement. Anglin C, Frayne R, Hutchison CR, Ronsky J, Wilson D: NSERC-CIHR Collaborative Health Research Projects (\$380,800; 2008-extended beyond 2011).	co-investigator	basic/biomedical	Ongoing / Renewed	NSERC	\$380,800.00
3 grants					\$420,800.00

Kirkpatrick, Andrew W. – General Surgery/Trauma**Research funded with peer-reviewed grant support**

Title	Role	Theme	Status	Funding Source	Award
Tele-mentored Ultrasonography (TMUS) to Support Remote Canadian Communities. (\$10,000.00) Collaborative Program – Letter of Intent. Alberta Innovates Health Solutions. PI – Douglas Hamilton; Co-investigators Kirkpatrick AW, Wilson S,	co-investigator	health services	New	Alberta Innovates - Health Solutions (AIHS)	\$10,000.00
Peritoneal Vacuum therapy to reduce the systemic inflammatory insult from intra-peritoneal sepsis/injury/hypertension: A randomized comparison of baseline wall suction versus KCI AbThera abdominal dressing. Kirkpatrick AW (Principle Investigator). Ouellet JF (Resident Investigator). Ouellet JF,	principal investigator	clinical	Ongoing / Renewed	Calgary Surgical Research Development Fund	\$4,000.00

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Kirkpatrick AW, McBeth PB, Doig C, Ball CG, Kubes P, Leger C, Tiruta C. Calgary Surgical Research Development Fund (\$4000.00).					
Telementoring to support Austere Resuscitations	principal investigator	clinical	New	Canadian Forces Department of National Defense	\$175,000.00
Peritoneal Vacuum therapy to reduce the systemic inflammatory insult from intra-peritoneal sepsis/injury/hypertension: A randomized comparison of baseline wall suction versus KCI AbThera abdominal dressing. Kirkpatrick AW (Principle Investigator). Ouellet JF, Kirkpatrick AW, McBeth PB, Doig C, Ball CG, Kubes P, Leger C, Tiruta C. Investigator Initiated Trial Agreement between KCI USA and the Governors of the University of Calgary and Andrew W Kirkpatrick (\$218,550.00). KCI-Contract Number: KCI-Clinical/UniversityCalgaryAlbertaHealth/082611-000/7	principal investigator	clinical	Ongoing / Renewed	KCI USA and University of Calgary	\$218,550.00
2011 Developing a Patient and Family-Centered Approach for Measuring the Quality of Trauma Care. STELFOX HT (Principle Investigator). STELFOX HT (Principle Investigator). Straus S, Nathens AB, Tallon JM, Gagliardi A, Hudak P, Quan H, Chernoff J, Burns K, Evans D, Loughheed V, Vuksic A, Fortin CM, Kagan C, Zarins H, KIRKPATRICK AW, Straus SE. CIHR's Partnerships for Health System Improvement Competition, \$628,692.00 over three years (C)	co-investigator	health services (education)	New	CIHR Partnerships for Health System	\$628,692.00
5 grants					\$1,036,242.00

Kortbeek, John B.**Research with no funding or non-peer reviewed support**

Title	Role	Theme	Status	Funding Source	Award
Impact of Massive Transfusion Protocol and Exclusion of Plasma Products from Female Donors on Outcome of Trauma Patients in Calgary Zone of Alberta Health Services	co-principal investigator	health services			\$0.00
1 grant					\$0.00

Krawetz, Roman – Department of Surgery**Research funded with peer-reviewed grant support**

Title	Role	Theme	Status	Funding Source	Award
Synovial Mesenchymal Stem Cells: Distinct roles in cartilage regeneration and the pathogenesis of Osteoarthritis	principal investigator	basic/biomedical	New	Alberta EAE small equipment grant	\$272,000.00
Synovial Mesenchymal Stem Cells: Distinct roles in cartilage regeneration and the pathogenesis of Osteoarthritis.	principal investigator	basic/biomedical	New	CFI	\$272,000.00
The p21 signaling axis in accelerated fracture repair.	principal investigator	basic/biomedical	New	AO Foundation	\$120,000.00
Synovial stem cell biology	principal investigator	basic/biomedical	New	NSERC	\$195,000.00
Consequences of knee joint injury in youth sport: Implications for knee osteoarthritis and other health outcomes.	co-investigator	clinical	New	Canadian Institutes of Health Research	\$380,640.00
Cellular basis of endogenous cartilage repair in super-healer mice	principal investigator	basic/biomedical	New	Canadian Institutes of Health Research	\$731,270.00
6 grants					\$1,970,910.00

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Matthews, T. Wayne – Otolaryngology – Head and Neck Surgery					
Research with no funding or non-peer reviewed support					
Title	Role	Theme	Status	Funding Source	Award
Head and Neck Cancer Dysphagia Outcomes	co-principal investigator	clinical			\$5,000.00
Head and Neck Oncology Outcomes	co-investigator	clinical			\$0.00
Research funded with peer-reviewed grant support					
Title	Role	Theme	Status	Funding Source	Award
Pan Canadian Optically Guided Approach for Oral Lesions Surgical Trial	local sub-investigator	clinical	New	Terry Fox Research Institute	\$4,734,000.00
The Impact of CAIX in Cervical Node Metastases in Oral Cavity Squamous Cell Carcinoma	co-investigator	basic/biomedical	New	University Calgary Office of Surgical Research - Research Prize	\$75,000.00
Does the Harmonic Scalpel reduce Operating Time and Blood Loss in Patients Undergoing Major Surgery for Oral Cavity Squamous Cell Carcinoma? : A Prospective, Randomized Trial.	co-investigator	clinical	New	Ohlson Research Initiative	\$11,243.00
5 grants					\$4,825,243.00

McKinnon, J. Gregory – Surgical Oncology					
Research with no funding or non-peer reviewed support					
Title	Role	Theme	Status	Funding Source	Award
Multicenter Selective Lymphadenectomy Trial II – John Wayne Cancer Center and NCI 2005-	principal investigator	clinical			\$0.00
1 grant					\$0.00

Monroy Cuadros, F. Mauricio - Transplant					
Research funded with peer-reviewed grant support					
Title	Role	Theme	Status	Funding Source	Award
Standard Criteria Living Kidney Donor Safety Study	co-investigator	clinical	Ongoing / Renewed	Canadian Institutes of Health Research	\$1,214,665.00
Canadian Living Kidney Donor Safety Study	co-investigator	clinical	Ongoing / Renewed	Canadian Institutes of Health Research	\$200,000.00
The Long-term Effects of becoming a living Kidney Donor	principal investigator	clinical	Ongoing / Renewed	Canadian Institutes of Health Research	\$200,000.00
3 grants					\$1,614,665.00

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Moore, Randy D. – Vascular Surgery					
Research with no funding or non-peer reviewed support					
Title	Role	Theme	Status	Funding Source	Award
Thoraflex: A New Approach to aortic arch disease	local principal investigator	clinical			\$20,000.00
FDA Phase 2 STUDY OF THE ANACONDA ENDOVASCULAR STENT GRAFT REPAIR FOR THE TREATMENT OF INFRARENAL AAA	co-principal investigator	clinical			\$300,000.00
Research funded with peer-reviewed grant support					
Title	Role	Theme	Status	Funding Source	Award
Fluid Flow and Vascular Endothelial Cell Drug Response	co-investigator	basic/biomedical	Ongoing / Renewed	Heart & Stroke Foundation of Canada	\$300,000.00
TX2 trial for the endovascular repair of thoracic aortic aneurysm	principal investigator	basic/biomedical	New	FDA	\$30,000.00
4 grants					\$650,000.00

Oddone Paolucci, Elizabeth – Department of Surgery					
Research with no funding or non-peer reviewed support					
Title	Role	Theme	Status	Funding Source	Award
Exploring the learning experiences in the general surgery clerkship.	principal investigator	health services (education)			\$0.00
"Faculty Development and Evaluation."	co-investigator	health services (education)			\$0.00
"An investigation of the relationship between conformity and communication in medical education."	co-investigator	health services (education)			\$0.00
"Assessment of Conformity."	co-investigator	health services (education)			\$0.00
"Formative Curriculum Evaluation of the University of Calgary O&G Clerkship: A Mixed-Methods Case Study."	co-investigator	health services (education)			\$5,000.00
Research funded with peer-reviewed grant support					
Title	Role	Theme	Status	Funding Source	Award
"Identification of factors related to experiences of conformity in medical education."	co-principal investigator	health services (education)	New	Dept of Surgery - Calgary Surgical Research Development Fund	\$1,900.00
"Boot camp training for pediatric general surgery fellows: Is there a need for it to ease the transition to fellowship?"	principal investigator	health services (education)	New	Calgary Surgical Research Development Fund, Department of Surgery	\$601.50
"From education to engagement to action: A dynamic, interactive, and integrated knowledge translation approach to bring evidence into practice for introducing new health technologies."	co-principal investigator	health services (education)	New	Alberta Innovates - Health Solutions (AIHS)	\$25,000.00
Multi-Source feedback for assessing clinical competence in surgical residents.	co-investigator	health services (education)	New	Dept of Surgery - Calgary Surgical Research Development Fund	\$2,900.00
9 grants					\$35,401.50

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Quan, May Lynn – General Surgery					
Research funded with peer-reviewed grant support					
Title	Role	Theme	Status	Funding Source	Award
Towards better outcomes for young women with breast cancer: A Pan Canadian Collaborative	co-principal investigator	clinical	New	Canadian Institutes of Health Research	\$5,695,303.00
Towards better outcomes for young women with breast cancer: A Pan Canadian Collaborative	principal investigator	clinical	New	Canadian Institutes of Health Research	\$25,000.00
Improving safety in the operating room: Evaluating implementation of the safe surgery checklist	principal investigator	health services	Ongoing / Renewed	MSI Foundation	\$100,000.00
3 grants					\$5,820,303.00

Romanchuk, Kenneth G. - Ophthalmology					
Research funded with peer-reviewed grant support					
Title	Role	Theme	Status	Funding Source	Award
Is Peripheral Neuropathy Occurring in Association with Idiopathic Parkinson's Disease, or an Iatrogenic Complication?"	co-investigator	clinical	New	HBI CRU award & Parkinson Society of Canada award	\$53,212.00
Intermittent Exotropia Study 1 (IXT1): A randomized trial of bilateral lateral rectus recession versus unilateral lateral rectus recession with medial rectus resection for intermittent exotropia	local principal investigator	clinical	Ongoing / Renewed	Pediatric Eye Disease Investigator's Group	\$2,000.00
Intermittent Exotropia Study (IXT2): a randomized clinical trial of observation versus occlusion therapy for intermittent exotropia	co-investigator	clinical	Ongoing / Renewed	Pediatric Eye Disease Investigator's Group	\$2,000.00
Canadian Pediatric Acute Demyelinating Disease Study:	co-investigator	clinical	Ongoing / Renewed	Multiple Sclerosis Research Foundation	\$454,709.00
Corneal Confocal Microscopy: A Rapid Noninvasive Approach to Detect Diabetic Neuropathy In Children With Type I Diabetes.	co-investigator	clinical	Ongoing / Renewed	Juvenile Diabetes Research Foundation	\$365,000.00
5 grants					\$876,921.00

Salazar Banuelos, Anastasio - Transplant					
Research with no funding or non-peer reviewed support					
Title	Role	Theme	Status	Funding Source	Award
IMMUNO - Artificial Immune Systems	principal investigator	basic/biomedical			\$0.00
Research funded with peer-reviewed grant support					
Title	Role	Theme	Status	Funding Source	Award
Cellular Transplantation in Swine: Effect of Bone Marrow Seeding on Graft Rejection, Tolerance, and Survival (Protocol #M03018)	principal investigator	basic/biomedical	Ongoing / Renewed	Department of Surgery	\$50,000.00
2 grants					\$50,000.00

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Salo, Paul T. – Orthopedic Surgery					
Research funded with peer-reviewed grant support					
Title	Role	Theme	Status	Funding Source	Award
Derivation of a Clinical Prediction Guide in the Diagnosis of Facet Joint Mediated Pain in the Cervical Spine	co-investigator	basic/biomedical	Ongoing / Renewed	COREF	\$20,000.00
Biological Augmentation of Ligament and Tendon Healing	co-investigator	basic/biomedical	Ongoing / Renewed	American Orthopaedic Society for Sport	\$246,019.00
Role of the Central Nervous System in Arthritis: The Missing Link in Chronic Arthritis Pain	co-investigator	basic/biomedical	Ongoing / Renewed	McCaig Institute for Bone and Joint Health.	\$10,000.00
Role of the Central Nervous System in Arthritis: The Missing Link in Chronic Arthritis Pain	co-investigator	basic/biomedical	Ongoing / Renewed	Faculty of Veterinary Medicine, University of Calgary, Strategic Research Grant.	\$49,000.00
Investigations of Mechanisms and Treatment in Post-Traumatic Joint Contractures	co-investigator	basic/biomedical	Ongoing / Renewed	Canadian Institutes of Health Research	\$100,000.00
5 grants					\$425,019.00

Schachar, Norman – Orthopedic Surgery					
Research with no funding or non-peer reviewed support					
Title	Role	Theme	Status	Funding Source	Award
Biological Aspects of Tissue Repair	principal investigator	health services			\$500,000.00
Meniscus Interest Group	team grant investigator	health services (education)			\$0.00
Investigating Osteochondral Allografts as a Biological Option to Repair Joint Defects	principal investigator	clinical			\$0.00
Meniscus Transplantation Research Group	co-investigator	basic/biomedical			\$0.00
Soft Tissue Sarcoma Project	co-investigator	clinical			\$0.00
Research funded with peer-reviewed grant support					
Title	Role	Theme	Status	Funding Source	Award
"Establishing a Culture of Mindful Practice in Surgery at a New Orthopaedic Centre"	principal investigator	clinical	New	University of Calgary - Orthopaedic Research	\$4,486.40
Primary Lead in Research Development	principal investigator	basic/biomedical	Ongoing / Renewed	Private Donor	\$1,000,000.00
7 grants					\$1,504,486.40

Sutherland, Francis R. – General Surgery					
Research with no funding or non-peer reviewed support					
Title	Role	Theme	Status	Funding Source	Award
Preoperative steroid utilization in liver resections: A randomized clinical trial	co-investigator	clinical			\$0.00
Wound protectors in HPB surgery	co-investigator	clinical			\$10,000.00
2 grants					\$10,000.00

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Thornton, Gail M. – Department of Surgery					
Research with no funding or non-peer reviewed support					
Title	Role	Theme	Status	Funding Source	Award
A Biomechanical Evaluation of Suture Locking Mechanisms	co-principal investigator	clinical			\$15,000.00
Research funded with peer-reviewed grant support					
Title	Role	Theme	Status	Funding Source	Award
Mechanics of Damage in Biological Soft Tissues	principal investigator	basic/biomedical	Ongoing / Renewed	NSERC	\$125,000.00
Role of Mast Cells in Achilles Tendinopathy	co-investigator	basic/biomedical	New	Canadian Institutes of Health Research	\$100,000.00
3 grants					\$240,000.00

Yilmaz, Serdar - Transplant					
Research with no funding or non-peer reviewed support					
Title	Role	Theme	Status	Funding Source	Award
A Prospective, Randomized, Open-Label, Pilot Study to Compare the Effect on Carotid Atherosclerosis of a Tacrolimus-Based Regimen with Conversion from a Tacrolimus to a Sirolimus-Based Regimen at 3-4 Months Post-Transplant in De Novo Renal Transplant Recipients. Protocol: 0468H1-101995/0468H1-319-NA (Grant ID: 21190)	co-investigator	clinical			\$53,971.00
A Comparison of Effects of Standard Dose vs. Low Dose Advagraf with IL-2 Receptor Antibody Induction, MMF and Steroids, with or without an ACEi/ARB-based Antihypertensive Therapy on Renal Allograft Histology, Function and Immune Response. (Grant ID: 21983)	co-investigator	clinical			\$113,725.00
Master Lab Service Agreement - FKC-014 - A blinded, centralized review of post transplant renal histology to assess the degree of acute and chronic histologic changes	principal investigator	clinical			\$113,831.00
Central Biopsy Review for NOVARTIS Study CRAD001AUS92 A 12 month, multi-center, randomized, open-label non-inferiority study of efficacy and safety comparing concentration-controlled Everolimus with low dose tacrolimus to CellCept® with standard dose tacrolimus in de novo renal transplant recipients Novartis Pharma AG, Basel, Switzerland Anticipated total dollar support: \$ 936,812 (US\$) Primary investigator: Serdar Yilmaz, M.D., Ph.D.	principal investigator	clinical			\$81,717.00
Long-term effects of becoming a living kidney donor study. CIHR sponsored study.	co-investigator	basic/biomedical			\$11,250.00
Long-term effects of becoming a living kidney donor study. CIHR sponsored study.	co-investigator	basic/biomedical			\$11,250.00
Research funded with peer-reviewed grant support					
Title	Role	Theme	Status	Funding Source	Award
Astellas Service Agreement RT703938 FKC Advagraf with IL-2 014	co-principal investigator	basic/biomedical	Ongoing / Renewed	Astellas Pharma	\$633,750.00
Astellas Service Agreement RT703938 FKC Advagraf with IL-2 014	co-principal investigator	basic/biomedical	Ongoing / Renewed	Astellas Pharma	\$633,750.00
Central Biopsy Review for NOVARTIS Study CRAD001AUS92	principal investigator	basic/biomedical	Ongoing / Renewed	Novartis Pharma	\$936,813.00
Central Biopsy Review for NOVARTIS Study CRAD001AUS92	principal investigator	basic/biomedical	Ongoing / Renewed	Novartis Pharma	\$936,813.00
10 grants					\$3,526,870.00
Department of Surgery Total Grants: 148				\$41,453,791.90	