DEPARTMENT OF SURGERY

Annual Report 2013/2014
April 1, 2013 to March 31, 2014
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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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 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
University of Calgary, Cumming School of Medicine
### Surgical Executive Team

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<td><strong>Dr. John Kortbeek</strong></td>
<td>Department Head Surgery</td>
</tr>
<tr>
<td><strong>Dr. Mary Brindle</strong></td>
<td>Deputy Head, Department of Surgery</td>
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<tr>
<td><strong>Ms. Andria Marin-Stephens</strong></td>
<td>Manager, Department of Surgery</td>
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<tr>
<td><strong>Ms. Christine Bourgeois</strong></td>
<td>Administrative Assistant to Dr. Kortbeek</td>
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<tr>
<td><strong>Dr. Eduardo Kalaydjian</strong></td>
<td>Section Chief, Dentistry and Oral Health</td>
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<tr>
<td><strong>Dr. Francis Sutherland</strong></td>
<td>Section Chief, General Surgery</td>
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<tr>
<td><strong>Dr. Michael Ashenhurst</strong></td>
<td>Section Chief, Ophthalmology</td>
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<tr>
<td><strong>Dr. Richard Edwards</strong></td>
<td>Section Chief, Oral Maxillofacial Surgery</td>
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<tr>
<td><strong>Dr. Kevin Hildebrand</strong></td>
<td>Section Chief, Orthopaedics</td>
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<tr>
<td><strong>Dr. Wayne Matthews</strong></td>
<td>Section Chief, Otolaryngology</td>
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<tr>
<td><strong>Dr. Frankie Fraulin</strong></td>
<td>Section Chief, Paediatrics and Facility Chief, ACH</td>
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<tr>
<td><strong>Dr. Francois Harton</strong></td>
<td>Section Chief, Podiatry</td>
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<tr>
<td><strong>Dr. A. Robertson Harrop</strong></td>
<td>Section Chief, Plastic Surgery</td>
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<tr>
<td><strong>Dr. Greg McKinnon</strong></td>
<td>Section Chief, Surgical Oncology</td>
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<td><strong>Dr. Sean McFadden</strong></td>
<td>Section Chief, Thoracic Surgery</td>
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<td><strong>Dr. Anastasio Salazar</strong></td>
<td>Section Chief, Transplant</td>
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<td><strong>Dr. Paul Petrasek</strong></td>
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<td><strong>Dr. Kevin Carlson</strong></td>
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<td><strong>Dr. Jason Werle</strong></td>
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<td><strong>Dr. John Donaghy</strong></td>
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<td><strong>Dr. Donald Buie</strong></td>
<td>Facility Chief, FMC</td>
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<tr>
<td><strong>Dr. Beth Lange</strong></td>
<td>Facility Chief, SHC</td>
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<tr>
<td><strong>Dr. Jacques Bouchard</strong></td>
<td>Director, Office of Surgical Education</td>
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<td><strong>Dr. Fiona Costello</strong></td>
<td>Director, Office of Surgical Research</td>
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<td><strong>Dr. Lea Austen</strong></td>
<td>Physician Lead, Health Technology and Innovation</td>
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<tr>
<td><strong>Drs. Elaine Joughin and Sean Grondin</strong></td>
<td>Physician Leads, Quality and Safety</td>
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<td><strong>Dr. Andrew Kirkpatrick</strong></td>
<td>Medical Director, Trauma Services</td>
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<tr>
<td><strong>Dr. Maureen O’Brien</strong></td>
<td>Faculty Ombudsman and Advisor on Diversity</td>
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<tr>
<td><strong>Dr. Marie-France Guimond</strong></td>
<td>Resident Ombudsman, Department of Surgery</td>
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<td><strong>Dr. Craig Pearce</strong></td>
<td>Acting Department Head, Anesthesia</td>
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<td><strong>Ms. Michele Austad</strong></td>
<td>Manager, Department of Anesthesia</td>
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<td><strong>Dr. Doug Wilson</strong></td>
<td>Department Head, Obstetrics and Gynecology</td>
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<td><strong>Dr. Imtiaz Ali</strong></td>
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<td><strong>Dr. John Wong</strong></td>
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<td><strong>Dr. Ken Thomas</strong></td>
<td>Spine Program Lead</td>
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<td><strong>Ms. Shawna Syverson</strong></td>
<td>Senior Operating Officer, FMC</td>
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<tr>
<td><strong>Ms. Denise Brind</strong></td>
<td>Executive Director, Surgery, FMC</td>
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<td><strong>Mr. James Finstad</strong></td>
<td>Communications</td>
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<td><strong>Ms. Margaret Fullerton</strong></td>
<td>Vice President, ACH</td>
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<tr>
<td><strong>Ms. Jill Woodward</strong></td>
<td>Executive Director, Inpatient Care, Child and Women's Health, ACH</td>
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<tr>
<td><strong>Ms. Debra Harris</strong></td>
<td>OR Manager, ACH</td>
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<tr>
<td><strong>Ms. Janice Stewart</strong></td>
<td>Director, Surgery, RGH</td>
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<tr>
<td><strong>Ms. Susan Reader</strong></td>
<td>OR Manager, RGH</td>
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<tr>
<td><strong>Ms. Val Marsten</strong></td>
<td>Director, Surgery, PLC</td>
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<tr>
<td><strong>Ms. Joanne Cabrera</strong></td>
<td>Executive Director, Surgery &amp; Women's Health, SHC</td>
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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. Graham Cobb joined the Section of Oral and Maxillofacial Surgery, March 1, 2014.

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

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

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

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

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

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

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

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

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

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

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

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

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

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<tr>
<td>Total Cal Zone acute as of Mar 2014:</td>
<td>65395</td>
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<tr>
<td>ACH</td>
<td>10331</td>
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<tr>
<td>Total adult acute</td>
<td>55064</td>
</tr>
<tr>
<td>Unscheduled/ emerg cases with no acats code &amp; Without ach</td>
<td>17118</td>
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<tr>
<td>Cases Scheduled with Acats</td>
<td>~~= 37,946</td>
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This report excludes the few services that are not participating in the aCATS coding, (e.g. Cardiology 1304, Transplant 518, Respiratory 70, etc)
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 that 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.

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 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.

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

“As 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. 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 or 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, 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.

CHAPPS 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.
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.
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

albertahealthservices.ca
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 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

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.

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.

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.
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.

“McCaig 24/7”

Dr. Jason Werle

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.
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.
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 word 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. 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
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

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

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!”
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 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. 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.
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.

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 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.
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


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

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
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):**
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](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](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 complied 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.

**ACCOMPLISHMENTS AND HIGHLIGHTS IN RESEARCH**

- The Calgary Surgical Research Development Fund (CSRDF): The CSDRF 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
  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

**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:
  1. **Award Recipient:** Heena Singh
  2. **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.

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, FRCP, 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.”

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?”

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

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 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
- 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
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
  - Specialty Clinics including:
    - Oral Medicine
    - Endodontics
    - Periodontics
    - 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 afterhour’s 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”.
- 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 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
- 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 disinfector 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 NHFS 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

- 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)

- 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 1.0FTE 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).
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 ACESS (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.
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.

• 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.

### Residents in Ophthalmology in 2013-2014

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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

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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 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 is 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, 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.


• 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 Canadian Ophthalmology Society, Montreal, Quebec, June 14-17, 2013.


• 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.


• L Lagrou and W Astle. “Outcomes of persistent fetal vasculature cataracts wit 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.

- **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.


- **A Crichton**, Glaucoma Surgery for the Retina Specialist”, “Glaucoma Lasers for the Retina Specialist”, Canadian Retinal Society Meeting, March 10, 2013, Banff, AB.


• **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.


• 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.


• 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 14, 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.


• 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 bevacamab”. 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 Deschenes and A Kherani. “A case of choroidal osteoma treated with photodynamic therapy and intravitreal bevacizumab”. Poster presentation at the Canadian Ophthalmic Pathology Society at the Annual Scientific Meeting of the Canadian Ophthalmological Society, Montreal, Quebec, June 14, 2013.

• F Kherani, O Ziouzinas, 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.


- 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**. 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.


- **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.** “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.** “Update on Optic Neuropathies” Southern Alberta Eye Clinic Research day, Calgary, Alberta, October, 2013.


- **S Subramaniam.** Optic Neuropathies. Ophthalmology Technologists Seminar, Rocky View Eye Clinic, Calgary, Canada, January 16, 2013.


- **S Subramaniam, W Fletcher.** Reversing Vision Loss and Preventing Optic Atrophy in Leber’s Hereditary


- 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 electoretinography (mERG) findings in hydroxychloroquine retinopathy, 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, RG Williams, F Adatia, K Hammamji, K Warrian, M Deschênes, A Kirker


- M Munro and R Yau. “Maffucci 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.


- 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)


- 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, 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 (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 (P-I). Laser-assisted sub-epithelial keratectomy (LASEK) for the treatment of infantile nystagmus syndrome. 2011 to present.


• 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. X01: Correction of refractive error 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.


• 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-I), 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, 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, Danji, 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 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,** Rosza Endowment for Hearing Research (co-investigator), 2013-14, Study of Vestibulo-Ocular Reflex in Normal Subjects and Patients with Vestibular Dysfunction, $24,600


- **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.


- **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, 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.


- **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.


- **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.


- **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.

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. 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.


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.
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 centers) 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. Lewkonia were the evening local adjudicatos. 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.

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.

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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

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.

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

<table>
<thead>
<tr>
<th>Name</th>
<th>Specialization</th>
</tr>
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<tbody>
<tr>
<td>Catherine O’Brien</td>
<td>Banff Sport Medicine</td>
</tr>
<tr>
<td>Farid Bouhouf</td>
<td>Combined Spine</td>
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<tr>
<td>Jacob Oh</td>
<td>Combined Spine</td>
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<tr>
<td>Kate Campbell</td>
<td>Combined Spine</td>
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<tr>
<td>Kristine Huago</td>
<td>Combined Spine</td>
</tr>
<tr>
<td>Michael Spiess</td>
<td>Combined Spine</td>
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<tr>
<td>Rohit Amritanand</td>
<td>Combined Spine</td>
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<tr>
<td>Sean Sutter</td>
<td>Combined Spine</td>
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<tr>
<td>Sung Yuh</td>
<td>Combined Spine</td>
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<tr>
<td>Steven Hunt</td>
<td>Foot &amp; Ankle</td>
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<tr>
<td>Sebastian Gunkel</td>
<td>Hand &amp; Wrist</td>
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<tr>
<td>Joby John</td>
<td>Joint Reconstruction</td>
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<tr>
<td>Mohammed Alsherhri</td>
<td>Joint Reconstruction</td>
</tr>
<tr>
<td>Kamal Bali</td>
<td>Joint Reconstruction</td>
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<tr>
<td>Mohammed Alsherhri</td>
<td>Joint Reconstruction/Conservative Hip</td>
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<tr>
<td>Olanrewanju Okusanya</td>
<td>Paediatric Spine</td>
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<tr>
<td>Pablo Krainz</td>
<td>Paediatric Spine</td>
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<tr>
<td>Rajpal Bhandal</td>
<td>Paediatrics</td>
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<tr>
<td>Samir Alsayegh</td>
<td>Paediatrics</td>
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<tr>
<td>Jonathan Sharr</td>
<td>Trauma</td>
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<tr>
<td>Martin Mangupli</td>
<td>Trauma</td>
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<tr>
<td>Stephen Hunt</td>
<td>Trauma</td>
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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 Schwartzpenber
  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

Goals and Strategies
• Expanding Clinical Research and Education / Simulation opportunities

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 Hui TW 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

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 and 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.

Univarsity, 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

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 eScription 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
- Past President - Canadian Society of Otolaryngology - Head and Neck Surgery
- 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 Lumingu 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.

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 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, 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) - 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. Mahmoud 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 PEDIATRIC
OPHTHALMOLOGY

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 Heath 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 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.
- 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.

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.

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.
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

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.

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
- 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.
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 postgraduate 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 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.

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 underserviced 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

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.

• 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.

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

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.
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 Bielsch, Carol Smith, Teresa Moseley. **Data Analyst-** Raman Sevyrai. **Surgeons:** Drs Sean Grondin, Andrew Graham, Sean McFadden and Gary Gelfand

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.
- **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.

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.

**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.

**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 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

albertahealthservices.ca
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 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 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.
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)

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.
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:
• Other major QA projects published and presented in 2013/2014 include:
  • 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, impatient 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 inpatient 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
- 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

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

International Urology Society - Local Organizing Committee 2013
Prostate Cancer Centre Medical Advisory Board
Dr. G. Kozak
AMA rep forum representative
Surgical Robotics Program - Chair
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
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.
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Leadership – Department of Surgery

Surgical Research
Department of Surgery
Section Chiefs
Department of Surgery

ZONE CLINICAL
DEPARTMENT HEAD
Dr. John B. Kortbeek

Section Chief
Dentistry & Oral Health
Dr. E. Kalaydjian

Section Chief
General Surgery
Dr. F. Sutherland

Section Chief
Surgical Oncology
Dr. G. McKinnon

Section Chief
Ophthalmology
Dr. M. Ashenhurst

Section Chief
Oral Maxillofacial
Dr. R. Edwards

Section Chief
Orthopedics
Dr. K. Hildebrand

Section Chief
Otolaryngology
Dr. W. Matthews

Section Chief
Paediatric Surgery
Dr. F. Fraulin

Section Chief
Plastic Surgery
Dr. A.R. Harrop

Section Chief
Podiatry
Dr. F. Harton

Section Chief
Thoracic Surgery
Dr. S. McFadden

Section Chief
Transplant
Dr. A. Salazar

Section Chief
Urology
Dr. K. Carlson

Section Chief
Vascular Surgery
Dr. P. Petrasek

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Site Leadership
Department of Surgery

ZONE CLINICAL DEPARTMENT HEAD
Dr. John B. Kortbeek

Facility Chief
Alberta Children’s Hospital
Dr. F. Fraulin

Facility Chief
Foothills Medical Centre
Dr. D. Buie

Facility Chief
Peter Lougheed Centre
Dr. J. Donaghy

Facility Chief
Rockyview General Hospital
Dr. J. Werle

Facility Chief
South Health Campus
Dr. B. Lange

Alberta Children’s Hospital
- 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
- 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
- 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
- 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
- Dr. Beth Lange, Facility Chief and Chair OR Committee
- Dr. Keith Drader, Chief, Anesthesia
- Ms. Lori Gervais, OR Manager
- Ms. Joanne Cabrera, Director

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# Surgical Education

## Department of Surgery

### ZONE CLINICAL DEPARTMENT HEAD

Dr. John B. Kortbeek

### DIRECTOR

OFFICE OF SURGICAL EDUCATION

Dr. Jacques Bouchard

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## Surgical Skill Courses

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<td>Dr. W. Donald Buie</td>
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<td>Ashley Bialesch</td>
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<td>Dr. Joyce Wong</td>
<td>Michelle Mills</td>
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### Chair

Surgical Skills Foundations

Dr. M. Clark

Post Graduate Surgical Training Committee

Dr. R. Buckley

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### Advanced Trauma

Life Support

Dr. M. Durham

Operative Management

Dr. R. Lall

### Advanced Trauma Life Support

Core Surgical Skills

Dr. A Harvey, Dr. A. Ponton-Carss

### Advanced Laparoscopic Skills

Dr. T. MacLean

### Core Surgical Skills

Dr. A. Ponton-Carss

### Microvascular Surgery

Dr. C. Schrag

### Temporal Bone Lab

Dr. J. Brookes

### Peripheral Nerve Course

Dr. J. Wong

### Spine Course

Dr. B. Jacobs

### Orthopaedic Trauma/Fracture Course

TBD

### Ocular Surgery Simulation

Dr. J. Bhamra and Dr. A. Al-Ghoul

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### Fundamentals of Laparoscopic Surgery

Dr. Artan Reso
### Section of Dentistry and Oral Health

<table>
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Wong, Andrew L. Clinical Associate Professor General Surgery Pediatric Surgery

### Section of Ophthalmology

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# Section of Podiatric Surgery

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### Section of Surgical Oncology

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### Section of Thoracic Surgery

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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  General Surgery (Red Deer)
Gregg, Sean  Clinical Lecturer  Clinical Neurosciences
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

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### Total Activity Cases

#### 2.1 Surgical Activity Reports

#### Surgical Statistical Activity by Service

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

#### Total Activity Cases by Hours

#### Current Year Hours 2013-2014

#### Current Year Activity 2013-2014

#### Total Activities

#### Annual Report 2013-2014

#### Alberta Health Services

#### albertahealthservices.ca

#### 127
## Total Activity Cases

### Surgical Statistical Activity by Admit Type

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

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**ANNUAL REPORT 2013-2014**

**Total Activity Cases**

Surgical Statistical Activity by Admit Type

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

albertahealthservices.ca
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
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Annual Report 2013-2014

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129
### Total Activity Cases

#### Surgical Statistical Activity by Patient Type

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

| Srv Type | Patient Type | 10/11 | 11/12 | 12/13 | Apr | May | Jun | Jul | Aug | Sep | Q2 | Oct | Nov | Dec | Q3 | Jan | Feb | Mar | Q4 | YTD |
|----------|--------------|-------|-------|-------|-----|-----|-----|-----|-----|-----|----|----|-----|-----|-----|----|-----|-----|-----|-----|-----|
| * | InPatient | 77 | 10 | 13 | 1 | 3 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 6 |
| | OutPatient | 157 | 4 | 4 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| | Subtotal | 234 | 14 | 17 | 2 | 3 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 7 |
| ALL | InPatient | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | OutPatient | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | Subtotal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| ANA | InPatient | 65 | 44 | 24 | 6 | 2 | 2 | 19 | 4 | 2 | 1 | 7 | 4 | 4 | 4 | 12 | 3 | 3 | 10 | 16 | 45 |
| | OutPatient | 5 | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 1 | 0 | 1 |
| | Subtotal | 70 | 44 | 27 | 6 | 2 | 2 | 19 | 4 | 2 | 1 | 7 | 4 | 4 | 4 | 12 | 3 | 3 | 10 | 16 | 45 |
| CAR | InPatient | 827 | 914 | 877 | 70 | 66 | 69 | 235 | 64 | 68 | 91 | 223 | 89 | 74 | 63 | 236 | 85 | 63 | 47 | 195 | 869 |
| | OutPatient | 405 | 441 | 483 | 41 | 44 | 44 | 128 | 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 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 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 | 93 | 51 | 65 | 76 | 64 | 205 | 30 | 47 | 80 | 157 | 63 | 61 | 57 | 181 | 86 | 56 | 64 | 188 | 731 |
| | OutPatient | 882 | 817 | 743 | 81 | 93 | 51 | 65 | 76 | 64 | 205 | 30 | 47 | 80 | 157 | 63 | 61 | 57 | 181 | 86 | 56 | 64 | 188 | 731 |
| | Subtotal | 963 | 870 | 794 | 100 | 108 | 87 | 305 | 47 | 80 | 157 | 63 | 61 | 57 | 181 | 86 | 56 | 64 | 188 | 731 |
| ENT | InPatient | 1271 | 1285 | 1410 | 110 | 118 | 108 | 338 | 99 | 104 | 101 | 304 | 129 | 116 | 120 | 365 | 115 | 113 | 138 | 366 | 1371 |
| | OutPatient | 4714 | 4873 | 4884 | 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 | 9080 | 8986 | 720 | 801 | 752 | 2273 | 755 | 741 | 748 | 2244 | 806 | 728 | 750 | 2284 | 826 | 710 | 857 | 2395 | 9196 |
| | OutPatient | 4818 | 5215 | 4946 | 468 | 453 | 475 | 1396 | 411 | 348 | 524 | 1283 | 555 | 542 | 455 | 1552 | 534 | 459 | 560 | 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 | 28 | 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 | 1194 | 449 | 438 | 453 | 1340 | 4820 |
| | 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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130
Total Activity Cases
Surgical Statistical Activity by Patient Type
All Hospitals (FMC, RGH, PLC, ACH, SHC)
Continued

Summary

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## 2.2 NHSF Surgical Indicator Report

<table>
<thead>
<tr>
<th>NHSF Activity</th>
<th>Fiscal 2012/13</th>
<th>Fiscal 2013/14</th>
<th>Fiscal 2014/15</th>
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</thead>
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<tr>
<td>Catarracts</td>
<td>12,204</td>
<td>12,956</td>
<td>12,607</td>
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<tr>
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<td>3,965</td>
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<tr>
<td>Ophthalmology</td>
<td>14,535</td>
<td>16,636</td>
<td>16,572</td>
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<tr>
<td>Oral Maxillofacial Surgery</td>
<td>761</td>
<td>854</td>
<td>984</td>
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<tr>
<td>Pcodistry</td>
<td>823</td>
<td>860</td>
<td>947</td>
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<tr>
<td>Restorative Dentistry</td>
<td>408</td>
<td>454</td>
<td>528</td>
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<tr>
<td>Vestibular Testing</td>
<td>239</td>
<td>229</td>
<td>234</td>
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<tr>
<td>NHSF Activity</td>
<td>17,389</td>
<td>19,063</td>
<td>19,265</td>
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(Note: Data is continuously & retrospectively updated & adjusted as information is received)

<table>
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<tr>
<th>NHSF Waiting List</th>
<th>Fiscal 2012/13</th>
<th>Fiscal 2013/14</th>
<th>Fiscal 2014/15</th>
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<td>Ophthalmology</td>
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<td>8,965</td>
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<tr>
<td>Oral Maxillofacial Surgery</td>
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<td>536</td>
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<tr>
<td>Pcodistry</td>
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<tr>
<td>Vestibular Testing</td>
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<tr>
<td>Total NHSF Wait List</td>
<td>10,125</td>
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</table>

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 cumulative statistics from the fiscal year March 2013-February 2014

<table>
<thead>
<tr>
<th>IP/OP</th>
<th>Surgeon Service</th>
<th>Number of Cases</th>
<th>Percent of Total Cases</th>
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<td>Vas</td>
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<td>0</td>
</tr>
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<td>Gyn</td>
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<td>158</td>
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<tr>
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<td>Med</td>
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<td></td>
<td>Vas</td>
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<td>1072</td>
<td>523</td>
</tr>
<tr>
<td>Total</td>
<td></td>
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<td>784</td>
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</table>

*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
Opthalmology
Urgent Eye Retinal/Choroid/Vitreous Wait Time

Orthopaedic Surgery
Elective Hip Arthroplasty Wait Time

Orthopaedic Surgery
Urgent Hip Arthroplasty Wait Time

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Orthopaedic Surgery
Elective Knee Arthroplasty Wait Time

Orthopaedic Surgery
Urgent Knee Arthroplasty Wait Time

Thoracic Surgery
Urgent Lung Wait Time

Total Cases:
2013-2014:
- Total Cases: 2,102
- %50th: 18.71%
- %90th: 41.36%

Target WT:
- 2011-2012: 35 weeks
- 2012-2013: 28 weeks
- 2013-2014: 21 weeks
- 2014-2015: 14 weeks

Total Cases:
2013-2014:
- Total Cases: 17
- %50th: 6.14%
- %90th: 29.05%

Target WT:
- 2011-2012: 35 weeks
- 2012-2013: 28 weeks
- 2013-2014: 21 weeks
- 2014-2015: 14 weeks

Total Cases:
2013-2014:
- Total Cases: 260
- %50th: 4.00%
- %90th: 9.36%

Target WT:
- 2011-2012: 35 weeks
- 2012-2013: 28 weeks
- 2013-2014: 21 weeks
- 2014-2015: 14 weeks
Urology
Elective Prostate Other Wait Time

Total Cases: 419
%90th: 6.71
%50th: 15.43

Urology
Urgent Prostate Other Wait Time

Total Cases: 145
%90th: 4.14
%50th: 9.36
2.5 Safe Surgery Checklist Compliance

Individual Checklist Compliance

<table>
<thead>
<tr>
<th>Site</th>
<th>Total Case Counts</th>
<th>Briefing Yes</th>
<th>Briefing Percent</th>
<th>Timeout Yes</th>
<th>Timeout Percent</th>
<th>Debriefing Yes</th>
<th>Debriefing Percent</th>
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<td>ACH</td>
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<td>FMC</td>
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<td>SHC</td>
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<td>99</td>
<td>708</td>
<td>99</td>
<td>694</td>
<td>97</td>
</tr>
</tbody>
</table>
3.1 Peer-Reviewed Journal Articles

**Section of General Surgery**


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; Karsanj D; Wilson J; **Dixon E**; **Sutherland FR**; Pasieka J; Ball C; **Bathe OF**. The effect of wait times on oncological outcomes from peripancreatic 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


15. Noble C; **Church N**; Shand A; Lees C; Brodie H; Greenhill G; Kennedy N. (2014). PTH-028&lt;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.


17. Hamilton LE; Jones K; **Church N**; Medlicott S. (2013). Synchronous appendiceal and intramucosal


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.


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


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.


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review [In Process Citation]. HPB (Oxford) 2014 April 16(4):297-303.
33. Karanickolas 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.
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; Ivatuty RR; Salomone JP; Reed LR. (2014). Trauma surgery associations and societies: which organizations match your goals? J Trauma Manag Outcomes 2014 8:6.
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; Klohn 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; Pasieka 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.
44. Kline GA; Pasieka 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.
47. Yammine K; Harvey A. (2013). Efficacy of preparation solutions and cleansing techniques on contamination of the skin in foot and ankle surgery:

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.


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


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; Andarrys 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


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


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.

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.


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.


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). 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.

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...


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


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


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;


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99. Kline GA; Pasieka 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


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110. Quan ML; Wong PC; Wang C; Woerner F; Smallheer JM; Barbera FA; Bozarth JM; Brown RL; Harpel MR; Luettgren JM; Morin PE; Peterson T; Ramamurthy V; Rendina AR; Rossi KA; Watson CA; Wei A; Zhang G; Seiffert D; Wexler RR. (2014).

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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


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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


Opthalmology


Draft Genome Sequence of Environmental Vibrio cholerae 2012EL-1759 with Similarities to the V. cholerae O1 Classical Biotype. Genome Announc, 2014, 2(4) p


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


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Section of Orthopaedic Surgery


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


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


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


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89. Hiscox C, Lamote 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):2996-3000


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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


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

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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


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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


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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


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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


46. Randall DR; Rudmik LR; Ball CG; Bosch JD. (2013). External laryngotraechal trauma: Incidence, airway control, and outcomes in a large Canadian center. Laryngoscope 2014 April 124(4):E123-33


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):7

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Section of Pediatric Surgery


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 [pub ahead of print] [Record Supplied By Publisher] Eval Health Prof, Jan 12 2014, p


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effectiveness of a video game as a child pedestrian educational tool. J Trauma Acute Care Surg, May 2014, 76(5) p1317-21

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Section of Plastic Surgery


Section of Surgical Oncology


5. Edwards JP; Datta I; Hunt JD; Stefan K; Ball CG; Dixon E; Grondin SC. (2014). The impact of

Section of Thoracic Surgery


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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


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ANNUAL REPORT
2013-2014


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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


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


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


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


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


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; Nutley M; Paynter R; Wei D; How T; Crepeau H; 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


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


Non Clinical


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


Joint Appointments

Anaesthesia

Cardiac Sciences
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


26. Kieser TM. (2013). Bilateral internal mammary artery grafting in CABG surgery: an extra 20 minutes for an extra 20 years. [In Process Citation] EuroIntervention, Dec 23 2013, 9(8) p899-901


Cell Biology and Anatomy


Clinical Neurosciences


technologies: which machine do you want to own? [In Process Citation] J Neuroophthalmol, Sep 2014, 34 Suppl pS3-9


Pharmacological therapy for acute spinal cord injury. Neurosurgery, Mar 2013, 72 Suppl 2 p93-105


General Surgery


Kinesiology


five years after stroke: FeSTivaLS trial [In Process Citation] Trials, 2014, 15(1) p322

Medical Genetics

Medicine/Oncology

Veterinary Medicine

Adjunct Appointments
Cell Biology, Anatomy, and Surgery
fraction unbound in liver for drugs. J Pharm Sci, Jul 2013, 102(7) p2085-95


**Department of Surgery**


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


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


### 3.2 Research Grants

#### Astle, William – Ophthalmology

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<td>Trachoma. Wiafe B, Ingram AD, Mwanga M, Glassco BC</td>
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<td>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, Teller R, Metz L</td>
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#### Research funded with peer-reviewed grant support

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#### Bathe, Oliver – General Surgery/Surgical Oncology

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<td>Prospective, Randomized Controlled Trial of Early Enteral Feeding Via a New Gastrojejunostomy Tube in Patients Undergoing Laparotomy for Periampullary and Pancreatic Neoplasms</td>
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12 grants $2,448,331.00
### Beaudry, Paul – General Surgery/Pediatric Surgery

**Research funded with peer-reviewed grant support**

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<td>Characterization and Targeting of Neuroblastoma Cancer Stem Cells (KCCFA Grant)</td>
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<td>Immunotherapy for Cancer - Repurposing Targeted Therapeutics with Oncolytic Viruses (CRIQ Grant)</td>
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<td>New</td>
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**3 grants $1,130,000.00**

### Brauer, Carmen A. – General Surgery/Orthopedic Surgery

**Research funded with peer-reviewed grant support**

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<tr>
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<th>Theme</th>
<th>Status</th>
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<tr>
<td>Treatment of medial epicondyle fractures in children: A systematic review</td>
<td>co-principal investigator</td>
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<td>An interdisciplinary collaboration to explore quality indicators in pediatric orthopaedics</td>
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<td>Quality Indicators in Cerebral Palsy: A Scoping Review</td>
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<td>Quality indicators in pediatric orthopaedics: A literature review</td>
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<td>Quality indicators in pediatric orthopaedic surgery</td>
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**6 grants $123,273.00**

### Bray, Robert C. – Department of Surgery

**Research funded with peer-reviewed grant support**

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<td>Development Implementation and Testing of Temporary, Controllable Pseudobezoars for Reducing Excess Weight</td>
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<td>Development of Innovations by Startup Enterprises, Co-Financed by the EU</td>
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**1 grant $260,000.00**
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<td>Effects of Educational Strategies on Cognitive Load for Teaching Medical and Surgical Procedures: An Exploratory Study</td>
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<td>The Canadian Pediatric Surgery Network (CAPSNet): Establishing Best Practices for Gastrochisis and Congenital Diaphragmatic Hernia</td>
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<td>The impact of maternal Serotonin Specific Re-uptake Inhibitors on neonatal pulmonary hypertension: An animal model</td>
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<td>Overcoming surfactant inhibition in neonates and infants: a clinical prospective cohort study with an animal model correlate</td>
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<td>CIHR Secondary Analysis of Databases: Canadian Pediatric Surgery Network (CAPSNet)</td>
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### Buie, W. Donald – General Surgery/Colorectal Surgery

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<td>Long term oncologic outcomes for rectal cancer in the province of Alberta</td>
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<td>Adenoma detection rate in screening colonoscopy</td>
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<td>Long term outcomes for the treatment for rectal cancer in the Province of Alberta</td>
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**Research funded with peer-reviewed grant support**

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<td>Timing of Rectal Cancer- response to chemoradiation</td>
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### Cooper, Linda - Ophthalmology

**Research funded with peer-reviewed grant support**

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<td>Corneal Confocal Microscopy: A Rapid Noninvasive Approach to Detect Diabetic Neuropathy in Children with type 1 Diabetes</td>
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### Dixon, Elijah – General Surgery/Surgical Oncology

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<td>Resectable colonic hepatic metastases: type of initial referral, time to surgical intervention and disease free survival.</td>
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#### Research funded with peer-reviewed grant support

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<td>“Effect of Physician Alternative Payment Plans on the Completeness and Validity of Administrative Data,”</td>
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<td>Tranexamic Acid Versus Placebo to Reduce Perioperative Blood Transfusion in Patients Undergoing Major Liver Resection: A Pilot Randomized Controlled Trial</td>
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<td>“The Effects of Call and Call Scheduling on General Surgeons’ and General Surgery Residents’ Perceived Quality of Life.”</td>
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<td>“Laparoscopic Cholecystectomy for Acute Calculous Cholecystitis: How Urgent is ‘Urgent’?”</td>
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<td>The Use of Wound Protectors to Prevent Surgical Site Infection in Patients Undergoing Pancreatoduodenectomy with Intra biliary Stents: A Randomized Controlled Trial</td>
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<td>Establishment of the Hepatopancreaticobiliary Community of Surgical Oncologists: Clinical, Evaluative and Prospective.</td>
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<td>Predictors of Acute Kidney Injury after Major Surgical Procedures.</td>
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<td>University of Calgary Department of Medicine and Department of Surgery Research Development Fund Award</td>
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11 grants $1,099,460.00

### Dort, Joseph C. – Otolaryngology – Head and Neck Surgery

#### Research funded with peer-reviewed grant support

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<th>Status</th>
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<td>Machine learning and MR texture analysis to assess human papilloma virus (HPV) status in head and neck tumors</td>
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<td>Developing and Testing a New Treatment for Oral Squamous Cell Carcinoma</td>
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<td>Efficacy of optically-guided surgery in the management of early-stage oral cancer</td>
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<td>Post-operative pulmonary complications in patients undergoing head and neck reconstructive surgery at FMC</td>
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<td>Calgary Surgical Research Development Fund</td>
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4 grants $184,000.00
### Frank, Cyril B. – Orthopedics

Research funded with peer-reviewed grant support

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<td>The Mechanical Causes of Osteoarthritis</td>
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**Total: 4 grants** $4,747,597.00

### Hart, David A. - Departments of Surgery / Microbiology, Immunology & Infectious Diseases / Medicine

Research funded with peer-reviewed grant support

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<td>Roll of Inflammation in Pseudotumor Development</td>
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<td>Stem Cells and Cartilage Repair</td>
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<td>Sex Differences in Nerve Involvement in OA</td>
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<td>Stem Cells as Diagnostic Markers</td>
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**Total: 5 grants** $7,079,000.00

### Hildebrand, Kevin A. – Orthopedics

Research funded with peer-reviewed grant support

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<td>Randomized Controlled Trial on the use of Low-Intensity Pulsed Ultrasound in the Healing of Scaphoid Non-Unions Treated with Surgical Fixation</td>
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<td>Investigations of Mechanisms and Treatment in Post-traumatic Joint Contractures</td>
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<td>The Dose-response Effect of the Mast Cell Stabilizer, Ketotifen Fumarate, on Post-traumatic Joint Contractures</td>
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<td>The Dose-response Effect of the Mast Cell Stabilizer, Ketotifen Fumarate on Post-traumatic Joint Contractures</td>
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albertahealthservices.ca
### Randomized Controlled Trial of Ketotifen to Prevent Post-traumatic Elbow Contractures
- **Principal Investigator**: basic/biomedical
- **Theme**: New
- **Funding Source**: American Foundation for Surgery of the Hand
- **Award**: $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
- **Theme**: New
- **Funding Source**: Canadian Orthopaedic Foundation
- **Award**: $10,000.00

### Post-Traumatic Elbow Joint Contractures: Defining Pathologic Capsular Mechanisms and Potential Future Treatment Paradigms
- **Principal Investigator**: basic/biomedical
- **Theme**: New
- **Funding Source**: American Society for Surgery of the Hand
- **Award**: $20,000.00

### Feasibility of randomized controlled trial of ketotifen for lateral epicondylalgia
- **Local Sub-investigator**: basic/biomedical
- **Theme**: New
- **Funding Source**: Canadian Institutes of Health Research
- **Award**: $15,000.00

### Tryptase as a Biomarker for Post-Traumatic Elbow Contracture
- **Principal Investigator**: basic/biomedical
- **Theme**: New
- **Funding Source**: Calgary Surgical Research Development Fund
- **Award**: $3,725.00

**10 grants $218,225.00**

### Hollaar, Gwendolyn – General Surgery

**Research with no funding or non-peer reviewed support**

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**1 grant $15,280.00**

### Hutchison, Carolyn R. - Orthopedics

**Research with no funding or non-peer reviewed support**

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<td>Joint-Sparing Transplant with fresh osteochondral allografts. Schachar N, Timmerman S, Hutchison CR, Heard M, Miller S.</td>
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<td>Assessment of Communication. Professional and Surgical Skills in an OSPRE: A Psychometric Study. Ponton-Carss, Donnone T, Hutchison CR.</td>
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**3 grants $420,800.00**

### Kirkpatrick, Andrew W. – General Surgery/Trauma

**Research funded with peer-reviewed grant support**

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<tr>
<td>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.</td>
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<td>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,</td>
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<tr>
<td>Kirkpatrick AW, McBeth PB, Doig C, Ball CG, Kubes P, Leger C, Tiruta C, Calgary Surgical Research Development Fund ($4000.00).</td>
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<td>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</td>
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2011 Developing a Patient and Family-Centered Approach for Measuring the Quality of Trauma Care. STELFOX HT (Principal Investigator), STELFOX HT (Principal 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, Zains H, KIRKPATRICK AW, Straus SE. CIHR’s Partnerships for Health System Improvement Competition, $628692.00 over three years (C) co-investigator health services (education) New CIHR Partnerships for Health System $628,692.00

#### Kortbeek, John B.

**Research with no funding or non-peer reviewed support**

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<td>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</td>
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1 grant $0.00

#### Krawetz, Roman – Department of Surgery

**Research funded with peer-reviewed grant support**

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<td>Synovial Mesenchymal Stem Cells: Distinct roles in cartilage regeneration and the pathogenesis of Osteoarthritis</td>
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<td>Synovial Mesenchymal Stem Cells: Distinct roles in cartilage regeneration and the pathogenesis of Osteoarthritis</td>
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<td>Consequences of knee joint injury in youth sport: Implications for knee osteoarthritis and other health outcomes.</td>
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6 grants $1,970,910.00
### Matthews, T. Wayne – Otolaryngology – Head and Neck Surgery

**Research with no funding or non-peer reviewed support**

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<td>Pan Canadian Optically Guided Approach for Oral Lesions Surgical Trial</td>
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<td>Terry Fox Research Institute</td>
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<td>The Impact of CAIX in Cervical Node Metastases in Oral Cavity Squamous Cell Carcinoma</td>
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<td>University Calgary Office of Surgical Research - Research Prize</td>
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<td>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.</td>
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5 grants $4,825,243.00

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### McKinnon, J. Gregory – Surgical Oncology

**Research with no funding or non-peer reviewed support**

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<td>Multicenter Selective Lymphadenectomy Trial II – John Wayne Cancer Center and NCI 2005-</td>
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1 grant $0.00

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### Monroy Cuadros, F. Mauricio - Transplant

**Research funded with peer-reviewed grant support**

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<td>The Long-term Effects of becoming a living Kidney Donor</td>
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3 grants $1,614,665.00
### Moore, Randy D. – Vascular Surgery

#### Research with no funding or non-peer reviewed support

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<td>Thoraflex: A New Approach to aortic arch disease</td>
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<td>FDA Phase 2 STUDY OF THE ANACONDA ENDOVASCULAR STENT GRAFT REPAIR FOR THE TREATMENT OF INFRARENAL AAA</td>
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#### Research funded with peer-reviewed grant support

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<td>Fluid Flow and Vascular Endothelial Cell Drug Response</td>
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<td>TX2 trial for the endovascular repair of thoracic aortic aneurysm</td>
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4 grants $650,000.00

### Oddone Paolucci, Elizabeth – Department of Surgery

#### Research with no funding or non-peer reviewed support

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<td>Exploring the learning experiences in the general surgery clerkship.</td>
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<td>&quot;Formative Curriculum Evaluation of the University of Calgary O&amp;G Clerkship: A Mixed-Methods Case Study.&quot;</td>
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#### Research funded with peer-reviewed grant support

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<td>&quot;Identification of factors related to experiences of conformity in medical education.&quot;</td>
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<td>Dept of Surgery - Calgary Surgical Research Development Fund</td>
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<td>&quot;Boot camp training for pediatric general surgery fellows: Is there a need for it to ease the transition to fellowship?&quot;</td>
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<td>&quot;From education to engagement to action: A dynamic, interactive, and integrated knowledge translation approach to bring evidence into practice for introducing new health technologies.&quot;</td>
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<td>Multi-Source feedback for assessing clinical competence in surgical residents.</td>
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<td>Dept of Surgery - Calgary Surgical Research Development Fund</td>
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9 grants $35,401.50
### Quan, May Lynn – General Surgery

#### Research funded with peer-reviewed grant support

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<tr>
<td>Towards better outcomes for young women with breast cancer: A Pan Canadian Collaborative</td>
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<td>Towards better outcomes for young women with breast cancer: A Pan Canadian Collaborative</td>
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<td>Improving safety in the operating room: Evaluating implementation of the safe surgery checklist</td>
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3 grants  

**Total:** $5,820,303.00

### Romanchuk, Kenneth G. - Ophthalmology

#### Research funded with peer-reviewed grant support

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<td>Is Peripheral Neuropathy Occurring in Association with Idiopathic Parkinson's Disease, or an Iatrogenic Complication?</td>
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<td>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</td>
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<td>Intermittent Exotropia Study (IXT2): a randomized clinical trial of observation versus occlusion therapy for intermittent exotropia</td>
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<td>Corneal Confocal Microscopy: A Rapid Noninvasive Approach to Detect Diabetic Neuropathy In Children With Type I Diabetes.</td>
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5 grants  

**Total:** $876,921.00

### Salazar Banuelos, Anastasio - Transplant

#### Research with no funding or non-peer reviewed support

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2 grants  

**Total:** $50,000.00
### Salo, Paul T. – Orthopedic Surgery

**Research funded with peer-reviewed grant support**

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5 grants $425,019.00

### Schachar, Norman – Orthopedic Surgery

**Research with no funding or non-peer reviewed support**

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<td>&quot;Establishing a Culture of Mindful Practice in Surgery at a New Orthopaedic Centre&quot;</td>
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7 grants $1,504,486.40

### Sutherland, Francis R. – General Surgery

**Research with no funding or non-peer reviewed support**

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<td>Preoperative steroid utilization in liver resections: A randomized clinical trial</td>
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2 grants $10,000.00
### Thornton, Gail M. – Department of Surgery

#### Research with no funding or non-peer reviewed support

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<td>Mechanics of Damage in Biological Soft Tissues</td>
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<td>NSERC</td>
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<td>Role of Mast Cells in Achilles Tendinopathy</td>
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<td>New</td>
<td>Canadian Institutes of Health Research</td>
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Yilmaz, Serdar - Transplant

#### Research with no funding or non-peer reviewed support

<table>
<thead>
<tr>
<th>Title</th>
<th>Role</th>
<th>Theme</th>
<th>Status</th>
<th>Funding Source</th>
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<tr>
<td>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)</td>
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<td>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)</td>
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<td>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</td>
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<td>Central Biopsy Review for NOVARTIS Study CRAD001AU592 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.</td>
<td>principal investigator</td>
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<td>Novartis Pharma</td>
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#### Research funded with peer-reviewed grant support

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<tr>
<td>Astellas Service Agreement RT703938 FKC Advagraf with IL-2 014</td>
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10 grants $3,526,870.00

### Department of Surgery Total Grants: 148

$41,453,791.90

albertahealthservices.ca