# Table of Contents

A Message from Dr. Kortbeek .................................................. 4  
Surgical Executive Team ....................................................... 6  
Department Members and New Faculty ................................. 7  
Promotions and Appointments ............................................. 8  
Report from the Surgical Strategic Clinical Network ............... 9  
Surgeons’ Day .................................................................. 18  
Rectal Cancer Pathway ....................................................... 20  
Leadership Retreat ............................................................ 21  
MacNeill Chair .................................................................. 22  
The Department - Dr. Schachar ........................................... 23  
History of Transplant Surgery ............................................ 25  
PRIHS Grant .................................................................... 28  
Surgical Foundations Retreat ............................................. 29  
South Health Campus Research ......................................... 30  
Quality & Safety ................................................................ 32  
Office of Surgical Education .............................................. 33  
Office of Surgical Research ................................................ 41  
Office of Health Technology and Information ....................... 46  
Section of Dentistry and Oral Health .................................. 48  
Section of General Surgery ................................................ 58  
Section of Ophthalmology .................................................. 60  
Section of Oral & Maxillofacial Surgery ............................... 64  
Section of Orthopedic Surgery ........................................... 66  
Section of Otolaryngology Head & Neck Surgery ............... 70  
Section of Pediatric Surgery ............................................... 74  
Section of Plastic Surgery .................................................... 85  
Section of Podiatric Surgery .............................................. 89  
Section of Surgical Oncology ............................................. 91  
Section of Thoracic Surgery .............................................. 94  
Section of Transplant Surgery .......................................... 97  
Section of Urology ........................................................... 100  
Section of Vascular Surgery ............................................... 105  

Appendices ........................................................................ 106
A Message from Dr. Kortbeek

As the University of Calgary approaches its 50th Anniversary, the Department recently celebrated the 33rd Annual Surgeons’ Day. We are fortunate to recognize our member's outstanding achievements. Dr. Janice Pasieka, who graces the cover of this Annual Report, was recently appointed as Secretary Treasurer of the International Association of Endocrine Surgeons. This important leadership role builds on a career of achievement and leadership in both clinical care and academics. She is among our faculty who have established an international reputation for the Department and the University.

To celebrate our history, as we build the future, we owe a debt of gratitude to Dr. Norm Schachar who completed his first person perspective of the history of the Department of Surgery in Calgary. With the aid of ZEDS we have been provided with a humorous and entertaining summary of the last half century. I enjoyed reading Norm’s stories as they brought back many great memories. We were saddened by the loss of one of our other world leaders - Dr. Cy Frank, who has throughout his career, been dedicated to improving public health care and the delivery of surgical services. His leadership continues to have a profound impact on our Department, on Calgary and on surgical services in Alberta and Canada. His work on bone and joint, hip and knee programs and most recently on creating the Strategic Networks, which are already transforming our health system – will endure. We were very saddened by his loss but continue to enjoy the fruits of his labor.

Our programs continue to change as they adopt new science and technology. Major change is looming under the leadership of Dr. Jim Powell. High standards of structure, financial reporting, accountability and organization of academic programs have been and are still being established.

The advent of new perfusion technologies which enhance organ survival and function is also having a dramatic impact. To that end, the transplant program has provided a narrative of the history of transplant surgery, including the efforts of the early pioneers; subsequent leadership of Dr. Francis Sutherland and the evolution of the program under the current 3 transplant surgeons; Drs. Anastasio Salazar, Serdar Yilmaz and Mauricio Monroy as well as with the transplant program leadership of Dr. Lee-Anne Tibbles.

The Vascular Surgery Project is opening this year at the Peter Lougheed Centre. The project represents a decade of hard work and advocacy led by Dr. Paul Petrasek. It will transform vascular care in the city and province.

Our fellowship programs continue to expand and under the leadership of Dr. Jim Powell. High standards of structure, financial reporting, accountability and organization of academic programs have been and are
continuing to be introduced. Our education programs continue to excel with the ongoing efforts of the Office of Surgical Education, Post Graduate Surgical Training Committee as well as our many residency training program leaders. The majority of our programs received full accreditation. Issues addressed by the Royal College of Surgeons and Physicians of Canada are currently being addressed. Our medical school is now participating in the Undergraduate Medical Education accreditation through 2015 and 2016 and will be working hard with the Faculty to ensure ongoing success in excellence in the delivery of our Undergraduate Medical Education programs as well.

We continue to face significant challenges in access for surgical services but working with the Network we now have robust provincial wait times reporting for scheduled surgery and in the Calgary Zone have accurate reporting for emergency and unscheduled procedures as well. We will continue to advocate for our patients in order to be able to provide the surgical care that they require.

I hope you will enjoy reading the stories and successes of our many members across the 14 specialties in the Department of Surgery and I look forward to working with all of you in the coming year.
Surgical Executive Team

Dr. John Kortbeek, Department Head Surgery  
Dr. Mary Brindle, Deputy Head, Department of Surgery  
Ms. Andria Marin, Manager, Department of Surgery  
Ms. Christine Bourgeois, Administrative Assistant to Dr. Kortbeek  
Dr. Eduardo Kalaydjian, Section Chief, Dentistry and Oral Health  
Dr. Elijah Dixon, Section Chief, General Surgery  
Dr. Michael Ashenhurst, Section Chief, Ophthalmology  
Dr. Richard Edwards, Section Chief, Oral Maxillofacial Surgery  
Dr. Kevin Hildebrand, Section Chief, Orthopaedics  
Dr. Wayne Matthews, Section Chief, Otolaryngology  
Dr. Frankie Fraulin, Section Chief, Paediatrics and Facility Chief, ACH  
Dr. Francois Harton, Section Chief, Podiatry  
Dr. A. Robertson Harrop, Section Chief, Plastic Surgery  
Dr. Greg McKinnon, Section Chief, Surgical Oncology  
Dr. Sean McFadden, Section Chief, Thoracic Surgery  
Dr. Anastasio Salazar, Section Chief, Transplant Surgery  
Dr. Paul Petrasek, Section Chief, Vascular Surgery  
Dr. Kevin Carlson, Section Chief, Urology  
Dr. Jason Werle, Facility Chief, RGH  
Dr. John Donaghy, Facility Chief, PLC  
Dr. Donald Buie, Facility Chief, FMC  
Dr. Beth Lange, Facility Chief, SHC  
Dr. Jacques Bouchard, Director, Office of Surgical Education  
Dr. Fiona Costello, Director, Office of Surgical Research  
Dr. Lea Austen, Physician Lead, Health Technology and Innovation  
Dr. Sean Grondin, Physician Lead, Quality and Safety  
Dr. Elaine Joughin, Physician Lead, Quality and Safety  
Dr. Rohan Lall, Medical Director, Trauma Services  
Dr. Maureen O’Brien, Faculty Ombudsman and Advisor on Diversity  
Dr. Gary Dobson, Department Head, Anesthesia  
Ms. Michele Austad, Manager, Department of Anesthesia  
Dr. Doug Wilson, Department Head, Obstetrics and Gynecology  
Dr. Imtiaz Ali, Section Chief, Cardiac Surgery, Department of Cardiac Sciences  
Dr. John Wong, Section Chief, Neurosurgery, Department of Clinical Neurosciences  
Dr. Ken Thomas, Program Director, Spine Surgery  
Ms. Shawna Syverson, Senior Operating Officer, FMC  
Ms. Holly Mackin, Executive Director, Surgery, FMC  
Ms. Margaret Fullerton, Director, ACH  
Ms. Jill Woodward, Executive Director, Inpatient Care, Child and Women’s Health, ACH  
Ms. Susan Reader, Director, Surgery, RGH  
Ms. Val Marsten, Director, Surgery, PLC  
Ms. Joanne Cabrera, Executive Director, Surgery & Women’s Health, SHC
We are a total of 410 members

297 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

Each of the 14 sections are led by a Section Chief, who meet with the other Section Chiefs and Facility Chiefs to form the Surgical Executive Committee. This Committee serves to make decisions, recommendations and develops policies regarding research, education and clinical practice, as well as resource utilization and allocation.

Our members are committed to a professional and academic culture that is continually progressing and improving. We are dedicated to providing excellence in clinical care, teaching, and research.

New Faculty

Dr. Mantaj Brar joined the Section of General Surgery, January 2, 2015.

Dr. Antoine Bouchard-Fortier joined the Section of General Surgery and Surgical Oncology, July 1, 2015.

Dr. Jeffrey Clark joined the Section of Vascular Surgery, August 1, 2014.

Dr. Jennifer Matthews joined the Section of Plastic Surgery, January 5, 2015.
Promotions

**Dr. Stephen French**, Section of Orthopedic Surgery, has been promoted to the rank of Clinical Assistant Professor.

**Dr. Richard Baverstock**, Section of Urology, has been promoted to the rank of Clinical Associate Professor.

**Dr. Sean Grondin**, Section of Thoracic Surgery, has been promoted to the rank of Clinical Associate Professor.

**Dr. James Powell**, Section of Orthopedic Surgery, has been promoted to the rank of Clinical Professor.

**Dr. Kevin Carlson**, Section of Urology, has been promoted to the rank of Clinical Associate Professor.

**Dr. Adrian Harvey**, Section of General Surgery, has been promoted to the rank of Clinical Associate Professor.

**Dr. Luke Rudmik**, Section of Otolaryngology, has been promoted to the rank of Clinical Associate Professor.

**Dr. Elijah Dixon**, Section of General Surgery, has been promoted to Professor

**Dr. Don Buie**, Section of General Surgery, has been promoted to Professor

Appointments

**Dr. Rohan Lall**, Section of General Surgery, has accepted the position of Medical Director - Trauma Services, Foothills Medical Centre

**Dr. James Powell**, Section of Orthopedic Surgery, has accepted the position of Fellowship Director.

**Dr. Paul Duffy**, Section of Orthopaedics, has accepted the position of Division Chief, Trauma Orthopedics

**Dr. Elijah Dixon**, Section of General Surgery, has accepted the position of Section Chief.
REPORTS
In May 2014, the transition from the Legacy Waitlist Report to Surgeon Detail Report was started. This transition was complete in September. Also in the fall, the service and site reports were rolled out. There are now seven reports in operation: surgeon detail, surgeon summary, service detail, service summary, site detail, site summary and site detail (operations).

SPREAD AND OPTIMIZATION
In 2014, 61,260 elective surgical cases in the Calgary Zone were completed using aCATS as a means to measure and assess whether cases were completed in or out of window in relation to their diagnosis access targets. (See Figure 1). The chart below gives more detail about the number of cases completed in and out of window. This number includes cases from non-hospital surgical facilities (18,477 total) and Tom Baker Cancer Centre (472 total).

This is an increase over last year for many reasons. aCATS code use in the Calgary Zone was expanded to include Cardiac surgery, and non-hospital surgical facilities cases. In addition, uplift funding and expanding codes to cases at the Tom Baker Cancer Centre increased the number of procedures where aCATS was applied in the booking process. Working with Calgary surgeons, the team also coded the remaining legacy OR bookings that did not have a dedicated aCATS code.

The following four sections breakdown this data. Section 1 highlight the total number of patient completed in and out of window for the 2014-2015 fiscal year. That number is then broken down by site. Section 2 highlights the total number of patients waiting as of July 17, 2015. This is then broken down by site. Section 3 is the total number of cancer patients completed in the 2014-2015 fiscal year. This is broken down by site. Section 4 shows the number of cancer patients waiting in and out of window as of July 17, 2015. This data is also broken down by site.

Data Source: OPTUM ORIS Data

Table 1. Patients Completed with aCATS Codes 2014-15
Section 2: Total Patients Waiting (as of July 17, 2015)
As of July 17, 2015, 18,469 scheduled patient surgical bookings have an aCATS code. Of those, 56% are waiting within their diagnosis access target (in window) and 44% are out of window. The graphs below show the percentage waiting in and out of target and the breakdown per site.

Data Source: OPTUM ORIS Data
Section 3: Total Cancer Patients completed (2014-2015 Fiscal year)

In the 2014-15 fiscal year, the number of cancer cases completed were 12,647. Forty-eight per cent were completed in window and 52 per cent were completed out of window. This data does not include non-hospital surgical facilities. See graphs below for summary.
Section 4: Total Cancer Patients Waiting (as of July 17, 2015)
The graphs below highlight the number of cancer patients waiting in and out of window as of July 17, 2015. This data does not include non-hospital surgical facilities. Figure 7 is the percentage of patients waiting in and out of window. Figure 8 is the number of patients waiting in and out of window by site.
The process to move from spread to optimization began in November 2014. The focus of this transition is on improving the quality of data, reviewing reports and modifying them to be effective scheduling and decision making tools for both surgeons and operations, and working with operations to review the current booking process and helping to improve and standardize where necessary – where aCATS affects the process.

FEEDBACK

In November, three surveys were sent out to gather feedback as the project moves past the halfway mark. Two different surveys were sent out to providers (surgeons and medical office assistants) and site operational leads. The third piece of feedback comprised of interviews with aCATS Leads. The Survey and Evaluation Team are currently analyzing the data and compiling the report. The feedback will be used to guide the ongoing optimization activities.

For more information about aCATS, please contact Bryan Atwood at bryan.atwood@albertahealthservices.ca.

Enhanced Recovery after Surgery sees Success

The Diabetes, Obesity and Nutrition (DON) SCN officially transitioned the ERAS project to the Surgery SCN in Spring 2015. Along with this transition, ERAS Alberta was formed to coordinate the implementation and research arms of this work. The 2015-16 plan includes expanding from colorectal surgery to other surgical procedures and spreading the ERAS colorectal pathway to three additional sites including Rockyview General Hospital.

At the six initial hospitals, the application of ERAS to colorectal surgery showed improved outcomes for surgical patients. On average, patients spent 1.6 fewer days in the hospital and rates of complication were reduced (Figure 10). Data was collected across the six hospitals through an ERAS interactive audit system (See graphs below). The initial sites included the Grey Nuns Community Hospital, Misericordia Community Hospital, University of Alberta Hospital, Royal Alexandra Hospital, Foothills Medical Center and Peter Lougheed Centre.

ERAS site interdisciplinary teams — led by a surgeon, an anesthesiologist and a nurse ERAS coordinator — continue to improve care at the site level through ongoing review of compliance and outcome audit data.

Each site also engages in provincial learning collaboratives that drive quality improvement and share best practice across surgical programs province wide. Pre ERAS data was collected at different times, depending on phase of implementation at the site. The pre and post data below represents a combination of all sites. The total number of patients pre-ERAS totaled 331. The number of patients post-ERAS totaled 1296.
**SUCCESSES**

Six day median LOS target for elective colorectal surgical patients across six sites have been met or exceeded. Average hospital length of stay has decreased by 18 per cent, freeing up almost 3,000 total bed days, creating the capacity for additional surgeries without having to add a single new bed.

The graph below provides a summary of complication rates for only PLC and Grey Nuns Hospital.
**LENGTH OF STAY REDUCTION FOR PLC AND FMC**

The team at PLC, led by Dr. John Heine and anesthesiologist Dr. Dean Jordan achieved a mean reduction in length of stay by 3.69 days. The total number of patients pre-ERAS was 75, and the total number of patients post-ERAS was 558.


The team at FMC, led by Dr. Tony Maclean and Dr. Don Buie and anesthesiologists Dr. Michael Chong and Dr. Duc Ha achieved a mean reduction in length of stay by 1.49 days. The number of patients captured on the pre-ERAS data totaled 54, and the number of patients post-ERAS totaled 137.


For information about ERAS in Alberta, please contact Jeannette Lawrence at jeannette.lawrence@albertahealthservices.ca
NSQIP takes flight
In the fall of 2014, the Surgery Strategic Clinical Network officially launched the National Surgery Quality Improvement Program (NSQIP) project. NSQIP depends upon clinical data that is rigorously collected and accurately risk-adjusted in order to understand and improve performance.

Five sites began implementing NSQIP in October 2014: Rockyview General Hospital, University of Alberta Hospital, Red Deer Regional Hospital, Queen Elizabeth II Hospital and Chinook Regional Hospital. Each site identified a Surgeon and Anesthesia Champion and hired a Surgical Clinical Reviewer (SCR) to lead the data abstraction. SCRs from each site completed a four-week intensive training course passing the certification exam early in 2015.

Data collection is now underway and teams are beginning to link with the existing Quality Improvement (QI) and Quality Assurance (QA) mechanisms, committees and resources in their respective sites and zones to ensure they are well-positioned to effectively use NSQIP reports to make measurable improvements in clinical care.

Dr. Lea Austen, Surgeon Champion; Dr. David Liepert, Anesthesia Champion; and Renee Duckworth, SCR form the core NSQIP Team at Rockyview. Dr. Liepert has been amazed by the QA and QI resources which exist within Alberta Health Services while Renee Duckworth, is confident that Rockyview is positioned for success: “I believe that one of the major successes so far has been the development of relationships between numerous different Alberta Health Services departments which have in turn helped ensure the success of the NSQIP project launch here at the Rockyview General Hospital.” For more information about NSQIP, please contact Stacy Kozak at stacy.kozak@albertahealthservices.ca or go to http://site.acsnsqip.org/

Safe Surgery Checklist Transitions to Operations
Safe Surgery Checklist (SSC) project officially transition to operations in December 2014. The Surgery SCN, Zone Implementation Leads (ZILs), Knowledge Management and Clinical Quality Metrics (CQM) continue to work collaboratively to ensure the checklist is consistently used across the province.

Use of the checklist is tracked through observational audits conducted every month at each surgical facility. In order to support auditors in providing consistent and accurate audits, an auditor-training module was launched on MyLearningLink. Nearly 200 auditors have taken the course.

Based on observational audits over the past 12 months, provincial compliance is above 90 per cent and the checklist is effective in catching potential errors in nearly four per cent of cases. In Calgary Zone, compliance is above 93 per cent (average over the fiscal year).

RESULTS
“Good Catches” = Averted Errors
The true value of the checklist is making surgery safer. In addition to recording compliance with the checklist, authors also note occasions where use of the checklist results in preventing an error. Observed averted errors range from an incomplete consent form to pre-op antibiotic allergy to wrong site or sided surgeries. In 2014-15, from the observational audits, 119 errors were averted as a result of the use of the SSC. By extrapolation, it is likely that more than 7,100 errors were avoided through the use of SSC.
### Safe Surgery Checklist Step Completion Rates by Site Q4 2014-15

<table>
<thead>
<tr>
<th>Zone</th>
<th>Briefing Completion Rate (%)</th>
<th>Timeout Completion Rate (%)</th>
<th>Debriefing Completion Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Correct Time</td>
<td>3 staff present</td>
<td>All portions covered</td>
</tr>
<tr>
<td>Alberta Children’s Hospital</td>
<td>100</td>
<td>98</td>
<td>98</td>
</tr>
<tr>
<td>Canmore General Hospital</td>
<td>96</td>
<td>85</td>
<td>96</td>
</tr>
<tr>
<td>Foothills Medical Centre</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>High River General Hospital</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Peter Lougheed Centre</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Rockyview General Hospital</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>South Campus Health Centre</td>
<td>99</td>
<td>99</td>
<td>97</td>
</tr>
<tr>
<td>Calgary Zone</td>
<td>99</td>
<td>98</td>
<td>99</td>
</tr>
<tr>
<td>Alberta</td>
<td>99</td>
<td>95</td>
<td>98</td>
</tr>
</tbody>
</table>

**Target was met (current target is 100%)**

**Approaching target (within 10%)**

**Need for investigation or follow up (lower than within 10% of target)**

Data Source: Q4 Quarterly compliance zone reports: Calgary Zone
Surgeons’ Day

Surgeons’ Day – a research symposium and dinner to acknowledge and honour the accomplishments of residents, fellows, medical students and surgeons took place in mid-June. The 33rd symposium was held at the Libin Theatre on Foothills Campus June 12, 2015.

The day was filled with four podium presentations sessions where resident research was presented, including, “The Effect of Synovecetomy in Total Knee Arthroplasty for Primary Osteoarthritis: A Meta-Analysis, by Dr. Sahil Kooner and Same-Day Discharge Achieved for Mastectomy with Implant Reconstruction Patients Using an Enhanced Care Pathway, by Dr. Danielle Dumestre, “Tryotase as a Biomarker of Post-Traumatic Joint Contracture in a Rabbit Model,” by Dr. Michaela Kopka.

Drs. Marlis Sabo, Indraneel Datta, Justin LeBlanc, and Fabio Ferri de Barros served as sessional moderators, introducing the speakers and moderating during the question period. Dr. Norman Schachar and Dr. Douglas Hedden were the judges for the day, as well as guest lecturers. A memoriam presentation for the late Dr. Cy Frank was presented by Dr. Nigel Shrive.

Dr. Schachar presented “A Paradigm Shift — Bone Banking from Bench to Bedside and Back” as the McMurtry Lecturer. This also serving as the launch of his new book, “The Department — A Surgeon’s Memories…Before I Forget,” which he signed copies of during the gala that evening.
Dr. Hedden discussed “The Future of Academic Surgery” as the McPhedran lecturer, and gave his input on academia and a career as a surgeon.

Posters were presented, reviewed by judges, and led by Dr. Shannon Puloski throughout the lunch break.

The evening gala and awards ceremony took place at the Sheraton Eau Claire, 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 Alberta Children’s Hospital, Dr. George Hamilton from Peter Lougheed Centre, and Dr. Garnette Sutherland from Foothills Medical Centre, with the Rockyview General Hospital winner to be awarded next year.

Dr. Joseph Dort and the Head and Neck Surgical Oncology Program received the Surgical Innovation Award for 2015.

The McPhedran Award for Innovation in Surgical Teaching was given to Dr. Jason Werle for his work with the TELUS Spark: Direct from the Operating Room School Program.

The two educator of the year awards were also presented. Dr. Peter Lewkonia was awarded the 2015 Educator of the Year Award while Dr. Andrew Graham was awarded the 2015 Ectopic Educator of the Year Award.

Resident awards were given to categories – Best Overall Research, Honorable Mention for Overall Research, and Best Poster, as well as an award for Best Research by a Fellow.

Dr. Devon Livingston of the Section of Orthopedics, received the award for Best Overall Research for his presentation, “Loop Mediated Isothermal Amplification (LAMP) for the Detection and Subtyping of Human Papillomaviruses (HPV) in Oropharyngeal Squamous Cell Carcinoma (OPSCC).”

Dr. Meulenkamp, of the Section of General Surgery, received the Honourable Mention for Overall Research for his presentation, “Incidence, Risk Factors and Location of Articular Malalignments of the Tibial Plateau,” for which he also won Best Paper by a Surgical Fellow.

Dr. Holly Mewhort of the Section of Cardiac Surgery received the award for Best Poster, for her poster, “Monocytes Increase Human Cardiac Myofibroblast-Mediated Extracellular Matrix Remodeling Through TGF-B1.”

The gala wrapped up with dancing and a performance by the Not Dave Trio, a resident band accompanied by Dr. Don Buie.
Rectal Cancer Pathway

The Rectal Cancer pathway was introduced in 2014 when Dr. Don Buie and Dr. John Heine received the PRIHS grant. It was piloted to take the patient through from diagnosis to treatment and optimizing their treatment strategies and options.

“This gives the opportunity for anyone who is diagnosed with rectal cancer in the province the same opportunity for care to the same standard as well as raising the standard of care through all modalities,” Dr. Buie said about the pathway.

So far the Rectal Cancer pathway has been successful in getting buy in from all major groups of care which would standardize care through all components of care.

Surgeons have had a couple of sessions on optimizing surgical care and we are doing a couple of other projects within the big project where we are using a new reporting technique. With the ultimate goal being real time care throughout the province and reporting back to individual providers so they can see how their care relates to the provincial level.

Clinical pathways provide a standardized method of care that includes multi-disciplinary aspects to improve efficiency and the patient experience.

The project looks to focus on providers who have an interest in rectal cancer, whether they are radiologists, surgeons, pathologists, chemotherapists or radiotherapists.

The pathway looks at collecting data throughout the province of Alberta and then feeding it back to the providers so that they can see how their patients are doing compared to other parts of the province.

The program has engaged radiologists in the province, and we are getting synoptic reports from them as well as with pathologists.

“If we can standardize this it will improve care across the province and save lives, because it will lower the chance of recurrence,” Dr. Buie says regarding how this new pathway affects patient care.

“We received the PRIHS grant in January of 2015, so we are halfway through the grant now and we have another half to go;” he says “and we are hoping to extend that by one more year, because it will take another year to get everything stabilized.”
Leadership Retreat

On April 23rd and 24th the department of surgery held a retreat with the University of Calgary entitled “You are a surgeon, but are you a leader?” The retreat was held in Banff with several workshops taking place over the course of the two day event.

The purpose of the retreat was to familiarize the surgical department with LEADS framework for physician leadership as well as to support and promote surgical leadership within the department of surgery in Calgary.

Following the retreat LEADS participants were be able to:

1. Understand more about what Surgical Leadership means to them and develop techniques to teach more effectively
2. Understand the LEADS Framework for the development of Physician Leadership in Canada
3. Be able to discuss the literature regarding Surgeons as Leaders
4. Understand some of the Challenges/Impediments to Surgeons as Leaders
5. The ability to use the ‘Lead-self’ model in which participants learn to coach their self awareness and personal development.

The goals in regard to outcomes from the retreat included providing a clear understanding of the need to ‘Lead Self’ first and provide some suggested means of achieving this, create an awareness of how team composition can impact on success, demonstrate the potential role of Executive Coaching in personal leadership development, continue the discussion regarding a Leadership Development Program for members of the Department of Surgery, University of Calgary.
MacNeill Chair

The largest boost this past year in helping us to increase our academic profile came from Brian and Brenda MacNeill. They generously donated funds to develop the first Chair in Pediatric Surgery in Western Canada, which was announced in May 2014 and the terms of reference were finalized in November 2014. The Chair is linked to the position of Section Chief of Pediatric Surgery and Site Chief of Surgery at ACH. The purpose of the Chair is to foster a strong, progressive academic environment for Pediatric Surgery. A proposal on how to use the funding was presented to the Advisory committee in January 2015 and in March a call for Letters of Intent was sent to our section members for proposals on projects that would meet this purpose. Ten projects were submitted and reviewed by a selection committee consisting of experienced researchers.

The successful project will be lead by Dr. Mary Brindle, entitled: The EQUIS OR (Efficiency, Quality, Innovation and Safety OR). It is a research platform to evaluate and improve outcomes and aligns nicely with the strategic priorities of ACHRI, specifically the Healthy Outcomes Pillar.

The team is multidisciplinary and includes members from most of the Divisions in Pediatric Surgery and will collaborate with quality improvement researchers at ACH and will also include members from nursing and anesthesia at ACH. The research platform will oversee multiple projects with the ultimate aim of benefiting the Pediatric population at ACH and worldwide and is expected to have a high likelihood of leading to sustainable outcomes.

The local philanthropists who have been supporters of the Alberta Children’s Hospital and this donation is the largest single donation ever received by the ACH. Brian and Brenda MacNeill have a genuine interest in helping children in our community who are served by the hospital and these funds will go directly to helping and treating children in the Calgary area.

By supporting the use of these funds for research the MacNeill’s are assisting in the crucial advancement of child health research - they understand and accept that getting to the root of child health problems is key to solving them and treating them in the most effective way possible.

This gift will allow surgeons to continue to perform over 10,000 surgeries at the ACH annually, and will also allow them to perform more intricate surgeries with more precision than previously possible.

Dr. Frankie Fraulin, Section Chief of Pediatric Surgery is certain this funding will help children receive treatment and return to health more quickly than ever before.
Dr. Norman Schachar took a different approach to history when he was asked to write a book about the history of the Department of Surgery in Calgary. Being one of the inaugural residents who attended the University of Calgary residency program, and an avid story teller, Dr. Schachar was the perfect choice. What has been produced from those memories is a memoir unlike any other.

Dr. Schachar knew he could tell stories, but also knew that he needed some help when it came to putting them on paper, which is where Zoey Duncan and the ZEDS came in, a family dedicated to communication. Duncan was able to take the memories that had been so carefully preserved in Dr. Schachar’s mind and turn them into, “The Department – A Surgeon’s Memories…Before I Forget.”

Dr. Schachar can tell stories better if he puts a little humour in it, in his mind, and he says “If I am telling a story and somebody laughs, I know at least they are listening, so for me it’s an indicator, and it’s easier when you are telling a long story, and it’s easier to laugh than to cry,” Dr. Schachar says, which led Duncan and Dr. Schachar to create the book, which left out the scandals and arguments because he didn’t want to write that type of book.

When Dr. Schachar was asked about his favorite story, it was difficult for him to pick just one, because they are all favorites. He did mention the tale of how he was admitted to Orthopedics in Calgary!

Duncan got involved after receiving a call from Dr. Schachar who said he needed help. She felt that the opportunity was too good to pass up. “You don’t think that a couple of years after graduating from journalism school you would have the opportunity to help someone write a book about their life,” Duncan said. Dr. Schachar appreciated the help with Duncan quickly catching on to the stories and experiences with very few questions asked.

The process of the book, which took over a year and a half to write and took up most of Dr. Schachar’s sabbatical year, and many interviews.

Dr. Schachar has many stories to tell, including sneaking his wife out of his apartment in the South Tower at the Foothills Medical Centre. The stories have even caught the eye of Mayor Naheed Nenshi, who is requesting his own copy – which Dr. Schachar plans to hand deliver with Duncan.
The Department covers the time from Dr. Schachar’s career beginnings at the Foothills Hospital in 1970 when he had no idea what was about to unfold, or how he was going to last in this new city, to following his new surgical idol into the bathroom. It is filled with each era in the department from Dr. Tait McPhedran to present with Dr. John Kortbeek. The book is a story book, not a history book. It is filled with memories and changes. Dr. Schachar wants readers to know, if they don’t feel like reading the whole thing - just read the table of contents, it will give you the basics.

The book just happens to fall on the 50th anniversary of the University of Calgary, and the book is the perfect way to commemorate the occasion. The book is available at the medical bookstore with a portion of proceeds going to the Norman Schachar Education Fund of the Calgary Surgical Education and Research Trust. Dr. Norman Schachar is currently living in Calgary with his wife.
The first living kidney donation and transplantation successfully took place between identical twin brothers in Boston on December 23, 1954. The surgery was performed by Dr. Joseph Murray and Dr. Murray was awarded the Nobel Prize in Medicine later in 1990’s. Kidney transplantation had started as a difficult surgical and scientific challenge confined to a few academic centres worldwide and was not developed until the 1980’s. Discovery of Cyclosporine (immunosuppressive agent) led transplantation surgery to become a routine surgery service in all parts of developed countries.

The first kidney transplant in Southern Alberta took place at the Foothills Medical Centre on May 13, 1971 on a cadaver donor. In the early years in Calgary, Dr. Bernie Churchill, Dr. Jack Williams, Dr. William Hyndman, Dr. George Abouna, and Dr. Mike Schneider all influenced and undoubtedly shaped the future direction of Transplant Surgery as they are the first pioneer surgeons in this field in Calgary.

Dr. Henry Mandin and Dr. Larry Atkins referred, managed, and followed those patients by keeping them alive without established coordination, lack of proper immunosuppressive drugs and immunologic monitoring. In 1974, the first living donor kidney transplant was done. By the end of 1977, 91 transplant surgeries had been completed. In the same year a Tissue Typing Laboratory was built by Dr. John Klassen. Dr. Klassen arrived in Calgary from Montreal as a Transplant Nephrologist and Immunologist. In those years, tissue and organ retrieval were not organized, and there was no program in place to try to increase donor supply by educating the medical community and public. Organ donation and transplantation was still thought of as research at the time. In 1979, the HOPE (Human Organ Procurement and Exchange Program) office opened in both Calgary and Edmonton to organize potential organ and tissue donors and was led by Dr. John Klassen. From 1977 – 1997, Dr. John Klassen was then later joined with the addition of Dr. Leen Paul and both were leading the transplant activities as transplant nephrologists.
There were more than 500 kidney transplants done in Calgary during that time. Dr. Francis Sutherland who joined as a Transplant surgeon, and was the Medical Director of the HOPE Program in 1993-97, had more kidney transplantation performed and multiorgan retrieval was started from deceased donors. The first living unrelated donor transplant was performed in September 1987 which was considered major Ethical dilemma in those years.

In 1997, Dr. Serdar Yilmaz, a transplant surgeon from Ohio State, and Dr. Azemi Brama from Dalhousie, Halifax came to the Foothills Medical Centre where there were no transplant activity in Calgary. Division of Transplant Surgery was established by Dr. Serdar Yilmaz. The Division of Transplant Surgery revitalized the kidney transplant program Dr. Yilmaz was appointed as first division chief. Dr. Rene Lafreniere who was the Chief of the Department of Surgery at that time was very instrumental. Dr. Serdar Yilmaz and Dr. Azami Barama performed the first combined kidney-pancreas transplant in Western Canada on March 5, 1998.

Dr. Yilmaz developed an electronic in-house information Transplant database which would be later called ALTRABase in 1998. This system was also including the HOPE Program, the Living Donation and the Tissue Typing Laboratory as well, which facilitated seamless patient care.

During that period a residency-training program was implemented for general surgery residents and a transplant surgery fellowship program and a transplant research fellowship was established. In 2002, the Transplant Surgery section graduated its first Transplant Surgeon, Dr. Mauricio Monroy-Cuadros, who is now the Fellowship Director for Multi-Organ Transplant Fellowship Program and the Medical Director for the Living Donor Southern Alberta Transplant Program.

In December 2001, Dr. Anastasio Salazar, who was recruited from Halifax, performed the first Laparoscopic Donor Nephrectomy together with visiting surgeon Dr. Ronald Pelletiere from Ohio State. This was the first of this kind in Western Canada. During the same time the Transplant In-Patient Service with step down unit was built on Unit 37 at the Foothills Medical Centre in 2002.

Until 2002 Transplant Surgery fell under the umbrella of the respective organ programs. However, in 2002 with the leadership of Dr. Yilmaz, all organ transplant groups were brought together to start a single integrated transplant program. This incorporated the Living Donor Program, collaborating with the Haskayne School of Business with the University of Calgary. The amalgamation of the Transplant Program under one administration and one physical location occurred in May 2003. Adult kidney, kidney/pancreas, liver, heart and lung transplant patients are followed pre and post transplant at the Foothills Medical Centre, and pediatric patients are followed at the Alberta Children’s Hospital. The transplant surgery for kidney and pancreas is performed in Calgary, however, the transplant surgery for heart, liver and lung is performed in Edmonton.

The idea was to bring all the organ groups together so that they could share other resources such as social work, nursing, nutrition, and all of the supports that are necessary for complete patient care, bringing together the different departments into one program. This organization model mainly focused on Disease Management which still remains innovative when compared to other parts of the country. The Transplant Program involves a wide variety of specialties including surgeons, hepatologists, nephrologists, respirologists, cardiologists, pathologists, and clinical service staff including nurse clinicians, social workers, pharmacists, dieticians, psychologists, and psychiatrists. In addition the program involves clinical, translational, and wet bench research as well as surgical education. Many patients are involved in translational research with the research protocol being an active part of their care.

Over the past 18 years, since the inception of the Section of Transplantation, the total numbers of kidney transplantations were more than 1000 and almost 100 of them have been combined kidney-
pancreas transplantation. Patient survival rates at 10 years were 90% for recipients of living donor kidneys, and 79% for recipients of deceased donor kidneys. Kidney graft survival at 10 years was 75% for recipients of living donor kidneys and 63% for recipients of deceased donor kidneys in Calgary. Calgary survival rates were much better; ten year average rates for US centres. The significant variation between Calgary and average US centre rates is possibly the implementation of patient centric disease management and longitudinal follow-up in a multidisciplinary environment with a comprehensive patient care information system.

The Kidney/Pancreas Transplant Team includes: Transplant Surgeons Dr. Serdar Yilmaz, Dr. Anastasio Salazar, and Dr. Mauricio Monroy-Cuadros and Transplant Nephrologists Dr. Lee-Ann Tibbles, Dr. Kevin McLaughlin, and Dr. Wenji Wang. The Transplant Program has mentored five surgical and two medical transplant fellows since the beginning.

The team utilized Anonymous Living Donation as a source to increase Living Donation in the ALTRA and performed our first anonymous donation transplant in 2010. Dr. Monroy facilitated in the concept, organized and established the Living Donor Paired Exchange (SATP) as a way to increase the potential number of donors in the region. The first local chain transplant was performed in 2011. The first ABO incompatible transplant initiated by Dr. Mauricio Monroy-Cuadros was performed in July 2013.

Finally, Dr. Yilmaz was serving as a Division Chief since the inception of the Transplant Surgery in 1997 and the inception of the ALTRA Program in 2003 handed the reins over to Dr. Salazar for the role of Division Chief of Transplant and Dr. Tibbles as the Medical Director for ALTRA for a new fresh vision in 2012.

Mr. Ralph Tibbles, one of Canada’s most recognized Graphic Designers, developed our ALTRA logo. He is also the designer of the official Canada Logo. ALTRA stands for Alberta Transplant and is the new logo of the Southern Alberta Transplant Program. The left side darkly shaded side represents the organ in its “sick” state. The shape on the right side is the new transplanted organ. The color change as the shading moves from darkness to light signifies the transition from a state of illness to health. The centre represents the surgeon’s knife.
PRIHS: Partnership for Research and Innovation in the Health System is a grant which partners with Alberta Health Services, supports networks of health researchers and clinical practitioners to improve the care and value of the health care system.

Drs. Gregg Nelson and Leah Gramlich received the grant this past year for their innovative work with ERAS: Enhanced recovery after surgery; a program which is innovative and has shown amazing promise at both Calgary and Edmonton hospitals. ERAS looks to lower post-operative complications and readmissions and numbers have shown a drop of almost 50% since introduction.

Alberta is the first market to apply ERAS provincially and the PRIHS funding is helping to keep that momentum going as research is able to continue and expansion into other disciplines is on the horizon.

Part of the ERAS plan is to re-evaluate traditional surgical procedures and involving the patients in their care as a significant part of their care team. Dr. Gregg Nelson stresses that everyone working as part of a team is key for ERAS. Nurses, surgeons, residents, patients and families are all involved in the process and without that involvement the results are less significant.

From early research in 1,000 cases of colorectal surgery, research showed that patients were discharged sooner, and readmission rates were significantly lower.

The ERAS framework has six key principles:

1. preoperative counseling
2. preoperative nutrition
3. no fasting before and after surgery
4. carbohydrate loading before surgery
5. standardized medications for pain
6. getting patients up, eating and mobile soon after surgery

So far six sites in Alberta are involved, Peter Lougheed Centre and Foothills Medical Centre in Calgary and Grey Nuns Community Hospital, Royal Alexandra Hospital, Misericordia Community Hospital and the University of Alberta Hospital in Edmonton with more to be added in the near future.
In its 8th year the Surgical Foundations Teacher-Training workshop included PGY-1 residents from both the University of Calgary and the University of Alberta for the second time, this past retreat taking place March 6-7 was also the second time that faculty from both establishments combined to teach the large learner group.

This year, Dr. Marcia Clark (orthopedics) introduced the Insights course to the learners. The “valuable leadership course that I have used every week in my clinical and academic life since I took it 7 years ago,” Dr. Clark wrote to residents in an email before the retreat. The course, which begins with a survey, teaches individuals about their learning habits and behaviours.

The retreat gave residents the opportunity to develop their teaching skills and gave them the skills to think clearly about their roles as lifelong learners and teachers of surgery. While at the retreat they developed how to:

- Prepare for teaching
- Develop techniques to teach more effectively
- Consider the educational needs of students and residents and
- Interact more effectively with other members of clinical and learning teams among other valuable skills.

The experience was valuable to all in attendance, with residents being asked to bring something to teach, that was not medical related, to highlight some of the teaching skills they have and the ones they would like to learn.

“The concept is fantastic. I would definitely attend something like this again,” were some of the positive sentiments residents had when speaking of the retreat after it concluded.

The plan is to continue the workshop retreat so that all of the University of Calgary future surgeons are prepared for their roles as teachers and leaders.
Based on the successful research programs within the department, South Health Campus has initiated its own research program. The program is within the Department of Surgery, specifically Orthopaedics. The program focuses on surgical outcomes.

“Dr. Neil White as the research head along with Dr. Stephen Miller as the Orthopedic site chief there, decided that research was going to be a vital part of SHC. Most of that drive came from Dr. White, who as a former resident helped elevate the research program at the Foothills Medical Centre,” Kimberly Carcary who developed the program and is the clinical research manager at FMC says about the development in the new hospital.

Dr. White realized it was key to have a dedicated resource put in place for research and came back to Calgary to set up the program at South Health. Lisa Murphy is support for the clinics that have been developed at South Health and has become the vital link to making the research program expansion possible.

The program at Foothills secured enough funding over time since the program was established that the program was expanded to SHC once the hospital opened. Lisa Murphy, the research assistant for the program at South Health is assisting in eight studies that are currently enrolling patients. “We are looking forward to having our own studies independent from what is happening at FMC,” Murphy says, with the ultimate goal being better patient care and practice changing research. “There are unanswered questions about what is the best patient care in orthopaedics, as well as looking into new procedures, such as whether particular injuries need surgery or not, and the only way to figure these things out is to enrol enough patients,” Murphy says of the program.

“We are lucky to have a team that is willing to help with research, because it is in addition to their practice,” Murphy says about the engagement from the surgeons involved with the program. The hope is to get more studies up and running and increase recruitment. Given that it is a brand new hospital, there is an expectation that a new hospital will be progressive so this new program adds to that progressive nature, and the South Health Campus is just laying the groundwork for new and patient focused initiatives.

The goals for the research program long term include:

1. Active recruitment for:
   - Orthopaedic trauma basic scientist.
   - Full time traumatologist with interest in upper extremity.
   - Trauma Surgeon with expertise in soft tissue techniques (repair, reconstruction).
   - Trauma Surgeon with expertise in geriatrics and osteoporosis.
   - Trauma Surgeon with interest in informatics and registry development.
   - Trauma specialist with an interest in orthopaedic education
   - Trauma specialist with interest in administration

2. Adequate operating room (OR) time (daytime trauma time) for patients within the Calgary Zone’s catchment area with the generalized guidelines being established of ‘the right hospital for the right patient at the right time to the right surgeon.’
3. Physician support for the orthopaedic trauma program especially with the development of the SHC. This campus should solidify Orthopaedic Trauma as a “way of life” for the young orthopaedic trauma surgeon.

4. Ongoing growth of the orthopaedic trauma program for public and professional education/knowledge expansion.

5. Persist at “finishing trauma studies started”.

6. Continue to foster Calgary surgeons at all levels of orthopedic trauma education locally, regionally, nationally and internationally.

7. Continue building an Orthopedic Trauma research team that has strength of character and is thought of world-wide when a research question comes to mind.

8. Development of an Endowment within the University of Calgary for sustaining a Trauma Professorship position.
Quality & Safety

SECTION STRUCTURE AND ORGANIZATION

Co-Director of Safety Surgical Services
Calgary Zone Pediatric Representative:

Structure
Surgical Representative
ACH Quality Assurance Council
Member
Surgical Services Quality Assurance Subcommittee

ACCOMPLISHMENTS AND HIGHLIGHTS

Two pediatric quality assurance reviews that involved surgical issues were completed in the past year.

ACH QAR 355 recommendation – That guidelines be developed to direct all admitted post-op patients to be clinically assessed and have orders reviewed by a physician upon admission to a unit.

These guidelines were developed and adopted. It is expected that these will be published under Practice Support Documents – Alberta Children’s Hospital on the AHS website in the future. Post-operatively physicians are expected to complete order review, documentation of relevant operative findings, communication to the most responsible physician if not the surgeon, and post-operative documentation and notes.

Pediatric Aphakia Implant Guidelines were adopted by the Calgary Zone Department of Surgery upon the request of the Surgical Services Quality Assurance Subcommittee.

ACH QAR4251 recommendation involves investigation and diagnosis of appendicitis patient and the reporting issues between the ACH Emergency Department and ACH Diagnostic Imaging. Recommendations are being finalized.

EDUCATION

Attended course – Investigation and Managing Patient Safety Events Feb 24-26 W21C

FUTURE DIRECTION AND INITIATIVES

Integration of quality assurance research within the Section of Pediatric Surgery MacNeill Chair within the EQuIS project under the leadership of Dr. Mary Brindle.

PHYSICIAN LEADS

Dr. Elaine Joughin - Pediatric Surgery
Dr. Sean Grondin - Thoracic Surgery
Office of Surgical Education

SECTION STRUCTURE AND ORGANIZATION

The Office of Surgical Education is designed and structured to assist, coordinate and enhance education in the Department of Surgery for undergraduate medical students, postgraduate learners like residents and fellows as well and continuing medical education and professional development of the surgeons in the Department. It also participates and facilitates education of surgical topics outside the Department in the community.

Dr. Jacques Bouchard, Office of Surgical Education Physician Lead
Photo provided by Dr. Jacques Bouchard
ACCOMPLISHMENTS AND HIGHLIGHTS

Dr. Richard Buckley:
Dr. Buckley stepped down from the position of Chair of PGSTC and Co-Director of Surgical Foundations in February 2015 after 10 years of dedicated, passionate and marvelous leadership of this committee. For the first 9 years of his tenure the PGSTC committee coordinated the activities of all residents in the Department including the activities of Surgical Foundations. He has developed an enviable CanMEDS program that has touched on all the non-expert roles on a monthly basis and providing unique views to residents by having all the sections organize sessions, inviting outside guests to teach or sometimes having residents do field trips to learn certain topics. These sessions also incorporated pre and post tests to evaluate the resident knowledge and determine what they should be taught.

He also quarterbacked the Principles of Surgery review sessions (now called Foundations of Surgery) and the R1 Critical Thinking Course. He was instrumental in getting the resident’s research skills and projects off the ground for the whole Department. In the past year, as a result of Royal College Standards, Surgical Foundations and some of the activities of the committee have been separated but close collaboration between the 2 committees has allowed for and enhanced curriculum and a continuation of the solid curriculum and structure elaborated under Dr. Buckley’s leadership.

<table>
<thead>
<tr>
<th>PROGRAM</th>
<th>Physician as Chair</th>
<th>FUNCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UME / SUGEC</strong></td>
<td>Dr. Adrian Harvey</td>
<td>Course Chair of the Surgery Clerkship and chairs SUGEC. The section representatives of the Undergraduate Clerkship sit on the Surgical Undergraduate Education Committee (SUGEC)</td>
</tr>
<tr>
<td></td>
<td>Dr. Jacques Bouchard</td>
<td>Sits on the University of Calgary UMEC and U of C clerkship committee</td>
</tr>
<tr>
<td>Surgical Foundations</td>
<td>Dr. Marcia Clark</td>
<td>Surgical Foundations coordinates the PGY1 and 2 curriculum, rotations, evaluations of participating Surgical programs (General, Orthopaedics, Vascular, ENT, plastics, Neurosurgery, Vascular, Cardiac)</td>
</tr>
<tr>
<td>PGSTC</td>
<td>Dr. Rick Buckley (until Feb. 2015)</td>
<td>Chairs the Post Graduate Surgical Training Committee and sits on PGME, University of Calgary</td>
</tr>
<tr>
<td></td>
<td>Dr. Jacques Bouchard (interim Chair)</td>
<td></td>
</tr>
<tr>
<td>Fellowships</td>
<td>Dr. James Powell</td>
<td>Coordinates with PGME all Department of Surgery Fellowships</td>
</tr>
<tr>
<td>CME / CPD</td>
<td>Dr. Ian Anderson</td>
<td>Represents the Department of Surgery on University of Calgary CME / CPD committee, chaired by Associate Dean CME / CPD</td>
</tr>
</tbody>
</table>
Educator of the year award: Awarded by the surgical residents the 2014 recipient was Dr. Peter Lewkonia of the Section of Orthopaedic Surgery (Spine Division).

The McPhedran award for Innovation in Education was given to Dr. Jason Werle, Orthopaedic Surgery, for his very popular and ongoing interactive knee surgery series where Alberta Health Services and the Telus Sparks Centre collaborate to broadcast live from the Operating room knee replacement surgeries to junior high and high school students. This program was highlighted in the 2013-14 report.

Two surgical programs are leading the way in transforming their curriculum to a Competency Based Program. Pediatric General Surgery and ENT are in the process of implementing their new curricula and evaluations.

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 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 section.

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). 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 2015 has a total of 176 clerks. The Department received 18-25 University of Calgary clerks (including UCLICs) for each of the eight surgery blocks. The 6 week rotation included 3 weeks in General Surgery, 2 weeks in either Orthopaedic surgery, Plastic Surgery or Urology and one week in any one of thoracic Surgery, Vascular surgery, Neurosurgery, Urology or Otolaryngology.

Visiting Clerks: A new nationwide portal system was developed and started accepting clerk requests for electives throughout Canada in February 2015. The AFMC – Association of Faculties of Medical Schools in Canada has an agreement with American Schools of Medicine as well as some International Schools of Medicine to accept medical students in their clerkship year for electives in Canada. Within the first month of the portal being open, there were 1200 requests for electives throughout Canada. Of the 1200 requests, over 800 were directed to the University of Calgary. These numbers reflect the quality of clerkship electives that is offered here. The number of visiting elective clerks has also increased with the addition of new surgical residency programs averaging 25 visiting clerks per month.

Postgraduate Surgical Education

Surgical Foundations
Surgical Foundations is a Royal College requirement for many surgical specialties and there are specific Standards that are followed to manage and coordinate the rotations, curriculum and educational activities of the first 2 years of these specialties. The Surgical Foundations committee is chaired by Dr. Marcia Clark who is the Director of the program. The committee members include the program directors of these
specialties and resident representatives. The committee oversees the PGY-1 Surgical Skills course delivered by Dr. Alicia Ponton-Carss, the Surgical Foundations curriculum, the Critical Thinking Course and resident evaluations in collaboration with the home programs.

**Surgical Residency programs**
The PGSTC (Post graduate Surgical Education Training Committee) coordinates and plans the joint teaching activities to all Surgical residents, mostly non expert CanMEDS roles. These activities involve all years of residency and all residency programs including primary programs (eg. General Surgery, Orthopaedics, Plastics, Otolaryngology etc), primary residencies of other Departments (Neurosurgery and Cardiac Surgery) secondary programs (eg. Colorectal, Pediatric General surgery, General Surgical Oncology, Thoracic etc) and non-Royal College programs (Dentistry). Dr. Rick Buckley chaired the committee for 10 years until February 2015. Interim chair is Dr. Jacques Bouchard. The Chair sits on the University PGME committee and help formulate and consider all policies related to post graduate education at the University of Calgary.

The PGSTC also interacts closely with the Surgical Foundations committee and helps fill in gaps in the curriculum and avoid duplication. Some of the surgical education is done in collaboration with other Departments such as Anesthesia, OB-Gyn, Cardiac and Clinical Neurosciences.

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

The PGSTC assists the surgical residency program in the preparation for the Royal College on site surveys which was done in Calgary February 2015. This occurs every 6 years for program with full accreditation and every 2 years for programs with provisional approval.


<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>3</td>
</tr>
<tr>
<td>General Surgery</td>
<td>Dr. Lloyd Mack</td>
<td>33</td>
</tr>
<tr>
<td>General Surgical Oncology</td>
<td>Dr. Wally Temple</td>
<td>3</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>Dr. Christopher Hanson</td>
<td>8</td>
</tr>
<tr>
<td>Orthopedic Surgery</td>
<td>Dr. Jason Werle</td>
<td>23</td>
</tr>
<tr>
<td>Otolaryngology</td>
<td>Dr. Doug Bosch</td>
<td>7</td>
</tr>
<tr>
<td>Pediatric General Surgery</td>
<td>Dr. Andrew Wong</td>
<td>2</td>
</tr>
<tr>
<td>Plastic Surgery</td>
<td>Dr. David McKenzie</td>
<td>11</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>2 Primary 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Secondary</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 fellows continues to increase and we currently have 27 fellows. Dr. James Powell is the new Director of the Fellowship programs for the Department of Surgery and Dr. Raul Kuchinad is the Director for the Orthopaedic program which has 14 fellows.

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

The Department of Surgery, Faculty of Medicine and Alberta Health Services have completed a major project to establish guidelines, training objectives, Evaluations, contracts and remuneration pathways for Clinical Fellows.

<table>
<thead>
<tr>
<th>Section</th>
<th>Program</th>
<th>Fellows</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orthopaedic surgery</td>
<td>Combined Ortho/Neuro Spine</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Hand and wrist</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Orthopaedic Trauma</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Foot and ankle</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Pediatric Spine</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Upper extremity</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Joint reconstruction</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Sports medicine</td>
<td>1</td>
</tr>
<tr>
<td>General Surgery</td>
<td>Trauma</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>HPB</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Trauma</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Endocrine</td>
<td>1</td>
</tr>
<tr>
<td>Urology</td>
<td>Functional reconstruction</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Urologic oncology</td>
<td>1</td>
</tr>
<tr>
<td>Plastic Surgery</td>
<td>Plastic surgery oncology</td>
<td>2</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>Retina</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Occuloplasty</td>
<td>1</td>
</tr>
</tbody>
</table>

Continuing Surgical Education
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 consist of CME representatives from every department in the medical school and the Calgary Zone and there are also plans are underway to create a Department of Surgery 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 assisted in re-accrediting all of the Departments rounds and educational activities with the guidelines provided by the Royal College of Physicians and Surgeons of Canada in line with the maintenance of competence program.

Surgical Simulation
Simulation has been an increasing component of the education of medical students, residents and Surgeons. There are dedicated medical simulation sites in all the Calgary hospitals in addition to mobile units managed by
Since its opening in April 2014, the ATSSL (Advanced Technical Skills Simulation Laboratory) has been the site of a number of more complex surgical simulation activities. There are recurrent courses offered such as the yearly PGY-1 surgical skills course, the spine and peripheral nerve course for senior residents and ATSSL training to name a few. The Centre has also hosted specialty training course for physicians and surgeons of Western Canada to learn new techniques. The following list is a sampling of the activity in the lab in the first 6 months of

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Program</th>
<th>Event</th>
<th>Description</th>
<th>Learner</th>
<th># Learners</th>
</tr>
</thead>
<tbody>
<tr>
<td>7-Jan-15</td>
<td>08:00-17:00</td>
<td>Spine</td>
<td>Spine &amp; Nerve Course</td>
<td>Peripheral Nerve Approaches in upper &amp; lower extremities</td>
<td>Residents</td>
<td>18</td>
</tr>
<tr>
<td>8-Jan-15</td>
<td>08:00-17:00</td>
<td>Spine</td>
<td>Spine &amp; Nerve Course</td>
<td>Anterior &amp; Posterior Cervical Spine Approaches</td>
<td>Residents</td>
<td>20</td>
</tr>
<tr>
<td>9-Jan-15</td>
<td>08:00-15:00</td>
<td>Spine</td>
<td>Spine &amp; Nerve Course</td>
<td>Posterior &amp; Anterolateral Thoracolumbar Spine Approaches + Neurology - craniotomies</td>
<td>Residents</td>
<td>30</td>
</tr>
<tr>
<td>15-Jan-15</td>
<td>12:30-15:30</td>
<td>Plastic Surgery</td>
<td>Cadaver Lab</td>
<td>Vessels and Nerves of Foot</td>
<td>Residents</td>
<td>4</td>
</tr>
<tr>
<td>15-Jan-15</td>
<td>13:00-15:00</td>
<td>ENT</td>
<td>Anatomy Dissection</td>
<td>Head and Neck</td>
<td>Residents</td>
<td>6</td>
</tr>
<tr>
<td>22-Jan-15</td>
<td>12:30-15:30</td>
<td>Plastic Surgery</td>
<td>Cadaver Lab</td>
<td>Groin flap, iliac flap</td>
<td>Residents</td>
<td>3</td>
</tr>
<tr>
<td>29-Jan-15</td>
<td>12:30-15:30</td>
<td>Plastic Surgery</td>
<td>Cadaver Lab</td>
<td>SGAP/GAP, Gluteal V-Y</td>
<td>Residents</td>
<td>3</td>
</tr>
<tr>
<td>5-Feb-15</td>
<td>12:30-14:30</td>
<td>ENT</td>
<td>Anatomy Dissection</td>
<td>Head and Neck</td>
<td>Residents</td>
<td>7</td>
</tr>
<tr>
<td>5-Feb-15</td>
<td>12:30-15:30</td>
<td>Plastic Surgery</td>
<td>Cadaver Lab</td>
<td>Scapular / parascapular flap</td>
<td>Residents</td>
<td>5</td>
</tr>
<tr>
<td>13-Feb-15</td>
<td>09:00-12:00</td>
<td>Ob.Gyne</td>
<td>Laparoscopic skills</td>
<td>Cystectomy, Salpingectomy</td>
<td>Residents</td>
<td>10</td>
</tr>
<tr>
<td>19-Feb-15</td>
<td>10:30-16:00</td>
<td>General Surgery</td>
<td>Skills Day</td>
<td>Laparoscopic &amp; Open Skills</td>
<td>Residents</td>
<td>15</td>
</tr>
<tr>
<td>19-Feb-15</td>
<td>12:30-15:00</td>
<td>Plastic Surgery</td>
<td>Cadaver Lab</td>
<td>Lat +/- serratus flap</td>
<td>Residents</td>
<td>6</td>
</tr>
<tr>
<td>20-Feb-15</td>
<td>09:00-12:00</td>
<td>Ob.Gyne</td>
<td>Emergency Cesarian</td>
<td>Dry Simulation - Mock OR</td>
<td>Residents</td>
<td>3</td>
</tr>
<tr>
<td>5-Mar-15</td>
<td>12:30-15:30</td>
<td>Plastic Surgery</td>
<td>Cadaver Lab</td>
<td>Tendon transfers of upper extremity</td>
<td>Residents</td>
<td>6</td>
</tr>
<tr>
<td>5-Mar-15</td>
<td>14:00-17:00</td>
<td>Cardiac Surgery</td>
<td>Heart Lab</td>
<td>Mitral Valve Replacement</td>
<td>Residents</td>
<td>4</td>
</tr>
<tr>
<td>5-Mar-15</td>
<td>17:00-19:30</td>
<td>Cartiva</td>
<td>Synthetic Cartilage</td>
<td>Teach surgeons how to use the device</td>
<td>Residents, Staff</td>
<td>3</td>
</tr>
<tr>
<td>9-Mar-15</td>
<td>13:00-16:30</td>
<td>Dentistry</td>
<td>Suturing</td>
<td>hands-on practice for suturing</td>
<td>Residents</td>
<td>4</td>
</tr>
<tr>
<td>19-Mar-15</td>
<td>12:30-15:30</td>
<td>Plastic Surgery</td>
<td>Cadaver Lab</td>
<td>Tendon transfers of upper extremity</td>
<td>Residents</td>
<td>6</td>
</tr>
<tr>
<td>19-Mar-15</td>
<td>14:30-16:30</td>
<td>General Surgery</td>
<td>Cadaver Lab</td>
<td>Abdominal Wall Reconstruction, biologics, open technique, anatomy</td>
<td>Residents</td>
<td>15</td>
</tr>
<tr>
<td>26-Mar-15</td>
<td>12:30-15:30</td>
<td>Plastic Surgery</td>
<td>Cadaver Lab</td>
<td>Sub-mental artery flap</td>
<td>Residents</td>
<td>7</td>
</tr>
<tr>
<td>1-Apr-15</td>
<td>09:00-12:00</td>
<td>Orthopedics</td>
<td>Arthroscopy</td>
<td>ACL reconstruction with bone-patella-bone autograft</td>
<td>Residents</td>
<td>2</td>
</tr>
<tr>
<td>2-Apr-15</td>
<td>09:00-12:00</td>
<td>Orthopedics</td>
<td>Arthroscopy</td>
<td>ACL reconstruction with bone-patella-bone autograft</td>
<td>Residents</td>
<td>2</td>
</tr>
<tr>
<td>11-Apr-15</td>
<td>08:00-13:00</td>
<td>Wright Medical</td>
<td>Infinity Cadaver Workshop</td>
<td>Infinity total ankle</td>
<td>Staff Physicians</td>
<td>14</td>
</tr>
<tr>
<td>16-Apr-15</td>
<td>13:30-16:30</td>
<td>General Surgery</td>
<td>Skills Day</td>
<td>Laparoscopic &amp; Open Skills</td>
<td>Residents</td>
<td>15</td>
</tr>
<tr>
<td>16-Apr-15</td>
<td>12:30-15:30</td>
<td>Plastic Surgery</td>
<td>Cadaver Lab</td>
<td>Toe - Thumb Harvest</td>
<td>Residents</td>
<td>9</td>
</tr>
<tr>
<td>1-May-15</td>
<td>08:00-15:00</td>
<td>Stryker</td>
<td>Advanced Techniques in Spine</td>
<td>Minimally Invasive &amp; Navigated techniques in spine surgery</td>
<td>Staff Physicians</td>
<td>19</td>
</tr>
<tr>
<td>28-May-15</td>
<td>14:30-17:00</td>
<td>Cardiac Surgery</td>
<td>Heart Lab</td>
<td>Mitral Valve Replacement</td>
<td>Residents</td>
<td>3</td>
</tr>
<tr>
<td>4-Jun-15</td>
<td>10:30-16:30</td>
<td>General Surgery</td>
<td>Skills Day</td>
<td>Laparoscopic &amp; Open Skills</td>
<td>Residents</td>
<td>17</td>
</tr>
<tr>
<td>23-Jun-15</td>
<td>09:00-12:00</td>
<td>Orthopedics</td>
<td>Arthroscopy</td>
<td>Shoulder Arthroscopy</td>
<td>Residents</td>
<td>2</td>
</tr>
</tbody>
</table>
ATSSL is a joint venture between the University of Calgary and Alberta Health Services and strives to provide a safe and effective environment for learners to improve their proficiency in medical and surgical skills before these are applied to patients. While ATSSL staff provide the equipment and assistance to run these sessions, the Executive continues to work at enhancing funding and endowment of the lab, setting up effective governance, and planning to get Royal College Certification as a Simulation Centre/Program within the next few years. Dr. Jacques Bouchard has been the Co-Director of ATSSL for 5 years during the planning and construction and the Medical Director in 2014-15. A search is currently underway for a new Medical Director of ATSSL which should be named by October 2015. Currently all the short-listed applicants are members of the Department of Surgery.
CHALLENGES

Clerkship:
Teaching all of what is important in multiple disciplines of Surgery in a 6 week clerkship is a real challenge. Mandatory rotations, selectives and the academic curriculum has been carefully designed and adjusted to provide optimal exposure for the medical students. 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:
With increased emphasis on simulation and the availability of the facilities the residency programs must adapt their curriculum to integrate simulation. Faculty development must continue to have a pool of Surgeons trained to teach in a simulated environment. The Royal College has started rolling out Competency by Design which will transform all the existing residency program into Competency based training with enhance evaluations and more structured learning. The first programs out of the gate to implement this is Otolaryngology and Pediatric General Surgery. This will involve a lot of work from key educators in the Department and in each section to change the culture of their program and implement a variety of new teaching and assessment tools. Much collaboration will be required and within 5 years we should see dramatic changes to all of our programs.

Fellowships:
A major project has been completed to look at all fellowship at the University of Calgary, establish clear guidelines, educational objectives, evaluation tools and sustainable funding for all fellows. Recent changes in Canadian immigration laws have also required us to define precisely what is a postgraduate fellow and what kind of services they provide over the educational aspects of the fellowship. Dr. James Powell is the new Director for fellowship and will continue to grow and enhance the fellowships in Calgary.

WORKFORCE PLANNING
FUTURE DIRECTIONS AND INITIATIVES

A survey of surgeons in the Department indicated that all surgeons in the Department were expected and wanted to be involved in teaching and education of students, residents and fellows. It was felt that surgeons with a strong interest, additional training or degrees in education would be required to lead curricular changes and the implementation of simulation activities and competency based education. There is already a core of surgeons in leadership positions in education but as we recruit new recruits to fill in clinical gaps we must also consider finding and recruiting surgeons that will be an integral part of leading the changes in education.

Much of the energy of Program Directors and Educators will be focused on implementing Competency by Design for all of our Surgical Residency program.

The External Survey of the Royal College was completed in February 2015. The surgical program, by and large, received glowing reviews from the survey panel. However no program is perfect and we continue to work to correct deficiencies or weaknesses. Three of our surgical programs had difficulties that led to a provisional approval by the College. Many changes have already been implemented to address the weaknesses and hopefully the follow up reviews in 2017 will successfully convert these programs to full approval.
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 Research and Education Program Grants
8. Administering the Calgary Surgical Research Development Fund
9. Administering the Departments of Medicine and Surgery Research Development Fund
10. Organizing the annual Surgeons’ Day Research Symposium
11. Distributing a monthly OSR newsletter, which provides updates on research related initiatives relevant to the Department of Surgery

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 Group. 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:**
   Chelsie O’Brien
   Office of Surgical Research and Surgical Foundations

4. **Department of Surgery Research Committee (Members):**
   Dr. Chad Ball, Dr. Paul Beaudry, Dr. Mary Brindle, Ms. Kimberly Carcary Dr. Marcia Clark, Dr. Fiona Costello, Dr. Frankie Fraulin, Dr. Gary Gelfand, Mr. Stephen Jefferson, Dr. John Kortbeek, Dr. Justin LeBlanc, Dr. Steve Lopushinsky, Dr. Tony MacLean, Dr. Michael Monument, Dr. Elizabeth Oddone Paolucci, Dr. Luke Rudmik, Dr. Marlis Sabo, Ms. Emi Sanders, Dr. Miller Smith, and Dr. Claire Temple-Oberle
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 25 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://wcm.ucalgary.ca/cip/files/cip/cip-handbook-final-Jan2014.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 2016.

- **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: www.ucalgary.ca/osr

**Department of Surgery Research and Education Program Grant:**
The Department of Surgery Research and Education Program Grant (up to $100,000) rewards excellence, innovation, and the potential for future success and impact on the Department of Surgery. The Research stream assists promising new faculty members (within the first 5 years of their clinical appointment) in establishing their research program, while the Education stream assists any faculty member who wishes to pursue further training in a field relevant to surgical education. 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, 2016.

**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 Alberta. In 2014, the CHREB reviewed 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 Group 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 and Education Program Grant 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**

1. **Title:** “A Novel Patient-Specific 3D Haptic Surgical Simulation Platform for Otologic Surgery.”
   - Team: Dr. Justin Lui (Resident), Dr. Devon Livingstone (Resident), Dr. Garnette Sutherland, Dr. Sonny Chan, and Dr. Joseph C. Dort (PI).

2. **Title:** “A micro-simulation model for the accurate prediction of the Rhinologic workforce requirements in Canada.”
   - Team: Dr. Kristine Anne Smith (Resident), Dr. Sean Grondin, and Dr. Luke Rudmik (PI).

3. **Title:** “Evaluating pain outcomes of caudal vs ilioinguinal nerve block in children undergoing unilateral groin surgery.”
   - Team: Dr. Bryce Weber (PI), Dr. Adam Spencer, Dr. Andrew Walker, and Dr. Steven Lopushinsky.
• Surgeon’s Scientist Program (SSP): The 2015 SSP recipient is Dr. Navjit Dharampal, PGY4, Section of General Surgery. She will be working on her Masters of Translational Medicine at the University of California Berkeley / San Francisco campuses.

• Department of Surgery Research and Education Program Grant: The Department of Surgery Research and Education Program Grants (up to $100,000) reward excellence, innovation, and the potential for future success and impact on the Department of Surgery. The Research stream assists promising new faculty members (within the first 5 years of their clinical appointment) in establishing their research program, while the Education stream assists any faculty member who wishes to pursue further training in a field relevant to surgical education. In the 2015 funding year, the following projects were supported:

• Departments of Medicine and Surgery Research Development Fund: This annual competition was established jointly by the Departments of Medicine and Surgery, provides two awards of up to $12,500 annually based on the recommendations of a review committee, as well as on budget availability. In the evaluation process priority is given to projects involving students, residents, and junior faculty within the first five years of their appointment. A variety of clinical, translational or epidemiologic research project proposals are considered. This year, there were a total of 11 applications considered and we were able to fund 2 projects.

Medical Education, Quality Improvement Category: Title: “Local tools to global challenge: Standardizing clinical patient handovers” Team: Dr. Elizabeth Oddone Paolucci (PI), Dr. Qahir Ramji (Resident), Dr. Marcia Clark, and Dr. Ghazwan Altabbaa.

• 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 2015, the recipient and honorable mention for the Peter Cruse Memorial Award were:

• Award Recipient: Mr. Joseph Solomon, University of Calgary, Faculty of Medicine.
• Honorable Mention: Ms. Helen Zakrewski, University of Calgary, Faculty of Medicine.

Dr. Elizabeth Oddone Paolucci, PhD, Associate Director OSR
• 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 2015, the Research Day Symposium was held at the Libin Theatre, Foothills Hospital, Health Sciences Centre on June 12, 2015. The 2015 McPhedran Lecturer was Dr. Douglas Hedden, current Walter Stirling Anderson Professor and Chair of Surgery in the Faculty of Medicine and Dentistry at the University of Alberta. He is also the Zone Clinical Department Head, Surgery – Edmonton Zone within Alberta Health Services. He co-chairs the Surgical Strategic Clinical Network for the Province of Alberta; a committee of Alberta Health Services. His lecture was entitled “The Future of Academic Surgery.” Dr. Norman Schachar, a Professor in the Departments of Orthopaedics and Surgery, as well as the Assistant Dean of Continuing Medical Education and Professional Development for the University of Calgary, delivered the 2015 McMurtry lecture, entitled: “A Paradigm Shift – Bone Banking from Bench to Bedside and Back.”

Research Day award recipients included:

Best Overall Research: Dr. Devon Livingstone, Otolaryngology, R2 “Loop Mediated Isothermal Amplification (LAMP) for the Detection and Subtyping of Human Papillomaviruses (HPV) in Oropharyngeal Squamous Cell Carcinoma (OPSCC).”

Honourable Mention - Overall Research: Dr. Brad Meulenkamp, Orthopaedic Surgery, Fellow, “Incidence, Risk Factors and Location of Articular Malreductions of the Tibial Plateau.”

Best Poster: Dr. Holly Mewhort, Cardiac Surgery, R5 “Monocytes Increase Human Cardiac Myofibroblast-Mediated Extracellular Matrix Remodeling Through TGF-B1.”

Best Research by a Surgical Fellow: Dr. Brad Meulenkamp, Orthopaedic Surgery, Fellow, “Incidence, Risk Factors and Location of Articular Malreductions of the Tibial Plateau.”

• Newsletter: In 2014, the OSR created a monthly newsletter, which highlights the accomplishments of Department members and provides information about upcoming grant deadlines. The newsletter also publicizes updates from the CHREB aimed to improve the efficiency of the ethics review process for researchers.
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 SSCN EDSP worked on several key provincial initiatives including:

- Informing provincial approach for supporting new and retiring practices for provincial surgical services planning for the next 3-5 years
- Evaluated and recommended seven main objectives for provincial Robotic Assisted Surgery (RAS) re-evaluation of the clinical, financial and value for money associated with implementing a robotic surgery program in Alberta including: 1) Establishment of a RAS Steering Committee and smaller RAS Working Groups as appropriate, 2) Identification of current RAS activity in Alberta
- and develop data collection and analysis strategies, 3) Identification of emerging RAS procedures of interest in Alberta, 4) Identification of current state of evidence and gaps in knowledge for RAS for procedures of interest, 5) Establishment of strategy for a provincial training and credentialing process, 6) Need to commission a comprehensive economic and operational financial analysis, 7) Consideration of patient engagement issues

Education

- To engage and educate physicians and managers throughout the province in the use of the Decision-Support Program, 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 SSCN-EDSP team received grant funding from Alberta Innovates Health Solutions to build capacity for evidence-informed decision-making around the introduction of new technologies by rolling out the Evidence Decision Support Program to three additional Strategic Clinical Networks in Alberta.
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.

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

• We are now preparing to work collaboratively with the new Scientific Directors and Assistant Scientific Directors of the SCNs to integrate the EDSP to additional SCNs in Alberta.
Section of Dentistry and Oral Health

SECTION STRUCTURE AND ORGANIZATION

Current Committees

Division of Adult Dentistry
Division members representing Adult Dentistry in the following committees

- Corrections Health – Dr. A. Paladino
- ADA&C Hospital Committee – Dr. E. Kalaydjian
- ZMAC (Zone Medical Advisory Committee) – Dr. E. Kalaydjian
- SAIT Dental Assisting Program – Dr. E. Kalaydjian, Dr. G. Yates, Dr. A. Houghton
- Surgical Foundations PGSTC – Dr. E. Kalaydjian
- Calgary Zone Surgical Executive Committee – Dr. E. Kalaydjian
- Combined FMC OR Committee – Dr. E. Kalaydjian
- Dental General Practice Residency Program Training Committee – Dr. E. Kalaydjian
- Provincial Head and Neck Tumour Team Executive Committee – Dr. E. Kalaydjian
- Canadian Association of Hospital Dentists – Co-founder and Secretary/Treasurer – 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

Dr. Eddie Kalaydjian - Dentistry and Oral Health Section Chief

- CDSA (Canadian Dental Specialist Association) Past President – Dr. R. Barsky
- CDSA Board Member for the Canadian Academy of Pediatric Denstists – Dr. R. Barsky
- Alberta Academy of Pediatric Dentistry, President – Dr. R. Barsky
- Western Society of Pediatric Dentistry, Vice-President – Dr. S. Hulland
- Oral Health initiative for the Calgary Backpack Program, Director – Dr. S. Hulland
- Alberta Academy of Pediatric Dentistry, Past-President – Dr. S. Hulland
- Alberta Academy of Pediatric Dentistry - Western Society Pediatric Dentistry Rep. – Dr. S. Hulland
- Alberta Children’s Hospital - Medical Staff Association - Vice President – Dr. S. Hulland
- Journal of The Canadian Dental Association, Expert Panel of Reviewers and Advisors – Dr. W. Loeppky
- Dentistry for All, Executive Director – Dr. B. Krusky
- Society for a Healthy Mouth Healthy Child (Alberta) and Foundation For A Healthy Mouth Healthy Child(USA), Founder and President – Dr. L. Smith
• ACH Institute for Maternal and Child Health Research – Dr. L. Smith
• Children's Tooth Fairy Foundation Board – Dr. K. Badwi
• Calgary and District Dental Society, 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:
    (a) Oral Medicine
    (b) Endodontics
    (c) Periodontics
    (d) Oral and Maxillofacial Surgery
• FMC DENTAL GENERAL PRACTICE RESIDENCY (GPR) PROGRAM
  • Hosted at Foothills Hospital Dental Clinic
  • Enrolment: 2 residents
• 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, 2015, Adult Dentistry Division membership composed of
  - 25 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: two residents 2014-2015
- Preceptors for FMC Dental Residency Program
  - general dentists
  - specialists
    - Oral and Maxillofacial Surgeons (OMFS)
    - Periodontists
    - Oral Medicine
    - Endodontist
- CORRECTIONS DENTISTRY
  - two casual dentist
  - actively recruited during 2014-2015 to hire more dentists to work at Corrections Site
- FMC DENTAL CLINIC
  - 3 full time dentists. Dr. Amreek Suri joined as full time staff dentist (September 2014)
  - several casual general dentists
  - several specialist preceptors for the dental residency program

Division of Pediatric Dentistry
- There are currently 19 pediatric dentists in Calgary
  - 15 have AHS appointments
  - 17 have AHS appointments and 16 have AHS privileges: Drs. Robert Barsky, Kari Badwi, Christine Bell, Aimee Castro, Marie-Claude Cholette, Sarah Hulland, J. Bradley Krusky, Choo-Kar Kua, Warren Loepky, Orest Pilopowicz, 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.
  - 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 (2.3 FTE)
  - Dr. Christine Bell (0.8 FTE)
  - Dr. Marie-Claude Cholette (0.8 FTE)
  - Casuals:
    - Dr. Sarah Hulland (0.1 FTE)
    - Dr. Choo-Kar Kua (0.1 FTE)
    - Dr. Farida Saher (0.1 FTE)
    - Dr. Tim Seto (0.1 FTE)
    - Dr. Michele Thal (0.1 FTE)
    - 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. Rafael Figueiredo 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
• FMC DENTAL GENERAL PRACTICE RESIDENCY (GPR) PROGRAM
  • Program maintains its accreditation by the Commission on Dental Accreditation of Canada (CDAC).
  • Surgical Implant Program: in progress
  • Continued partnership between FMC GPR PROGRAM, Adult Dentistry and OMFS for the after hour’s on-call program (Calgary Zone).

• FMC DENTAL CLINIC
  • Comprehensive primary care
  • Dental specialty clinics include:
    - Oral Medicine
    - Endodontics
    - Pediodontics
    - Oral and Maxillofacial Surgery
  Surgical Implant Program: in progress
  • Clinic maintains its accreditation by the Commission on Dental Accreditation of Canada (CDAC) for 5 year period of year 2013 - 2018.
  • Sedation Dentistry Clinic: program expanded to include 2-drugs intravenous procedural sedation

• NHSF
  • Dental treatment for children and ‘Special Needs’ patients under general anesthesia; insured services for patients that meet established criteria

• 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)

Division of Community Dentistry/Dental Public Health Clinic Program
• Dental Public Health Clinic Program maintains its accreditation by the Commission on Dental Accreditation of Canada (CDAC).
• 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.
• Continue to work with HPTP clinics and Urgent Cares, Emergency Rooms in order to reduce severe dental infections in target low income population.

Education
Division of Adult Dentistry
Residents:
• Enrollment: 2 residents (2014-2015)
• Once again we noted a large increase in the number of qualified candidates applying
• Staff hospital dentists continue to welcome residents from Radiation Oncology on a as requested basis
• Staff hospital dentists participate in half-day academic teaching for Geriatrics and Emergency Medicine residents.
• The Dental Residency Program maintains its accreditation by the Commission on Dental Accreditation of Canada (CDAC).
Fellows:
- None

Dental Students:
- Foothills Medical Centre Dental Clinic hosted a total of seven third year dental students from the University of Alberta on an elective rotation in “Hospital Dentistry”

**Division of Pediatric Dentistry**

Residents:
- 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.

Fellows:
- None

Dental Students:
- The Dental Public Health Clinics hosted a total of seven third year dental students from the University of Alberta on an elective rotation in “Hospital Dentistry”.

**Division of Community Dentistry/Dental Public Health Clinic Program**

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

Fellows:
- None

Dental Students:
- The Dental Public Health Clinics hosted a total of seven third year dental students from the University of Alberta on an elective rotation in “Hospital Dentistry”.

**Research**

**Division of Adult Dentistry**

- Canadian Optically Guided Approach for Oral Lesions Surgical Trial (C OOLS Study) with The Terry Fox Research Institute – (Clinical Lead in the Calgary Zone is Dr. Dort). Dr. Kalaydjian is an FV specialist and co-investigator in AHS Calgary Zone.
- Clinical Trial (SWOG S0307). ‘Phase III Trial of Bisphosphonates as adjunctive therapy for Primary Breast Cancer.’ (Clinical Lead is Dr. Patterson, Tom Baker Cancer Centre).
- Clinical Trial (RTOG 1016). ‘Phase III Trial of Radiotherapy plus Cetuximab versus Chemotherapy in HPV-Associated Oropharynx Cancer.’
- The FMC Dental Clinic Hospital Dentists also participated in a research project with Dr. William Connors, R5, Infectious Disease, HPTP unit. The study was aimed at providing a care pathway for patients presenting with orofacial abscesses of dental origin.

**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 (N14-012)]

**Division of Community Dentistry/Dental Public Health Clinic Program**

- The clinics participated in one research project last 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 was to prevent repeat visits to the HPTP clinics by patients who could not afford to remove the infected tooth responsible for the abscess. This year, we continue our cooperation with the HPTP clinics by providing referral coupons with strict timelines in order to entice patients to come in for treatment. The project is partially funded by a Greenshield Insurance Company grant. Information will be collected on use of these referral coupons and presented to Greenshield.
Challenges

Responses to Issues

Division of Adult Dentistry
- Quality Assurance
- Continued peer-lead QA strategies for Dental Cases (i.e. M&M Rounds)
- Both the FMC Dental Clinic and the Dental Residency Program continue to maintain accreditation by the Commission on Dental Accreditation of Canada (CDAC)
- FMC DENTAL CLINIC
  - Dental Implants– it remains a challenge to operationalize as well as initiate the provision of dental implants to our patient population.
  - OR Access – Lack of dedicated OR blocks for our Special Needs patients at the FMC site continues to result in an increase in wait times for dental treatment under a general anesthetic. 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 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.
- 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 five years.
- 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 five 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 an inability to deliver optimal care within our target times.

Limited AHS Non-Hospital Surgical Facility (NHSF) funding to support the delivery of dental treatment under general anesthesia is restricting recruitment of the community-based pediatric dentists in the City of Calgary. Furthermore, as the cost of treatment per unit is increased at the NHSF, the amount of insured general anesthesia dental cases will decrease.

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.
- The program is experiencing a pronounced increase in emergency visits. Emergency visits consisted of approx 35% of our total work. This has resulted in longer wait times for dental treatment in our clinics thus; appointments are being scheduled 6 months out.
- We are unable to establish additional 1.0 FTE permanent dentist position until funding can be made available.
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
   • FMCDental 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 FMCDental 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 NHSF or rural OR's.
• FMCDENTAL 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 in the Access Improvement Measures (AIM) Program in June 2013.
    iv) Endodontist – 0.5 day per month minimum
• FMCDental Clinic
  • FMCDental Staff Dentists
    • Recruitment of General Practice Dentist/Special Needs Dentist – casual, replacements (based on need)

Division of Community Dentistry/Dental Public Health Clinic Program
• The Dental Public Health Clinics would need to recruit a 1.0FTE dentist to reduce wait times for patients and to increase capacity to see emergencies and/or urgent cases faster.
• An increase in Sr. Sylla Skaria’s FTE from 0.8 to 1.0 was requested this year and denied due to financial reasons.

Division of Pediatric Dentistry
• ACH Dental Clinic: 1.0 FTE Pediatric dentist
• Community workforce: plan to increase our current workforce to meet the demands of the population.

albertahealthservices.ca
Goals and Strategies
Division of Community Dentistry/Dental Public Health
- Need to maintain our standing as safety net for disadvantaged patients.
- To help reduce dental disparities in our region.
- To keep our target patient population from developing serious infections that necessitate emergency room visits, IV antibiotics in the HPTP clinic, hospital admission and/or surgical intervention. This will result in cost savings for the healthcare system.
- Ultimately, we would like to see the clinics spread beyond the City of Calgary and eventually become a more provincial program.
- Impact on other departments and zonal resources.

Division of Adult Dentistry
- continued collaboration and support from community partners.
- continued collaboration and support from other AHS Clinical Departments & Divisions (i.e. Department of Surgery, Section of OMFS).

Division of Community Dentistry/Dental Public Health Clinic Program
- The Dental Public Health Clinics are funded by Public Health and work to reduce the impact of dental disease on Urgent Care, the HPTP clinic and the Emergency Rooms by delivering care to disadvantaged people before they require assistance from these acute care sites.

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). This is a partnership of the FMC Dental Residency Program with OMFS and Adult Dentistry.

Division of Community Dentistry/Dental Public Health Clinic Program
- We continue to honour the continuity of care agreement with Sheldon Chumir Urgent Care which we developed in 2013. 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. We continue to function within the care pathway which we had created in collaboration with HPTP Clinics; this has been distributed to urgent care and ER's in the area in order to funnel patients in this direction rather than acute care. We have recently also provided referral coupons to entice low income patients to come for treatment in our clinics. We continue to work with HPTP to reduce recurrent visits due to dental infections. Public health is funding this to prevent greater costs in acute care.

Quality Assurance, Quality Improvement, and Innovation
Division of Adult Dentistry
- Quality Assurance
- Continue with peer-lead QA strategies for Dental Cases (i.e. M&M Rounds)
- Maintain accreditation for the FMC Dental Clinic and Dental Residency Program from the Commission on Dental Accreditation of Canada (CDAC)
• FMC Dental Clinic
  • Dental Implants Program
  • Complete work in progress such that can begin to offer treatment to patient population.

• CORRECTIONS
  • IPC
  • Continue working with IPC experts to address concerns and make service improvements within constraints of system (e.g. limited physical space, limited money)

Division of Community Dentistry/Dental Public Health Clinic Program
  • IPC
  • An IPC review was completed. The review was successful, no concerns were raised.
  • Access of Family Physicians to specialists
  • Talks with Mosaic and other PCN’s have been held in the past and the division would like to see more planned in the future. 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

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). This is a partnership of the FMC Dental Residency Program with OMFS and Adult Dentistry.

Division of Community Dentistry/Dental Public Health Clinic Program
  • We continue to honour the continuity of care agreement with Sheldon Chumir Urgent Care which we developed in 2013. 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. We continue to function within the care pathway which we had created in collaboration with HPTP Clinics; this has been distributed to urgent care and ER’s in the area in order to funnel patients in this direction rather than acute care. We have recently also provided referral coupons to entice low income patients to come for treatment in our clinics. We continue to work with HPTP to reduce recurrent visits due to dental infections. 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 (e.g. attending quarterly meetings, M&M Rounds, Region Wide Dentistry Rounds)

• FMC DENTAL CLINIC
  • Collaborate with FMC Dental Clinic Manager to fully operationalize the Dental Implant Program and begin to provide dental implant treatment to our patient population
  • 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 2016
  • 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 the ACH Dental Clinic Accreditation with the Commission on Dental Accreditation of Canada (CDAC).
• 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
• We look forward to 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 were implemented last year to channel underprivileged patients from ER’s, Urgent Care and HPTP clinics to our clinic for definitive low cost care. Providing innovative ways to encourage patient referrals and patient compliance with dental treatment.
• When funding from Public Health becomes available we would like to hire more fulltime dentists. This may not be possible in the short term as no increase in public health funding is planned to date.
• We would be glad to host dental residents for more days if the Dental GPR Program and Foothills Medical Centre Dental Clinic decide to increase the number of residents. This would solve a logistical clinical training space issue for the FMC Dental Clinic and would provide our clinics with a workforce to help more disadvantaged people.
• Maintain current standing with Commission on Dental Accreditation of Canada (CDAC).
Section of General Surgery

The Section is currently in a transition period. Dr. E. Dixon has taken over as Head from Dr. F. Sutherland this spring. As you know, Dr. Sutherland served a full 10-year term. Dr. Sutherland was at the helm when we worked within the Calgary Regional Health Authority up until this spring. He devoted a lot of time and energy to the Section over that 10-year span and has positioned us for on-going success. We will have a dinner to celebrate his time as Section Head this fall (November 2015) please set this aside and plan to attend.

As part of the transition period some of the organizational structure of the Section will change. A Clinical Executive will continue to oversee the Section business. As well, the Academic Committee will remain in place. We have struck a new Finance Committee that will oversee the Sectional funds and will help make strategic decisions about future fundraising endeavors. A permanent Recruitment Committee with broad representation will be formed and will control and oversee all future recruitment within the Section. Dr. Tony Maclean has taken over as FMC Site Chief of General Surgery. Dr. Maclean is one of the high volume colorectal surgeons in the city, in addition he is the past program director, and is currently very involved with the Royal College exams for both General Surgery and Colorectal Surgery. The group is very excited to have Dr. Maclean take over this very important role.

This past June saw all of the Chief Residents (Kwan, Morrissey, O’Keefe, Stewart, Grendar, Yoon) successfully pass their Royal College exams. This along with the recent successful Royal College review and approval of the residency program highlights the strength of our training program and the great job that Dr. Lloyd Mack has done over the past 5 years. Dr. Mack will be stepping down as Program Director after his very successful 5-year term this fall. We will be having a celebration sometime this fall to recognize all of Dr. Mack’s hard work. We are now accepting applications for Program Director.

This past year Dr. Janice Pasieka had the First Edition of her new textbook in endocrine surgery published “Surgical Endocrinopathies: Clinical Management and the Founding Figures” available through Amazon and Springer. This is truly an amazing accomplishment, and really is a confirmation of what a worldwide leader in her field she is recognized as. Dr. Chad Ball was recently invited to give one of the Dean’s Talks entitled ‘The next generation of trauma surgeon and trauma care’ these talks are created in a format similar to a TED talk – I would highly recommend that everyone watch it.

Dr. Elijah Dixon, General Surgery Section Chief
Academic production by Section members remains very high, as measured by peer reviewed publications and grant funding. Dr. Don Buie and Dr. Elijah Dixon were both promoted to the Rank of Professor of Surgery. We are additionally very excited about the new recruits that have or will be starting over the next few months. Dr. Chris Armstrong has been recruited to the RGH. He has expertise in Minimally Invasive Surgery and Education. Chris will be highly involved in the Simulation Centre and in developing CME events along with Dr. Anderson for the Section. Dr. Richi Gill has been recruited to the PLC as an expert in Minimally Invasive Surgery and outcomes based research. Dr. Gill will be very involved in the Bariatric Surgery Program. Dr. Antoine Bouchard Fortier has been recruited to the FMC within the Surgical Oncology group. Dr. Fortier will have a practice focused on breast cancer and advanced gastrointestinal malignancy. Dr. Paul McBeth has been recruited to the FMC and SHC. Dr. McBeth has expertise in Trauma, Critical Care, General Surgery and engineering. He will be taking over as the new Research Director of the Residency Program. Please join us in welcoming all the new recruits. We are extremely excited to have successfully attracted these outstanding, highly sought after individuals to our Section.

Despite our successful recruits, we are still in need of new surgeons especially at the SHC. Dr. Dunham has done a great job managing the resources at SHC and is now looking to recruit at least 2 new surgeons within the next few months. In addition, he has been working hard on getting a surgical program located at the SHC. Workforce planning at the SHC has been difficult this past year; we are however very optimistic that general surgery at the SHC is going to flourish over the next year and into the future.

We are very excited about the coming year. We plan on a year with a number of new recruits, hopefully a new program at the SHC that will really stabilize and strengthen general surgery at the SHC, the Section will set up and get running the Recruitment and Finance committees, and will begin to develop a longitudinal fundraising campaign.
SECTION STRUCTURE AND ORGANIZATION

- Administrative: Admin Committee
- Section chief: Dr. Michael Ashenhurst
- Program Director: Dr. Chris Hanson
- Fellowship Director: Dr. Andrew Crichton
- Undergraduate education: Dr. John Huang
- Course Five coordinators: Dr. Karen Verstraten and Dr. Vivian Hill
- Research Day: Dr. Bryce Ford
- The Section of Ophthalmology provides clinical services through Alberta Health Service facilities, Non Hospital Surgical Facility’s and private offices.
- There are outpatient clinics located at the Rockyview General Hospital and Alberta Children’s Hospitals.
- We operate at five non hospital surgical facilities for cataract and non-cataract ophthalmic surgery.
- We provide primary on call coverage for the five major hospitals in Calgary and subspecialty coverage for Southern Alberta.
- We have active residency and fellowship programs
- June 2014 marked Dr. K. Romanchuk's retirement from clinical practice. We all wish to thank Dr. Romanchuk for many years of dedicated service. We are actively searching for a clinical replacement. Dr. Romanchuk will continue on with research activities to complete some ongoing projects. Dr. Romanchuk also hopes to start painting.
- Drs. Michael Fielden and Chirag Shah have successfully completed the search and selection process for Medical retina academic appointment. Dr. Fielden will be staffing a medical retina clinic at RGH and Dr. Shah will be assisting with the ROP program.

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)
- On-call Subcommittee chaired by Dr. Nand Goel.
- Residency Program Committee chaired by Residency Program Director, Dr. Chris Hanson
- 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.)
- Calgary Ophthalmic Medical Technology Training Program at Rockyview General Hospital
- Subspecialty clinics at Rockyview General Hospital: cornea, glaucoma, Marfan's syndrome connective tissue disorders eye clinic, neuro-ophthalmology, ocular oncology, retina, solid organ transplant eye clinic, Adult Strabismus, urgent eye and Thyroid.
- Retinopathy of prematurity screening service to the Neonatal Intensive Care Units at Alberta Children's Hospital, Foothills Medical Centre, Peter Lougheed Centre, Rockyview General Hospital and South Health Campus.

The University of Calgary Ophthalmology program is presently in a transition phase following a Royal college review with intent to withdraw. We will under go an external review in two years.

The Royal College review has given us some direction for restructuring of the training program. These changes have been started this year.

RTC

The training program committee will be downsized to include the following staff.

- Dr. Hanson Chair- Program Director
- Elected Junior and Senior resident
- Dr. Feisal Adatia - Research Chair
- PGY1 coordinator (by correspondence)
- Dr. Ashenhurst - Section Head
- Dr. Fielden - Curriculum
- Dr. Fletcher - Evaluations
- Undergraduate teaching leader TBA
  (New recruit or Dr. Dotchin?)

| Membership in the Section of Ophthalmology 2014-15 |
|-----------------|-----------------|
|               | Adatia | V | Hill |
| Adatia         |         | A | Ghoul |
| Al Ghoul       |         | J | Huang |
| Anand          |         | P | Huang |
| A sandhurst    |         | J | Kassab |
| WF Astle       |         | A | Kherani |
| AE Ball        |         | F | Kherani |
| Bhamra         |         | AH | Kirk |
| Chow           |         | R | Lang |
| Cooper         |         | JA | McWhae |
| Costello*      |         | P | Mitchell |
| Chrichton      |         | RJ | Mitchell |
| Culver         |         | K | Punja |
| Demong         |         | KG | Romanchuk |
| S Dotchin      |         | PR | Savage |
| Douglas        |         | CM | Skov |
| AL Ells        |         | SS | Smith |
| WA Fletcher*   |         | S | Subramaniam* |
| B Ford         |         | JA | Van Westenbrugge |
| PF Gibson      |         | KL | Vestraten |
| HV Gimbel      |         | K | Warrian^ |
| N Goel         |         | E | Weis |
| J Gohill       |         | RG | Williams |
| P Gooi         |         | J | Wong |
| R Gordon       |         | JP | Wyse |
| C Hanson       |         | R | Yau |

*neuro-ophthalmology
^Locum
Program coordinators will be:
- Comprehensive - Bill Chow
- Cornea - Peter Huang
- Glaucoma - Patrick Gooi
- Pediatrics - Linda Cooper
- Plastics - Karim Punja
- Retina - Patrick Mitchell
- Surgical teaching (R. Mitchell)

The surgical teaching coordinator will be responsible for tracking and organizing the surgical teaching experience for the residents to ensure adequate surgical exposure.
- A resident mentoring program has been instituted and an external ombudsman has been engaged.
- The On-call duties for the residents have been adjusted.
- Teaching curriculum has been formalized and updated.
- Significant work groups. Workshops were run this year for RGH surgery utilization and Block booking protocol changes including incentives for surgical teaching.

Membership

ACCOMPLISHMENTS AND HIGHLIGHTS

New staff

Clinical Service
- Dr. Christopher Hanson has transitioned to full time comprehensive practice based at the Rockyview Hospital.
- An indirect diode laser was purchased for treatment of retinopathy of prematurity in the Foothills Medical Centre, Neonatal Intensive Care Unit
- We are very excited to announce that Dr. Brenda 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 program receives referrals from all over Canada. 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 one new resident Dr. Paul Huang in the PGY1 year as per our CARMS match.
- Dr. Lisa Lagrou and Adam Muzychuk successfully passed their Royal College Certification in 2015.
- Fellows
- We presently have fellows training in our Retina and Oculoplastics programs. We are participating in the re-structured billing program for fellows with in Department of Surgery
- 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.
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 are considering engaging a full or part time clinical coordinator for the ROP program.

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 centres) as well as southern Alberta and the Crowsnest Pass area.

CURRENT OMFS COMMITTEES AND COMMITTEES THAT OMFS ARE PART OF:

- City wide surgical executive committee.
- 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.
- Hyberac oxygen committee for oral and maxillofacial surgery HBOT requirements.
- Alberta head and neck cancer centre committee.
- Pediatric surgery division and operating room committee at the Alberta Children's Hospital.
- Office of surgical research committee.

CLINICS

The OMFS Section provides OMFS services at the Foothills hospital through the Foothills hospital dental clinic. Dr. G. Cobb, Dr. S. Higashi, Dr. M. Smith and Dr. S. Touchan rotate through the 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. Tobial Meiszinger and Dr. Evgeniya Kazachenko) rotated through our service (hospital and office). Plastic surgery residents (Dr. Rebeca Hartley and Dr. Kody Johnson) also did a two week rotation through our service this year (hospital and office).
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.
Section of Orthopedic Surgery

Section Structure and Organization

Current Committees

- Orthopaedic Executive Committee
- Operations Committee (Site Chiefs)
- Orthopaedic Surgery Residency Training Committee – OSRTC (Education Leads)
- Orthopaedic Surgery Fellowship Training Committee (Fellowship Program Directors)
- Research Committee (Research Leads)
- Education Committee (Education Directors)

Director, Research Committee: Dr. Paul Salo has taken on the directorship and will be working with Orthopaedic Faculty and the McCaig Institute to promote research collaboration between clinical faculty and non-clinical researchers in bone and joint health.

- Education Director: Dr. Carol Hutchison was appointed to this role in July 2014.
- Sue Miller was hired in September 2014 as the new Manager for the Academic Operations Office.

Programs

Membership

- Sadly on March 5, 2015, Dr. Cy Frank passed away. He was a Cumming School of Medicine Department of Surgery faculty member for over 30 years and served as Division Chief, Orthopaedics from 1997 to 2007. He received many awards and accolades over his distinguished teaching/academic research career. He will be greatly missed by his colleagues and friends.
- The membership count on April 1, 2014 was 58 teaching faculty and 5 non-clinical faculty.
- Dr. Raj Sharma and Dr. Stephen Hunt started in the summer of 2014. Drs. Michael Monument, Jeremy LaMothe, Ryan Martin, and Alex Soroceanu started in the fall of 2014.
- Dr. Norman Schachar announced he will take a terminal sabbatical in 2014/2015 and will stop his orthopaedic operative practice.
- Dr. Lowell van Zuiden announced in 2014 he would be stopping his operative practice.

ACCOMPLISHMENTS AND HIGHLIGHTS

Education

- Medical Students (Dr. Lewkonia was the Clerkship Director and Dr. Hutchison was the MSK Course II Chair)
- Post-Graduate Medical Education (PGME)
- Residents
- The Orthopaedic Surgery Residency Program enjoyed the following Visiting Professors in the 2014 academic year, enhancing the resident learning experience:
  - Dr. Mininder Kocher from Boston Children’s Hospital in conjunction with the 2nd Annual Calgary Orthopaedic Resident Research Day
  - Dr. Paul Beaule from the University of Ottawa
  - Dr. Theddy Slongo from the Children’s University Hospital, Bern Switzerland
  - Dr. Roberto Guarniero from the University of Sao Paulo, Brazil
  - Dr. Brent Hagel from the Alberta Children’s Hospital
- 2014 Canadian Orthopaedic Resident Forum (CORF) was held April 4th-7th at the Fairmont
Palliser Hotel. CORF was attended by 80 final year Orthopaedic Residents and 1 auditor. Educational and oral examination sessions were facilitated by 36 Faculty members from across the Nation.

- 6 Residents successfully passed their Royal College Examinations.
- We had 5 new Residents start on July 1, 2014.
- Graduate Medical Education (Fellows)
- Dr. Raul Kuchinad, orthopaedic fellowship Program Director, has nine active fellowship programs.

Fellows in the orthopaedic fellowship program from April 1st, 2014 – March 31st, 2015 were as follows:

<table>
<thead>
<tr>
<th>Name</th>
<th>Specialty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saleh Alsaifi</td>
<td>Paediatric</td>
</tr>
<tr>
<td>Rajpal Bhandal</td>
<td>Paediatric</td>
</tr>
<tr>
<td>Farid Bouhouf</td>
<td>Combined Spine</td>
</tr>
<tr>
<td>Kate Campbell</td>
<td>Combined Spine</td>
</tr>
<tr>
<td>Nathan Deis</td>
<td>Combined Spine</td>
</tr>
<tr>
<td>Nicholas Desy</td>
<td>Trauma</td>
</tr>
<tr>
<td>Eoin Fenton</td>
<td>Combined Spine</td>
</tr>
<tr>
<td>Kanwaljeet Garg</td>
<td>Combined Spine</td>
</tr>
<tr>
<td>Sebastian Guenkel</td>
<td>Hand &amp; Wrist</td>
</tr>
<tr>
<td>Kristine Haugo</td>
<td>Combined Spine</td>
</tr>
<tr>
<td>Steve Hunt</td>
<td>Foot &amp; Ankle</td>
</tr>
<tr>
<td>Parag Jaiswal</td>
<td>Joint Reconstruction</td>
</tr>
<tr>
<td>Angus Jennings</td>
<td>Foot &amp; Ankle</td>
</tr>
<tr>
<td>Joby John</td>
<td>Joint Reconstruction</td>
</tr>
<tr>
<td>Pablo Krainz</td>
<td>Paediatric Spine</td>
</tr>
<tr>
<td>Ian Lutz</td>
<td>Joint Reconstruction</td>
</tr>
<tr>
<td>Michael Loewen</td>
<td>Banff Sport Medicine</td>
</tr>
<tr>
<td>Martin Mangupli</td>
<td>Trauma</td>
</tr>
<tr>
<td>Brad Meulenkamp</td>
<td>Trauma</td>
</tr>
<tr>
<td>Yohei Ono</td>
<td>Upper Extremity</td>
</tr>
<tr>
<td>Parham Rasoulinjad</td>
<td>Combined Spine</td>
</tr>
<tr>
<td>Narendra Ramisetti</td>
<td>Arthroscopy</td>
</tr>
<tr>
<td>Jonathon Sharr</td>
<td>Trauma</td>
</tr>
<tr>
<td>Alexandra Stratton</td>
<td>Combined Spine</td>
</tr>
<tr>
<td>Antonio Tsahtsalis</td>
<td>Combined Spine</td>
</tr>
</tbody>
</table>
The 7th Annual Fellows Research Symposium was held on Wednesday, May 7th, 2014. Presentations were given by 12 of the current fellows. It was a very successful event. Our guest adjudicator was Dr. Paul Beaule from the University of Ottawa. Local adjudicators were Dr. Ian Le and Dr. Ken Thomas. Dr. Marcia Clark moderated the event.

The awards were as follows:
- 1st Place and recipient of the Norman Schachar Research Award was Joby John, Joint Reconstruction Fellow.
- 2nd Place was Martin Mangupli, Trauma Fellow.
- 3rd Place was Kate Campbell, Combined Spine fellow.

CME
- The 17th Annual Glen Edwards Day: May 23rd, 2014 at the Health Sciences Centre; hosted by the Spine Division. 2014 Glen Edwards Day had 111 attendees. 2015 will be hosted by the Arthroplasty Division.
- Afternoon in Arthroplasty: Monday, September 22nd, 2014, at the Radisson Hotel. This public Education course for patients waiting for or curious about Hip and Knee Replacement Surgery was well attended.
- The 42nd Annual Paediatric Orthopaedic Seminar and Townsend Lecture: Friday, October 24th, 2014 at the Calgary Winter Club with guest speakers Dr. Roberto Guarniero (Brazil) and Dr. Theddy Slongo (Switzerland) and local speakers Dr. Brent Hagel and Dr. Fabio Ferri-de-Barros and giving the RD Dewar Lecture.
- Citywide Orthopaedic Surgery Rounds are held the third Friday of every month except July and August.

Research Highlights (Residents)
- In 2014 the Research Portfolio awarded a total of 3 COREF research grant applications. A total of $12,321.00 was awarded.

Research Awards
- Resident Research Day (April 11, 2014)
- 1st Place and the recipient of the Dr. Robert Townsend Scientific Award
  - Dr. Jaret Woodmass
  - “Suture Locking of Interference Fit Knotless Suture Anchors are Affected by Bone Quality”
- Best Junior Presentation Award
  - Dr. Jennifer Leighton
  - “Prospective Abuse and Intimate Partner Violence Surgical Evaluation (PRAISE-2)”

COREF Grants
- Dr. Devin Lemmex 2014 COREF Grant Award, $4,021.00 “Orthopaedic Research Portfolio Grant Application - Loading of the Paediatric Hockey Wrist During Hockey Slap Shots”.
- Dr. Jennifer Leighton 2014 COREF Grant Award, $5,000.00 “Orthopaedic Research Portfolio Grant Application - Unicondylar Knee Arthroplasty Versus Total Knee Arthroplasty in Patients with Anteromedial Osteoarthritis of the Knee”.
- Dr. Sebastian Guenkel 2014 COREF Grant Award, $3,300.00 Orthopaedic Research Portfolio Grant Application – “Accuracy of Surgeon Assessment of Intra-Operative Fluoroscopy”.
- Dr. Angus Jennings 2014 COREF Grant Award, $5,000.00 “Does SPECT-CT Guide/Change Management in Foot and Ankle Surgery?”

Research Highlights (Faculty)
- The Faculty Research Symposium took place on Monday, June 2nd, 2014. Faculty presented their latest research, and to encourage collaboration with the McCaig Institute Steve Boyd presented an update on the Mobility and Joint Health Facility.
CHALLENGES

Response to Issues
- On call support for Surgeons

Ongoing Matters and Plan of Action
- There have been concerns about On Call coverage as resident numbers decrease. A Clinical Assistants program has been developed and overseen by Dr. Linda Mrkonjic to train Clinical Assistants to cover call at Calgary acute care sites.
- Another challenge is the lengthy wait lists for patients to see Orthopaedic surgeons and then to get to the OR. Orthopaedics is recruiting further surgeons as well as exploring other management processes and continuing to advocate for more surgical resources.

WORKFORCE PLANNING

Future Needs
- In Fall 2015, two new recruits will start. Dr. Alex Reszanoff, Soft-tissue knee will be at PLC and Dr. Prism Schneider, Trauma/Research at FMC.
- Recruitment for 2016 will be for a Foot and Ankle Trauma position and a Paediatric position with an interest in Sport Medicine.

Goals and Strategies
- New recruits are encouraged to become members of the McCaig Institute for Bone & Joint Health and to collaborate in research.

QUALITY ASSURANCE, QUALITY IMPROVEMENT, AND INNOVATION

Access of Family Physicians to specialists (See Challenges)
Patient flow through the Emergency Department
Section of Otolaryngology
Head & 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)

- President Alberta Society of Otolaryngology
  - Dr. SP Chandarana

- Surgical Representative – Executive Committee, Provincial Tumor Group - Head and Neck Cancer
  - Dr. Jennifer Matthews

Programs

- Resident Training Program – the program currently accepts one and two residents on alternating years through the CaRMS process
- Senior Medical Director – Cancer Strategic Clinical Network
  - Dr. JD Bosch
- Bone Anchored Hearing Aid Program, Drs. J Chau, E. Lange and W Yunker
- Cochlear Implant Program, Dr. P Park (Adult and Children), Dr. J Brookes (Children)
- University of Calgary – Head and Neck Surgical Oncology Program (HNSOP) – Dr. J Dort (Drs. TW Matthews, SP Chandarana, C Schrag (Plastic Surgery)
- The University of Calgary HNSOP welcomes Dr. Jennifer Matthews (Plastic Surgery). Dr. Jennifer Matthews joined the University of Calgary HNSOP in January 2015.

ACCOMPLISHMENTS AND HIGHLIGHTS

Highlights

University, Zone, Provincial and National Professional Service

Dr. JD Bosch
- President Alberta Society of Otolaryngology
- Dr. SP Chandarana
• Surgical Representative – Executive Committee
  University of Calgary Medical Group
• Member – Calgary Zone Medical Staff Support
  Framework Alberta Health Services/University of
  Calgary
• Chair – Major Clinical Surgeons, Executive
  Committee, University of Calgary Medical Group,
  Department of Surgery
• Member – Minor Surgery Clinic Task Force -
  Department of Surgery, University of Calgary
• Member – Provincial Tumor Group for Endocrine
  Cancer Alberta Health Services
• Director – Residents’ Clinic, University of Calgary,
  Division of Otolaryngology: Dr. JC Dort
• Director of Ohlson Research Initiative, Ohlson
  Professor of Head and Neck Surgery
• Member – Provincial Tumor Group for Head and
  Neck Cancer Alberta Health Services
• Appointed the Director of the Provincial Oncology
  Strategic Clinical Network
• Co-Chair AHS Provincial Head and Neck Oncology
  Team: Dr. D Drummond
• Received the Resident Teaching Award from the
  Otolaryngology Program 2015: Dr. E Lange
• Site Lead, Department of Surgery SHC: Dr. TW
  Matthews:
• Chair, Royal College of Physicians and Surgeons
  Specialty Committee (Otolaryngology – Head
  and Neck Surgery)
• Member – Provincial Tumor Group for Head
  and Neck Cancer Alberta Health Services: Dr. LR
  Rudmik
• Promoted to Associate Professor, Surgery
  Adjunct Associate Professor in the Department
  of Otolaryngology Head and Neck Surgery at the
  University of Arizona
• Petro Canada Young Innovator Award in
  Community Health
• 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
• Research Committee for American Rhinologic
  Society – Member
• Clinical Investigator Program – Department of
  Surgery Representative
• Department of Surgery Research - Committee
  Member: Dr. W Yunker
• Alberta Children’s Hospital Patient Flow Committee
  Member, 2015
• President Alberta Children’s Hospital Medical Staff
  Association, 2015-2016
• Early Hearing Detection and Intervention Program
  Initiative: High Level Care Pathway Working Group
  Member, 2015
• Board member – Alberta Society of Otolaryngology,
  2013 – present
• Alberta Society of Otolaryngology Representative
to the Alberta Medical Association, 2013 – present
• Family Medicine Resident Elective Coordinator,
  University of Calgary, Otolaryngology – Head and
  Neck Surgery Residency Training Program, 2011 –
  present: Dr. B Hoshowsky
• The Hoshowsky family has generously created the
  “Dr. Borys, Melanie, Larrissa and Halya Medical
  Education Bursary” to support undergraduate
  medical students at the University of Calgary.

Education
Residents
• Dieter Fritz (PGY5) graduated June 30, 2015
• Drs. Derek Randall (PGY5) graduated June 30, 2015
• Dr. Jon Dautremont (PGY4)
• Dr. Kristine Smith (PGY3)
• Dr. Carrie Liu (PGY2)
• Dr. Devon Livingstone (PGY2)
• Dr. Julie Lumingu (PGY1)
• Dr. Justin Lui (PGY1)

Medical Students
The following medical students completed clinical
electives in Otolaryngology – Head and Neck Surgery
at the University of Calgary
• Francisco Lee University of Calgary
• Alex Dyck University of Saskatchewan
• Dianne Valenzuela University of British Columbia
• Sung Ho Um University of Western Ontario
• Nicholas Tkaczy NOSM
• Isak Pavol University of Saskatchewan
• Jesse Ory University of British Columbia
• Marlon Danilweitz University of Ottawa
• Ayham Al Afif Dalhousie University
• Kwadwo Mponponsuo University of Saskatchewan
• Michael Yong University of Calgary
• Stephon Hamton Memorial University
• Neil Mundi University of Calgary
• Jeff Wells University of Calgary
• Charnelle Carlos University of Toronto
• Tara He University of Toronto
• Veronica Wong University of Manitoba
• Serena Nelko University of Manitoba
• Alain Joe Azzi University of Ottawa
• Mark Kubanski University of Alberta
• Joseph Soloman University of Calgary
• Brian Chang University of Alberta
• Mark Kubanski University of Alberta
• Christina Thrornton University of Calgary

Research
The academic activity of the Section’s 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.

CHALLENGES

Response to Issues

Ongoing Matters and Plan of Action
Access for clinic consultations and surgery remain issues in Otolaryngology. Rhinology, neurovestibular medicine and general otolaryngology are currently a stressed practice areas. 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 with expertise in neurovestibular disorders to the SHC.
  • Recruitment of an additional surgeon to each of PLC and RGH in 2016 as part of the succession of existing senior surgeons and to serve anticipated population needs. This includes a subspecialist laryngologist (PLC) and rhinologist (RGH). Additional recruitment to the FMC and RGH are being considered. The new otolaryngologists’ skill sets will complement the subspecialty focus of the site (see below) as well as the current clinical and academic priorities.
• 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 endocrine 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 improvement initiatives remain priorities for the Section. Current projects include appropriateness and cost effectiveness in the management of sinonasal disease (Dr. L Rudmik) oncologic and functional outcomes in head and neck oncology.
• Recruitment of new faculty to support the Neurovestibular Clinic at SHC will further improve access, diagnostic testing as well as research opportunities.

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.

Otolaryngology – Head and Neck Surgery is the first Royal College surgical specialty to transition to Competence By Design (competency-based medical education) with the first cohort of residents to enroll in July 2016.
Section of Pediatric Surgery

SECTION STRUCTURE AND ORGANIZATION

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

Pediatric Surgery Division Heads

- **Dentistry:** Dr. Marie-Claude Cholette
- **General Surgery:** Dr. Mary Brindle
- **Gynecology:** Dr. Phillipa Brain
- **Neurosurgery:** Dr. Walter Hader
- **Ophthalmology:** Dr. Michael Ashenhurst
- **Oral and Maxillofacial Surgery:** Dr. Miller Smith
- **Orthopedic Surgery:** Dr. Dave Parsons
- **Otolaryngology:** Dr. Derek Drummond
- **Plastic Surgery:** Dr. Donald McPhalen
- **Urology:** Dr. Anthony Cook

OVERVIEW AND HIGHLIGHTS

This past year has been busy for both the Section of Pediatric Surgery and for Surgery at the Alberta Children's Hospital. Having a dual role as Section Chief and Site Chief, the issues that arise often overlap. The majority of surgery in children under 18 years of age in the Calgary Zone is done at ACH, but there are also variable amounts (mostly in older teenagers) done at the adult zone. This year the focus has been around increasing the academic profile of the group, issues dealing with OR access for patients, and issues dealing with recruiting new surgeons.

The largest boost this past year in helping us to increase our academic profile came from Brian and Brenda MacNeill. They generously donated funds to develop the first Chair in Pediatric Surgery in Western Canada, which was announced in May 2014 and the terms of reference were finalized in November 2014. The Chair is linked to my position as Section Chief of Pediatric Surgery and Site Chief of Surgery at ACH. The purpose of the Chair is to foster a strong, progressive academic environment for Pediatric Surgery. A proposal on how to use the funding was presented to the Advisory committee in January 2015 and in March a call for Letters of Intent was sent to our section members for proposals on projects that would meet this purpose. Ten projects were submitted and reviewed by a selection committee consisting of experienced researchers. The successful project will be lead by Dr. Mary Brindle, entitled: The EQUIS OR (Efficiency, Quality, Innovation and Safety OR). It is a research platform to evaluate and improve outcomes and aligns nicely with the strategic priorities of ACHRI, specifically the Healthy Outcomes Pillar. The team is multidisciplinary and includes members from most of the Divisions in Pediatric Surgery and will collaborate with researchers from W21C, quality
improvement researchers at ACH and will also include members from nursing and anesthesia at ACH. The research platform will oversee multiple projects with the ultimate aim of benefiting the Pediatric population at ACH and worldwide and is expected to have a high likelihood of leading to sustainable outcomes.

Operating room access remains the busiest issue for our group. We continue to work on ways to optimize OR use. Challenges range from not having enough elective time with patients “out of window” (PCATS) to not being able to fill some days due to the nature of surgery in children or the types of problems with which a division deals to access for urgent cases to operating after hours. We reviewed and rewrote the guidelines for the OR and developed a Daily Task Force Team consisting of the Task Force Nurse (charge nurse), Daily on call Anesthesiologist, and Daily Surgeon. The Daily Surgeon is on a volunteer, rotating basis. This process has helped with daily prioritization decisions regarding bumping, late rooms, and overcapacity issues (ie. beds in hospital). We have also implemented other ideas such as half day urgent rooms during times of room closures (Spring, Summer, Christmas), an ICU bed decision flow chart, the Induction Room Process as an alternative for some inpatients, Short Stay Unit extension on certain weekends, changing some divisions elective time to urgent time, and allocating returned OR days to divisions with the largest numbers of patients out of window. We are also reporting monthly at our ACH OR committee on bumping and postponements, which has helped to increase awareness among the divisions.

I have seen an increase in the interest of our members in supporting the Section of Pediatric Surgery. This is not an easy task as most members are also members of their specific Adult based specialty. Many members have significant roles in those sections such as Rob Harrop and Michael Ashenhurst who are Section Chiefs of Plastics and Ophthalmology respectively. Others such as Derek Drummond are the research leads for their section while others are very involved at a provincial or national level such as Gerry Kiefer and the Physician Compensation Committee. We have had a resurgence of attendance at business meetings where the passion of the group is evident. We have gained a new division – Division of Pediatric Oral Maxillofacial Surgery with Miller Smith at the head. He has done a great job making himself available and showing interest in cleft palate patients with secondary deformities and in patients with oral tumors. We are losing some significant members. Drs. Hyndman and Romanchuk are retiring and they played significant leadership roles during their time. Bud Shandro is also stepping down leaving a void in community Pediatric ENT coverage. Recruitment for Pediatric Surgery Specialists has been difficult as the number of trained specialists is limited (both by limited numbers of fellowships and limited job opportunities). Neurosurgery has attracted a very important candidate who will by have a significant academic role at ACHRI – Dr. Jay Riva-Cambrin. Pediatric Ophthalmology and Pediatric Plastic Surgery are looking for new recruits. There are currently locums in Pediatric General Surgery, Pediatric Orthopedics and Pediatric Urology. One of the main difficulties with recruitment remains the lack of an Academic ARP that the other large Pediatric Hospitals in the country have (Sick Kids, UBC, CHEO). Nonetheless the future remains positive for our Section. People make the section and we have great people. I have taken information provided by the Division heads and summarized some of the highlights and future directives in each of the divisions below.

DIVISION OF PEDIATRIC DENTISTRY

Division Structure and Organization

DENTISTS (Offices on site)
- Dr. Marie-Claude Cholette (0.8 FTE) Division Head and Clinical Director, ACH Dental Clinic (1996-2008, Interim 2011- ). Examiner, Royal College of Dentists of Canada
- Dr. Christine Bell (0.8 FTE)

Members
Currently, there are 17 community Pediatric dentists in Calgary, of which 13 have AHS clinical privileges.
- Dr. Robert Barsky (ACH OR)
  - President of Alberta Academy of Pediatric Dentistry
  - Examiner for the Royal College of Dentists of Canada
  - Canadian Dental Specialist Association (CDSA) Board Member for the Canadian Academy of Pediatric Dentists
- Dr. Sarah Hulland (Clinic 0.1 FTE and ACH OR)
  - Western Society of Pediatric Dentistry - Vice President
  - Oral Health initiative for the Calgary Backpack Program, Director
  - Alberta Academy of Pediatric Dentistry - Past President
  - Alberta Academy of Pediatric Dentistry - Western Society Pediatric Dentistry Rep
  - Alberta Children's Hospital - Medical Staff Association - Vice President
- Dr. Warren Loeppky (ACH OR)
  - Examiner, Royal College of Dentists of Canada
  - Expert Panel of Reviewers and Advisors, Journal of The Canadian Dental Association
- Dr. Farida Saher (Clinic 0.1 FTE)
- Dr. Sandy Schwann (ACH OR)
  - Secretary/Treasurer, Alberta Academy of Pediatric Dentistry
- Dr. Tim Seto (Clinic 0.1 FTE)
- Dr. Michelle Thal (Clinic 0.1 FTE)

Also:
- Dr. Darrell Kemp – Orthodontist
  - (Contributes to Cleft Palate Clinic and works in Dental clinic ½ day Q2mths)
- Dr. Miller Smith – Oral and Maxillofacial Surgeon
  - (Contributes to Cleft Palate Clinic and works in Dental Clinic ½ day Q2mths)

**Programs**

**ACH DENTAL CLINIC**
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 and minimal/moderate oral sedation. If general anesthesia is required, patients are treated in the Alberta Children's Hospital operating room. The clinic also provides multidisciplinary care with input from orthodontists and oral and maxillofacial surgeons.

**CLEFT PALATE CLINIC**
The Dentistry team that contributes to this clinic include: Pediatric Dentists: Drs. Christine Bell, Marie-Claude Cholette and Sarah Hulland
Orthodontists: Drs. Michael Bindman and Darrell Kemp
Oral & Maxillofacial Surgeons: Drs. Doug Vincelli and Miller Smith
The team has provided in hospital delivery of nasoalveolar molding (NAM) appliances since 2005 and speech appliances for velopharyngeal insufficiency since 2013.

**NON HOSPITAL SURGICAL FACILITIES**
Community Pediatric dentists with AHS privileges also provide dental care for children under general anesthesia at AHS contracted Non-Hospital Surgical Facilities and participate in after-hour call services.

**Accomplishments and Highlights**
The ACH Dental Clinic underwent renovations this past year; the team continued to see patients during this time by accessing other hospital facilities. The patient numbers continue to increase and unfortunately the waiting times also continue to increase. There is tremendous pressure on the current staff due to this patient volume.

The ACH staff Pediatric dentists continue to welcome FMC General Practice Residency (GPR) residents for 4 weeks per year and Family Medicine and 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, Genetics and Pediatric Residents.
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)] (2014-present)

Future Directions and Initiatives

This upcoming fiscal year will see the addition of several community Pediatric dentists to help with the clinical load: Dr. Aimee Castro (0.2 FTE), Dr. Choo-Kar Kua (0.1 FTE). The Dental Clinic really needs another full time Pediatric dentist (1.0 FTE) but despite advocating and lobbying for another position over the last 5 years, this position has still not been approved. The team is working on trying to reduce wait times by reviewing the criteria for patients that should be seen in the clinic. Another goal is to hopefully develop a one-year postgraduate Pediatric Residency training program. Also the ACH Dental Clinic continues to look for areas where specialized Pediatric dentistry services can expand. Future areas of interest include a Comprehensive Orthodontic Clinic for Special Needs patients and a 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. Anna Shawyer (locum)
- Dr. Andrew Wong (Residency Program Director)

Changes in Members in the Past Year

Dr. Paul Beaudry was on sabbatical from July 2014 to June 2015. Dr. Anna Shawyer, a recent graduate from Hamilton, Ontario was hired as his locum.

Programs/Clinics

The Pediatric General Surgeons are actively involved in the care of Trauma patients, Oncology patients, Neonatal patients with complex GI problems, etc. The service also helps to run the ECLS/ECMO program at ACH.

Accomplishments and Highlights

Dr. Paul Beaudry, while on sabbatical, worked with his lab to develop innovative approaches to treating neuroblastoma; research which is supported by a recent grant from CRIO.

Dr. Mary Brindle has continued this year in her administrative roles. Also, her research in population health has received ongoing grant support by CIHR and she has published multiple peer-reviewed manuscripts including one article cited by the American Pediatric Surgical Association as a key article to be used to determine best practices in Pediatric surgery. She continues to mentor residents and graduate students in research.

Dr. Robin Eccles continues to run a formal educational program for all residents in Pediatric general surgery. This year, she was the official host and organizer of the yearly meeting of the Pacific Association of Pediatric Surgery—one of the largest international academic societies for Pediatric surgery.

Dr. Steven Lopushinsky has taken on the role of vice chair of the education committee at the Canadian Association of Pediatric Surgery in addition to his role as surgical lead of Pediatric trauma and associate program director. He continues to be recognized for his teaching at the undergraduate and graduate level receiving
numerous awards including the Bronze medal award for his teaching contributions at the medical school. He has mentored graduate students in educational research with resultant peer-reviewed publications and international presentations.

Dr. Anna Shawyer recently joined the division of Pediatric Surgery as a locum from McMaster where she completed her masters of science in health research methodology. She has published multiple peer-reviewed manuscripts since joining the division and has presented her research nationally.

Dr. Andrew Wong remains program director of Pediatric General Surgery and has assumed national recognition in his role as a leader in developing new educational and evaluative processes for Pediatric surgery. He continues to receive recognition and awards for his teaching at the undergraduate and graduate level. He was instrumental in the program receiving full accreditation from the Royal College this year.

**Future Directions and Initiatives**

The group has applied for an expansion to their clinical ARP to include a sixth Pediatric General Surgeon. They are hoping to recruit during the next fiscal year. Dr. Mary Brindle will be taking a sabbatical starting in August 2015 and spending time at Harvard. Dr. Brindle will also use this time to develop the EQUiS platform for research sponsored by the Brian and Brenda MacNeill Chair in Pediatric Surgery.

**Division of Pediatric Gynecology**

Division Head: Dr. Philippa Brain, Division Head Pediatric Gynecology & Western CANPAGO representative

**Members**
- Dr. Jaelene Mannerfeldt
- Dr. Sarah McQuillan

**Programs/Clincs**
The Pediatric Gynecology team runs 6 clinics per month and has 1 OR day per month. The number of patients continues to increase yearly. All members work at FMC as well. The majority of cases in patients under 18 years of age are done at ACH.

**Accomplishments and Highlights**
The members are actively involved in education at the undergraduate, post graduate and masters level. Dr. Kathy Kenny obtained her Masters of Ethics with her project: Evaluating perspectives in gender assignment in children with ambiguous genitalia and disorders of sexual development. Pediatric and Endocrine fellows often attend the Pediatric Gynecology clinics as well. Dr. Brain actively presents on various topics including: Hormonal contraception and adolescents, Pediatric gynaecological emergencies, the female athlete triad, polycystic ovarian syndrome, nutrition and adolescence, vulvar ulcers, care of a Pediatric periclitoral mass, etc. Dr. McQuillan is the newest addition to the group and has published articles on vaginal agenesis.

**Future Directions and Initiatives**
The Division of Pediatric Gynecology at the University of Calgary has close ties to the Division of Pediatric Gynecology at UBC. There are intentions of developing a western fellowship in Pediatric and Adolescent Gynecology between these two universities. The group is also working with the endocrine team to come up with a joint triage process for polycystic ovarian syndrome patients and working with the hematology clinic to develop a screening tool for teens with bleeding disorders. The group also hopes to increase the number of clinics to decrease the waiting time for patients.
DIVISION OF PEDIATRIC NEUROSURGERY

Division Structure and Organization

Division Head – Dr. Walter Hader

Members
- Dr. Clare Gallagher
- Dr. Mahmood Benour (Locum)

Dr. Mark Hamilton closed his Pediatric Neurosurgery practice to focus on adults. Dr. Benour, having just completed his Pediatric Neurosurgery fellowship, took on a locum position from July 2014- Sept 2015.

Programs/Clinics
Neurosurgery Clinic - All members participate.
Craniofacial Clinic
  Dr. Gallagher with Dr. R. Frank (Plastic Surgeon)

Accomplishments and Highlights

The generous donation from Brian and Brenda Macneill (via ACH Foundation) has greatly enhanced the epilepsy surgical program through the purchase of a stereotactic robot, ROSA, utilized for the implantation of depth electrodes in epilepsy investigations. Multiple children have benefited already from this safer and less invasive approach to intracranial EEG monitoring.

Institution of an operative quality assurance protocol for the management of ventriculoperitoneal shunt infection that was initiated in May of 2013, has shown dramatic improvements in the rate of shunt infection at the Alberta Children’s Hospital. Adherence to the protocol has been excellent at over 95 %, and over the initial two years of prospective monitoring no new infection has been identified. Thanks goes out to the operating room staff for their diligence in following the protocol.

Future Directions

Recruitment of a new academic Pediatric Neurosurgeon was completed in March 2015. Dr Jay Riva-Cambrin, currently in Utah, will join the team in September of 2015. He will bring a wealth of clinical research experience to Calgary as part of an international hydrocephalus network.

DIVISION OF PEDIATRIC OPHTHALMOLOGY

Division Structure and Organization

Division Head: Dr. William F. Astle

Members
Onsite:
- Dr. Linda Cooper, Residency Program Director, Ophthalmology
- Dr. Ken Romanchuk

Offsite:
- Dr. Michael Ashenhurst, Division Head Pediatric Ophthalmology, Section Head Ophthalmology
- Dr. Stephanie Dotchin
- Dr. Anna Ells
- Dr. Brenda Gallie
- Dr. Vivian Hill
- Dr. Femida Kherani
- Dr. Carolyn Skov

CHANGES IN MEMBERS IN THE PAST YEAR:
Dr. Brenda Gallie, world expert on Retinoblastoma, based out of the Toronto Hospital for Sick Children, joined the Division and runs a retinoblastoma clinic bimonthly.

Programs/Clinics
- ACH Vision Clinic – Drs. Astle, Cooper, Romanchuk
- Retinoblastoma Clinic (Dr. Gallie)
- Retinopathy of Prematurity Follow up Clinic (Run by Dr. Ells for many years. She stepped down from the clinic this year.)
Oculoplastic Clinic – Dr. Kherani
Vascular Birthmark Clinic – referrals for patients at risk for eye problems associated with hemangiomas or capillary malformations.

Accomplishments and Highlights

The Vision Clinic remains very busy treating Pediatric patients with strabismus, glaucoma, cataracts, and low vision. Wait times for appointments have increased again this past year.

A new retinoblastoma clinic was developed this year. Patients previously were sent to Toronto to Dr. Gallie’s clinic at the Hospital for Sick Children. Now patients with this rare tumor, who live in Alberta, can be monitored and evaluated here in Calgary.

Neonates are screened for Retinopathy of Prematurity (ROP) in NICUs at all 5 hospitals across the city. The logistics of covering the 5 hospitals and keeping track of patients, even when they are transferred between sites, has been a stress to the division.

Future Directions

Dr. Ken Romanchuk is retiring at the end of June 2015. The Division is recruiting for his replacement. The goal is for the new recruit to organize the ROP program for the city along with a nurse coordinator, for whom funding has been recently approved.

DIVISION OF PEDIATRIC ORTHOPEDICS

Division Structure and Organization

Dr. David L. Parsons - Division Head Pediatric Orthopedic Surgery, Royal College of Physicians and Surgeons of Canada Examiner, Royal College of Physicians and Surgeons Orthopedic Specialty Committee
Dr. Carmen Brauer
Dr. Chukwudi Chukwunyerenwa (Locum)

Accomplishments and Highlights

There was a continued increase in the number of referrals, both elective and fractures, to the Orthopedic clinic. This stimulated the need for a Quality Improvement project and the clinic staff and Orthopedic team completed an AIM project to streamline referral patterns and wait times. This led to the addition of a booking clerk who booked fracture patients directly, thereby reducing phone calls. The clinic also saw the addition of 2 full time and 1 part time Orthopedic technologists.
Dr. Dave Parsons was a visiting professor at the Riyadh King Faisal Hospital and also served as an External Examiner. The spine team (Drs. Ferri-de-Barros and Parson) published their skull femoral traction technique for scoliosis showing improved outcomes for patients. They also presented these findings at several meetings. The Spine team has also recently received a substantial ACH Foundation Child Health Grant to look at surgical simulation for Scoliosis Surgery Training. Dr. Ferri-de-Barros was also involved in a study evaluating a staging system for Legg Calve Perthes Disease.

Dr. Simon Goldstein achieved his Certified Canadian Physician Executive (CCPE) recognition. He was also involved in a collaborative research project looking at Resident Sleep Hours.

Dr. Elaine Joughin is involved in multiple research projects looking at simple bone cysts in kids, safety and efficacy of the synoviorthesis procedure, and PRISM.

Dr. Gerry Kiefer published on slipped capital femoral epiphyses and congenital limb deficiencies in Alberta. He also has a grant to look at inflammatory biomarkers in hip dysplasia.

The Orthopedic team also published a prospective randomized controlled trial on different treatments for congenital idiopathic clubfoot.

**Future Directions**

Dr. James Harder is planning to retire in 2016 and a new recruit has been identified, hopefully starting in July 2016. The new recruit will have a focus in sports medicine for young adolescents.

**Programs/Clinics**
- Pediatric Multidisciplinary Dental Clinic (Dr. Miller Smith)
- Cleft Palate Clinic (Drs. Smith and Vincelli)

**Accomplishments and Highlights**

This past year was the first year Oral Maxillofacial surgery was assigned dedicated OR time. Previously the members used scramble time or time donated by Pediatric dentistry. The number of patients treated in the OR has increased in the past year. Some Pediatric patients are still managed at PLC if medical history allows for uncomplicated care.

**Future Directions**

The Section of Oral Maxillofacial surgery is planning to officially designate Pediatric OMFS as a separate division in June 2015. The service provided by OMFS will continue to increase at ACH. There are also plans for future research projects in the areas of Cleft Lip and Palate Surgery and Obstructive Sleep Apnea management.

**DIVISION OF PEDIATRIC OTOLARYNGOLOGY**

**Division Structure and Organization**

**PHYSICIANS (Offices on Site)**
- Dr. Derek Drummond - Division Head Pediatric Otolaryngology, Research Director, Section of Otolaryngology
- Dr. James Brookes
- Dr. Warren Yunker

**PHYSICIANS (Offices off Site)**
- Dr. Jason Chau
- Dr. Monica Hoy
- Dr. Ian Huang
- Dr. Anita Hui
- Dr. Beth Lange
- Dr. Phil Park
- Dr. W. Shandro
Programs/Clinics

- ENT Clinic
- Cleft Palate Clinic
- Dysphagia Clinic
- Hearing Clinic
- Microtia Clinic
- Tracheostomy Clinic
- Vascular Malformations Clinic
- Voice Clinic

Accomplishments and Highlights

The ENT clinical service remains one of the highest volume services in Pediatric surgery having seen over 8000 patients last year. The members are actively involved in teaching at all levels. Dr. Drummond received the Resident Teaching Award for ENT in 2014-2015.

Dr. Yunker continues with presentations and research in the areas of the Pediatric Upper Airway Microbiome, Overnight oximetry in patients undergoing adenotonsillectomy, non antibiotic treatment of otitis media, epistaxis prevention, and Kawasaki disease associated sensorineural hearing loss.

Dr. Monica Hoy has joined the Surgical Undergraduate Education Committee as the ENT representative and she continues to do her Masters of Medical Education while maintaining a busy practice.

Future Directions

Dr. W. Shandro is retiring in June 2015 and his OR time will be redistributed among the members. Dr. James Brookes was appointed the Residency Training Program director for Otolaryngology starting in July 2015.

DIVISION OF PEDIATRIC PLASTIC SURGERY

Division Structure and Organization

PHYSICIANS (Offices on Site)
- Dr. Don McPhalen - Division Head Pediatric Plastic Surgery
- Dr. Jocelyn Dilay
- Dr. Ryan Frank
- Dr. Frankie Fraulin - Section Head Pediatric Surgery, ACH Site Chief of Surgery
- Dr. Rob Harrop - Section Head Plastic Surgery

Programs/Clinics

- Plastic Surgery Clinic
- Brachial Plexus Clinic
- Burn Clinic
- Cleft Palate Clinic
- Complex Upper Extremity Clinic
- Craniofacial Clinic
- Microtia Clinic
- Vascular Birthmark Clinic

Accomplishments and Highlights

The clinical volume has continued to increase over the past year with record numbers of patients seen in the Plastics clinic, the Vascular Birthmark Clinic and the Cleft Palate Clinic. We are looking at various ways to deal with capacity issues. The significant increased number of referrals from Emergency has increased the number of urgent patients seen, but has displaced the elective patients causing a significant increase in wait times.

The group remains very active in teaching medical students and residents who rotate through the service. Dr. Donald McPhalen completed his 8th year as an examiner for the Royal College. He is an active member of the Master Teacher program and has received multiple awards in the past year for his teaching including the Associate Dean's letter of Excellence for teaching in Communications, Physical Exam, Course 1, Course 4 and he also received a Gold Star Faculty Appreciation award for teaching in Physicianship. He
is also the Medical Director of the Kananaskis Country Public Safety Mountain Rescue Group.

Dr. Rob Harrop leads the Section of Plastic Surgery. He also serves as Secretary Treasurer for the Canadian Society of Plastic Surgeons (CSPS) and is on the Education Foundation of the CSPS. Along with Dr. McPhalen, he supervises a grad student looking at craniofacial growth patterns following cleft lip and palate reparative surgery. He has had several presentations in the past year and several publications on topics including cleft lip and palate, sternal wound dehiscence, and head and neck reconstruction.

Dr. Ryan Frank participates in the National Residents review course in Plastic Surgery. He also organizes the medical students and residents for the group and represents the site on the Residency Training Committee.

Dr. Frankie Fraulin represents the Section of Pediatric Surgery and the ACH site on various zone committees. In addition he continues as the Surgical Undergraduate representative for Plastic Surgery. He completed a 3-year term as Secretary-Treasurer of the Alberta Society of Plastic Surgeons. He is involved in several research projects with residents looking at the use of smart phones for clinical photography and reviewing hand fractures. He remains a board member of Project Outreach.

### Future Directions

The division is currently in the process of recruiting a new full time Pediatric Plastic Surgeon.

---

### DIVISION OF PEDIATRIC UROLOGY

#### Division Structure and Organization

**PHYSICIANS (Offices on Site)**
- Dr. Anthony Cook - Division Head Pediatric Urology
- Dr. William Hyndman
- Dr. Bryce Weber - Director Undergraduate and Graduate Education Pediatric Urology

#### CHANGES IN MEMBERS IN THE PAST YEAR:

This was Dr. Hyndman's last full year on staff. He is retiring at the end of June 2015. He was the Section Head of Pediatric Surgery for 6 years, having stepped down in January 2014. His dedication to patient care is admirable; his expertise is second to none; his even mannerisms and nature will be missed. He truly is a gentleman of Urology. He received the Award for Significant Contribution to ACH this year at Surgeon’s Day.

**Programs/Clinics**
- Pediatric Urology Clinic, Alberta Children’s Hospital and South Health Campus
- Joint Nephrology/Urology Clinic
- Joint Multidisciplinary Myelomeningocele Clinic

#### Accomplishments and Highlights

The members strive for excellence within the four pillars, i.e., administration, teaching, research and clinical. Pediatric Urology continues to be an extremely busy service from a clinical perspective. Referrals have increased approximately fifteen percent over the previous year, as has operative interventions. All members are involved with undergraduate and graduate urologic education from medical student formal lectures, elective and selective opportunities, to postgraduate family practice education and urologic fellowship training. Dr. Fermin-Risso is the fourth fellow to complete a paediatric urological fellowship at ACH over the past six years.
Clinical research continues to be an integral facet of the division. All members are involved with clinical research; two such projects have recently been presented at the national Canadian urology meeting including our experience with vesicoureteral reflux and Pediatric renal trauma. A randomized surgical trial looking at the efficacy of intravesical Botox vs placebo is ongoing. ACH is the world leader with respect to patient recruitment, i.e. over half of the patients presently enrolled in this global trial have been from within the division.

**Future Directions**

Dr. Carolina Fermin-Risso has finished her Pediatric Urology fellowship and is starting a locum for the next year. She is an excellent addition to the Pediatric Urology team. Recruitment for a Pediatric Urologist to replace Dr. Hyndman will begin in early 2016.

Ongoing quality assessment initiatives will continue to guide excellent patient care outcomes. Education and research opportunities will continue to maintain the division as a national leader in Pediatric urologic healthcare.
Section of Plastic Surgery

SECTION STRUCTURE AND ORGANIZATION

Current Committees

Plastic Surgery Executive
- Section Head – Rob Harrop
- Resident Training Program Director – David McKenzie
- Research Director – Claire Temple-Oberle
- CME Director – Earl Campbell
- Undergraduate Medicine Director – Frankie Fraulin
- Rounds Coordinator – Christiaan Schrag
- FMC Site Chief – William de Haas
- RGH Site Chief – Mark Haugrud
- PLC Site Chief – Alan Lin
- ACH Site Chief – Don McPhalen
- SHC Site Chief – Fred Loiselle
- 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
- James Kennedy
- Resident Representatives

Membership
On-site Members:
- FMC
  - Claire Temple-Oberle
- SHC
  - James Kennedy
  - Fred Loiselle (Head, SHC Division of Plastic Surgery)
- ACH
  - Don McPhalen (Head, Division of Pediatric Plastic Surgery)
  - Frankie Fraulin (Head, Section of Pediatric Surgery)
  - Rob Harrop (Head, Section of Plastic Surgery)
  - Jocelyn Dilay
- Off-site Members:
  - Vim de Haas (Head, FMC Division of Plastic Surgery)
  - Dave McKenzie (Plastic Surgery Residency Program Director)
  - Dale Birdsell
  - Robert Lindsay
  - Christiaan Schrag
  - Duncan Nickerson (Director, Department of Surgery Mentorship Office)
  - Earl Campbell
  - Jennifer Matthews

Dr. Rob Harrop, Plastic Surgery Section Chief
PLC
- Alan Lin (Head, PLC Division of Plastic Surgery)
- George Hamilton
- Greg Waslen
- Wayne Perron
- Farrah Yau
- Jonathan Lee
- Ryan Frank
- Justin Yeung

RGH
- Mark Haugrud (Head, RGH Division of Plastic Surgery)
- John Beveridge
- Frank Sutton
- Paul Whidden
- Doug Humphreys

ACH
- Ryan Frank

SHC
- Jeff Dawes

Banff/Canmore
- Elizabeth Hall-Findlay
- Tom Sinclair

ACCOMPLISHMENTS AND HIGHLIGHTS

Clinical Service
- Dr. Schrag 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. Temple-Oberle hosted the Alberta Breast Reconstruction Awareness Day on October 15, 2014. 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.

- Dr Temple-Oberle, as a member of the Tom Baker Cancer Centre Clinical Trial Team was also a finalist for the AHS President's Award.
- NewadditionstoourfacultyareDr. Jennifer Matthews and Dr. Justin Yeung. Dr Matthews completed her plastic surgery residency at the University of Calgary and an Oncologic Reconstruction fellowships at the McMaster University. She practices at the FMC. Dr Yeung completed his plastic surgery training at the University of Calgary and a fellowship in Hand and Upper Extremity Surgery at New York University. He is practicing at the PLC.
- Dr Enzio Magi has retired from practice after a long and distinguished career at the Foothills Medical Centre and Calgary General Hospital. During his career he served as President of the FMC medical staff, program director for the U of C Plastic Surgery Training Program, Head of the Section of Plastic Surgery, Chief Examiner of the Royal College of Physicians and Surgeons of Canada Plastic Surgery Examination Committee, and Chairman of the Royal College of Physicians and Surgeons of Canada Plastic Surgery Specialty Committee.
- Dr George Hamilton received the 2015 Department of Surgery Distinguished Service Award for the PLC site.

Education Residents
- Under the direction of Dr Dave McKenzie the University of Calgary Plastic Surgery Resident Training Program received full accreditation by the recent Royal College of Physicians and Surgeons Program Review
- 2 residents are accepted to the plastic surgery training program each year.
- Drs. Jevon Brown and Vishal Sharma successfully completed their FRCSC specialty examinations in plastic surgery. Dr Brown is beginning a craniofacial fellowship at the University of Washington in Seattle. Dr Sharma is beginning a hand surgery fellowship at New York University.
• Dr Schrag, with the assistance of other plastic surgery faculty again conducted the Microsurgical Skills Simulation Course on June 1-5, 2015 for the plastic surgery residents
• Dr Schrag (in collaboration with faculty from Clinical Neurosciences) served with other faculty in the Spine and Peripheral Nerve Course held on January 7, 2015
• Plastic Surgery Resident Research Day held on December 12, 2014.

Fellows/Graduate Students
• Drs. McPhalen and 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. Temple-Oberle continues to offer an oncologic reconstruction fellowship; her current fellow is Dr Marcio Barreto

Medical Students
• Dr. D. McPhalen is an active member of the University of Calgary Master Teacher Program

National and International Representation
• Dr. Campbell is presently the Chairman of the Membership Committee and Chairman of the Accreditation Committee for the American Society of Plastic Surgeons, Past-President of the Alberta Society of Plastic Surgeons, Treasurer of the Northwest Society of Plastic Surgeons and serves on the Corporate Affairs Committee for the Royal College of Physicians and Surgeons of Canada,
• Dr. Lin serves presently as the Chairman of the Joint Alberta Medical Association/Workers Compensation Board Advisory Committee and Contract Negotiation Team
• Dr. Waslen is presently the Past-President of the Canadian Society of Aesthetic Plastic Surgeons
• Dr. 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. Harrop and McPhalen serve as Examiners on 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
• Drs. Fraulin and McPhalen continue to participate in the “Project Outreach International Charity Program” an annual mission which provides burn reconstruction surgery to children in an underserved area in Peru. The 4th year plastic surgery residents from the University of Calgary accompanied the team this year
• Dr. Schrag participated in a medical mission to Haiti
• Dr. 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

CHALLENGES
• Increasing the number of academic plastic surgery faculty remains a priority for the Section of Plastic Surgery. This goal remains difficult due to lack of availability of new Geographic Full-Time faculty positions or Alternate Relationship Plans.
• Full utilization of time in the Main Operating room at the SHC has been challenging. We believe this is due to lack of awareness by referring physicians about the presence of the plastic surgery service at the SHC and limited in-hospital referrals to plastic surgeons. We continue to work on strategies to address these issues but expect this to improve as overall activity at the SHC increases
• 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.
WORKFORCE PLANNING

Future Needs
• Plans for future plastic surgery recruitment will be based on retirement of existing staff, population growth and needs for specific expertise.

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

QUALITY ASSURANCE, QUALITY IMPROVEMENT, AND INNOVATION

• A variety of clinical databases have been established to review delivery of care to certain large subsets of patients. These include:
  • ACH Vascular Birthmark Clinic database
  • Head and Neck Cancer Database (in collaboration with ENT)
  • Burn Database
  • Breast Reconstruction Database
• In collaboration with our ENT colleagues, a standardized clinical care pathway is now well established 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 and treatment of oncologic patients requiring immediate or delayed reconstruction following cancer resection

• In response to the provincial funding uplift for oncologic surgery, the section has increased the number of oncologic reconstructive procedures at all of the acute care adult sites.

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. Faced with continually increasing volumes of complex patients, we aim to build on our past successes in developing novel approaches to providing efficient and high quality patient care. We recognize the need to increase our academic profile nationally and internationally and thus feel it is necessary to increase our complement of academic plastic surgery faculty through focused recruitment.
SECTION STRUCTURE AND ORGANIZATION

There are currently 11 members in the section of Podiatric Surgery. Six of those members are taking 1:6 calls for PLC, RGH, SHC, ACH and FMC. Calls from Urgent Care Centers and RAAPID in the region are also directed to the six podiatrists on call. Currently the section chief is involved in the PLC Site Leaders Committee, PLC Surgical Suite Advisory Committee and the Department of Surgery - Executive Committee. Our section currently meets every other month depending on the need. At our section meeting we hold a Journal Club/Article Review and Case Discussion. Members are free to bring issues to the meeting to be discussed.

ACCOMPLISHMENT AND HIGHLIGHTS

I am pleased to announce that the Limb Preservation Clinic at Peter Lougheed Hospital is strong and very busy. This year we increased our presence at the clinic from one afternoon to two afternoons a week to meet the demand. It is possible that we may need to increase and add another half day per week this year as the demand increases. We are starting to look at statistics to see how this clinic has decreased the number of admissions and increased the ability to treat this patient population on an outpatient basis. We hope that this concentrated patient population can help populating research and guidelines in the treatment of the diabetic foot.

This year we put together a block booking and allocation guidelines for the NHSF case allocations. This was long overdue. The purpose of this policy is to fairly distribute cases to AHS contracted NHSF and encourage participation of physicians within the section. Our section has grown by one member as we have welcomed Dr. Karim Manji. His dynamic personality is welcome among all of us. We hope that Dr. Manji can help with research, specifically with the diabetic foot care and clinic.

CHALLENGES

Challenges are numerous at this point. They remain virtually the same yearly. We know the reality of the currently budget and expending without the financial support is currently the biggest challenge that we face. The diabetic foot preservation clinic at Peter Lougheed Hospital could grow but is limited by the financial support and staff that is allocated to our clinic.

Our section needs residents/fellow both for the present and the future of our section and profession in this province. There is a lack of ability to be able to push this residency through different layers of committees and bureaucracy. There remains a lack of members within our section willing to take that project and make it happen. Our physicians are few and have private offices so no one seems to be able to really be involved to start this residency program.

The Limited OR time in hospital is a huge challenge that we face. NHSF provides the availability to do low risk cases and remains cost effective. The problem comes into effect when someone has a complication or requires special plates or screws then these cases cannot effectively be done in the NHSF and need to be done in a hospital OR. Each member of our section gets 4 OR days per year. This places patient at risk of not being able to get appropriate care in a timely fashion for surgeries that require bone grafts, plates, screws or special instruments. This needs to be revised so that surgeons may have access to the OR to deal with complications and more involved surgeries.
WORKFORCE PLANNING

We recently added a sixth member in our section and at this point do not anticipate adding any further surgeons. I would like to see our surgeons being able to cover all locations efficiently. That would mean possibly needing to have access to facilities. I have asked for access to the Minor OR clinic at Foothills Hospital to help patients at FMC to have easier patient centered care.

QUALITY ASSURANCE AND IMPROVEMENT

Our section, these past 3 years, are self-reporting post-op complications and issues for NHSF. The cases that have complications can also be discussed at section meetings. This allows everyone to learn from each other and give ideas on how we can improve the system and set up pathways to prevent further complications.

Overall this past year we have grown our section in the department of diabetic foot as I was hoping. This year I would like to see some research come out of that clinic. It is a perfect set up for that.

One of the goals and challenges this year is to deal with how we can better manage patients that require access to a hospital OR for surgeries. I hope that we can find a way to help these patients that require that care.

Dr. Francois Harton, Podiatric Surgery Section Chief
SECTION HEAD

J. Gregory McKinnon MD FRCSC
Professor of Surgery and Oncology

SECTION STRUCTURE AND ORGANIZATION

The Section of Surgical Oncology consists of a multidisciplinary group of surgeons dedicated to cancer care as their primary goal. Five members are located full-time in the Tom Baker Cancer Centre (TBCC) and three of these are primary appointments to the Department of Oncology with cross-appointment to Surgery. All other members are primarily appointed to the Department of Surgery and are located at various sites and in other Sections including plastic surgery, general surgery, otolaryngology, thoracic and urology.

PROGRAMS

The development of plans for a new cancer center are proceeding and will hopefully lead to a new facility in the next five to seven years. In the meantime, the Section continues to lead in the surgical treatment of sarcoma, melanoma, HPB, advanced gastrointestinal (GI) and breast cancer. It also leads in major provincial projects in head and neck and rectal cancer.

Cancer Surgery Alberta was created by Dr. Temple and the Section of Surgical Oncology. Although it has expanded to a national program, its centre will remain at the TBCC. There are now over 33,000 patients in the database.

Dr. Bathe continues as Provincial Tumor Group Leader for GI, Dr. Mack of the Provincial Sarcoma Tumor Group and Dr. Temple-Oberle of the TBCC Cutaneous Tumor Group.

SECTION HIGHLIGHTS

The section is pleased to report the successful recruitment of Dr. Antoine Bouchard-Fortier as a full-time surgical oncologist. His role will be clinical and academic with an emphasis on breast and advanced gastrointestinal cancer. Although Dr. Bouchard-Fortier will be located in the Foothills Hospital, we hope and expect to eventually attract full participation in the Department of Oncology. In addition, the Department of Surgery recruited Dr. Michael Monument, a researcher and expert in soft tissue sarcoma. Dr. Monument is expected to move to a full-time position and is also building a research program. Three other members of the Department of Surgery, who have a strong role in cancer treatment, will be expected to be cross-appointed to Oncology in the near future. Dr. Lloyd Mack was appointed as Acting Deputy Head for the Department of Oncology. Dr. Elijah Dixon was appointed Section Head of General Surgery. More recruitment is now possible because of an investment in resources for operative treatment of cancer patients in the Calgary Zone. This important upgrade of OR time is leading to improved wait times, extra recruitment and concomitant program development.

TRAINING PROGRAMS

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

Postgraduate: Dr. Temple continues his role of Program Director for the Section of Surgical Oncology. The Surgical Oncology program was successfully certified by the Royal College in 2015 with reciprocal recognition by the American Board of Surgery and the ACGME. One Fellow graduated in 2015 and has taken a position here at the University of Calgary. The program remains in the international match for approved programs and continues to receive large numbers of Canadian and international applicants.
Dr. Temple-Oberle continues to oversee the Fellowship in oncologic reconstruction and successfully graduated Dr. M. Baretto in June 2015. Dr. Baretto plans to stay on for another year of extra fellowship.

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.

RESEARCH

Highlights of the research year include Dr. Quan’s receipt of a 5.7 million dollar grant from CIHR to study breast cancer in young women. Members of the Section continue to be highly active and have published over ninety peer-reviewed manuscripts in 2014 and 2015.

CHALLENGES

The Section has struggled to engage the provincial plan for comprehensive cancer care, particularly with the uncertainty of the building of a Calgary Cancer Centre. In the meantime, program building is ongoing with progress made in a number of areas. Going forward, the resurrection of building plans at the Foothills campus appears to be an encouraging development.

WORKFORCE PLANNING

A workforce plan includes new recruitment in colorectal oncologic surgery, endocrine and plastics.

QUALITY ASSURANCE, QUALITY IMPROVEMENT, AND INNOVATION

The section plans to move forward with the development of multidisciplinary pathway driven clinical and research initiatives. Some of these will be based in the cancer center infrastructure, others not. This will require further recruitment of academic surgeons and more engagement in both provincial and zonal organization and planning.

FUTURE DIRECTIONS AND INITIATIVES

The section plans to move forward with the development of multidisciplinary pathway driven clinical and research initiatives. Some of these will be based in the cancer center infrastructure, others not. This will require further recruitment of academic surgeons and more engagement in both provincial and zonal organization and planning.

Dr. Gregory McKinnon, Surgical Oncology Section Chief
Photo provided by Dr. Gregory McKinnon
**ANNUAL REPORT 2014/2015**

**MEMBERSHIP**

<table>
<thead>
<tr>
<th>Last name</th>
<th>First name + initial</th>
<th>Primary Department</th>
<th>Secondary Department</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ball</td>
<td>Chad G.</td>
<td>Surgery</td>
<td>Oncology</td>
<td>General Surgery</td>
</tr>
<tr>
<td>Bathe</td>
<td>Oliver F.</td>
<td>Surgery</td>
<td>Oncology</td>
<td>General Surgery</td>
</tr>
<tr>
<td>Buie</td>
<td>W. Donald</td>
<td>Surgery</td>
<td>Oncology</td>
<td>General Surgery</td>
</tr>
<tr>
<td>Chandarana</td>
<td>Shamir</td>
<td>Surgery</td>
<td>Oncology</td>
<td>Otolarngology</td>
</tr>
<tr>
<td>Dawes</td>
<td>Jeffrey C.</td>
<td>Surgery</td>
<td>Oncology</td>
<td>Plastic Surgery</td>
</tr>
<tr>
<td>deHaas</td>
<td>William G.</td>
<td>Surgery</td>
<td>Oncology</td>
<td>Plastic Surgery</td>
</tr>
<tr>
<td>Dixon</td>
<td>Elijah</td>
<td>Surgery</td>
<td>Oncology</td>
<td>General Surgery</td>
</tr>
<tr>
<td>Donnelly</td>
<td>Bryan J.</td>
<td>Surgery</td>
<td>Oncology</td>
<td>Urology</td>
</tr>
<tr>
<td>Dort</td>
<td>Joseph C.</td>
<td>Surgery</td>
<td>Clinical Neurosciences</td>
<td>Otolarngology</td>
</tr>
<tr>
<td>Gelfand</td>
<td>Gary A.J.</td>
<td>Surgery</td>
<td>Oncology</td>
<td>Thoracic Surgery</td>
</tr>
<tr>
<td>Graham</td>
<td>Andrew J.</td>
<td>Surgery</td>
<td>Oncology</td>
<td>Thoracic Surgery</td>
</tr>
<tr>
<td>Harvey</td>
<td>Adrian</td>
<td>Surgery</td>
<td>Oncology</td>
<td>General Surgery</td>
</tr>
<tr>
<td>Lafrenière</td>
<td>René</td>
<td>Surgery</td>
<td>Oncology</td>
<td>General Surgery</td>
</tr>
<tr>
<td>Lindsay</td>
<td>Robert L.</td>
<td>Surgery</td>
<td>Oncology</td>
<td>Plastic Surgery</td>
</tr>
<tr>
<td>Magi</td>
<td>Enzio</td>
<td>Surgery</td>
<td>Oncology</td>
<td>Plastic Surgery</td>
</tr>
<tr>
<td>Matthews</td>
<td>T. Wayne</td>
<td>Surgery</td>
<td>Oncology</td>
<td>Otolarngology</td>
</tr>
<tr>
<td>McFadden</td>
<td>Sean</td>
<td>Surgery</td>
<td>Oncology</td>
<td>Thoracic Surgery</td>
</tr>
<tr>
<td>McKinnon</td>
<td>J. Gregory</td>
<td>Surgery</td>
<td>Oncology</td>
<td>General Surgery</td>
</tr>
<tr>
<td>McWhae</td>
<td>John A.</td>
<td>Surgery</td>
<td>Oncology</td>
<td>Ophthalmology</td>
</tr>
<tr>
<td>Mew</td>
<td>Daphne J.Y.</td>
<td>Surgery</td>
<td>Oncology</td>
<td>General Surgery</td>
</tr>
<tr>
<td>Pasieka</td>
<td>Janice L.</td>
<td>Surgery</td>
<td>Oncology</td>
<td>General Surgery</td>
</tr>
<tr>
<td>Quan</td>
<td>May Lynn</td>
<td>Surgery</td>
<td>Oncology</td>
<td>General Surgery</td>
</tr>
<tr>
<td>Sutherland</td>
<td>Francis R.</td>
<td>Surgery</td>
<td>Oncology</td>
<td>General Surgery</td>
</tr>
<tr>
<td>Mack</td>
<td>Lloyd</td>
<td>Oncology</td>
<td>Surgery</td>
<td>General Surgery</td>
</tr>
<tr>
<td>Temple</td>
<td>Walley</td>
<td>Oncology</td>
<td>Surgery</td>
<td>General Surgery</td>
</tr>
<tr>
<td>Temple-Oberle</td>
<td>Claire</td>
<td>Oncology</td>
<td>Surgery</td>
<td>Plastic Surgery</td>
</tr>
</tbody>
</table>

Dr. Temple-Oberle continues to oversee the Fellowship in oncologic reconstruction and successfully graduated Dr. M. Baretto in June 2015. Dr. Baretto plans to stay on for another year of extra fellowship.

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.

**RESEARCH**

Highlights of the research year include Dr. Quan's receipt of a 5.7 million dollar grant from CIHR to study breast cancer in young women. Members of the Section continue to be highly active and have published over ninety peer-reviewed manuscripts in 2014 and 2015.

**CHALLENGES**

The Section has struggled to engage the provincial plan for comprehensive cancer care, particularly with the uncertainty of the building of a Calgary Cancer Centre. In the meantime, program building is ongoing with progress made in a number of areas. Going forward, the resurrection of building plans at the Foothills campus appears to be an encouraging development.

**WORKFORCE PLANNING**

A workforce plan includes new recruitment in colorectal oncologic surgery, endocrine and plastics.

**QUALITY ASSURANCE, QUALITY IMPROVEMENT, AND INNOVATION**

The section plans to move forward with the development of multidisciplinary pathway driven clinical and research initiatives. Some of these will be based in the cancer center infrastructure, others not. This will require further recruitment of academic surgeons and more engagement in both provincial and zonal organization and planning.

**FUTURE DIRECTIONS AND INITIATIVES**

The section plans to move forward with the development of multidisciplinary pathway driven clinical and research initiatives. Some of these will be based in the cancer center infrastructure, others not. This will require further recruitment of academic surgeons and more engagement in both provincial and zonal organization and planning.
SECTION STRUCTURE AND ORGANIZATION

- The section membership is comprised of four full-time clinical surgeons: Drs. Gary Gelfand, Sean McFadden, Andrew Graham and Sean Grondin

Current Committees:
- The Section continues an active monthly sectional meeting to address all issues related to clinical thoracic surgery care, education and research.(Chair– Dr. S. McFadden)
- The Section does monthly morbidity and mortality rounds to maintain quality assurance. (Director– Dr. G. Gelfand)
- In conjunction with our nursing and allied health colleagues the section maintains a Unit 61 quality council.(Chair– Dr. G. Gelfand)

Programs:
- The Section continues to participate fully with the Alberta Thoracic Oncology Program a provincial program to aid patient access for lung cancer treatment.(Provincial Representative– Dr. S. McFadden)
- The section maintains an active Thoracic Surgery Residency program.(Program director- Dr. S. Grondin)
- Drs. S. McFadden and G. Gelfand continue to provide expert care for patients with thoracic outlet syndrome and tracheal stenosis. Dr. A. Graham is leading the myasthenia gravis/thymoma patient care efforts within the Section of Thoracic Surgery.

Membership: Fellows:
- The Section members all maintain Royal College and Alberta Medical Association Status. All members actively participate with the Lung Cancer Tumour Group at the Tom Baker Cancer Centre.
- Dr. S. Grondin has been appointed membership to the prestigious American Association of Thoracic Surgeons as well as the European Society of Thoracic Surgeons.

ACCOMPLISHMENTS AND HIGHLIGHTS

Clinical Service:
- The Section is very pleased to have its first full Clinical Professor with Dr. S. Grondin having received promotion this year. Congratulations on behalf of the Section for all the hard work and dedication.
- Dr. S. Grondin was awarded the King James IV Surgery Travelling Fellowship for Canada in 2016.
- Dr. S. Grondin has assumed many leadership roles nationally and internationally including Vice-President of the Canadian Association of Thoracic Surgeons, Board member and Canadian Director of the Society of Thoracic Surgeons and Secretary of the Western Thoracic Surgical Association.
• The Section was delighted to have Dr. Richard Inculet, from The University of Western Ontario, as our visiting professor this spring. It was a wonderful 3 days of learning and fellowship. Dr. John. Mitchell, from The University of Colorado will be visiting in October 2015 as part of the ongoing visiting professor lecture series.

• Dr. S. Grondin is Currently Co-Chair of the Alberta Health Service Services Quality Assurance Committee and Co-Chair of the University of Calgary Medical Group.

• One service highlight was Dr. S. McFadden performing the first diaphragm pacing procedure in Alberta. There will be more to come with the multidisciplinary team who strive to help these unfortunate patients.

• Dr. A. Graham also successfully performed the first videoscopic thymectomy in Calgary.

• The clinical service continues to grow with the section diligently working to fill the cancer surgery uplift time allocated.

Education

• The Section was pleased to receive a full accreditation for our Thoracic Surgery Residency from the Royal College after the most recent external review.

• The Section is fortunate to have Dr. S. Grondin as our Education Director spending countless hours directing, focusing and educating all the learners who come to our service.

• The Section is blessed with dedicated teachers, but of special note, Dr. A. Graham was voted by the residents of all surgical specialties to receive the coveted Ectopic Teaching Award from the Department of Surgery. He was also honoured with a teaching award from the Postgraduate Medical Education Office.

• Fellows- We said good-bye to Dr. Janet Edwards who completed her 2 years of training. She is presently working at Duke University in a minimally invasive Fellowship.

• Dr. Wiley Chung has entered his senior year of training and we look forward to his hard work and dedication over the next 12 months.

• We have also been fortunate to receive our colleagues from the Pulmonary Medicine Fellowship, their experience and expertise while on the service helps us all.

• Medical Students- The Thoracic Surgery selective continues to be a rewarding experience for the many students who we have met over the last year. We hope a little of what we taught will follow through to their many different areas of specialization.

• Research- The highlight for the year was Dr. J. Edwards winning the Brompton Research Award for best research project and presentation at the European Society of Thoracic Surgery meeting in Lisbon, Portugal.

• The Section of Thoracic Surgery continues to be the leader in surgical workforce planning research in Canada. Collaboration with our colleagues in colorectal surgery, general surgery, hepatobiliary surgery, vascular surgery and otolaryngology has established the University of Calgary as an international leader in this area of research with several important publications reported.

• Dr. Grondin has been invited to be the McMutry Lecturer for Surgeons day 2016 in recognition of his contributions to the Department in research, teaching and leadership development.

CHALLENGES

• Response to Issues- The service has grown substantially and recruitment is needed to keep pace with the clinical demands in order to maintain excellent patient care.
• **Future Risks**- Recruitment is dependent on acceptance of an Alternative Relationship Plan application which is presently passing through the appropriate Alberta Health Services, Alberta Health and Wellness and Alberta Medical Association processes.

**WORKFORCE PLANNING**

• **Future Needs**- Two Thoracic Surgeons are needed urgently to maintain excellence in clinical care, teaching and research as well as participation in key leadership roles in the Department and national and international organizations.

• **Goals and Strategies**- Further develop and enhance our administrative and academic commitments to the University of Calgary and Alberta Health Services.

• **Impact on other departments and zonal resources**- Two new surgeons will enhance our collaboration with medical and surgical colleagues including participation in multidisciplinary research initiatives and patient care planning.

**QUALITY ASSURANCE, QUALITY IMPROVEMENT, AND INNOVATION**

• Dr. A. Graham has been actively working on development and implementation of a real time discharge summary based tracking system for monitoring and hopefully modifying patient morbidities. Preliminary trials of the system show promise.

**FUTURE DIRECTIONS AND INITIATIVES**

• The section is in the very early stages with our Pulmonary, Cystic Fibrosis, Nursing, Allied Health Colleagues in planning and developing a Chest Focused service with Unit 61 as the hub.
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.

ACCOMPLISHMENTS AND HIGHLIGHTS

Clinical Service
- For the 3rd year, we have achieved an increase in the number of transplants performed from 64 per fiscal year to 71.
- The increase in the number of transplants from year to year has been the continuing trend for the past 3 years.
- We continue to perform highly sensitive and ABO incompatible transplants.
- We have also seen an increase to date in both the number of Good Samaritan and cadaveric donations.
- We continue to perform local and national paired exchange transplants.
- This year, we continued to utilize ambulatory surgery for peritoneal dialysis catheter exteriorization which alleviated pressure on our OR time, therefore allowing for increased bookings for more complex cases. This in turn has resulted in time saved for both patients and doctors, as well as saving on resources.

This strategy allows the service to be provided on an emergency and semi-emergency basis with short wait times within the order of a week.
- Dr. Yilmaz is ongoing in his work to establish 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 optimal utilization of our OR time with a decrease in the cancellation rate.

Dr. Anastasio Salazar, Transplant Surgery Section Chief
Education
Residents
• The continued rotation of General surgery residents as well as nephrology residents on a regular basis.

Fellows
• Dr. Kishore Persaud, a surgical fellow from Guyana, completed his fellowship and returned to his country where he is currently active in transplantation.
• We are accepting for rotation, a fellow from the section of Hepatobiliary surgery with whom we hope to collaborate closely.

Medical Students
• Shadowing on a regular basis from the IMG Program as well as seasonal students.
• Support also for training nursing 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
• Although we have observed an increase in the number of cadaveric donations, we are continually trying to optimize our utilization of live donors as well as kidneys for therapeutic use. We continue to wait for the implementation of non-heart beating donations 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 continued growth of the population in Southern Alberta, we would like to see an increase in our materials and human resources in order to provide professional medical care in an efficient and high quality manner.

WORKFORCE PLANNING

Future Needs
• With the continued trend of increasing transplants and vascular access activity, we hope to have a 4th surgeon join our program in the hopes of increasing our efficiency in a highly demanding clinical group.

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 using the best technology available and to do this in a safe and expeditious manner. In order to reach this goal, we need to strive towards further professionalism in the way we conduct our duties. We need to decrease the level of bureaucracy while continuing to increase our efficiency and patient satisfaction. Our strategy is to review all of the processes and without making drastic changes, improve what is possible and implement changes where required.
• Bringing simplicity to the process, which should be compatible with the practice of other sections and departments 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 are currently in the process of implementing a safer and more efficient strategy in dealing with the logistics of cadaveric and local and imported transplants.

Access of Family Physicians to specialists
- Our referrals seldom come from family physicians as our patients are generally referred to us by nephrologists. Live donors are required to refer themselves directly to our program at their own will, in the hopes of alleviating any outside pressure to donate.

Patient flow through the Emergency Department
- We have 24 hour coverage all year round for any emergencies related to transplant patients as well as vascular access and PD catheter patients. Consultations by the Emergency department are attended to on an on call basis.

FUTURE DIRECTIONS AND INITIATIVES

Our hope is for continued improvement in the clinical setting. We hope to implement further research and educational activities in the near future, once the clinical services are working at an optimal level.

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
Fellowship Director, Urologic Oncology - Dr. Eric Hyndman
HTA Lead - Dr. Gregory Kozak
Research Lead - Dr. Bryan Donnelly
SCN Representative - Dr. Eric Hyndman

Programs

Prostate Cancer Centre (PCC) Rapid Access Clinics
- RAC I: screening, diagnosis
- RAC II: education for newly diagnosed patients
- RAC III: early post-treatment follow-up and support
- RAC IV: sexual and urinary function post-treatment
- RAC V: active surveillance
- RAC VI: Clinic for Advanced and Metastatic Prostate Cancer (CAMP)

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, internal medicine, nursing, physiotherapy.

Urology Clinic South Health Campus
The Urology Clinic at South Health Campus provides consultative and follow up services for its emergency department and inpatient population. The urology presence at South Health is led by a Nurse Practitioner who is fully supported by the Urology team. Adult and pediatric urology clinics, as well as urodynamics services, also now operate in the Outpatient Clinic area of the SHC.

Men's Health Program
A comprehensive men’s health program is under development, with the intent of bringing other common and important health concerns to the attention of men presenting with urologic concerns. Screening and referral processes will be established.

Membership

The section of urology has a total of 16 urologists, 13 adult, and 3 pediatric. Dr. Peter Wilkin retired in 2014. Dr. C. William Hyndman and Dr. James Leong will retire in 2015. One member is on partial leave. One adult and one pediatric locum complete our staff.
Awards and Achievements

- Dr. Richard Baverstock promoted to Clinical Associate Professor
- Dr. Kevin Carlson promoted to Clinical Associate Professor
- Dr. C. William Hyndman: Surgeon’s Day Outstanding Contribution Award
- Dr. Kevin Carlson and Dr. Richard Baverstock: CUA Incontinence Grant.
- Dr. Richard Baverstock: Honour Roll Award – “Great Teaching to Class of 2015” – Faculty of Medicine
- Dr. Richard Baverstock: Leo Spackman Award – Best Presentation by Staff at Prairie Urology 2015

ACCOMPLISHMENTS AND HIGHLIGHTS

Clinical Service

- We are a high volume service centralized at a single site. Numerous efficiencies, the dedication of our practitioners and staff, and the introduction of alternative providers have allowed us to keep step with the growing demand for our services. Examples:
  - Our cystoscopy clinic continues to throughput the highest volume of patients in the country, last year exceeding 11,000 procedures.
  - We strive to optimize utilization of our surgical robotic technology through refinements in room and resource allocation.
  - We have participated in a pilot program integrating a Physician Assistant (PA) into our clinical service, and it has proven to be successful. Our PA has contributed to improvements in access, quality and continuity of care for our emergency room patients, inpatients, and consultations.
  - Similarly, our two nurse practitioners (NP’s) – one at RVH and one at SHC – have proven invaluable.
  - Clinics such as vesia [Alberta Bladder Centre] and the rapid access clinics (RAC’s) at the PCC are examples of innovative care models that improve quality and access simultaneously, and also link clinical care to research opportunities.

Research

- Attention was turned last year (as published in the annual report) to the development and refinement of SOP’s at the SAIU to improve continuity of care, access and service delivery, and these are integrated into the Section. Further work is ongoing to evaluate referral practices. Sub-specialty divisions of the section have well established intake systems.

Education

- The Reconstructive and Functional Urology Fellowship and Pediatric Urology Fellowship continued to be major successes and important contributors to the Section, and the former was awarded the CUA-Pfizer Incontinence Fellowship Grant.

QUALITY ASSURANCE, QUALITY IMPROVEMENT, AND INNOVATION

- Dr. Geoffrey Gotto is Quality Assurance Lead for the Section.
- Dr. Gregory Kozak is the Physician Lead for HTA for the Section.
- Dr. Eric Hyndman is Section representative on the Surgical Clinical Network.
- 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 also participates in the NSQUIP pilot at Rockyview Hospital.
- The Rapid Access Clinics of the PCC and vesia [Alberta Bladder Centre] demonstrate innovation in care delivery.
Committees

Dr. A. Cook  
ACH OR Committee Member  
Dr. B. Donnelly  
Department of Surgery Research Committee  
Prostate Cancer Centre Operating Committee Member  
Prostate Cancer Centre Board Member  
Prostate Cancer Centre Medical Operations Committee Member  
Doc Seaman Research Chair- Prostate Cancer Centre  
Alberta Prostate Cancer Research Initiative (APCaRI), Co-chair

Dr. M. Duffy  
Alberta Section of Urology – Secretary  
Section Lead, CME

Dr. J. Dushinski  
Prostate Cancer Foundation Board Member  
Prostate Cancer Centre Board Member  
Prostate Cancer Centre Medical Operations Committee Member  
Calgary Zone Laser Safety Committee  
Canadian Urological Association Guidelines Committee Member  
World Congress of Endo Urology organizing committee 2017  
Section Lead, Patient Information

Dr. G. Gotto  
GU Chair for the Canadian Partnership Against Cancer (CPAC)  
Cancer Care Clinical Network Member  
Alberta Provincial GU Tumor Team Executive Board and Guidelines Committee  
Kidney Cancer Canada Medical Advisory Board Member  
Clinic for Advanced and Metastatic Prostate Cancer (CAMP), Medical Director  
Section Lead, Quality Assurance  
CUA Faculty Development Committee for the Canadian Prostate Cancer (CaPCAN) III Program

Dr. E. Hyndman  
Bladder Cancer Canada Board Member  
Prairie Urological Association, President  
Prostate Cancer Centre Active Surveillance Program Director  
Kidney Cancer Research Network of Canada Member  
Urology Physician Assistant Supervisor  
Alberta Prostate Cancer Research Initiative (APCaRI) Committee Member  
Surgical Clinical Network Section Representative  
Fellowship Director, Urologic Oncology

Dr. J. Kawakami  
Canadian Urologic Association Scholarship Committee  
Prostate Cancer Centre Medical Advisory Board

Dr. G. Kozak  
AMA Rep Forum Representative  
Surgical Robotics Program - Chair  
Director of HTA, Section of Urology and Southern Alberta Institute of Urology

Dr. J. Lee  
Canadian Male Sexual Health Council Member  
Canadian Society for the Study of the Aging Male Member  
Patient Information Committee, Canadian Urological Association (CUA)  
CUA Continuing Professional Development Committee Member  
CUA Astellas Grant Awards Committee Member  
Surgical Undergraduate Education Committee Member, Department of Surgery  
Section Lead, Undergraduate Education

Dr. B. Weber  
Fellowship Director, Pediatric Urology Fellowship, Section of Urology, Department of Surgery  
Section Lead, Postgraduate Education
CHALLENGES

Response to Issues
- The past year was challenging from a service standpoint following the retirement of one member, pending retirement of another, partial leave of a third, and diversities in practice. Even with the assistance of locums we continue to work with a population to urologist ratio of >100,000:1 (compared to a national average of 56,000:1). The efficiencies listed above in Clinical Service Highlights will only get us so far. This section is continually challenged in managing the volume of patients in each practice, access needs, resource allocation and workforce requirements. We must also continue to support the advancement of sub-specialized clinical expertise but balance it with the necessity to serve the general urology needs of the Zone. Finally, we must continue to meet the challenge of providing zone-wide call coverage from a centralized location in the midst of such clinical volume.
- In the past few years we have employed a Director to assist the Section in its mission and advance the quality of its clinical care, education and research. Unfortunately, that position terminated early and remains vacant, leaving the Section without dedicated administrative support.

Ongoing Matters And Plan Of Action
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 challenge in meeting targeted access times, and cancer uplift time has been heavily utilized by the Section. Furthermore, we continue to be the major consumer of urgent oncology and fan-out time at RVH. Despite this, our cancer surgery access times remain the furthest out of window. We will continue to monitor aCATS and other data, refine practices, expand manpower, and petition for resources.

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 practice changes amongst Section members further add to this challenge. Data collection regarding referral wait-times and distribution etc. 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 as noted above. We will be recruiting at least one new urologist in 2015, and have secured three one-year locums for the coming year. We continue to refine our referral systems, employing centralized referral in some sub-specialty divisions of the section.

We have met the challenge of adding SHC to our adult call coverage with the help of onsite weekday support of dedicated NP. Similar models would be welcome to support the other adult sites, and clearly expanded manpower (physician and non-physician alike) will be critical as our population growth is already well ahead of us.

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 Section is critically undermanned. To meet the national average, we would require 28 active urologists, but function at present with 16, and not all of them full-time. We have maintained safe and effective care to date through extremely dedicated service of our members, hiring of locums, utilization of alternative providers (NP’s, PA, GP’s), expansion of fellowship programs, development of innovative care models, and off-loading of certain services. It is a testament to the dedication of members of our Section that research and education continue to advance. Meeting the needs of the community and the University will require us to go into an aggressive growth phase, which will require expansion of inpatient and outpatient resources both locally and zone-wide.
WORKFORCE PLANNING
A workforce plan has been developed. Near-term recruitment includes positions with sub-specialty expertise in endo-urolgy, robotics, reconstructive and functional urology, and pediatric urology.
Vascular Surgery welcomed Dr. Paul Cantle as a Locum Vascular Surgeon, starting in August 2015. Dr. Cantle is a University of Calgary graduate and an alumnus of the General Surgery training program. He completed his vascular training at the University of Ottawa, in June 2015. Paul will be with us until the end of the year, when he plans to commence a Trauma Fellowship, in Houston.

Starting July 2015, vascular surgery welcomed Dr. Michael Kwan (another U of C general surgery alumnus) as our PGY6 Fellow and Dr. Maher Sabalbal as our PGY1 direct-entry resident. Dr. Sabalbal is a 2015 graduate of Western University. Drs. Kwan and Sabalbal join Dr. Andrea Devrome (U of C ’14), our current PGY2 resident. In July 2016, we will be welcoming Dr. Kenton Rommens (a current U of C general surgery resident) as our PGY6 Fellow.

In November 2015, the PLC vascular surgery redevelopment project will begin a long-anticipated staged opening. First to open will be two hybrid endovascular OR suites, located on the second floor of the PLC East Tower. In December 2015, a new inpatient unit and step-down unit will open on the 5th floor of the East Tower, followed in January 2016 by an Ambulatory Clinic, also on the 5th floor, East Tower. These facilities are the end-product of a 10 year effort to fund, design, and construct a state-of-the-art surgical facility and a consolidated inpatient/outpatient care unit, that will act as a center of excellence for vascular surgery. The Ambulatory and Inpatient units will provide a “medical home” for patients needing vascular care from our catchment areas in southern Alberta, western Saskatchewan and southeastern BC. We are partnered in this effort with the Section of Podiatric surgery who will provide foot care clinics and on-site minor foot surgery and the Department of Medicine, who will provide a vascular risk assessment clinic in the new facility.

As 2015 draws to a close, Calgary’s vascular surgeons are pleased and proud of our successful Royal College training programs and our new facility at Peter Lougheed Centre, both of which equip us to provide our patients with the best possible care now and well into our future!
## Appendices

### 1.0 Department Structure and Organization

1.1 Governance  
1.2 Department Members  

### 2.0 Activity Reports

2.1 Surgical Activity Reports  
2.2 NHSF Surgical Indicator Reports  
2.4 Wait Time Reports  
2.4 Safety Checklist and Compliance  

### 3.0 Research

3.1 Peer-Reviewed Journal Articles  
3.2 Research Grants
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. E. Dixon

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
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. Kerryn Carter, 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. Holly Mackin, Director

Peter Lougheed Centre
• Dr. John Donaghy, Facility Chief and Chair OR Committee
• Dr. Bronwyn Parkinson, 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 Rawding, OR Manager
• Ms. Susan Reader, Director

South Health Campus
• Dr. Beth Lange, Facility Chief and Chair OR Committee
• Dr. Farrah Morrow, Chief, Anesthesia
• Ms. Lori Gervais, OR Manager
• Ms. Joanne Cabrera, Director
Surgical Education Department of Surgery

Surgical Education

Director
Dr. Jacques Bouchard

Coordinator
Ms. D. Glaser

Chair Surgical Skills Foundations
Dr. M. Clark

Undergraduate Medical Education
Director
Dr. J. Graham

Clerkship Evaluation Coordinator
Dr. A. Harvey

Education Coordinator
Ms. D. Glaser

Surgical Skill Courses

Advanced Trauma Operative Management
Dr. R. Lall

Advanced Trauma Life Support
Dr. M. Dunham

Core Surgical Skills
Dr. A. Harvey
Dr. A. Ponton-Carss

Temporal Bone Lab
Dr. J. Brookes

Peripheral Nerve Course
Dr. J. Wong

Ocular Surfacy Simulation
Dr. A. Al-Ghoul

Advanced Laparoscopic Skills
Dr. T. MacLean

Ocular Trauma Simulation
Dr. B. Jacobs

Microvascular Surgery
Dr. C. Schrag

Microvascular Trauma Course
Dr. J. Wong

Advanced Trauma Operative Management
Dr. R. Lall

Advanced Trauma Life Support
Dr. M. Dunham

Peripheral Nerve Course
Dr. J. Wong

Ocular Surfacy Simulation
Dr. A. Al-Ghoul

Advanced Trauma Operative Management
Dr. R. Lall

Advanced Trauma Life Support
Dr. M. Dunham

Peripheral Nerve Course
Dr. J. Wong

Ocular Surfacy Simulation
Dr. A. Al-Ghoul

Advanced Trauma Operative Management
Dr. R. Lall

Advanced Trauma Life Support
Dr. M. Dunham

Peripheral Nerve Course
Dr. J. Wong

Ocular Surfacy Simulation
Dr. A. Al-Ghoul

Advanced Trauma Operative Management
Dr. R. Lall

Advanced Trauma Life Support
Dr. M. Dunham

Peripheral Nerve Course
Dr. J. Wong

Ocular Surfacy Simulation
Dr. A. Al-Ghoul

Advanced Trauma Operative Management
Dr. R. Lall

Advanced Trauma Life Support
Dr. M. Dunham

Peripheral Nerve Course
Dr. J. Wong

Ocular Surfacy Simulation
Dr. A. Al-Ghoul

Advanced Trauma Operative Management
Dr. R. Lall

Advanced Trauma Life Support
Dr. M. Dunham

Peripheral Nerve Course
Dr. J. Wong

Ocular Surfacy Simulation
Dr. A. Al-Ghoul

Advanced Trauma Operative Management
Dr. R. Lall

Advanced Trauma Life Support
Dr. M. Dunham

Peripheral Nerve Course
Dr. J. Wong

Ocular Surfacy Simulation
Dr. A. Al-Ghoul

Advanced Trauma Operative Management
Dr. R. Lall

Advanced Trauma Life Support
Dr. M. Dunham

Peripheral Nerve Course
Dr. J. Wong

Ocular Surfacy Simulation
Dr. A. Al-Ghoul

Advanced Trauma Operative Management
Dr. R. Lall

Advanced Trauma Life Support
Dr. M. Dunham

Peripheral Nerve Course
Dr. J. Wong

Ocular Surfacy Simulation
Dr. A. Al-Ghoul

Advanced Trauma Operative Management
Dr. R. Lall

Advanced Trauma Life Support
Dr. M. Dunham

Peripheral Nerve Course
Dr. J. Wong

Ocular Surfacy Simulation
Dr. A. Al-Ghoul
### Department Members 2014/2015

#### Department of Surgery Members 2014/2015

<table>
<thead>
<tr>
<th>Name</th>
<th>Section of Dentistry and Oral Health Title/Rank</th>
<th>Primary Appointment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kalaydjian, Eduardo</td>
<td>Section Chief &amp; Clinical Associate Professor</td>
<td></td>
</tr>
<tr>
<td>Abougoush, Joel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abougoush, Tallel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Badwi (Stein), Kari</td>
<td></td>
<td>Pediatric Surgery</td>
</tr>
<tr>
<td>Barsky, Robert</td>
<td></td>
<td>Pediatric Surgery</td>
</tr>
<tr>
<td>Bell, Christine</td>
<td></td>
<td>Pediatric Surgery</td>
</tr>
<tr>
<td>Bindman, Michael</td>
<td></td>
<td>Pediatric Surgery</td>
</tr>
<tr>
<td>Brown, Duncan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cholette, Marie-Claude</td>
<td></td>
<td>Pediatric Surgery</td>
</tr>
<tr>
<td>Chow, Kuen A.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dalla Lana, Eugene</td>
<td></td>
<td></td>
</tr>
<tr>
<td>David, Dionysius</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dyck, Willy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Houghton, Alan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hulland, Sarah</td>
<td></td>
<td>Pediatric Surgery</td>
</tr>
<tr>
<td>Kemp, Darrel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kopec, Perry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Krusky, J. Bradley</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kua, Choo-Kar</td>
<td></td>
<td>Pediatric Surgery</td>
</tr>
<tr>
<td>Lakhani, Moez</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lee, Morley</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loeppky, Warren</td>
<td></td>
<td>Pediatric Surgery</td>
</tr>
<tr>
<td>Lovick, David</td>
<td></td>
<td>Pediatric Surgery</td>
</tr>
<tr>
<td>Lu, Ta Sen</td>
<td></td>
<td>Pediatric Surgery</td>
</tr>
<tr>
<td>Mehra, Tarun</td>
<td></td>
<td>Pediatric Surgery</td>
</tr>
<tr>
<td>Olowe, Adebayo</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paladino, Antonietta</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>Pilipowicz, Orest</td>
<td></td>
<td>Pediatric Surgery</td>
</tr>
<tr>
<td>Rabie, Heidi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saher, Farida</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>Schwann, Sandra</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seto, Timothy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shariff, Galib</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sheiny, Shirin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>Title</td>
<td>Department</td>
</tr>
<tr>
<td>-----------------------</td>
<td>------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>Skaria, Sylla</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smith, Leonard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suri, Amreek (Ricky)</td>
<td>Clinical Lecturer</td>
<td>Pediatric Surgery</td>
</tr>
<tr>
<td>Switzer, Samuel</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>Tamminen, John</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tetteh-Wayoe, Mercy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thal, Michelle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tung, Albert</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Varshney, Sheila</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vinsky, Rory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wierzbicki, Tom</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>Yaholnitsky, Stephen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yates, Gregory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yu, Thomas</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>Title/Rank</td>
<td>Primary Appointment</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-------------------------------------------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>Dixon, Elijah</td>
<td>Section Chief and Professor</td>
<td></td>
</tr>
<tr>
<td>Anderson, Ian B.</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Armstrong, Christopher S.</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>Armstrong, C. Paul</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>Austen, Lea</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Ball, Chad</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Bathe, Oliver F.</td>
<td>Professor</td>
<td></td>
</tr>
<tr>
<td>Bouchard-Fortier, Antoine</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>Brar, Mantaj</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Brzezinski, Wojciech</td>
<td>Clinical Lecturer (Medicine Hat)</td>
<td></td>
</tr>
<tr>
<td>Buie, W. Donald</td>
<td>Professor</td>
<td></td>
</tr>
<tr>
<td>Buie, William</td>
<td>Honorary Clinical Associate Professor</td>
<td></td>
</tr>
<tr>
<td>Church, Neal G.</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Datta, Indraneel</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Debru, Estifanos</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Dunham, Michael B.</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Gill, Richdeep</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Graham, John S.</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Hagerman, Neil</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harvey, Adrian</td>
<td>Clinical Associate Professor</td>
<td></td>
</tr>
<tr>
<td>Heine, John A.</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Hollaar, Gwendolyn</td>
<td>Associate Professor</td>
<td></td>
</tr>
<tr>
<td>Ibbottson, Geoff</td>
<td>Clinical Lecturer (Grande Prairie)</td>
<td></td>
</tr>
<tr>
<td>Jenken, Daryl</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Johnson, Douglas R.E.</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Kanashiro, Jeanie</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Kirkpatrick, Andrew W.</td>
<td>Professor</td>
<td></td>
</tr>
<tr>
<td><strong>Kortbeek, John B.</strong></td>
<td><strong>Zone Clinical Department Head Surgery and Professor</strong></td>
<td></td>
</tr>
<tr>
<td>Lafreniere, Rene</td>
<td>Professor</td>
<td></td>
</tr>
<tr>
<td>Lall, Rohan N.</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Lopushinsky, Steven</td>
<td>Clinical Assistant Professor</td>
<td>Pediatric Surgery</td>
</tr>
<tr>
<td>Lui, Robert C.K.</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Mack, Lloyd</td>
<td>Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>MacLean, Anthony R.</td>
<td>Clinical Associate Professor</td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>Title</td>
<td>Department</td>
</tr>
<tr>
<td>-----------------------</td>
<td>---------------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>Martin, Steven</td>
<td></td>
<td></td>
</tr>
<tr>
<td>McKinnon, J. Gregory</td>
<td>Professor</td>
<td></td>
</tr>
<tr>
<td>McBeth, Paul</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Mew, Daphne J.Y.</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Mitchell, Philip C.</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Mulloy, Robert H.</td>
<td>Clinical Associate Professor</td>
<td></td>
</tr>
<tr>
<td>Nixon, James A.</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Papenkopf, Cort W.</td>
<td></td>
<td>Rural Medicine</td>
</tr>
<tr>
<td>Pasieka, Janice</td>
<td>Clinical Professor</td>
<td></td>
</tr>
<tr>
<td>Quan, May Lynn</td>
<td>Associate Professor</td>
<td></td>
</tr>
<tr>
<td>Reso, Artan</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>Rosen, Wayne S.</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Rothwell, Bruce C.</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Selman, William</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sutherland, Francis R.</td>
<td>Professor</td>
<td></td>
</tr>
<tr>
<td>Temple, Walley J.</td>
<td>Professor</td>
<td></td>
</tr>
<tr>
<td>Topstad, Dawnelle R.</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>Way, Jeffrey C.E.</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Wong, Andrew L.</td>
<td>Clinical Associate Professor</td>
<td>Pediatric Surgery</td>
</tr>
<tr>
<td>Name</td>
<td>Title/Rank</td>
<td>Primary Appointment</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-------------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>Ashenhurst, Michael E.</td>
<td>Section Chief &amp; Clinical Associate Professor</td>
<td></td>
</tr>
<tr>
<td>Adatia, Feisal</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Al-Ghoul, Ahmed R.</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>Anand, Jag</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>Anderson-Penno, Ellen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Astle, William F.</td>
<td>Professor</td>
<td>Pediatric Surgery</td>
</tr>
<tr>
<td>Ball, Arlene E.</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>Bhamra, Jamie</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>Chow, Bill</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Cooper, Linda</td>
<td>Associate Professor</td>
<td>Pediatric Surgery</td>
</tr>
<tr>
<td>Crichton, Andrew C.S.</td>
<td>Clinical Professor</td>
<td></td>
</tr>
<tr>
<td>Culver, Ronald L.</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Demong, Thaddeus T.</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>Dotchin, Stephanie</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>Douglas, Gordon</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Ells, Anna</td>
<td>Clinical Professor</td>
<td></td>
</tr>
<tr>
<td>Fielden, Michael</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Ford, Bryce</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Gibson, Peter F.</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Gimbel, Howard V.</td>
<td>Clinical Professor</td>
<td></td>
</tr>
<tr>
<td>Goel, Nand K.</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Gohill, Jitendra</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Gooi, Patrick</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>Gordon, Robert</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Hanson, Christopher</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>Hill, Vivian E.</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Huang, John T.</td>
<td>Clinical Associate Professor</td>
<td></td>
</tr>
<tr>
<td>Huang, Peter T.</td>
<td>Clinical Professor</td>
<td></td>
</tr>
<tr>
<td>Kassab, Jacinthe</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>Kherani, Amin</td>
<td>Clinical Associate Professor</td>
<td></td>
</tr>
<tr>
<td>Kherani, Femida</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Kirk, Angus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kirker, G.E. Mervyn</td>
<td>Clinical Associate Professor</td>
<td></td>
</tr>
<tr>
<td>Lang, Robert M.</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
</tbody>
</table>
McWhae, John A.
Mitchell, Patrick
Mitchell, Robert J.
Punja, Karim
Romanchuk, Kenneth G.
Savage, Paul R.G.
Shah, Chirag
Skov, Carolyn M.B.
Smith, Stanley S.
Van Westenbrugge, John A.
Verstraten, Karin L.
Weis, Ezekiel
Williams, R. Geoff
Wong, Jonathan
Wyse, J. Patrick
Yau, Ryan

Clinical Associate Professor
Clinical Assistant Professor
Clinical Assistant Professor
Clinical Assistant Professor
Clinical Professor
Clinical Assistant Professor
Clinical Lecturer
Clinical Lecturer
Clinical Assistant Professor
Clinical Lecturer
Clinical Assistant Professor
Clinical Assistant Professor
Clinical Lecturer
Clinical Associate Professor
Clinical Lecturer
Clinical Assistant Professor

Pediatric Surgery
Pediatric Surgery
<table>
<thead>
<tr>
<th>Name</th>
<th>Title/Rank</th>
<th>Primary Appointment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edwards, Richard</td>
<td>Section Chief &amp; Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Bureau, Stephen</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Cobb, Graham</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Goos, Ryan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Habijanac, Brett</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Higashi, Shawn</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>Kroetsch, Lorne</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smith, Miller</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Summers, Terence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Touchan, Simon</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>Vincelli, Douglas J.</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>William, Hedd-Wyn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Young, Carl Wayne</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>Title/Rank</td>
<td>Primary Appointment</td>
</tr>
<tr>
<td>-----------------------</td>
<td>--------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Hildebrand, Kevin A.</td>
<td>Section Chief &amp; Professor</td>
<td></td>
</tr>
<tr>
<td>Abelseth, Gregory A.</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Batuyong, Eldridge</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>Bauman, John</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Bazant, Francis J.</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Bell, Douglas</td>
<td>Clinical Associate Professor</td>
<td></td>
</tr>
<tr>
<td>Bering, Michael P.</td>
<td>Clinical Lecturer (Medicine Hat)</td>
<td></td>
</tr>
<tr>
<td>Bois, Aaron</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>Boorman, Richard S.</td>
<td>Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Bouchard, Jacques A.</td>
<td>Clinical Professor</td>
<td></td>
</tr>
<tr>
<td>Bowen, Vaughan</td>
<td>Clinical Professor</td>
<td></td>
</tr>
<tr>
<td>Brauer, Carmen</td>
<td>Assistant Professor</td>
<td>Pediatric Surgery</td>
</tr>
<tr>
<td>Bray, Robert C.</td>
<td>Professor</td>
<td></td>
</tr>
<tr>
<td>Buchko, Gregory</td>
<td></td>
<td>Rural Medicine</td>
</tr>
<tr>
<td>Buckley, Richard E.</td>
<td>Clinical Professor</td>
<td></td>
</tr>
<tr>
<td>Burkart, Brian C.</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Cho, Roger K.N.</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Clark, Marcia</td>
<td>Clinical Associate Professor</td>
<td></td>
</tr>
<tr>
<td>Cundal, Cory S.</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>Dhaliwal, Gurpreet Singh</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>De Souza, F. Kelley</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Donaghy, John J.</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Dougall, Hugh R</td>
<td>Clinical Associate Professor</td>
<td></td>
</tr>
<tr>
<td>Duffy, Paul J.</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Edwards, Glen E.</td>
<td>Clinical Professor</td>
<td></td>
</tr>
<tr>
<td>Ferri de Barros, Fabio</td>
<td>Clinical Assistant Professor</td>
<td>Pediatric Surgery</td>
</tr>
<tr>
<td>French, Stephen</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Goldstein, Simon G.</td>
<td>Clinical Assistant Professor</td>
<td>Pediatric Surgery</td>
</tr>
<tr>
<td>Harder, James A.</td>
<td>Clinical Associate Professor</td>
<td>Pediatric Surgery</td>
</tr>
<tr>
<td>Hart, David A.</td>
<td>Professor</td>
<td></td>
</tr>
<tr>
<td>Heard, S. Mark</td>
<td>Clinical Lecturer</td>
<td>Rural Medicine</td>
</tr>
<tr>
<td>Hiemstra, Laurie A.</td>
<td></td>
<td>Rural Medicine</td>
</tr>
<tr>
<td>Hiscox, Christina</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>Hollinshead, Robert M.</td>
<td>Clinical Professor</td>
<td></td>
</tr>
</tbody>
</table>
Hu, Richard W-C  Clinical Professor
Hunt, Stephen  Clinical Lecturer
Hutchison, Carolyn R.  Associate Professor
Johnston, Kelly D.  Clinical Lecturer
Joughin, V. Elaine  Clinical Assistant Professor  Pediatric Surgery
Kiefer, Gerhard N.  Clinical Associate Professor  Pediatric Surgery
Korley, Robert  Clinical Lecturer
Kuchinad, Raul  Clinical Lecturer
Lamothe, Jeremy  Clinical Lecturer
Le, Ian  Clinical Assistant Professor
Leblanc, Justin  Clinical Lecturer
Lewkonia, Peter  Clinical Assistant Professor
Lo, Ian K.Y.  Assistant Professor
Longino, David  Clinical Assistant Professor
Mackenzie, James R.  Clinical Lecturer
Martin, Ryan  Clinical Lecturer
Miller, Stephen D.  Clinical Associate Professor
Mohtadi, Nicholas G.H.  Clinical Professor
Mrkonjic, Linda A.  Clinical Assistant Professor
O’Brien, Maureen  Clinical Lecturer
Parsons, David L.  Clinical Associate Professor  Pediatric Surgery
Penner, Darrell A.  Clinical Lecturer
Powell, James N.  Clinical Professor
Puloski, Shannon K.T.  Clinical Lecturer
Rendall, Edward  Clinical Lecturer
Rezansoff, Alexander  Clinical Lecturer
Russell, Iain S.  Clinical Assistant Professor
Sabo, Marlis  Clinical Assistant Professor
Salo, Paul T.  Professor
Sharma, Rajrishi  Clinical Assistant Professor
Schachar, Norman S.  Clinical Professor
Schneider, Prism  Clinical Assistant Professor
Soroceanu, Alex  Clinical Assistant Professor
Stewart, James I.  Clinical Lecturer
Swamy, Ganesh  Clinical Assistant Professor
Thomas, Kenneth C.  Clinical Associate Professor
Timmermann, Scott  Clinical Assistant Professor
Van Zuiden, Lowell J.  Clinical Assistant Professor
Werle, Jason R.  Clinical Associate Professor
White, Neil  Clinical Lecturer
<table>
<thead>
<tr>
<th>Name</th>
<th>Title/Rank</th>
<th>Primary Appointment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matthews, T. Wayne</td>
<td>Section Chief &amp; Associate Professor</td>
<td></td>
</tr>
<tr>
<td>Bosch, J. Douglas</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Brookes, James</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Burke, Robert</td>
<td>Clinical Associate Professor</td>
<td></td>
</tr>
<tr>
<td>Chau, Jason K.</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Chau, Justin K.</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Chandarana, Shamir</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Dort, Joseph C.</td>
<td>Professor</td>
<td></td>
</tr>
<tr>
<td>Drummond, Derek S.</td>
<td>Clinical Assistant Professor</td>
<td>Pediatric Surgery</td>
</tr>
<tr>
<td>Gillis, Thomas M.</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Hoshowsky, Borys O.</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>Hoy, Monica</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>Huang, Ian T.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hui, Anita</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Lange, Elizabeth J.</td>
<td>Clinical Associate Professor</td>
<td></td>
</tr>
<tr>
<td>Marck, Paul A.</td>
<td>Clinical Associate Professor</td>
<td></td>
</tr>
<tr>
<td>Mechor, Brad</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Park, Phillip S.</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Rudmik, Luke</td>
<td>Clinical Associate Professor</td>
<td></td>
</tr>
<tr>
<td>Shandro, W.G. (Bud)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wagner, Garth A.L.</td>
<td>Clinical Associate Professor</td>
<td></td>
</tr>
<tr>
<td>Warshawski, S. Joseph</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Yunker, Warren</td>
<td>Clinical Assistant Professor</td>
<td>Pediatric Surgery</td>
</tr>
<tr>
<td>Zakhary, Kristina</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>Title/Rank</td>
<td>Section of Pediatric Surgery</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-------------------------------------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>Fraulin, Frankie</td>
<td>Section Chief &amp; Clinical Associate Professor</td>
<td>Section of Pediatric Surgery</td>
</tr>
<tr>
<td>Ashenhurst, Michael E.</td>
<td>Clinical Associate Professor</td>
<td>Section of Pediatric Surgery</td>
</tr>
<tr>
<td>Astle, William F.</td>
<td>Professor</td>
<td>Section of Pediatric Surgery</td>
</tr>
<tr>
<td>Badwi (Stein), Kari</td>
<td></td>
<td>Section of Pediatric Surgery</td>
</tr>
<tr>
<td>Barr, Richard</td>
<td></td>
<td>Section of Pediatric Surgery</td>
</tr>
<tr>
<td>Baverstock, Richard</td>
<td>Clinical Assistant Professor</td>
<td>Section of Pediatric Surgery</td>
</tr>
<tr>
<td>Beaudry, Paul</td>
<td>Clinical Assistant Professor</td>
<td>Section of Pediatric Surgery</td>
</tr>
<tr>
<td>Bell, Christine</td>
<td></td>
<td>Section of Pediatric Surgery</td>
</tr>
<tr>
<td>Bosch, J. Douglas</td>
<td>Clinical Assistant Professor</td>
<td>Section of Pediatric Surgery</td>
</tr>
<tr>
<td>Brauer, Carmen</td>
<td>Assistant Professor</td>
<td>Section of Pediatric Surgery</td>
</tr>
<tr>
<td><strong>Brindle, Mary E.</strong></td>
<td>Associate Head, Surgery &amp; Associate Professor</td>
<td>Section of Pediatric Surgery</td>
</tr>
<tr>
<td>Brookes, James</td>
<td>Clinical Assistant Professor</td>
<td>Section of Pediatric Surgery</td>
</tr>
<tr>
<td>Burke, Robert</td>
<td>Clinical Associate Professor</td>
<td>Section of Pediatric Surgery</td>
</tr>
<tr>
<td>Campbell, Earl A.D.</td>
<td>Clinical Assistant Professor</td>
<td>Section of Pediatric Surgery</td>
</tr>
<tr>
<td>Cholette, Marie-Claude</td>
<td>Clinical Assistant Professor</td>
<td>Section of Pediatric Surgery</td>
</tr>
<tr>
<td>Cook, Anthony J.</td>
<td>Clinical Assistant Professor</td>
<td>Section of Pediatric Surgery</td>
</tr>
<tr>
<td>Cooper, Linda</td>
<td>Associate Professor</td>
<td>Section of Pediatric Surgery</td>
</tr>
<tr>
<td>Dilay, Jocelyn E.</td>
<td></td>
<td>Section of Pediatric Surgery</td>
</tr>
<tr>
<td>Donnelly, Bryan J.</td>
<td>Clinical Assistant Professor</td>
<td>Section of Pediatric Surgery</td>
</tr>
<tr>
<td>Dotchin, Stephanie</td>
<td>Clinical Lecturer</td>
<td>Section of Pediatric Surgery</td>
</tr>
<tr>
<td>Drummond, Derek S.</td>
<td>Clinical Assistant Professor</td>
<td>Section of Pediatric Surgery</td>
</tr>
<tr>
<td>Dushinski, John W.</td>
<td>Clinical Assistant Professor</td>
<td>Section of Pediatric Surgery</td>
</tr>
<tr>
<td>Duffy, Martin</td>
<td>Clinical Lecturer</td>
<td>Section of Pediatric Surgery</td>
</tr>
<tr>
<td>Eccles, Robin C.</td>
<td>Clinical Assistant Professor</td>
<td>Section of Pediatric Surgery</td>
</tr>
<tr>
<td>Ferri de Barros, Fabio</td>
<td>Clinical Assistant Professor</td>
<td>Section of Pediatric Surgery</td>
</tr>
<tr>
<td>Frank, Ryan</td>
<td>Clinical Lecturer</td>
<td>Section of Pediatric Surgery</td>
</tr>
<tr>
<td>Ford, Bryce</td>
<td>Clinical Assistant Professor</td>
<td>Section of Pediatric Surgery</td>
</tr>
<tr>
<td>Gelfand, Gary A.J.</td>
<td>Clinical Assistant Professor</td>
<td>Section of Pediatric Surgery</td>
</tr>
<tr>
<td>Gillis, Thomas M.</td>
<td>Clinical Assistant Professor</td>
<td>Section of Pediatric Surgery</td>
</tr>
<tr>
<td>Goldstein, Simon G.</td>
<td>Clinical Assistant Professor</td>
<td>Section of Pediatric Surgery</td>
</tr>
<tr>
<td>Harder, James A.</td>
<td>Clinical Associate Professor</td>
<td>Section of Pediatric Surgery</td>
</tr>
<tr>
<td>Hosshowsky, Borys O.</td>
<td>Clinical Lecturer</td>
<td>Section of Pediatric Surgery</td>
</tr>
<tr>
<td>Huang, Ian T.</td>
<td></td>
<td>Section of Pediatric Surgery</td>
</tr>
<tr>
<td>Hui, Anita</td>
<td>Clinical Assistant Professor</td>
<td>Section of Pediatric Surgery</td>
</tr>
<tr>
<td>Name</td>
<td>Title</td>
<td>Department</td>
</tr>
<tr>
<td>-----------------------</td>
<td>--------------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>Harrop, A. Robertson</td>
<td>Clinical Associate Professor</td>
<td>Plastic Surgery</td>
</tr>
<tr>
<td>Hulland, Sarah</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humphreys, Douglas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Joughin, V. Elaine</td>
<td>Clinical Assistant Professor</td>
<td>Ophthalmology</td>
</tr>
<tr>
<td>Kiefer, Gerhard N.</td>
<td>Clinical Associate Professor</td>
<td>Ophthalmology</td>
</tr>
<tr>
<td>Kherani, Femida</td>
<td>Clinical Assistant Professor</td>
<td>Ophthalmology</td>
</tr>
<tr>
<td>Kirk, Angus</td>
<td>Clinical Associate Professor</td>
<td>Ophthalmology</td>
</tr>
<tr>
<td>Kirker, G.E. Mervyn</td>
<td>Clinical Assistant Professor</td>
<td>Urology</td>
</tr>
<tr>
<td>Kozak, Gregory N.</td>
<td>Clinical Assistant Professor</td>
<td>Ophthalmology</td>
</tr>
<tr>
<td>Lange, Elizabeth J.</td>
<td>Clinical Associate Professor</td>
<td>Otolaryngology</td>
</tr>
<tr>
<td>Lau, Henry</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>Lee, Jay</td>
<td>Clinical Assistant Professor</td>
<td>Urology</td>
</tr>
<tr>
<td>Leong, James</td>
<td></td>
<td>Urology</td>
</tr>
<tr>
<td>Loeppky, Warren</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lopushinsky, Steven</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>McKenzie, C. David</td>
<td>Clinical Assistant Professor</td>
<td>Plastic Surgery</td>
</tr>
<tr>
<td>McPhalen, Donald F.</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Mehra, Tarun</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metcalfe, Donald G.</td>
<td>Clinical Assistant Professor</td>
<td>Urology</td>
</tr>
<tr>
<td>Park, Phillip S.</td>
<td>Clinical Assistant Professor</td>
<td>Otolaryngology</td>
</tr>
<tr>
<td>Parsons, David L.</td>
<td>Clinical Associate Professor</td>
<td></td>
</tr>
<tr>
<td>Pilipowicz, Orest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Romanchuk, Kenneth G.</td>
<td>Clinical Professor</td>
<td></td>
</tr>
<tr>
<td>Savage, Paul R.G.</td>
<td>Clinical Assistant Professor</td>
<td>Ophthalmology</td>
</tr>
<tr>
<td>Schwann, Sandra</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skov, Carolyn M.B.</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>Shandro, W.G. (Bud)</td>
<td></td>
<td>Otolaryngology</td>
</tr>
<tr>
<td>Smith, Leonard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vinsky, Rory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wagner, Garth A.L.</td>
<td>Clinical Associate Professor</td>
<td>Otolaryngology</td>
</tr>
<tr>
<td>Warshawski, S. Joseph</td>
<td>Clinical Lecturer</td>
<td>Otolaryngology</td>
</tr>
<tr>
<td>Weber, Bryce</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Wong, Andrew L.</td>
<td>Clinical Associate Professor</td>
<td></td>
</tr>
<tr>
<td>Yunker, Warren</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>Title/Rank</td>
<td>Primary Appointment</td>
</tr>
<tr>
<td>-----------------------</td>
<td>------------------------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Harrop, A. Robertson</td>
<td>Section Chief &amp; Clinical Associate Professor</td>
<td>Pediatric Surgery</td>
</tr>
<tr>
<td>Beveridge, John A.</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>Birdsell, Dale C.</td>
<td>Clinical Professor</td>
<td></td>
</tr>
<tr>
<td>Campbell, Earl A.D.</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Dawes, Jeffrey</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>De Haas, William G.</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Dilay, Jocelyn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frank, Ryan</td>
<td>Clinical Lecturer</td>
<td>Pediatric Surgery</td>
</tr>
<tr>
<td>Fraulin, Frankie</td>
<td>Clinical Associate Professor</td>
<td>Pediatric Surgery</td>
</tr>
<tr>
<td>Hall-Findlay, Elizabeth</td>
<td></td>
<td>Rural Medicine</td>
</tr>
<tr>
<td>Hamilton, George D.</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Haugrud, Mark J.</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Humphreys, Douglas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kennedy, James</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>Lee, Jonathan</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>Lin, Alan</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Lindsay, Robert L.</td>
<td>Clinical Associate Professor</td>
<td></td>
</tr>
<tr>
<td>Loiselle, Frederick</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>Magi, Enzio</td>
<td>Clinical Associate Professor</td>
<td></td>
</tr>
<tr>
<td>Mathews, Jennifer</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>McKenzie, C. David</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>McPhalen, Donald F.</td>
<td>Clinical Assistant Professor</td>
<td>Pediatric Surgery</td>
</tr>
<tr>
<td>Nickerson, Duncan A.</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Perron, Wayne</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schrag, Christiaan</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Sinclair, Thomas M.</td>
<td></td>
<td>Rural Medicine</td>
</tr>
<tr>
<td>Sutton, Frank</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waslen, Gregory D.</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Whidden, Paul G.R.</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>Yau, Farrah</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>Yeung, Justin</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
</tbody>
</table>
## Section of Podiatric Surgery

<table>
<thead>
<tr>
<th>Name</th>
<th>Title/Rank</th>
<th>Primary Appointment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harton, Francois</td>
<td>Section Chief &amp; Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>Bulanda, Catherine S.</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>Feldman, Ziv S.</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>Gurevitch, Darryl</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>Gurevitch, Jason</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>Haverstock, Brent D.</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Humble, R. Neal</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Lelièvre, Phillip M.</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>Manji, Karim</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>Newsom, Russell</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paul, Darrell</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Somer, Gregory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unger, Kenneth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zivot, Mark L.</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
</tbody>
</table>

## Section of Surgical Oncology

<table>
<thead>
<tr>
<th>Name</th>
<th>Title/Rank</th>
<th>Primary Appointment</th>
</tr>
</thead>
<tbody>
<tr>
<td>J. Gregory McKinnon</td>
<td>Section Chief &amp; Professor</td>
<td></td>
</tr>
<tr>
<td>Arlette, John</td>
<td>Clinical Professor</td>
<td>General Surgery</td>
</tr>
<tr>
<td>Ball, Chad</td>
<td>Clinical Associate Professor</td>
<td>General Surgery</td>
</tr>
<tr>
<td>Bathe, Oliver F.</td>
<td>Professor</td>
<td>General Surgery</td>
</tr>
<tr>
<td>Buie, W. Donald</td>
<td>Professor</td>
<td>General Surgery</td>
</tr>
<tr>
<td>Bosch, J. Douglas</td>
<td>Clinical Assistant Professor</td>
<td>Otolaryngology</td>
</tr>
<tr>
<td>Chandarana, Shamir</td>
<td>Clinical Assistant Professor</td>
<td>Otolaryngology</td>
</tr>
<tr>
<td>Dawes, Jeffrey</td>
<td>Clinical Lecturer</td>
<td>Plastic Surgery</td>
</tr>
<tr>
<td>Dixon, Elijah</td>
<td>Professor</td>
<td>General Surgery</td>
</tr>
<tr>
<td>Dort, Joseph C.</td>
<td>Professor</td>
<td>Otolaryngology</td>
</tr>
<tr>
<td>Gelfand, Gary A.J.</td>
<td>Clinical Assistant Professor</td>
<td>Thoracic Surgery</td>
</tr>
<tr>
<td>Graham, Andrew J.</td>
<td>Clinical Associate Professor</td>
<td>Thoracic Surgery</td>
</tr>
<tr>
<td>Lafreniere, Rene</td>
<td>Professor</td>
<td>General Surgery</td>
</tr>
<tr>
<td>Lindsay, Robert L.</td>
<td>Clinical Associate Professor</td>
<td>Plastic Surgery</td>
</tr>
<tr>
<td>Mack, Lloyd</td>
<td>Assistant Professor</td>
<td>General Surgery</td>
</tr>
<tr>
<td>MacLean, Anthony R.</td>
<td>Clinical Associate Professor</td>
<td>General Surgery</td>
</tr>
<tr>
<td>Magi, Enzio</td>
<td>Clinical Associate Professor</td>
<td>Plastic Surgery</td>
</tr>
<tr>
<td>Matthews, T. Wayne</td>
<td>Associate Professor</td>
<td>Otolaryngology</td>
</tr>
<tr>
<td>Name</td>
<td>Title/Rank</td>
<td>Primary Appointment</td>
</tr>
<tr>
<td>-----------------------</td>
<td>---------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>McFadden, Sean</td>
<td>Section Chief &amp; Clinical Assistant Professor</td>
<td>Thoracic Surgery</td>
</tr>
<tr>
<td>Gelfand, Gary A.J.</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Graham, Andrew J.</td>
<td>Clinical Associate Professor</td>
<td></td>
</tr>
<tr>
<td>Grondin, Sean C.</td>
<td>Clinical Professor</td>
<td></td>
</tr>
<tr>
<td>Salazar, Anastasio</td>
<td>Section Chief &amp; Associate Professor</td>
<td>Transplant Surgery</td>
</tr>
<tr>
<td>Monroy, F. Mauricio</td>
<td>Associate Professor</td>
<td></td>
</tr>
<tr>
<td>Yilmaz, Serdar</td>
<td>Associate Professor</td>
<td></td>
</tr>
</tbody>
</table>
### Section of Urology

<table>
<thead>
<tr>
<th>Name</th>
<th>Title/Rank</th>
<th>Primary Appointment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carlson, Kevin</td>
<td>Section Chief &amp; Clinical Associate Professor</td>
<td></td>
</tr>
<tr>
<td>Barr, Richard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baverstock, Richard</td>
<td>Clinical Associate Professor</td>
<td></td>
</tr>
<tr>
<td>Cook, Anthony J.</td>
<td>Clinical Assistant Professor</td>
<td>Pediatric Surgery</td>
</tr>
<tr>
<td>Donnelly, Bryan J.</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Duffy, Martin</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>Dushinski, John W.</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Gotto, Geoffrey</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Hyndman, C. William</td>
<td>Clinical Assistant Professor</td>
<td>Pediatric Surgery</td>
</tr>
<tr>
<td>Hyndman, Matthew Eric</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Kawakami, Jun</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Kozak, Gregory N.</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Lee, Jay</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Leong, James</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metcalfe, Charles</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>Metcalfe, Donald G.</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Shields, William R.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weber, Bryce</td>
<td>Clinical Assistant Professor</td>
<td>Pediatric Surgery</td>
</tr>
<tr>
<td>Wilkin, R. Peter</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
</tbody>
</table>

### Section of Vascular Surgery

<table>
<thead>
<tr>
<th>Name</th>
<th>Title/Rank</th>
<th>Primary Appointment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petrasek, Paul F.</td>
<td>Section Chief &amp; Associate Professor</td>
<td></td>
</tr>
<tr>
<td>Clark, Jeffrey</td>
<td>Clinical Lecturer</td>
<td></td>
</tr>
<tr>
<td>Guimond, Marie-France</td>
<td>Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Moore, Randy D.</td>
<td>Associate Professor</td>
<td></td>
</tr>
<tr>
<td>Nutley, Mark</td>
<td>Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Samis, Gregory A.</td>
<td>Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Wong, Joyce</td>
<td>Clinical Assistant Professor</td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>Title/Rank</td>
<td>Department</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-----------------------------------</td>
<td>-------------------------------------</td>
</tr>
<tr>
<td>Krawetz, Roman</td>
<td>Assistant Professor</td>
<td>Surgery and Cell Biology &amp; Anatomy</td>
</tr>
<tr>
<td>Oddone Paolucci, Elizabeth</td>
<td>Assistant Professor</td>
<td>Department of Surgery</td>
</tr>
<tr>
<td>Thornton, Gail M.</td>
<td>Associate Professor</td>
<td>Civil Engineering</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Title/Rank</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appoo, Jehangir</td>
<td>Clinical Assistant Professor</td>
<td>Cardiac Sciences</td>
</tr>
<tr>
<td>Bayes, Alexander J.</td>
<td>Clinical Associate Professor</td>
<td>Cardiac Sciences</td>
</tr>
<tr>
<td>Biernaskie, Jeffrey A.</td>
<td>Assistant Professor</td>
<td>Veterinary Medicine</td>
</tr>
<tr>
<td>Bech-Hansen, N. Torben</td>
<td>Professor</td>
<td>Medical Genetics</td>
</tr>
<tr>
<td>Burgess, John J.</td>
<td>Clinical Associate Professor</td>
<td>Cardiac Sciences</td>
</tr>
<tr>
<td>Casha, Steven</td>
<td>Assistant Professor</td>
<td>Clinical Neurosciences</td>
</tr>
<tr>
<td>Clark, Andrea</td>
<td>Assistant Professor</td>
<td>Kinesiology</td>
</tr>
<tr>
<td>Costello, Fiona</td>
<td>Clinical Assistant Professor</td>
<td>Clinical Neurosciences</td>
</tr>
<tr>
<td>Dobson, Gary M.</td>
<td>Associate Professor</td>
<td>Anaesthesia</td>
</tr>
<tr>
<td>Duplessis, Stephan J.</td>
<td>Clinical Assistant Professor</td>
<td>Clinical Neurosciences</td>
</tr>
<tr>
<td>Fedak, Paul W. M.</td>
<td>Assistant Professor</td>
<td>Cardiac Sciences</td>
</tr>
<tr>
<td>Fletcher, William A.</td>
<td>Professor</td>
<td>Clinical Neurosciences</td>
</tr>
<tr>
<td>Gabriel, Vincent</td>
<td>Clinical Assistant Professor</td>
<td>Clinical Neurosciences</td>
</tr>
<tr>
<td>Gregg, Sean</td>
<td>Clinical Lecturer (Red Deer)</td>
<td>General Surgery</td>
</tr>
<tr>
<td>Hamilton, Mark</td>
<td>Associate Professor</td>
<td>Clinical Neurosciences</td>
</tr>
<tr>
<td>Hayry, Pekka</td>
<td>Clinical Professor</td>
<td>Pathology and Laboratory Medicine</td>
</tr>
<tr>
<td>Hurlbert, R. John</td>
<td>Associate Professor</td>
<td>Clinical Neurosciences</td>
</tr>
<tr>
<td>Kidd, William T.</td>
<td>Clinical Assistant Professor</td>
<td>Cardiac Sciences</td>
</tr>
<tr>
<td>Jena, Debakanta</td>
<td>Clinical Assistant Professor</td>
<td>Family Medicine</td>
</tr>
<tr>
<td>Kurwa, Habib</td>
<td>Clinical Associate Professor</td>
<td>Medicine/Oncology</td>
</tr>
<tr>
<td>MacEachern, Paul R.</td>
<td>Clinical Assistant Professor</td>
<td>Medicine/Oncology</td>
</tr>
<tr>
<td>McColl, Ryan</td>
<td>Clinical Lecturer (Lethbridge)</td>
<td>General Surgery</td>
</tr>
<tr>
<td>Lysack, John</td>
<td>Clinical Associate Professor</td>
<td>Radiology/Clinical Neurosciences</td>
</tr>
<tr>
<td>Maitland, Andrew</td>
<td>Associate Professor</td>
<td>Cardiac Sciences</td>
</tr>
<tr>
<td>Muldrew, Kenneth B.</td>
<td>Assistant Professor</td>
<td>Cell Biology &amp; Anatomy</td>
</tr>
<tr>
<td>Prieur (Kieser), Teresa M.</td>
<td>Associate Professor</td>
<td>Cardiac Sciences</td>
</tr>
<tr>
<td>Rothschild, John</td>
<td>Clinical Associate Professor</td>
<td>Cardiac Sciences</td>
</tr>
<tr>
<td>Stell, William K.</td>
<td>Professor</td>
<td>Cell Biology &amp; Anatomy</td>
</tr>
<tr>
<td>Subramaniam, Suresh</td>
<td>Clinical Assistant Professor</td>
<td>Clinical Neurosciences</td>
</tr>
<tr>
<td>Name</td>
<td>Title/Rank</td>
<td>Department</td>
</tr>
<tr>
<td>-----------------------</td>
<td>---------------------</td>
<td>-------------------------------------</td>
</tr>
<tr>
<td>Bultz, Barry D.</td>
<td>Adjunct Professor</td>
<td>Surgery, Oncology &amp; Psychiatry</td>
</tr>
<tr>
<td>Crump, Trafford</td>
<td>Adjunct Lecturer</td>
<td>Department of Surgery</td>
</tr>
<tr>
<td>Duncan, Neil A.</td>
<td>Adjunct Associate Professor</td>
<td>Department of Surgery</td>
</tr>
<tr>
<td>Herzog, Walter</td>
<td>Adjunct Associate Professor</td>
<td>Department of Surgery</td>
</tr>
<tr>
<td>McGann, Locksley E.</td>
<td>Adjunct Professor</td>
<td>Department of Surgery</td>
</tr>
<tr>
<td>Nigg, Benno M.</td>
<td>Adjunct Professor</td>
<td>Department of Surgery</td>
</tr>
<tr>
<td>Plaas, Anna H.K.</td>
<td>Adjunct Associate Professor</td>
<td>Department of Surgery</td>
</tr>
<tr>
<td>Ponton-Carss, Alicia</td>
<td>Adjunct Assistant Professor</td>
<td>Department of Surgery</td>
</tr>
<tr>
<td>Poulin, Paule</td>
<td>Adjunct Assistant Professor</td>
<td>Cell Biology &amp; Anatomy and Surgery</td>
</tr>
<tr>
<td>Rangayyan, Rangaraj M.</td>
<td>Adjunct Professor</td>
<td>Radiology and Surgery</td>
</tr>
<tr>
<td>Shrive, Nigel G.</td>
<td>Adjunct Professor</td>
<td>Department of Surgery</td>
</tr>
<tr>
<td>Sigalet, David L.</td>
<td>Adjunct Professor</td>
<td>Department of Surgery</td>
</tr>
<tr>
<td>Wishart, Paul M.</td>
<td>Adjunct Assistant Professor</td>
<td>Department of Surgery</td>
</tr>
<tr>
<td>Zemicke, Ronald F.</td>
<td>Adjunct Professor</td>
<td>Surgery/Physiology &amp; Pharmacology</td>
</tr>
</tbody>
</table>
Surgical Statistical Activity by Service
All Hospitals (FMC, RGH, PLC, ACH, SHC)

Total Activity Cases

| Service | 11/13 | 12/13 | 13/14 | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | G1 | G2 | Oct | Nov | Dec | G3 | Jan | Feb | Mar | Q4 | YTD | Change | Variance |
|---------|-------|-------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|          |       |       |       |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|          |       |       |       |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

Total:

|          |       |       |       |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|          |       |       |       |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

Total Activity Cases by Hours

| Service | 11/13 | 12/13 | 13/14 | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | G1 | G2 | Oct | Nov | Dec | G3 | Jan | Feb | Mar | Q4 | YTD | Change | Variance |
|---------|-------|-------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|          |       |       |       |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|          |       |       |       |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

Total:

|          |       |       |       |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|          |       |       |       |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
## Surgical Statistical Activity by Admit Type

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

### Calgary Zone

| Srv | Admit Type | 11/12 | 12/13 | 13/14 | Apr | May | Jun | Jul | Aug | Sep | Q2 | Oct | Nov | Dec | Q3 | Jan | Feb | Mar | Q4 | YTD change |
|-----|------------|-------|-------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
|     | Elective   | 3     | 6     | 1     | 0   | 0   | 0   | 1   | 0   | 0   | 0   | 1   | 0   | 1   | 2   | 0   | 0   | 0   | 0   | 1   | 100.00 |
|     | Emergency  | 4     | 9     | 5     | 0   | 0   | 1   | 1   | 0   | 1   | 2   | 0   | 2   | 0   | 1   | 0   | 0   | 0   | 0   | 0   | 0.00  |
|     | Urgent     | 0     | 2     | 0     | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0.00  |
|     | Total      | 13    | 17    | 7     | 0   | 0   | 1   | 1   | 0   | 1   | 2   | 0   | 2   | 0   | 1   | 2   | 0   | 0   | 0   | 0   | 700.00 |
| **ALL** | Elective   | 0     | 0     | 0     | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0.00  |
|       | Total      | 0     | 0     | 0     | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0.00  |
| **ANA** | Elective   | 0     | 3     | 1     | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0.00  |
|       | Total      | 0     | 3     | 1     | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0.00  |
| **CAR** | Elective   | 0     | 0     | 1     | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0.00  |
|       | Total      | 0     | 0     | 1     | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0.00  |
| **COH** | Elective   | 0     | 0     | 0     | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0.00  |
|       | Total      | 0     | 0     | 0     | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0.00  |
| **DEN** | Elective   | 0     | 0     | 0     | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0.00  |
|       | Total      | 0     | 0     | 0     | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0.00  |
| **ENT** | Elective   | 0     | 0     | 0     | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0.00  |
|       | Total      | 0     | 0     | 0     | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0.00  |

### Note

- YTD change represents the year-to-date change in the number of surgical procedures performed.
- The table above provides a detailed breakdown of surgical activity across different hospitals, Admit Type categories, and time periods.
<table>
<thead>
<tr>
<th>Sr</th>
<th>Admit Type</th>
<th>2013/14</th>
<th>% YTD change</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPH</td>
<td>Urgent</td>
<td>555</td>
<td>850</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2042</td>
<td>2490</td>
</tr>
<tr>
<td>ORA</td>
<td>Elective</td>
<td>365</td>
<td>323</td>
</tr>
<tr>
<td></td>
<td>Emergency</td>
<td>76</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Urgent</td>
<td>4</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>365</td>
<td>411</td>
</tr>
<tr>
<td>OLT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>601</td>
<td>845</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1236</td>
<td>1376</td>
</tr>
<tr>
<td>PLS</td>
<td>Elective</td>
<td>2278</td>
<td>2202</td>
</tr>
<tr>
<td></td>
<td>Emergency</td>
<td>639</td>
<td>426</td>
</tr>
<tr>
<td></td>
<td>Urgent</td>
<td>597</td>
<td>595</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>3412</td>
<td>3223</td>
</tr>
<tr>
<td>POD</td>
<td>Elective</td>
<td>249</td>
<td>157</td>
</tr>
<tr>
<td></td>
<td>Emergency</td>
<td>149</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Urgent</td>
<td>14</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>418</td>
<td>276</td>
</tr>
<tr>
<td>PEY</td>
<td>Elective</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Emergency</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Urgent</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>RAD</td>
<td>Elective</td>
<td>113</td>
<td>143</td>
</tr>
<tr>
<td></td>
<td>Emergency</td>
<td>184</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Urgent</td>
<td>14</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>481</td>
<td>549</td>
</tr>
<tr>
<td>RES</td>
<td>Elective</td>
<td>17</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Emergency</td>
<td>29</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>46</td>
<td>47</td>
</tr>
<tr>
<td>RES-TNO</td>
<td>Elective</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>TRN</td>
<td>Elective</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>URO</td>
<td>Elective</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>VAS</td>
<td>Elective</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Summary</td>
<td></td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

**ANNUAL REPORT 2014/2015**
Surgical Statistical Activity by Patient Type
All Hospitals (FMC, RGH, PLC, ACH, SHC)
Surgical Statistical Activity by Patient Type
All Hospitals (FMC, RGH, PLC, ACH, SHC)

### Calgary Zone Surgical Statistical Activity by Patient Type

<table>
<thead>
<tr>
<th>Patient Type</th>
<th>11/12</th>
<th>12/13</th>
<th>13/14</th>
<th>14/15</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Q1</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Q3</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Q4</th>
<th>YTD</th>
</tr>
</thead>
<tbody>
<tr>
<td>THO InPatient</td>
<td>537</td>
<td>486</td>
<td>482</td>
<td></td>
<td>40</td>
<td>39</td>
<td>51</td>
<td>130</td>
<td>29</td>
<td>30</td>
<td>50</td>
<td>139</td>
<td>39</td>
<td>45</td>
<td>139</td>
<td>53</td>
<td>36</td>
<td>47</td>
<td>196</td>
<td>510</td>
</tr>
<tr>
<td>THO OutPatient</td>
<td>50</td>
<td>66</td>
<td>54</td>
<td></td>
<td>7</td>
<td>5</td>
<td>2</td>
<td>14</td>
<td>3</td>
<td>5</td>
<td>2</td>
<td>10</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>6</td>
<td>0</td>
<td>4</td>
<td>3</td>
<td>37</td>
</tr>
<tr>
<td>Subtotal</td>
<td>587</td>
<td>552</td>
<td>536</td>
<td></td>
<td>47</td>
<td>44</td>
<td>53</td>
<td>144</td>
<td>32</td>
<td>35</td>
<td>52</td>
<td>119</td>
<td>42</td>
<td>47</td>
<td>52</td>
<td>141</td>
<td>53</td>
<td>40</td>
<td>50</td>
<td>143</td>
</tr>
<tr>
<td>TRN InPatient</td>
<td>140</td>
<td>208</td>
<td>221</td>
<td></td>
<td>6</td>
<td>19</td>
<td>22</td>
<td>49</td>
<td>22</td>
<td>9</td>
<td>10</td>
<td>41</td>
<td>16</td>
<td>13</td>
<td>24</td>
<td>53</td>
<td>13</td>
<td>16</td>
<td>23</td>
<td>52</td>
</tr>
<tr>
<td>TRN OutPatient</td>
<td>330</td>
<td>283</td>
<td>304</td>
<td></td>
<td>38</td>
<td>31</td>
<td>27</td>
<td>98</td>
<td>32</td>
<td>37</td>
<td>26</td>
<td>95</td>
<td>91</td>
<td>41</td>
<td>16</td>
<td>21</td>
<td>78</td>
<td>16</td>
<td>24</td>
<td>60</td>
</tr>
<tr>
<td>Subtotal</td>
<td>470</td>
<td>492</td>
<td>525</td>
<td></td>
<td>46</td>
<td>50</td>
<td>49</td>
<td>145</td>
<td>54</td>
<td>46</td>
<td>36</td>
<td>136</td>
<td>57</td>
<td>29</td>
<td>45</td>
<td>131</td>
<td>29</td>
<td>40</td>
<td>43</td>
<td>112</td>
</tr>
<tr>
<td>URO InPatient</td>
<td>4025</td>
<td>4078</td>
<td>5219</td>
<td></td>
<td>406</td>
<td>472</td>
<td>420</td>
<td>1567</td>
<td>430</td>
<td>419</td>
<td>434</td>
<td>1263</td>
<td>460</td>
<td>424</td>
<td>427</td>
<td>1311</td>
<td>431</td>
<td>425</td>
<td>453</td>
<td>1368</td>
</tr>
<tr>
<td>URO OutPatient</td>
<td>2597</td>
<td>2745</td>
<td>2897</td>
<td></td>
<td>247</td>
<td>262</td>
<td>236</td>
<td>744</td>
<td>217</td>
<td>149</td>
<td>287</td>
<td>533</td>
<td>334</td>
<td>248</td>
<td>256</td>
<td>832</td>
<td>284</td>
<td>265</td>
<td>237</td>
<td>786</td>
</tr>
<tr>
<td>Subtotal</td>
<td>7049</td>
<td>7623</td>
<td>8156</td>
<td></td>
<td>703</td>
<td>734</td>
<td>674</td>
<td>2111</td>
<td>647</td>
<td>668</td>
<td>701</td>
<td>1916</td>
<td>794</td>
<td>672</td>
<td>677</td>
<td>2143</td>
<td>715</td>
<td>690</td>
<td>730</td>
<td>2135</td>
</tr>
<tr>
<td>VAS InPatient</td>
<td>703</td>
<td>765</td>
<td>761</td>
<td></td>
<td>52</td>
<td>68</td>
<td>64</td>
<td>186</td>
<td>62</td>
<td>62</td>
<td>76</td>
<td>200</td>
<td>58</td>
<td>58</td>
<td>66</td>
<td>206</td>
<td>72</td>
<td>61</td>
<td>72</td>
<td>205</td>
</tr>
<tr>
<td>VAS OutPatient</td>
<td>113</td>
<td>185</td>
<td>146</td>
<td></td>
<td>11</td>
<td>7</td>
<td>15</td>
<td>33</td>
<td>8</td>
<td>11</td>
<td>27</td>
<td>15</td>
<td>13</td>
<td>13</td>
<td>41</td>
<td>16</td>
<td>13</td>
<td>9</td>
<td>38</td>
<td>139</td>
</tr>
<tr>
<td>Subtotal</td>
<td>816</td>
<td>951</td>
<td>907</td>
<td></td>
<td>63</td>
<td>75</td>
<td>79</td>
<td>217</td>
<td>70</td>
<td>70</td>
<td>87</td>
<td>227</td>
<td>92</td>
<td>71</td>
<td>78</td>
<td>241</td>
<td>88</td>
<td>74</td>
<td>81</td>
<td>243</td>
</tr>
</tbody>
</table>

### Summary

<table>
<thead>
<tr>
<th>Patient Type</th>
<th>11/12</th>
<th>12/13</th>
<th>13/14</th>
<th>14/15</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Q1</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Q3</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Q4</th>
<th>YTD</th>
</tr>
</thead>
<tbody>
<tr>
<td>InPatient</td>
<td>37986</td>
<td>38309</td>
<td>40838</td>
<td></td>
<td>3700</td>
<td>3610</td>
<td>3854</td>
<td>10984</td>
<td>3329</td>
<td>3323</td>
<td>3682</td>
<td>15254</td>
<td>3961</td>
<td>3522</td>
<td>3486</td>
<td>10569</td>
<td>3665</td>
<td>3449</td>
<td>3807</td>
<td>10921</td>
</tr>
<tr>
<td>OutPatient</td>
<td>27374</td>
<td>27039</td>
<td>29068</td>
<td></td>
<td>2755</td>
<td>2747</td>
<td>2623</td>
<td>8125</td>
<td>1891</td>
<td>1536</td>
<td>2648</td>
<td>6168</td>
<td>3047</td>
<td>2463</td>
<td>2381</td>
<td>7911</td>
<td>2683</td>
<td>2533</td>
<td>2713</td>
<td>7829</td>
</tr>
<tr>
<td>Total</td>
<td>65259</td>
<td>65338</td>
<td>70006</td>
<td></td>
<td>64855</td>
<td>63577</td>
<td>62777</td>
<td>19089</td>
<td>5223</td>
<td>4862</td>
<td>6330</td>
<td>16412</td>
<td>6908</td>
<td>6055</td>
<td>5967</td>
<td>18780</td>
<td>6348</td>
<td>5982</td>
<td>6520</td>
<td>18856</td>
</tr>
</tbody>
</table>

albertahealthservices.ca
NHSF Surgical Indicator Report
Wait Time Reports by Procedure Group
2.4 Safe Surgery Checklist Compliance

Date: 03/01/2015 to 03/31/2015

![Individual Checklist Compliance Chart]

<table>
<thead>
<tr>
<th>Site</th>
<th>Total Case Counts</th>
<th>Briefing</th>
<th>Briefing Percent</th>
<th>Timeout</th>
<th>Timeout Percent</th>
<th>Debriefing</th>
<th>Debriefing Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACH</td>
<td>1086</td>
<td>989</td>
<td>91</td>
<td>991</td>
<td>91</td>
<td>962</td>
<td>91</td>
</tr>
<tr>
<td>FMC</td>
<td>1846</td>
<td>1787</td>
<td>97</td>
<td>1719</td>
<td>93</td>
<td>1787</td>
<td>97</td>
</tr>
<tr>
<td>PLC</td>
<td>1293</td>
<td>1286</td>
<td>99</td>
<td>1287</td>
<td>100</td>
<td>1284</td>
<td>99</td>
</tr>
<tr>
<td>RGH</td>
<td>1664</td>
<td>1655</td>
<td>99</td>
<td>1656</td>
<td>100</td>
<td>1653</td>
<td>99</td>
</tr>
<tr>
<td>SHC</td>
<td>962</td>
<td>948</td>
<td>99</td>
<td>947</td>
<td>98</td>
<td>945</td>
<td>98</td>
</tr>
</tbody>
</table>
3.1 Peer-Reviewed Journal Articles

Section of Dentistry and Oral Health


Section of General Surgery


4. 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 (ISSN: 1752-2897)


8. Mai KT; Ball CG; Kos Z; Belanger EC; Islam S; Sekhon H (2014) Three-dimensional cell groups with disordered nuclei and cellular discohesion (3DDD) are associated with high sensitivity and specificity for cystoscopic urine cytopathological diagnosis of low-grade urothelial neoplasia. Diagn Cytopathol 2014 Jul;42(7):555-63 (ISSN: 1097-0339)


14. Mckee JL; Roberts DJ; van Wijngaarden-Stephens MH; Vis C; Gao H; Belton KL; Voaklander D; Ball CG; Bratu I; Ibbotson GC; Martin K; Engels P; Paton-Gay D; Parks P; Thomas L; Guilfoyle J; Kortbeek JB; Kirkpatrick AW, Collective Name: Provincial Trauma Committee of Alberta. (2015) The right treatment at the right time in the right place: a population-based, before-and-after study of outcomes associated with implementation of an all-inclusive trauma system in a large Canadian province. Ann Surg 2015 Mar;261(3):558-64 (ISSN: 1528-1140)


16. 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. HPB (Oxford) 2014 Oct;16(10):936-42 (ISSN: 1477-2574)


18. Wei AC; Urbach DR; Devitt KS; Wiebe M; Bathe OF; McLeod RS; Kennedy ED; Baxter NN (2014) Improving quality through process change: a scoping review of process improvement tools in cancer surgery. BMC Surg 2014;14:45 (ISSN: 1471-2482)

19. Steele SR; McCormick J; Melton GB; Paquette I; Rivadeneira DE; Stewart D; Buie WD; Rafferty J (2015) Practice parameters for the management of Clostridium difficile infection. Dis Colon Rectum 2015 Jan;58(1):10-24 (ISSN: 1530-0358)

20. Kaiser AM; Orangio GR; Zutshi M; Alva S; Hull TL; Marcello PW; Margolin DA; Rafferty JF; Buie WD; Wexner SD (2014) Current status: new technologies for the treatment of patients with fecal incontinence. Surg Endosc 2014 Aug;28(8):2277-301 (ISSN: 1432-2218)


22. James MT; Dixon E; Roberts DJ; Barry R; Balint C; Bharwani A; Buie WD; Godinez T; Hemmelgarn BR; Kortbeek JB; Manns BJ; Marin A; Scott-Douglas N; Stelfox HT; Pannu N (2014) Improving prevention, early recognition and management of acute kidney injury after major surgery: results of a planning meeting with multidisciplinary stakeholders. Can J Kidney Health Dis 2014;1:20 (ISSN: 2054-3581)

23. Hamilton TD; Leugner D; Kopciuk K; Dixon E; Sutherland FR; Bathe OF (2014) Identification of prognostic inflammatory factors in colorectal liver metastases. BMC Cancer 2014;14:542 (ISSN: 1471-2407)

24. 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 (pancreatocoduodenectomy) with preoperatively-placed intrabiliary stents: protocol for a randomised controlled trial [In Process Citation]. BMJ Open 2014;4(8):e005577 (ISSN: 2044-6055)


27. Quan S; Frolikis A; Milne K; Molodecky N; Yang H; Dixon E; Ball CG; Myers RP; Ghosh S; Hilsden R; van Zanten SV; Kaplan GG (2014) Upper-gastrointestinal bleeding secondary to peptic ulcer disease: Incidence and outcomes. World J Gastroenterol 2014 Dec 14;20(46):17568-77 Saciragic (ISSN: 2219-2840)
28. Jhaveri K; Cleary S; Audet P; Balaa F; Bhayana D; Burak K; Chang S; Dixon E; Haider M; Molinari M; Reinhold C; Sherman M (2015) Consensus statements from a multidisciplinary expert panel on the utilization and application of a liver-specific MRI contrast agent (gadoxetic acid). AJR Am J Roentgenol 2015 Mar;204(3):498-509 (ISSN: 1546-3141)

29. 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. Am J Surg 2014 Aug;208(2):171-7 (ISSN: 1879-1883)


33. Kirkpatrick AW; De Waele JJ; De Laet I; De Keulenaer BL; D'Amours S; Bjorck M; Balogh ZJ; Leppaniemi A; Kaplan M; Chiaka Ejike J; Reintam Blaser A; Sugrue M; Ivatury RR; Malbrain ML (2015) WSACS - The Abdominal Compartment Society. A Society dedicated to the study of the physiology and pathophysiology of the abdominal compartment and its interactions with all organ systems [In Process Citation]. Anaesthesiol Intensive Ther 2015;47(3):191-4 (ISSN: 1731-2515)


35. 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). Injury 2014 Sep;45(9):1413-21 (ISSN: 1879-0267)


38. Roberts DJ; Zygun DA; Kirkpatrick AW; Ball CG; Faris PD; Bobrovitz N; Robertson HL; Stelfox HT (2014) A protocol for a scoring 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 (ISSN: 2044-6055)


40. Blackmore C; Ouellet JF; Niven D; Kirkpatrick AW; Ball CG (2014) Prevention of delirium in trauma patients: are we giving thiamine prophylaxis a fair chance? Can J Surg 2014 Apr;57(2):78-81 (ISSN: 1488-2310)

41. Malbrain ML; Marik PE; Witters I; Cordemans C; Kirkpatrick AW; Roberts DJ; Van Regenmortel N (2014) Fluid overload, de-resuscitation, and outcomes in critically ill or injured patients: a systematic review with suggestions for clinical practice. Anaesthesiol Intensive Ther 2014 Nov-Dec;46(5):361-80 (ISSN: 1731-2515)

43. Malbrain ML; De Laet I; De Waele JJ; Sugrue M; Schachtrupp A; Duchesne J; Van Ramshorst G; De Keulenaer B; Kirkpatrick AW; Ahmadi-Noorbakhsh S; Mulier J; Pelosi P; Ivatury R; Pracca F; Wise R; Pelosi P (2014) The role of abdominal compliance, the neglected parameter in critically ill patients - a consensus review of 16. Part 2: measurement techniques and management recommendations. Anaesthesiol Intensive Ther 2014 Nov-Dec;46(5):406-32 (ISSN: 1731-2515)

44. Malbrain ML; Roberts DJ; De Laet I; De Waele JJ; Sugrue M; Schachtrupp A; Duchesne J; Van Ramshorst G; De Keulenaer B; Kirkpatrick AW; Ahmadi-Noorbakhsh S; Mulier J; Ivatury R; Pracca F; David M; Roberts DJ (2014) The role of abdominal compliance, the neglected parameter in critically ill patients - a consensus review of 16. Part 1: definitions and pathophysiology. Anaesthesiol Intensive Ther 2014 Nov-Dec;46(5):392-405 (ISSN: 1731-2515)

45. 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 (ISSN: 1879-1883)

46. 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. Ann Surg Oncol 2014 Jun;21(6):1795-82 (ISSN: 1534-4681)

47. Ng D; Falck V; McConnell YJ; Mack LA; Temple WJ; Gui X (2014) Appendiceal goblet cell carcinoid and mucinous neoplasms are closely associated tumors: lessons from their coexistence in primary tumors and concurrence in peritoneal dissemination. J Surg Oncol 2014 May;109(6):548-55 (ISSN: 1096-9098)


49. 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. J Clin Hypertens (Greenwich) 2014 Jul;16(7):488-96 (ISSN: 1751-7176)

50. 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. J Hum Hypertens 2014 May;28(5):298-302 (ISSN: 1476-5527)

51. Kuo JH; Pasieka JL; Parrack KM; Chabot JA; Lee JA (2014) Endocrine surgery in present-day academia. Surgery 2014 Dec;156(6):1461-8; discussion 1469-70 (ISSN: 1532-7361)


54. Shea-Budgell M; Quan ML; Mehling B; Temple-Oberle C (2014) Breast reconstruction following prophylactic or therapeutic mastectomy for breast cancer: Recommendations from an evidence-based provincial guideline. Plast Surg (Oakv) 2014 Summer;22(2):103-11 (ISSN: 2292-5503)


57. Rivard JD; Temple WJ; McConnell YJ; Sultan H; Mack LA (2014) Preoperative computed tomography does not predict resectability in peritoneal carcinomatosis. Am J Surg 2014 May;207(5):760-4; discussion 764-5 (ISSN: 1879-1883)

Section of Ophthalmology


5. Robitaille JM; Gillett RM; Le Blanc MA; Gaston D; Nightingale M; Mackley MP; Parkash S; Hathaway J; Thomas A; Ells A; Traboulsi El; Heon E; Roy M; Shalev S; Fernandez CV; MacGillivray C; Wallace K; Fahiminya S; Majewski J; McMaster CR; Bedard K (2014) Phenotypic Overlap Between Familial Exudative Vitreoretinopathy and Microcephaly, Lymphedema, and Chorioretinal Dysplasia Caused by KIF11 Mutations [In Process Citation]. JAMA Ophthalmol 2014 Dec 1;132(12):1393-9 (ISSN: 2168-6173)


7. Quinn GE; Ying GS; Daniel E; Hildebrand PL; Ells A; Baumritter A; Kemper AR; Schron EB; Wade K (2014) Validity of a telemedicine system for the evaluation of acute-phase retinopathy of prematurity. JAMA Ophthalmol 2014 Oct;132(10):1178-84 (ISSN: 2168-6173)


12. Smith EE; O’Donnell M; Dagenais G; Lear SA; Wielgosz A; Sharma M; Poirier P; Stotts G; Black SE; Strother S; Noseworthy MD; Benavente O; Modi J; Goyal M; Batool S; Sanchez K; Hill V; McCreary CR; Frayne R; Islam S; De Jesus J; Rangarajan S; Teo K; Yusuf S; Collective Name: PURE Investigators. (2015) Early cerebral small vessel disease and brain volume, cognition, and gait. Ann Neurol 2015 Feb;77(2):251-61 (ISSN: 1531-8249)

13. Lam WC; Albiani DA; Yoganathan P; Chen JC; Kherani A; Maberley DA; Oliver A; Rabinovitch T; Sheidow TG; Tourville E; Wittenberg L; Sigooin C; Baptiste DC (2015) Real-world assessment of intravitreal dexamethasone implant (0.7 mg) in patients with macular edema: the CHROME study. Clin Ophthalmol 2015;9:1255-68 (ISSN: 1177-5467)

15. Munro M; McWhae J; Romanchuk K; Crichton A; Carter G; Ball A (2014) Two cases of spontaneous filtering blebs, one idiopathic and one associated with Terrien marginal degeneration. Cornea 2014 Jul;33(7):752-4 (ISSN: 1536-4798)

16. Zhang H; Micomono DC; Dziegielewski PT; Sowerby LJ; Weis E; Wright ED (2015) Endoscopic vidian neurectomy: a prospective case series [epub ahead of print] [Record Supplied By Publisher] Int Forum Allergy Rhinol 2015 Mar 2; p S2042-6984


Section of Orthopaedic Surgery


8. Woods TC; Carroll MJ; Nelson AA; More KD; Berdusco R; Sohmer S; Boorman RS; Lo IK (2014) Transtendon rotator-cuff repair of partial-thickness articular surface tears can lead to medial rotator-cuff failure. Open Access J Sports Med 2014;5:151-7 (ISSN: 1179-1543)


12. Buckley R; Leighton R; Sanders D; Poon J; Coles CP; Stephen D; Paolucci EO (2014) Open reduction and internal fixation compared with ORIF and primary subtalar arthrodesis for treatment of Sanders type IV calcaneal fractures: a randomized multicenter trial. J Orthop Trauma 2014 Oct;28(10):577-83 (ISSN: 1531-2291)


16. Solbak NM; Heard BJ; Achari Y; Chung M; Shrive NG; Frank CB; Hart DA (2015) Alterations in Hoffa’s fat pad induced by an inflammatory response following idealized anterior cruciate ligament surgery [In Process Citation]. Inflamm Res 2015 Aug;64(8):615-26 (ISSN: 1420-908X)


18. Marshall DA; Vanderby S; Barnabe C; MacDonald KV; Maxwell C; Mosher D; Wasylik T; Lix L; Stat P; Enns E; Frank C; Noseworthy T (2015) Estimating the Burden of Osteoarthritis to Plan for the Future [epub ahead of print]. Arthritis Care Res (Hoboken) 2015 May 4; p S2151-4658

19. Atarod M; Ludwig TE; Frank CB; Schmidt TA; Shrive NG (2015) Cartilage boundary lubrication of ovine synovial fluid following anterior cruciate ligament transection: a longitudinal study [In Process Citation]. Osteoarthritis Cartilage 2015 Apr;23(4):640-7 (ISSN: 1522-9653)

20. Kopka M; Mohtadi N; Naylor A; Walker R; Donald M; Frank C (2015) The use of magnetic resonance imaging in acute knee injuries can be reduced by non-physician expert clinics [In Process Citation]. Phys Sportsmed 2015 Feb;43(1):30-6 (ISSN: 0091-3847)


25. Conner-Spady BL; Marshall DA; Bohm E; Dunbar MJ; Loucks L; Hennigar AW; Frank C; Noseworthy TW (2014) Patient factors in referral choice for total joint replacement surgery. Med Care 2014 Apr;52(4):300-6 (ISSN: 1537-1948)

27. Egloff C; Sawatsky A; Leonard T; Hart DA; Valderrabano V; Herzog W (2014) Effect of muscle weakness and joint inflammation on the onset and progression of osteoarthritis in the rabbit knee [In Process Citation]. Osteoarthritis Cartilage 2014 Nov;22(11):1886-93 (ISSN: 1522-9653)


33. Hiscox C; La Mothe J; White N; Bromley M; Oddone Paolucci E; Hildebrand K (2014) Diagnosis of occult scaphoid fractures: a randomized, controlled trial comparing bone scans to radiographs for diagnosis [In Process Citation]. CJEM 2014 Jul;16(4):296-303 (ISSN: 1481-8035)

34. Blair-Pattison A; Hu RW; Swamy G; Anglin C (2014) Forces in spinal cannulation and breaches ex vivo [In Process Citation]. Proc Inst Mech Eng H 2014 Jul;228(7):693-702 (ISSN: 2041-3033)

35. Tomkins-Lane CC; Battie MC; Hu R; Macedo L (2014) Pathoanatomical characteristics of clinical lumbar spinal stenosis [In Process Citation]. J Back Musculoskelet Rehabil 2014;27(2):223-9 (ISSN: 1878-6324)


39. Da Cunha RJ; Al Sayegh S; La Mothe JM; Letal M; Johal H; Parsons DL; Ferri-de-Barros F (2015) Intraoperative skull-femoral traction in posterior spinal arthrodesis for adolescent idiopathic scoliosis: the impact on perioperative outcomes and health resource utilization [In Process Citation] Spine (Phila Pa 1976) 2015 Feb 1;40(3):E154-60 (ISSN: 1528-1159)


ANNUAL REPORT 2014/2015

42. Kaniki N; Willits K; Mohtadi NG; Fung V; Bryant D (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. Arthroscopy 2014 Sep;30(9):1139-45 (ISSN: 1526-3231)

43. Sabo MT; Talwalkar S; Hayton M; Watts A; Trail IA; Stanley JK (2014) Intermediate outcomes of ulnar head arthroplasty [In Process Citation]. J Hand Surg Am 2014 Dec;39(12):2405-2411.e1 (ISSN: 1531-6564)


46. Passias PG; Soroceanu A; Smith J; Boniello A; Yang S; Scheer JK; Shaffrey C; Kim HJ; Protopsaltis T; Mundis G; Gupta M; Klineberg E; Lafage V; Ames C (2014) Postoperative Cervical Deformity in 215 Thoracolumbar Patients With Adult Spinal Deformity: Prevalence, Risk Factors, and Impact on Patient-Reported Outcome and Satisfaction at 2-Year Follow-up [In Process Citation]. Spine (Phila Pa 1976) 2015 Mar 1;40(5):283-91 (ISSN: 1528-1159)

47. Fisher CG; Vaccaro AR; Patel AA; Prasad SK; Chi J; Mulpuri K; Thomas KC; Whang PG (2015) Evidence-based recommendations for spine surgery [In Process Citation]. Spine (Phila Pa 1976) 2015 Mar 1;40(5):E309-16 (ISSN: 1528-1159)


Section of Otolaryngology

1. Randall DR; Rudmik LR; Ball CG; Bosch JD (2014) External laryngotracheal trauma: Incidence, airway control, and outcomes in a large Canadian center. Laryngoscope 2014 Apr;124(4):E123-33 (ISSN: 1531-4995)


4. Dang M; Lysack JT; Wu T; Matthews TW; Chandarana SP; Brockton NT; Bose P; Bansal G; Cheng H; Mitchell JR; Dort JC (2015) MRI Texture Analysis Predicts p53 Status in Head and Neck Squamous Cell Carcinoma [In Process Citation]. AJNR Am J Neuroradiol 2015 Jan;36(1):166-70 (ISSN: 1936-959X)

5. Randall DR; Lysack JT; Hudon ME; Guggisberg K; Nakoneshny SC; Wayne Matthews T; Dort JC; Chandarana SP (2015) Diagnostic utility of central node necrosis in predicting extracapsular spread among oral cavity squamous cell carcinoma [In Process Citation]. Head Neck 2015 Jan;37(1):92-6 (ISSN: 1097-0347)

7. Harris JR; Lau H; Surgeoner BV; Chua N; Dobrovolsky W; Dort JC; Kalaydjian E; Nesbitt M; Scrimger RA; Seikaly H; Skarsgard D; Webster MA; Collective Name: Members of the Alberta Provincial Head and Neck Tumour Team. (2014) Health care delivery for head-and-neck cancer patients in Alberta: a practice guideline. Curr Oncol 2014 Oct;21(5):e704-14 (ISSN: 1198-0052)

8. Bose P; Thakur SS; Brockton NT; Klimowicz AC; Kornaga E; Nakoneshny SC; Riabowol KT; Dort JC (2014) Tumor cell apoptosis mediated by cytoplasmic ING1 is associated with improved survival in oral squamous cell carcinoma patients. Oncotarget 2014 May 30;5(10):3210-9 (ISSN: 1949-2553)


10. Macdonald KI; Wright ED; Sowerby LJ; Rotenberg BW; Chin CJ; Rudmik L; Sommer DD; Nayan S; Des Rosiers M; Tewfik MA; Valdes CJ; Massoud E; Thomas D; Kilty SJ; Vescan A; Mechor B; Lavigne F; Fandino M; Javer AR; Witterick IJ (2015) Squeeze bottle versus saline spray after endoscopic sinus surgery for chronic rhinosinusitis: A pilot multicentre trial [In Process Citation]. Am J Rhinol Allergy 2015 Jan;29(1):13-7 (ISSN: 1945-8932)


16. Lui JT; Rudmik L; Randall DR (2014) Reducing the preoperative ecological footprint in otolaryngology [In Process Citation] Otolaryngol Head Neck Surg 2014 Nov;151(5):805-10 (ISSN: 1097-6817)


22. Rudmik L; Smith TL; Schlosser RJ; Hwang PH; Mace JC; Soler ZM (2014) Productivity costs in patients with refractory chronic rhinosinusitis. Laryngoscope 2014 Sep;124(9):2007-12 (ISSN: 1531-4995)

23. Orlandi RR; Smith TL; Marple BF; Harvey RJ; Hwang PH; Kern RC; Kingdom TT; Luong A; Rudmik L; Senior BA; Toskala E; Kennedy DW (2014) Update on evidence-based reviews with recommendations in adult chronic rhinosinusitis. Int Forum Allergy Rhinol 2014 Jul;4 Suppl 1:S1-S15 (ISSN: 2042-6984)


Section of Pediatric Surgery

1. Mataftsi A; Haidich AB; Kokkali S; Rabiah PK; Birch E; Stager DR; Cheong-Leen R; Singh V; Egbert JE; Astle WF; Lambert SR; Amitabh P; Khan AO; Grigg J; Dimitrakos SA; Nischal KK (2014) Postoperative glaucoma following infantile cataract surgery: an individual patient data meta-analysis. JAMA Ophthalmol 2014 Sep;132(9):1059-67 (ISSN: 2168-6173)


3. Turner B; Dasgupta R; Brindle ME (2014) A contemporary prediction rule for esophageal atresia (EA) and tracheoesophageal fistula (TEF) [In Process Citation]. J Pediatr Surg 2014 Dec;49(12):1758-61 (ISSN: 1531-5037)


5. Ross MJ; Liu H; Netherton SJ; Eccles R; Chen PW; Boag G; Morrison E; Thompson GC (2014) Outcomes of children with suspected appendicitis and incompletely visualized appendix on ultrasound. Acad Emerg Med 2014 May;21(5):538-42 (ISSN: 1553-2712)

6. Da Cunha RJ; Al Sayegh S; La Mothe JM; Letal M; Johal H; Parsons DL; Ferri-de-Barros F (2015) Intraoperative skull-femoral traction in posterior spinal arthrodesis for adolescent idiopathic scoliosis: the impact on perioperative outcomes and health resource utilization [In Process Citation] Spine (Phila Pa 1976) 2015 Feb 1;40(3):E154-60 (ISSN: 1528-1132)


Section of Plastic Surgery

1. Doherty C; **Nickerson D**; Southern DA; Kieser T; Appoo J; Dawes J; De Souza MA; Harrop AR; Rabi D Collective Name: Alberta Provincesal Project for Outcome Assessment in Coronary Heart Disease (APPROACH) Investigators. (2014) Trends in postcoronary artery bypass graft sternal wound dehiscence in a provincial population. Plast Surg (Oakv) 2014 Fall;22(3):196-200 (ISSN: 2292-5503)


4. 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 Jun;133(6):1477-84 (ISSN: 1529-4242)


Section of Surgical Oncology


Section of Thoracic Surgery


2. 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. J Surg Educ 2014 May-Jun;71(3):360-6 (ISSN: 1878-7452)


Section of Transplant Surgery

1. Garg AX; Nevis IF; McArthur E; Sontrop JM; Koval JJ; Lam NN; Hildebrand AM; Reese PP; Storsley L; Gill JS; Segev DL; Habous S; Bugeja A; Knoll GA; Dipchand C; **Monroy-Cuadros M**; Lentine KL Collective Name: DONOR Network. (2015) Gestational hypertension and preeclampsia in living kidney donors. N Engl J Med 2015 Jan 8;372(2):124-33 (ISSN: 1533-4406)
2. Baig LA; Beran TN; Vallevand A; Baig ZA; Monroy-Cuadros M (2014) Accuracy of portrayal by standardized patients: results from four OSCE stations conducted for high stakes examinations. BMC Med Educ 2014;14:97 (ISSN: 1472-6920)


Section of Urology 2013-2015

1. Karsenty G; Baverstock R; Carlson K; Diaz DC; Cruz F; Dmochowski R; Fulford S; Giannantoni A; Heesakkers J; Kaufmann A; Peyrat L; Thavaseelan J; Dasgupta P (2015) Technical aspects of botulinum toxin type A injection in the bladder to treat urinary incontinence: reviewing the procedure [In Process Citation] Int J Clin Pract 2014 Jun;68(6):731-42 (ISSN: 1742-1241)


4. Huang KC; Dolph M; Donnelly B; Bismar TA (2014) ERG expression is associated with increased risk of biochemical relapse following radical prostatectomy in early onset prostate cancer. Clin Transl Oncol 2014 Nov;16(11):973-9 (ISSN: 1699-3055)


6. Al Bashir S; Alshalalfa M; Hegazy SA; Dolph M; Donnelly B; Bismar TA (2014) Cysteine-rich secretory protein 3 (CRISP3), ERG and PTEN define a molecular subtype of prostate cancer with implication to patients’ prognosis. J Hematol Oncol 2014;7:21 (ISSN: 1756-8722)


8. Flannigan RK; Gottot GT; Donnelly B; Carlson KV (2014) Standardized follow-up program may reduce emergency room and urgent care visits for patients undergoing radical prostatectomy. Can Urol Assoc J 2014 Jul;8(7-8):E505-9 (ISSN: 1911-6470)


13. Lavallee LT; Tanguay S; Jewett MA; Wood L; Kapoor A; Rendon RA; Moore RB; Lacombe L; Kawakami J; Pautler SE; Drachenberg DE; Black PC; Lattouf JB; Morash C; Cagianos I; Liu Z; Breau RH (2015) Surgical management of stage T1 renal tumours at Canadian academic centres. Can Urol Assoc J 2015 Mar-Apr;9(3-4):99-106 (ISSN: 1911-6470)

14. Kim M; Boyle SL; Fernandez A; Matsumoto ED; Pace KT; Anidjar M; Kozak GN; Dave S; Welk BK; Johnson MI; Pautler SE (2014) Development of a novel classification system for anatomical variants of the puboprostatic ligaments with expert validation. Can Urol Assoc J 2014 Nov;8(11-12):432-6 (ISSN: 1911-6470)


Department of Surgery

1. Lee WY; Sanz MJ; Wong CH; Hardy PO; Salman-Dilgimen A; Moriarty TJ; Chaconas G; Marques A; Krawetz R; Mody CH; Kubes P (2014) Invariant natural killer T cells act as an extravascular cytotoxic barrier for joint-invading Lyme Borrelia. Proc Natl Acad Sci U S A 2014 Sep 23;111(38):13936-41 (ISSN: 1091-6490)


3. Taiani JT; Buie HR; Campbell GM; Manske SL; Krawetz RJ; Rancourt DE; Boyd SK; Matyas JR (2014) Embryonic stem cell therapy improves bone quality in a model of impaired fracture healing in the mouse; tracked temporally in vivo micro-CT. Bone 2014 Jul;64:263-72 (ISSN: 1873-2763)

4. Ando W; Kutcher JJ; Krawetz R; Sen A; Nakamura N; Frank CB; Hart DA (2014) Clonal analysis of synovial fluid stem cells to characterize and identify stable mesenchymal stromal cell/mesenchymal progenitor cell phenotypes in a porcine model: a cell source with enhanced commitment to the chondrogenic lineage. Cytotherapy 2014 Jun;16(6):776-88 (ISSN: 1477-2566)

5. Gareau T; Lara GG; Shepherd RD; Krawetz R; Rancourt DE; Rinker KD; Kallos MS (2014) Shear stress influences the pluripotency of murine embryonic stem cells in stirred suspension bioreactors. J Tissue Eng Regen Med 2014 Apr;8(4):268-78 (ISSN: 1932-7005)


Joint Appointments

1. Di Eusanio M; Trimarchi S; Peterson MD; Myrmel T; Hughes GC; Korach A; Sundt TM; Di Bartolomeo R; Greason K; Khoynezhad A; Appoo JJ; Folesani G; De Vincentis C; Montgomery DG; Isselbacher EM; Eagle KA; Nienaber CA; Patel HJ (2014) Root replacement surgery versus more conservative management during type A acute aortic dissection repair. Ann Thorac Surg 2014 Dec;98(6):2078-84 (ISSN: 1552-6259)


6. Rahmani W; Abbasi S; Hagner A; Raharjo E; Kumar R; Hotta A; Magness S; Metzger D; Biernaskie J (2014) Hair follicle dermal stem cells regenerate the dermal sheath, repopulate the dermal papilla, and modulate hair type. Dev Cell 2014 Dec 8;31(5):543-58 (ISSN: 1878-1551)

7. Burnett LN; Carr E; Tapp D; Raffin Bouchal S; Horch JD; Biernaskie J; Gabriel V (2014) Patient experiences living with split thickness skin grafts. Burns 2014 Sep;40(6):1097-105 (ISSN: 1879-1409)

8. Khuong HT; Kumar R; Senjaya F; Grochmal J; Ivanovic A; Shakhbazau A; Forden J; Webb A; Biernaskie J; Midha R (2014) Skin derived precursor Schwann cells improve behavioral recovery for acute and delayed nerve repair. Exp Neurol 2014 Apr;254:168-79 (ISSN: 1090-2430)


11. Kuhle J; Gaiottino J; Leppert D; Petzold A; Bestwick JP; Malaspina A; Lu CH; Dobson R; Di Santoi G; Norgren N; Nissim A; Kappos L; Hurlbert J; Yong VW; Giovanoni G; Casha S (2015) Serum neurofilament light chain is a biomarker of human spinal cord injury severity and outcome. J Neurol Neurosurg Psychiatry 2015 Mar;86(3):273-9 (ISSN: 1468-330X)


13. Costello F; Pan YI; Yeh EA; Hodge W; Burton JM; Kardon R (2015) The temporal evolution of structural and functional measures after acute optic neuritis [epub ahead of print] [Record Supplied By Publisher]. J Neurol Neurosurg Psychiatry 2015 Feb;10; p S1468-330X

14. Schippling S; Balk Lj; Costello F; Albrecht P; Balcer L; Calabresi P; Frederiksen J; Frohman E; Green A; Klistorner A; Outteryck O; Paul F; Plant G; Traber G; Vermersch P; Villoslada P; Wolf S; Petzold A (2015) Quality control for retinal OCT in multiple sclerosis: validation of the OSCAR-IB criteria [In Process Citation]. Mult Scler 2015 Feb;21(2):163-70 (ISSN: 1477-0970)


16. Zhornitsky S; Greenfield J; Koch MW; Patten SB; Harris C; Wall W; Alikhani K; Burton J; Busche K; Costello F; Davenport JW; Jarvis SE; Lavaraoto D; Parpal H; Patry DG; Yeung M; Metz LM (2015) Long-term persistence with injectable therapy in relapsing-remitting multiple sclerosis: an 18-year observational cohort study. PLoS One 2015;10(4):e0123824 (ISSN: 1932-6203)

17. Yeh EA; Marrie RA; Reginald YA; Buncic JR; Noguera AE; O'Mahony J; Mah JK; Banwell B; Costello F (2014) Functional-structural correlations in the afferent visual pathway in pediatric demyelination. Neurology 2014 Dec 2;83(23):2147-52 (ISSN: 1526-632X)

19. **Costello F; Modi J; Lautner D; Bhayana D; Scott JN; Davenport WJ; Trufyn J; Frayne R; Ciura VA; Goyal M; Mah J; Hill MD** (2014) Validity of the diagnostic criteria for chronic cerebrospinal venous insufficiency and association with multiple sclerosis. CMAJ 2014 Aug 5;186(11):E418-26 (ISSN: 1488-2329)


21. Petzold A; Wattjes MP; **Costello F**; Flores-Rivera J; Fraser Cl; Fujihara K; Leavitt J; Marignier R; Paul F; Schippling S; Sindic C; Villoslada P; Weinshenker B; Plant GT (2014) The investigation of acute optic neuritis: a review and proposed protocol. Nat Rev Neurol 2014 Aug;10(8):447-58 (ISSN: 1759-4766)


23. Smith BC; Dobson G; Dawson D; Charalampopoulos A; Grapsa J; Nihoyannopoulos P (2014) Three-dimensional speckle tracking of the right ventricle: toward optimal quantification of right ventricular dysfunction in pulmonary hypertension. J Am Coll Cardiol 2014 Jul 8;64(1):41-51 (ISSN: 1558-3597)


26. Teo KK; Cohen E; Buller C; Hassan A; Carere R; Cox JL; Ly H; **Fedak PW**; Chan K; Legare JF; Connelly K; Tanguay JF; Ye J; Gupta M; John Mancini GB; Dagenais G; Williams R; Teoh K; Latter DA; Townley R; Meyer SR (2014) Canadian Cardiovascular Society/Canadian Association of Interventional Cardiology/Canadian Society of Cardiac Surgery position statement on revascularization--multivessel coronary artery disease. Can J Cardiol 2014 Dec;30(12):1482-91 (ISSN: 1916-7075)

27. Mahadevia R; Barker AJ; Schnell S; Entezari P; Kansal P; **Fedak PW**; Malaisrie SC; McCarthy P; Collins J; Carr J; Markl M (2014) Response to letter regarding article, “Bicuspid aortic cusp fusion morphology alters aortic three-dimensional outflow patterns, wall shear stress, and expression of aortopathy” Circulation 2014 Nov 4;130(19):e171 (ISSN: 1524-4539)


31. Bracey NA; Gershkovitch B; Chun J; Vilaysane A; Meijndert HC; Wright JR; **Fedak PW**; Beck PL; Muruve DA; Duff HJ (2014) Mitochondrial NLRP3 protein induces reactive oxygen species to promote Smad protein signaling and fibrosis independent from the inflammasome. J Biol Chem 2014 Jul 11;289(28):19571-84 (ISSN: 1083-351X)

32. Mewhort HE; Turnbull JD; Meijndert HC; Ngu JM; **Fedak PW** (2014) Epicardial infarct repair with basic fibroblast growth factor-enhanced CorMatrix-ECM biomaterial attenuates postischemic cardiac remodeling. J Thorac Cardiovasc Surg 2014 May;147(5):1650-9 (ISSN: 1097-685X)


35. Roldan Urgoiti GB; Singh AD; Tsang RY; Nordal RA; Lim G; Chan JA; Starreveld YP; de Robles PA; Biagioni BJ; Hamilton MG; Easaw JC (2014) Population based analysis ependymoma patients in alberta from 1975 to 2007 [In Process Citation]. Can J Neurol Sci 2014 Nov;41(6):729-34 (ISSN: 0317-1671)


37. Hurlbert RJ; Hadley MN; Walters BC; Araabi B; Dhall SS; Gelb DE; Rozzelle CJ; Ryken TC; Theodore N (2015) Pharmacological therapy for acute spinal cord injury [In Process Citation] Neurosurgery 2015 Mar;76 Suppl 1:S71-83 (ISSN: 1524-4040)

38. Shamji MF; Bains I; Yong E; Sutherland G; Hurlbert RJ (2014) Treatment of herniated lumbar disk by sequestrectomy or conventional disectomy. World Neurosurg 2014 Nov;82(5):879-83 (ISSN: 1878-8750)

39. Dvorak MF; Noonan VK; Fallah N; Fisher CG; Rivers CS; Ahn H; Tsai EC; Linassi AG; Christie SD; Attabib N; Hurlbert RJ; Fourney DR; Johnson MG; Fehlings MG; Drew B; Bailey CS; Paquet J; Parent S; Townson A; Ho C; Craven BC; Gagnon D; Tsui D; Fox R; Mac-Thiong JM; Kwon BK (2014) Minimizing errors in acute traumatic spinal cord injury trials by acknowledging the heterogeneity of spinal cord anatomy and injury severity: an observational Canadian cohort analysis. J Neurotrauma 2014 Sep 15;31(18):1540-7 (ISSN: 1557-9042)


41. Mummaneni PV; Whitmore RG; Curran JN; Ziewacz JE; Wadhwa R; Shaffrey CI; Asher AL; Heary RF; Cheng JS; Hurlbert RJ; Douglas AF; Smith JS; Malhotra NR; Dante SJ; Magge SN; Kaiser MG; Abbed KM; Resnick DK; Ghogawala Z (2014) Cost-effectiveness of lumbar discectomy and single-level fusion for spondylolisthesis: experience with the NeuroPoint-SD registry. Neurosurg Focus 2014 Jun;36(6):E3 (ISSN: 1092-0684)

42. Thomas R; Piccolo F; Miller D; MacEachern PR; Chee AC; Huseini T; Yarmus L; Bhatnagar R; Lee HJ; Feller-Kopman D; Maskell NA; Tremblay A (2015) Intrapleural Fibrinolysis for the Treatment of Indwelling Pleural Catheter-Related Symptomatic Loculations: A Multi-Center Observational Study [epub ahead of print] [Record Supplied By Publisher] Chest 2015 Mar 5; p S1931-3543

43. Stather DR; Chee A; MacEachern P; Dumoulin E; Hergott CA; Gelberg J; Folch E; Majid A; Gonzalez AV; Tremblay A (2015) Endobronchial ultrasound learning curve in interventional pulmonary fellows [In Process Citation] Respir Care 2015 Feb;60(2):333-9 (ISSN: 1440-1843)

44. Cressman S; Lam S; Tammemagi MC; Evans WK; Leigh NB; Regier DA; Bolbocean C; Shepherd FA; Tsao MS; Manos D; Liu G; Atkar-Khattra S; Cromwell I; Johnston MR; Mayo JR; McWilliams A; Couture C; English JC; Goffin J; Hwang DM; Puksa S; Roberts H; Tremblay A; MacEachern P; Burrowes P; Bhatia R; Finley RJ; Goss GD; Nicholas G; Seely JM; Sekhon HS; Yee J; Amjadi K; Cutz JC; Ionescu DN; Yasufuku K; Martel S; Soghrati K; Sin DD; Tan WC; Urbanski S; Xu Z; Peacock SJ (2014) Collective Name: Pan-Canadian Early Detection of Lung Cancer Study Team. (2014) Resource utilization and costs during the initial years of lung cancer screening with computed tomography in Canada. J Thorac Oncol 2014 Oct;9(10):1449-58 (ISSN: 1556-1380)


47. Moustafa S; Patton DJ; Alvarez N; Al Shanawani M; Al Dossari K; Connelly MS; Prieur T; Mookadam F (2015) Double chambered right ventricle with ventricular septal defect in adults: case series and review of the literature. J Cardiovasc Ultrasound (Korea) 2015 Mar;23(1):48-51 (ISSN: 1975-4612)
48. Moustafa S; Patton DJ; Al Shanawani M; Connelly MS; Alvarez N; Prieur T; Mookadam F (2015) Unusual myocardial late gadolinium enhancement in isolated noncompaction cardiomyopathy [In Process Citation] Echocardiography 2015 Feb;32(2):400-2 (ISSN: 1540-8175)

49. Moustafa S; Patton DJ; Connelly MS; Alvarez N; Prieur T; Mookadam F (2015) An atypical case of left atrial myxoma [In Process Citation] Rev Port Cardiol 2015 Jan;34(1):75-7 (ISSN: 2174-2030)

50. Moustafa S; Alvarez N; Connelly MS; Prieur T; Patton DJ; Mookadam F (2014) Severe form of tetralogy of fallot: late presentation. J Cardiovasc Ultrasound (Korea 2014 Dec;22(4):228-9 (ISSN: 1975-4612)

51. Moustafa S; Patton DJ; Alvarez N; Prieur T; Connelly MS; Alnasser M; Mookadam F (2014) Unusual cardiac infiltration in diffuse large B-cell lymphoma. J Cardiovasc Ultrasound (Korea 2014 Sep;22(3):160-1 (ISSN: 1975-4612)


54. Goyal M; Demchuk AM; Menon BK; Eesa M; Rempel JL; Thornton J; Roy D; Jovin TG; Willinsky RA; Sapkota BL; Dowlatshahi D; Frei DF; Kamal NR; Montanera WJ; Poppe AY; Ryckborst KJ; Silver FL; Shuaib A; Tampieri D; Williams D; Bang OY; Baxter BW; Burns PA; Choe H; Heo JH; Holmstedt CA; Jankowitz B; Kelly M; Linares G; Mandzia JL; Shankar J; Sohn SI; Swartz RH; Barber PA; Coutts SB; Smith EE; Morrish WF; Weill A; Subramaniam S; Mitha AP; Wong JH; Lowerison MW; Sajobi TT; Hill MD (2015) Randomized assessment of rapid endovascular treatment of ischemic stroke. N Engl J Med 2015 Mar 12;372(11):1019-30 (ISSN: 1533-4406)

55. Coutts SB; Dubuc V; Mandzia J; Kenney C; Demchuk AM; Smith EE; Subramaniam S; Goyal M; Patil S; Menon BK; Barber PA; Dowlatshahi D; Field T; Asdaghi N; Camden MC; Hill MD Collective Name: TEMPO-1 Investigators. Tenecteplase-tissue-type plasminogen activator evaluation for minor ischemic stroke with proven occlusion. Stroke 2015 Mar;46(3):769-74 (ISSN: 1524-4628)

Adjunct Appointments

1. Bultz BD; Cummings GG; Grassi L; Travado L; Hoekstra-Weebers J; Watson M (2014) 2013 President’s Plenary International Psycho-oncology Society: embracing the IPOS standards as a means of enhancing comprehensive cancer care. Psychooncology 2014 Sep;23(9):1073-8 (ISSN: 1099-1611)

2. Valentini V; Abrahamsson PA; Aranda SK; Astier A; Audisio RA; Boniol M; Bonomo L; Brunelli A; Bultz B; Chiti A; De Lorenzo F; Eriksson JG; Goh V; Gospodarowicz MK; Grassi L; Kelly J; Kortmann RD; Kutluk T; Plate A; Poston G; Saarto T; Soffietti R; Torresin A; van Harten WH; Verzijlbergen JF; von Kalle C; Poortmans P (2014) Still a long way to go to achieve multidisciplinarity for the benefit of patients: commentary on the ESMO position paper (Annals of Oncology 25(1): 9-15, 2014). Ann Oncol 2014 Sep;25(9):1863-5 (ISSN: 1569-8041)

3. Crump T; Repin N; Sutherland J (2015) Reforming Long-Term Care Funding in Alberta [In Process Citation]. Healthc Q 2015;18(1):26-31 (ISSN: 1710-2774)


14. Egloff C; Sawatsky A; Leonard T; Hart DA; Valderrabano V; Herzog W (2014) Effect of muscle weakness and joint inflammation on the onset and progression of osteoarthritis in the rabbit knee [In Process Citation] Osteoarthritis Cartilage 2014 Nov;22(11):1886-93 (ISSN: 1522-9653)


19. Power GA; Makrakos DP; Stevens DE; Herzog W; Rice CL; Vandervoort AA (2014) Shortening-induced torque depression in old men: implications for age-related power loss. Exp Gerontol 2014 Sep;57:75-80 (ISSN: 1873-6815)


24. Makela JT; Rezaeian ZS; Mikkonen S; Madden R; Han SK; Jurvelin JS; Herzog W; Korhonen RK (2014) Site-dependent changes in structure and function of lapine articular cartilage 4 weeks after anterior cruciate ligament transection. Osteoarthritis Cartilage 2014 Jun;22(6):869-78 (ISSN: 1522-9653)


26. Reardon AJ; Elliott JA; McGann LE (2014) Fluorescence as an alternative to light-scatter gating strategies to identify frozen-thawed cells with flow cytometry [In Process Citation] Cryobiology 2014 Aug;69(1):91-9 (ISSN: 1090-2392)


29. Lienhard K; Vienneau J; Nigg S; Meste O; Colson SS; Nigg BM (2015) Relationship between lower limb muscle activity and platform acceleration during whole-body vibration exercise [epub ahead of print] [Record Supplied By Publisher] J Strength Cond Res 2015 Mar 10; p S1533-4287


32. Friesenbichler B; Lienhard K; Vienneau J; Nigg BM (2015) Vibration transmission to lower extremity soft tissues during whole-body vibration [In Process Citation] J Biomech 2014 Sep 22;47(12):2858-62 (ISSN: 1873-2380)


34. Casti P; Mencattini A; Salmeri M; Rangayyan RM (2015) Analysis of structural similarity in mammograms for detection of bilateral asymmetry [In Process Citation] IEEE Trans Med Imaging 2015 Feb;34(2):662-71 (ISSN: 1558-254X)


38. Ehnes DD; Price FD; Shrive NG; Hart DA; Rancourt DE; Zur Nieden NI (2015) Embryonic stem cell-derived osteocytes are capable of responding to mechanical oscillatory hydrostatic pressure [In Process Citation] J Biomech 2015 Jul 16;48(10):1915-21 (ISSN: 1873-2380)

39. Andrews SH; Rattner JB; Shrive NG; Ronsky JL (2015) Swelling significantly affects the material properties of the menisci in compression [In Process Citation] J Biomech 2015 Jun 1;48(8):1485-9 (ISSN: 1873-2380)


42. Bouwmeester JC; Belenkie I; **Shrive NG**; Tyberg JV (2014) Genesis of the characteristic pulmonary venous pressure waveform as described by the reservoir-wave model. J Physiol 2014 Sep 1;592(Pt 17):3801-12 (ISSN: 1469-7793)


44. Andrews SH; Rattner JB; Abusara Z; Adesida A; **Shrive NG**; Ronsky JL (2014) Tie-fibre structure and organization in the knee menisci. J Anat 2014 May;224(5):531-7 (ISSN: 1469-7580)

45. Soon IS; de Bruyn JC; Hubbard J; Wrobel I; Sauve R; **Sigalet DL**; Kaplan GG (2014) Rising post-colectomy complications in children with ulcerative colitis despite stable colectomy rates in United States [In Process Citation] J Crohns Colitis 2014 Nov 1;8(11):1417-26 (ISSN: 1876-4479)


47. Hua Z; Turner JM; Mager DR; **Sigalet DL**; Wizzard PR; Nation PN; Ball RO; Pencharz PB; Wales PW (2014) Effects of polymeric formula vs elemental formula in neonatal piglets with short bowel syndrome. JPEN J Parenter Enteral Nutr 2014 May;38(4):498-506 (ISSN: 0148-6071)
3.2 Research Grants

Department of Surgery

Total Grants: 166

Total Funding: $45,449,120.40

Dr. William Astle – Pediatric Surgery - Ophthalmology

<table>
<thead>
<tr>
<th>Title</th>
<th>Role</th>
<th>Theme</th>
<th>Status</th>
<th>Funding Source</th>
<th>Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research with no funding or non-peer reviewed support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refractive Surgery in Children. Huang PT, Farran P, Paszuk A</td>
<td>principal investigator</td>
<td>clinical</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trachoma. Wiafe B, Ingram AD, Mwanga M, Glassco BC</td>
<td>principal investigator</td>
<td>social, cultural, environmental and population</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Clinical-Demographic, Epidemiology, Pathology, Neuroimaging Features and Outcome of Acute Demyelation in Canadian Children. Romanchuk K, Costello F, Slick D, AbouReslan W, Wei XC, Burton J, Tellier R, Metz L</td>
<td>co-investigator</td>
<td>clinical</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Research funded with peer-reviewed grant support

<table>
<thead>
<tr>
<th>Title</th>
<th>Role</th>
<th>Theme</th>
<th>Status</th>
<th>Funding Source</th>
<th>Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATS 1, &amp; 10-16</td>
<td>co-investigator</td>
<td>clinical</td>
<td>Ongoing / Renewed</td>
<td>NIH</td>
<td>$4,000.00</td>
</tr>
</tbody>
</table>

| 4 grants | $4,000.00 |

albertahealthservices.ca
<table>
<thead>
<tr>
<th>Title</th>
<th>Role</th>
<th>Theme</th>
<th>Status</th>
<th>Funding Source</th>
<th>Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research with no funding or non-peer reviewed support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research funded with peer-reviewed grant support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cancer Cachexia: Phenotype Definition, Markers for Genetic Predisposition and Prognosis</td>
<td>co-investigator</td>
<td>basic/biomedical</td>
<td>Ongoing / Renewed</td>
<td>Canadian Institutes of Health Research</td>
<td>$470,365.00</td>
</tr>
<tr>
<td>Development of a Metabolomic Response Biomarker</td>
<td>principal investigator</td>
<td>multi-themed</td>
<td>New</td>
<td>Breast Cancer Society of Canada</td>
<td>$36,330.00</td>
</tr>
<tr>
<td>Tissue Procurement for The Cancer Genome Atlas Project - renewal</td>
<td>principal investigator</td>
<td>multi-themed</td>
<td>Ongoing / Renewed</td>
<td>National Cancer Institute (US)</td>
<td>$243,681.00</td>
</tr>
<tr>
<td>Predicting and improving responses of colorectal cancer patients to anti-VEGF therapy</td>
<td>co-investigator</td>
<td>multi-themed</td>
<td>New</td>
<td>Canadian Cancer Research Society</td>
<td>$199,498.00</td>
</tr>
<tr>
<td>Prospective, Randomized Controlled Trial of Early Enteral Feeding Via a New Gastrojejunostomy Tube in Patients Undergoing Laparotomy for Periampullary and Pancreatic Neoplasms</td>
<td>principal investigator</td>
<td>multi-themed</td>
<td>Ongoing / Renewed</td>
<td>Novartis</td>
<td>$15,000.00</td>
</tr>
<tr>
<td>The Biological Role of TEM8 in Human Breast Cancer</td>
<td>principal investigator</td>
<td>multi-themed</td>
<td>Ongoing / Renewed</td>
<td>Breast Cancer Society of Canada</td>
<td>$21,364.00</td>
</tr>
<tr>
<td>Metabolomic Biomarker Development for Metastatic Colorectal Cancer</td>
<td>principal investigator</td>
<td>multi-themed</td>
<td>New</td>
<td>NSERC</td>
<td>$105,000.00</td>
</tr>
<tr>
<td>Genetic and Molecular Basis of Severe Muscle Wasting (Sarcopenia)</td>
<td>co-investigator</td>
<td>multi-themed</td>
<td>Ongoing / Renewed</td>
<td>National Cancer Institute of Canada (NCIC)</td>
<td>$417,846.00</td>
</tr>
<tr>
<td>Vascular heterogeneity in colorectal cancer: regulation of VEGFR2 by TGF-beta</td>
<td>co-investigator</td>
<td>multi-themed</td>
<td>Ongoing / Renewed</td>
<td>Novartis Nutrition Corporation</td>
<td>$15,000.00</td>
</tr>
<tr>
<td>Randomized controlled trial of early enteral feeding via a new gastrojejunostomy tube in patients undergoing laparotomy for periampullary and pancreatic neoplasms</td>
<td>principal investigator</td>
<td>multi-themed</td>
<td>Ongoing / Renewed</td>
<td>Alberta Cancer Research Institute</td>
<td>$543,247.00</td>
</tr>
<tr>
<td>Canadian-International Network for the Advancement of the Treatment of Cancer-Associated Cachexia</td>
<td>co-investigator</td>
<td>multi-themed</td>
<td>Ongoing / Renewed</td>
<td>Alberta Cancer Research Institute</td>
<td>$381,000.00</td>
</tr>
<tr>
<td>The role of vitamin D and inflammation in colorectal cancer metastases, Alberta Cancer Research Institute</td>
<td>co-investigator</td>
<td>basic/biomedical</td>
<td>Ongoing / Renewed</td>
<td>Alberta Innovates - Health Solutions (AIHS)</td>
<td>$750,000.00</td>
</tr>
<tr>
<td>12 grants</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$2,448,331.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dr. Paul Beaudry – Pediatric Surgery – General Surgery</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Research with no funding or non-peer reviewed support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research funded with peer-reviewed grant support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phage Display Study of Neuroblastoma</td>
<td>co-principal investigator</td>
<td>basic/biomedical</td>
<td>New</td>
<td>James Fund/Hospital for Sick Children/Peloton 65</td>
<td>$80,000.00</td>
</tr>
<tr>
<td>Characterization and Targeting of Neuroblastoma Cancer Stem Cells (KCCFA Grant)</td>
<td>principal investigator</td>
<td>basic/biomedical</td>
<td>Ongoing / Renewed</td>
<td>Kids Cancer Care Foundation of Alberta</td>
<td>$300,000.00</td>
</tr>
<tr>
<td>Immunotherapy for Cancer - Repurposing Targeted Therapeutics with Oncolytic Viruses (Conio Grant)</td>
<td>co-principal investigator</td>
<td>basic/biomedical</td>
<td>New</td>
<td>Alberta Innovates - Health Solutions (AIHS)</td>
<td>$750,000.00</td>
</tr>
<tr>
<td>3 grants</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$1,130,000.00</td>
</tr>
</tbody>
</table>
### Dr. Carmen Brauer – Pediatric Surgery – Orthopedic Surgery

<table>
<thead>
<tr>
<th>Title</th>
<th>Role</th>
<th>Theme</th>
<th>Status</th>
<th>Funding Source</th>
<th>Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research with no funding or non-peer reviewed support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research funded with peer-reviewed grant support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment of medial epicondyle fractures in children: A systematic review</td>
<td>co-principal investigator</td>
<td>clinical</td>
<td>Ongoing / Renewed</td>
<td>Calgary Surgical Research Development Fund</td>
<td>$1,750.00</td>
</tr>
<tr>
<td>An interdisciplinary collaboration to explore quality indicators in pediatric orthopaedics</td>
<td>co-principal investigator</td>
<td>social, cultural, environmental and population</td>
<td>Ongoing / Renewed</td>
<td>Canadian Institute for Health Research</td>
<td>$14,360.00</td>
</tr>
<tr>
<td>Treatment of medial epicondyle fractures in children: A systematic review</td>
<td>co-principal investigator</td>
<td>clinical</td>
<td>Ongoing / Renewed</td>
<td>Canadian Orthopaedic Foundation</td>
<td>$2,500.00</td>
</tr>
<tr>
<td>Quality Indicators in Cerebral Palsy: A Scoping Review</td>
<td>principal investigator</td>
<td>clinical</td>
<td>New</td>
<td>Alberta Innovates Health Solutions Knowledge Transfer/Innovation Research Grant</td>
<td>$24,663.00</td>
</tr>
<tr>
<td>Quality indicators in pediatric orthopaedics: A literature review</td>
<td>co-principal investigator</td>
<td>health services (education)</td>
<td>Ongoing / Renewed</td>
<td>University of Calgary, COREF Research Grant</td>
<td>$5,000.00</td>
</tr>
<tr>
<td>Quality indicators in pediatric orthopaedic surgery</td>
<td>principal investigator</td>
<td>clinical</td>
<td>Ongoing / Renewed</td>
<td>University of Calgary, Department of Surgery Research Prize</td>
<td>$75,000.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6 grants</td>
<td>$123,273.00</td>
</tr>
</tbody>
</table>

### Dr. Robert Bray – Orthopedic Surgery

<table>
<thead>
<tr>
<th>Title</th>
<th>Role</th>
<th>Theme</th>
<th>Status</th>
<th>Funding Source</th>
<th>Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research with no funding or non-peer reviewed support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research funded with peer-reviewed grant support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development Implementation and Testing of Temporary, Controllable Pseudobezoars for Reducing Excess Weight</td>
<td>co-investigator</td>
<td>clinical</td>
<td>Ongoing / Renewed</td>
<td>Development of Innovations by Startup Enterprises, Co-Financed by the EU</td>
<td>$260,000.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 grant</td>
<td>$260,000.00</td>
</tr>
</tbody>
</table>
### Dr. Mary Brindle – Pediatric Surgery – General Surgery

<table>
<thead>
<tr>
<th>Title</th>
<th>Role</th>
<th>Theme</th>
<th>Status</th>
<th>Funding Source</th>
<th>Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research with no funding or non-peer reviewed support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research funded with peer-reviewed grant support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effects of Educational Strategies on Cognitive Load for Teaching Medical and Surgical Procedures: An Exploratory Study</td>
<td>co-principal investigator</td>
<td>health services (education)</td>
<td>Ongoing / Renewed</td>
<td>UCMG</td>
<td>$10,000.00</td>
</tr>
<tr>
<td>The Canadian Pediatric Surgery Network (CAPSNet): Establishing Best Practices for Gastrochoschisis and Congenital Diaphragmatic Hernia</td>
<td>co-investigator</td>
<td>clinical</td>
<td>Ongoing / Renewed</td>
<td>Canadian Institutes of Health Research</td>
<td>$100,000.00</td>
</tr>
<tr>
<td>CIHR Secondary Analysis of Databases: Canadian Pediatric Surgery Network (CAPSNet)</td>
<td>co-principal investigator</td>
<td>social, cultural, environmental and population</td>
<td>Ongoing / Renewed</td>
<td>Canadian Institutes of Health Research</td>
<td>$100,000.00</td>
</tr>
<tr>
<td>The impact of maternal Serotonin Specific Re-uptake Inhibitors on neonatal pulmonary hypertension: An animal model</td>
<td>principal investigator</td>
<td>basic/biomedical</td>
<td>Ongoing / Renewed</td>
<td>ACH- Foundation</td>
<td>$49,200.00</td>
</tr>
<tr>
<td>Improving outcomes following diaphragmatic hernia repair using national data, systematic review and prospective trials</td>
<td>principal investigator</td>
<td>multi-themed</td>
<td>Ongoing / Renewed</td>
<td>ACHRI</td>
<td>$60,000.00</td>
</tr>
<tr>
<td>Overcoming surfactant inhibition in neonates and infants: a clinical prospective cohort study with an animal model correlate</td>
<td>co-principal investigator</td>
<td>basic/biomedical</td>
<td>Ongoing / Renewed</td>
<td>Alberta Children’s Hospital Foundation</td>
<td>$49,200.00</td>
</tr>
<tr>
<td>Improving outcomes for infants with Myelomeningocele: From fetus to child</td>
<td>principal investigator</td>
<td>health services</td>
<td>Ongoing / Renewed</td>
<td>Spinal Bifida Association</td>
<td>$25,000.00</td>
</tr>
<tr>
<td>CIHR Secondary Analysis of Databases: Canadian Pediatric Surgery Network (CAPSNet)</td>
<td>co-principal investigator</td>
<td>multi-themed</td>
<td>Ongoing / Renewed</td>
<td>Canadian Institutes of Health Research</td>
<td>$100,000.00</td>
</tr>
<tr>
<td><strong>8 grants</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>$493,400.00</strong></td>
</tr>
</tbody>
</table>

### Dr. William Buie – General Surgery

<table>
<thead>
<tr>
<th>Title</th>
<th>Role</th>
<th>Theme</th>
<th>Status</th>
<th>Funding Source</th>
<th>Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research with no funding or non-peer reviewed support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long term oncologic outcomes for rectal cancer in the province of Alberta</td>
<td>principal investigator</td>
<td>clinical</td>
<td></td>
<td></td>
<td>$0.00</td>
</tr>
<tr>
<td>Adenoma detection rate in screening colonoscopy</td>
<td>co-investigator</td>
<td>clinical</td>
<td></td>
<td></td>
<td>$0.00</td>
</tr>
<tr>
<td>Long term outcomes for the treatment for rectal cancer in the Province of Alberta</td>
<td>principal investigator</td>
<td>clinical</td>
<td></td>
<td></td>
<td>$12,000.00</td>
</tr>
<tr>
<td>Research funded with peer-reviewed grant support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Timing of Rectal Cancer- response to chemoradiation</td>
<td>local principal investigator</td>
<td>clinical</td>
<td>Ongoing / Renewed</td>
<td>National Institutes of Health Research (NIH US)</td>
<td>$38,000.00</td>
</tr>
<tr>
<td>Rectal Cancer Care Clinical Pathway</td>
<td>co-investigator</td>
<td>health services</td>
<td>New</td>
<td>Alberta Innovates - Health Solutions (AIHS)</td>
<td>$750,000.00</td>
</tr>
<tr>
<td><strong>5 grants</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>$800,000.00</strong></td>
</tr>
</tbody>
</table>
### Dr. Linda Cooper – Pediatric Surgery - Ophthalmology

<table>
<thead>
<tr>
<th>Title</th>
<th>Role</th>
<th>Theme</th>
<th>Status</th>
<th>Funding Source</th>
<th>Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research with no funding or non-peer reviewed support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research funded with peer-reviewed grant support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATS 1, 10-16</td>
<td>co-investigator</td>
<td>clinical</td>
<td>Ongoing / Renewed</td>
<td>NIH</td>
<td>$4,000.00</td>
</tr>
<tr>
<td>Corneal Confocal Microscopy: A Rapid Noninvasive Approach to Detect Diabetic Neuropathy in Children with type 1 Diabetes</td>
<td>co-investigator</td>
<td>clinical</td>
<td>Ongoing / Renewed</td>
<td>Juvenile Diabetes Research Foundation</td>
<td>$365.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2 grants $4,365.00

### Dr. Elijah Dixon – General Surgery

<table>
<thead>
<tr>
<th>Title</th>
<th>Role</th>
<th>Theme</th>
<th>Status</th>
<th>Funding Source</th>
<th>Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research with no funding or non-peer reviewed support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resectable colonic hepatic metastases: type of initial referral, time to surgical intervention and disease free survival.</td>
<td>local principal investigator</td>
<td>clinical</td>
<td></td>
<td></td>
<td>$0.00</td>
</tr>
<tr>
<td>Research funded with peer-reviewed grant support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tranexamic Acid Versus Placebo to Reduce Perioperative Blood Transfusion in Patients Undergoing Major Liver Resection: A pilot randomized controlled trial.</td>
<td>co-investigator</td>
<td>clinical</td>
<td>New</td>
<td>Canadian Institutes of Health Research</td>
<td>$248,319.00</td>
</tr>
<tr>
<td>&quot;Effect of Physician Alternative Payment Plans on the Completeness and Validity of Administrative Data.&quot;</td>
<td>co-investigator</td>
<td>health services</td>
<td>Ongoing / Renewed</td>
<td>Canadian Institutes of Health Research</td>
<td>$230,492.00</td>
</tr>
<tr>
<td>&quot;Improving safety in the operating room: Evaluating implementation of the Safe Surgery Checklist&quot;</td>
<td>co-investigator</td>
<td>clinical</td>
<td>New</td>
<td>M.S.I. Foundation</td>
<td>$98,000.00</td>
</tr>
<tr>
<td>&quot;Rates and waits for cancer surgery in Canada: Mixed method assessment.&quot;</td>
<td>principal investigator</td>
<td>health services</td>
<td>Ongoing / Renewed</td>
<td>Canadian Institutes of Health Research</td>
<td>$430,000.00</td>
</tr>
<tr>
<td>Tranexamic Acid Versus Placebo to Reduce Perioperative Blood Transfusion in Patients Undergoing Major Liver Resection: A Pilot Randomized Controlled Trial</td>
<td>co-investigator</td>
<td>clinical</td>
<td>New</td>
<td>Canadian Institutes of Health Research</td>
<td>$248,319.00</td>
</tr>
<tr>
<td>&quot;The Effects of Call and Call Scheduling on General Surgeons' and General Surgery Residents' Perceived Quality of Life.&quot;</td>
<td>principal investigator</td>
<td>health services</td>
<td>New</td>
<td>Calgary Surgical Research Development Fund</td>
<td>$1,230.00</td>
</tr>
<tr>
<td>&quot;Laparoscopic Cholecystectomy for Acute Calculus Cholecystitis: How Urgent is 'Urgent'?”</td>
<td>co-investigator</td>
<td>clinical</td>
<td>New</td>
<td>Calgary Surgical Research Development Fund</td>
<td>$2,300.00</td>
</tr>
<tr>
<td>The Use of Wound Protectors to Prevent Surgical Site Infection in Patients Undergoing Pancreatoduodenectomy with Intrabiliary Stents: A Randomized Controlled Trial</td>
<td>co-investigator</td>
<td>clinical</td>
<td>Ongoing / Renewed</td>
<td>Calgary Surgical Research Development Fund</td>
<td>$3,861.00</td>
</tr>
<tr>
<td>Establishment of the Hepatopancreaticobiliary Community of Surgical Oncologists: Clinical, Evaluative and Prospective.</td>
<td>co-investigator</td>
<td>health services</td>
<td>New</td>
<td>Canadian Institutes of Health Research</td>
<td>$24,900.00</td>
</tr>
<tr>
<td>&quot;Postoperative Outcomes Following Colectomy in Elderly Ulcerative Colitis Patients.&quot;</td>
<td>principal investigator</td>
<td>clinical</td>
<td>Ongoing / Renewed</td>
<td>M.S.I. Foundation</td>
<td>$47,858.00</td>
</tr>
<tr>
<td>Predictors of Acute Kidney Injury after Major Surgical Procedures.</td>
<td>co-investigator</td>
<td>clinical</td>
<td>New</td>
<td>University of Calgary Department of Medicine and Department of Surgery Research Development Fund Award</td>
<td>$12,500.00</td>
</tr>
</tbody>
</table>

12 grants $1,347,779.00
## Dr. Joseph Dort – Otolaryngology

<table>
<thead>
<tr>
<th>Title</th>
<th>Role</th>
<th>Theme</th>
<th>Status</th>
<th>Funding Source</th>
<th>Award</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Research with no funding or non-peer reviewed support</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Image Guided Surgery - Head and Neck Cancer Project</td>
<td>principal investigator</td>
<td>basic/biomedical</td>
<td></td>
<td></td>
<td>$60,449.00</td>
</tr>
<tr>
<td><strong>Research funded with peer-reviewed grant support</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loop mediated isothermal amplification PCR (LAMP) for bedside detection of human papillomavirus (HPV) in oropharyngeal squamous cell carcinoma (OPSCC).</td>
<td>co-principal investigator</td>
<td>clinical</td>
<td>Ongoing / Renewed</td>
<td>Calgary Surgical Research Development Fund</td>
<td>$4,000.00</td>
</tr>
<tr>
<td>FFPE Validation of a Survival Gene Signature in HPV-Negative Oral Cavity Cancer</td>
<td>co-investigator</td>
<td>basic/biomedical</td>
<td>New</td>
<td>National Institutes of Health Research (NIH US)</td>
<td>$2,008,985.00</td>
</tr>
<tr>
<td>Developing and Testing a New Treatment for Oral Squamous Cell Carcinoma</td>
<td>co-principal investigator</td>
<td>basic/biomedical</td>
<td>New</td>
<td>Alberta Innovates - Health Solutions (AIHS)</td>
<td>$746,000.00</td>
</tr>
<tr>
<td>Efficacy of optically-guided surgery in the management of early-stage oral cancer</td>
<td>local principal investigator</td>
<td>clinical</td>
<td>New</td>
<td>Terry Fox Research Institute</td>
<td>$180,000.00</td>
</tr>
<tr>
<td>2014 Royal College Janes Visiting Professorship in Surgery</td>
<td>national principal investigator</td>
<td>health services (education)</td>
<td>New</td>
<td>Royal College of Physicians and Surgeons of Canada</td>
<td>$7,000.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$3,006,434.00</td>
</tr>
</tbody>
</table>

## Dr. Cyril Frank – Orthopedic Surgery

<table>
<thead>
<tr>
<th>Title</th>
<th>Role</th>
<th>Theme</th>
<th>Status</th>
<th>Funding Source</th>
<th>Award</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Research with no funding or non-peer reviewed support</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Mechanical Causes of Osteoarthritis</td>
<td>co-investigator</td>
<td>basic/biomedical</td>
<td>New</td>
<td>Canadian Institutes of Health Research</td>
<td>$133,002.00</td>
</tr>
<tr>
<td>Training program for Biomedical Engineers for the 21st century</td>
<td>co-investigator</td>
<td>basic/biomedical</td>
<td>Ongoing / Renewed</td>
<td>NSERC</td>
<td>$1,650,000.00</td>
</tr>
<tr>
<td>Total joint replacement: Strategic management for timely treatment</td>
<td>co-investigator</td>
<td>social, cultural, environmental and population</td>
<td>Ongoing / Renewed</td>
<td>Canadian Institutes of Health Research</td>
<td>$1,478,500.00</td>
</tr>
<tr>
<td>CIHR Team in models of care in arthritis (MOCA)</td>
<td>co-investigator</td>
<td>health services</td>
<td>Ongoing / Renewed</td>
<td>Canadian Institutes of Health Research</td>
<td>$1,486,095.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$4,747,597.00</td>
</tr>
</tbody>
</table>

6 grants $3,006,434.00

4 grants $4,747,597.00
### Dr. David Hart – Surgery

<table>
<thead>
<tr>
<th>Title</th>
<th>Role</th>
<th>Theme</th>
<th>Status</th>
<th>Funding Source</th>
<th>Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research with no funding or non-peer reviewed support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research funded with peer-reviewed grant support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roll of Inflammation in Pseudotumor Development</td>
<td>co-investigator</td>
<td>basic/biomedical</td>
<td>Ongoing / Renewed</td>
<td>OREF</td>
<td>$79,000.00</td>
</tr>
<tr>
<td>Stem Cells and Cartilage Repair</td>
<td>principal investigator</td>
<td>basic/biomedical</td>
<td>Ongoing / Renewed</td>
<td>Canadian Arthritis Network</td>
<td>$50,000.00</td>
</tr>
<tr>
<td>Sex Differences in Nerve Involvement in OA</td>
<td>co-investigator</td>
<td>basic/biomedical</td>
<td>Ongoing / Renewed</td>
<td>ISIS MK Network Grant (Society for Women's Health Research (USA))</td>
<td>$200,000.00</td>
</tr>
<tr>
<td>Stem Cells as Diagnostic Markers</td>
<td>co-principal investigator</td>
<td>basic/biomedical</td>
<td>Ongoing / Renewed</td>
<td>Alberta Innovates - Health Solutions (AIHS)</td>
<td>$750,000.00</td>
</tr>
<tr>
<td>OA Team grant</td>
<td>co-investigator</td>
<td>basic/biomedical</td>
<td>Ongoing / Renewed</td>
<td>Alberta Innovates - Health Solutions (AIHS)</td>
<td>$6,000,000.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5 grants</td>
<td>$7,079,000.00</td>
</tr>
</tbody>
</table>
### Dr. Kevin Hildebrand – Orthopedic Surgery

<table>
<thead>
<tr>
<th>Title</th>
<th>Role</th>
<th>Theme</th>
<th>Status</th>
<th>Funding Source</th>
<th>Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research with no funding or non-peer reviewed support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research funded with peer-reviewed grant support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Typtase as Biomarker of Post-traumatic Joint Contractures</td>
<td>co-principal</td>
<td>basic/biomedical</td>
<td>New</td>
<td>Orthopaedic Research Portfolio Grant, Section of Orthopaedics</td>
<td>$4,500.00</td>
</tr>
<tr>
<td></td>
<td>investigator</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Randomized Controlled Trial on the use of Low-Intensity Pulsed Ultrasound in the Healing of Scaphoid Non-Unions Treated with Surgical Fixation</td>
<td>co-principal</td>
<td>basic/biomedical</td>
<td>New</td>
<td>Orthopaedic Research Portfolio Grant, Section of Orthopaedics</td>
<td>$5,000.00</td>
</tr>
<tr>
<td></td>
<td>investigator</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investigations of Mechanisms and Treatment in Post-traumatic Joint Contractures</td>
<td>principal</td>
<td>basic/biomedical</td>
<td>New</td>
<td>Workers' Compensation Board Research Program Alberta</td>
<td>$20,000.00</td>
</tr>
<tr>
<td></td>
<td>investigator</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Dose-response Effect of the Mast Cell Stabilizer, Ketotifen Fumarate, on Post-traumatic Joint Contractures</td>
<td>co-investigator</td>
<td>basic/biomedical</td>
<td>New</td>
<td>Orthopaedic Trauma Association</td>
<td>$20,000.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Dose-response Effect of the Mast Cell Stabilizer, Ketotifen Fumarate on Post-traumatic Joint Contractures</td>
<td>co-investigator</td>
<td>basic/biomedical</td>
<td>New</td>
<td>2013 COREF Research Grant, Section of Orthopaedics</td>
<td>$20,000.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investigations of Mechanisms and Treatment in Post-Traumatic Joint Contractures- Part II</td>
<td>principal</td>
<td>basic/biomedical</td>
<td>New</td>
<td>Worker's Compensation Board Research Program</td>
<td>$40,000.00</td>
</tr>
<tr>
<td></td>
<td>investigator</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Randomized Controlled Trial on the use of Low-Intensity Pulsed Ultrasound in the Healing of Scaphoid Non-Unions Treated with Surgical Fixation</td>
<td>co-investigator</td>
<td>basic/biomedical</td>
<td>New</td>
<td>Worker's Compensation Board Research Program</td>
<td>$40,000.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Randomized Controlled Trial of Ketotifen to Prevent Post-traumatic Elbow Contractures</td>
<td>principal</td>
<td>basic/biomedical</td>
<td>New</td>
<td>American Foundation for Surgery of the Hand</td>
<td>$100,000.00</td>
</tr>
<tr>
<td></td>
<td>investigator</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-Traumatic Joint Contractures: Correlation between the Human Condition and an Animal Model, and Identification of Potential Preventative Intervention.</td>
<td>principal</td>
<td>basic/biomedical</td>
<td>New</td>
<td>Canadian Orthopaedic Foundation</td>
<td>$10,000.00</td>
</tr>
<tr>
<td></td>
<td>investigator</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-Traumatic Elbow Joint Contractures: Defining Pathologic Capsular Mechanisms and Potential Future Treatment Paradigms.</td>
<td>principal</td>
<td>basic/biomedical</td>
<td>New</td>
<td>American Society for Surgery of the Hand</td>
<td>$20,000.00</td>
</tr>
<tr>
<td></td>
<td>investigator</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feasibility of randomized controlled trial of ketotifen for lateral epicondylalgia</td>
<td>local sub-</td>
<td>basic/biomedical</td>
<td>New</td>
<td>Canadian Institutes of Health Research</td>
<td>$15,000.00</td>
</tr>
<tr>
<td></td>
<td>investigator</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tryptase as a Biomarker for Post-Traumatic Elbow Contracture</td>
<td>principal</td>
<td>basic/biomedical</td>
<td>New</td>
<td>Calgary Surgical Research Development Fund</td>
<td>$3,725.00</td>
</tr>
<tr>
<td></td>
<td>investigator</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total Grants:** 12 | **Total Award:** $298,225.00
### Dr. Gwendolyn Hollaar – General Surgery

<table>
<thead>
<tr>
<th>Title</th>
<th>Role</th>
<th>Theme</th>
<th>Status</th>
<th>Funding Source</th>
<th>Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research with no funding or non-peer reviewed support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canadian Consensus on Global Health Resident Electives</td>
<td>co-principal investigator</td>
<td>health services (education)</td>
<td></td>
<td></td>
<td>$0.00</td>
</tr>
<tr>
<td>Improving Rural Health Initiative: A Lao PDR and University of Calgary Collaboration</td>
<td>co-principal investigator</td>
<td>health services (education)</td>
<td></td>
<td></td>
<td>$0.00</td>
</tr>
<tr>
<td>Research funded with peer-reviewed grant support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian Academic Partnership</td>
<td>principal investigator</td>
<td>health services (education)</td>
<td>New</td>
<td>McLaughlin Traveling Medical Education Fund: University of Calgary Faculty of Medicine</td>
<td>$15,280.00</td>
</tr>
<tr>
<td>Improving Rural Health: A Lao PDR / University of Calgary Collaboration to Develop and Disseminate Maternal Health Learning Materials</td>
<td>local sub-investigator</td>
<td>health services (education)</td>
<td>New</td>
<td>McLaughlin Traveling Medical Education Fund: University of Calgary Faculty of Medicine</td>
<td>$10,000.00</td>
</tr>
</tbody>
</table>

4 grants $25,280.00

### Dr. Carolyn Hutchison – Orthopedic Surgery

<table>
<thead>
<tr>
<th>Title</th>
<th>Role</th>
<th>Theme</th>
<th>Status</th>
<th>Funding Source</th>
<th>Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research with no funding or non-peer reviewed support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Joint-Sparing Transplant with fresh osteochondral allografts. Schachar N, Timmerman S, Hutchison CR, Heard M, Miller S.</td>
<td>co-investigator</td>
<td>basic/biomedical</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assessment of Communication, Professional and Surgical Skills in an OSPRE: A Psychometric Study. Ponton-Cars, Donnone T, Hutchison CR.</td>
<td>co-investigator</td>
<td>health services (education)</td>
<td></td>
<td></td>
<td>$40,000.00</td>
</tr>
<tr>
<td>Research funded with peer-reviewed grant support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3 grants $420,800.00
Dr. Andrew Kirkpatrick – General Surgery

<table>
<thead>
<tr>
<th>Title</th>
<th>Role</th>
<th>Theme</th>
<th>Status</th>
<th>Funding Source</th>
<th>Award</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Research with no funding or non-peer reviewed support</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Research funded with peer-reviewed grant support</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tele-mentored Ultrasonography (TMUS) to Support Remote Canadian Communities. ($10,000.00)</td>
<td>co-investigator</td>
<td>health services</td>
<td>New</td>
<td>Alberta Innovates - Health Solutions (AIHS)</td>
<td>$10,000.00</td>
</tr>
<tr>
<td>Collaborative Program – Letter of Intent. Alberta Innovates Health Solutions. PI – Douglas Hamilton; Co-investigators Kirkpatrick AW, Wilson S,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014 Telementoring of Resuscitative Care in Austere Environments ($175,000.00) – Awarded from the Canadian Forces Health Services, PI – Major Andrew W Kirkpatrick</td>
<td>local principal investigator</td>
<td>health services</td>
<td>Ongoing / Renewed</td>
<td>Canadian Forces Health Services</td>
<td>$175,000.00</td>
</tr>
<tr>
<td>2015 Telementoring of Resuscitative Care in Austere Environments ($10,000.00) – Awarded from the Royal College of Physicians and Surgeons of Canada Services, PI – Major Andrew W Kirkpatrick</td>
<td>local principal investigator</td>
<td>health services</td>
<td>Ongoing / Renewed</td>
<td>Royal College of Physicians and Surgeons of Canada</td>
<td>$10,000.00</td>
</tr>
<tr>
<td>Requested - CIHR ICRH Community Development Program Proposal: The Canadian Resuscitation Outcomes Consortium (CanROC), Principle Investigators Morrison L, Christenson J, and Stiell I. Co-investigator Kirkpatrick AW – Proposed Role Co-Investigator, Alberta Lead Trauma, Trauma Committee. Requested $3,000,000.00</td>
<td>co-investigator</td>
<td>health services</td>
<td>New</td>
<td>Canadian Institutes of Health Research</td>
<td>$0.00</td>
</tr>
<tr>
<td>Telementoring to support Austere Resuscitations</td>
<td>principal investigator</td>
<td>clinical</td>
<td>New</td>
<td>Canadian Forces Department of National Defense</td>
<td>$175,000.00</td>
</tr>
<tr>
<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>
<td>principal investigator</td>
<td>clinical</td>
<td>Ongoing / Renewed</td>
<td>KCI USA and University of Calgary</td>
<td>$218,550.00</td>
</tr>
</tbody>
</table>

8 grants $1,221,242.00
### Dr. John Kortbeek – General Surgery

<table>
<thead>
<tr>
<th>Title</th>
<th>Role</th>
<th>Theme</th>
<th>Status</th>
<th>Funding Source</th>
<th>Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research funded with peer-reviewed grant support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<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>
<td>co-principal investigator</td>
<td>health services</td>
<td></td>
<td>$0.00</td>
<td></td>
</tr>
<tr>
<td>Research with no funding or non-peer reviewed support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 grant $0.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Dr. Roman Krawetz - Surgery

<table>
<thead>
<tr>
<th>Title</th>
<th>Role</th>
<th>Theme</th>
<th>Status</th>
<th>Funding Source</th>
<th>Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research with no funding or non-peer reviewed support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research funded with peer-reviewed grant support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Synovial Mesenchymal Stem Cells: Distinct roles in cartilage regeneration and the pathogenesis of Osteoarthritis</td>
<td>principal investigator</td>
<td>basic/biomedical</td>
<td>New</td>
<td>Alberta EAE small equipment grant</td>
<td>$272,000.00</td>
</tr>
<tr>
<td>Synovial Mesenchymal Stem Cells: Distinct roles in cartilage regeneration and the pathogenesis of Osteoarthritis.</td>
<td>principal investigator</td>
<td>basic/biomedical</td>
<td>New</td>
<td>CFI</td>
<td>$272,000.00</td>
</tr>
<tr>
<td>Cellular basis of endogenous cartilage repair in super-healer mice</td>
<td>principal investigator</td>
<td>basic/biomedical</td>
<td>New</td>
<td>Canadian Institutes of Health Research</td>
<td>$100,000.00</td>
</tr>
<tr>
<td>Cellular basis of endogenous cartilage repair in super-healer mice</td>
<td>principal investigator</td>
<td>basic/biomedical</td>
<td>New</td>
<td>Canadian Institutes of Health Research</td>
<td>$731,270.00</td>
</tr>
<tr>
<td>Identification of inhibitors to cyclin-dependent kinase inhibitors (CDKis) for use in regenerative medicine strategies</td>
<td>principal investigator</td>
<td>basic/biomedical</td>
<td>New</td>
<td>Canadian Stem Cell Network</td>
<td>$75,000.00</td>
</tr>
<tr>
<td>Bone and Joint Stem Cell Biology. CRC.</td>
<td>principal investigator</td>
<td>basic/biomedical</td>
<td>New</td>
<td>CRC</td>
<td>$500,000.00</td>
</tr>
<tr>
<td>Cellular basis of endogenous cartilage repair in super-healer mice.</td>
<td>principal investigator</td>
<td>basic/biomedical</td>
<td>New</td>
<td>McCaig Professorship</td>
<td>$70,000.00</td>
</tr>
<tr>
<td>Monocyte chemotactic protein-1 regulates progenitor cell mediated cartilage repair</td>
<td>local principal investigator</td>
<td>basic/biomedical</td>
<td>New</td>
<td>University of Calgary Seed Grant</td>
<td>$17,000.00</td>
</tr>
<tr>
<td>The p21 signaling axis in accelerated fracture repair.</td>
<td>principal investigator</td>
<td>basic/biomedical</td>
<td>New</td>
<td>AO Foundation</td>
<td>$120,000.00</td>
</tr>
<tr>
<td>Synovial stem cell biology</td>
<td>principal investigator</td>
<td>basic/biomedical</td>
<td>New</td>
<td>NSERC</td>
<td>$195,000.00</td>
</tr>
<tr>
<td>Consequences of knee joint injury in youth sport: Implications for knee osteoarthritis and other health outcomes.</td>
<td>co-investigator</td>
<td>clinical</td>
<td>New</td>
<td>Canadian Institutes of Health Research</td>
<td>$380,640.00</td>
</tr>
<tr>
<td>11 grants $2,732,910.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Dr. Wayne Matthews - Otolaryngology

<table>
<thead>
<tr>
<th>Title</th>
<th>Role</th>
<th>Theme</th>
<th>Status</th>
<th>Funding Source</th>
<th>Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research with no funding or non-peer reviewed support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Head and Neck Cancer Dysphagia Outcomes</td>
<td>co-principal investigator</td>
<td>clinical</td>
<td></td>
<td></td>
<td>$5,000.00</td>
</tr>
<tr>
<td>Head and Neck Oncology Outcomes</td>
<td>co-investigator</td>
<td>clinical</td>
<td></td>
<td></td>
<td>$0.00</td>
</tr>
<tr>
<td>Research funded with peer-reviewed grant support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pan Canadian Optically Guided Approach for Oral Lesions Surgical Trial</td>
<td>local sub-investigator</td>
<td>clinical</td>
<td>New</td>
<td>Terry Fox Research Institute</td>
<td>$4,734,000.00</td>
</tr>
<tr>
<td>The Impact of CAIX in Cervical Node Metastases in Oral Cavity Squamous Cell Carcinoma</td>
<td>co-investigator</td>
<td>basic/biomedical</td>
<td>New</td>
<td>University Calgary Office of Surgical Research - Research Prize</td>
<td>$75,000.00</td>
</tr>
<tr>
<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>
<td>co-investigator</td>
<td>clinical</td>
<td>New</td>
<td>Ohlson Research Initiative</td>
<td>$11,243.00</td>
</tr>
<tr>
<td>5 grants</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$4,825,243.00</td>
</tr>
</tbody>
</table>

### Dr. J. Gregory McKinnon – General Surgery

<table>
<thead>
<tr>
<th>Title</th>
<th>Role</th>
<th>Theme</th>
<th>Status</th>
<th>Funding Source</th>
<th>Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research funded with peer-reviewed grant support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multicenter Selective Lymphadenectomy Trial II – John Wayne Cancer Center and NCI 2005-</td>
<td>principal investigator</td>
<td>clinical</td>
<td></td>
<td></td>
<td>$0.00</td>
</tr>
<tr>
<td>1 grant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$0.00</td>
</tr>
</tbody>
</table>

### Dr. Mauricio Monroy – Transplant

<table>
<thead>
<tr>
<th>Title</th>
<th>Role</th>
<th>Theme</th>
<th>Status</th>
<th>Funding Source</th>
<th>Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research with no funding or non-peer reviewed support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research funded with peer-reviewed grant support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Safety and Outcomes of Accepting Hypertensive Individuals as Living Kidney Donors</td>
<td>principal investigator</td>
<td>clinical</td>
<td>New</td>
<td>Canadian Institutes of Health Research</td>
<td>$352,098.00</td>
</tr>
<tr>
<td>Effect of living kidney donation on blood pressure during pregnancy</td>
<td>co-investigator</td>
<td>basic/biomedical</td>
<td>New</td>
<td>Kidney Foundation of Canada</td>
<td>$97,620.00</td>
</tr>
<tr>
<td>Standard Criteria Living Kidney Donor Safety Study</td>
<td>co-investigator</td>
<td>clinical</td>
<td>Ongoing / Renewed</td>
<td>Canadian Institutes of Health Research</td>
<td>$1,214,665.00</td>
</tr>
<tr>
<td>Canadian Living Kidney Donor Safety Study</td>
<td>co-investigator</td>
<td>clinical</td>
<td>Ongoing / Renewed</td>
<td>Canadian Institutes of Health Research</td>
<td>$200,000.00</td>
</tr>
<tr>
<td>The Long-term Effects of becoming a living Kidney Donor</td>
<td>principal investigator</td>
<td>clinical</td>
<td>Ongoing / Renewed</td>
<td>Canadian Institutes of Health Research</td>
<td>$200,000.00</td>
</tr>
<tr>
<td>5 grants</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$2,064,383.00</td>
</tr>
</tbody>
</table>
### Dr. Randy Moore – Vascular Surgery

<table>
<thead>
<tr>
<th>Title</th>
<th>Role</th>
<th>Theme</th>
<th>Status</th>
<th>Funding Source</th>
<th>Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research with no funding or non-peer reviewed support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thoraflex: A New Approach to aortic arch disease</td>
<td>local principal investigator</td>
<td>clinical</td>
<td></td>
<td></td>
<td>$20,000.00</td>
</tr>
<tr>
<td>FDA Phase 2 STUDY OF THE ANACONDA ENDOVASCULAR STENT GRAFT REPAIR FOR THE TREATMENT OF INFRARENAL AAA</td>
<td>co-principal investigator</td>
<td>clinical</td>
<td></td>
<td></td>
<td>$300,000.00</td>
</tr>
<tr>
<td>Research funded with peer-reviewed grant support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fluid Flow and Vascular Endothelial Cell Drug Response</td>
<td>co-investigator</td>
<td>basic/biomedical</td>
<td>Ongoing / Renewed</td>
<td>Heart &amp; Stroke Foundation of Canada</td>
<td>$300,000.00</td>
</tr>
<tr>
<td>TX2 trial for the endovascular repair of thoracic aortic aneurysm</td>
<td>principal investigator</td>
<td>basic/biomedical</td>
<td>New</td>
<td>FDA</td>
<td>$30,000.00</td>
</tr>
</tbody>
</table>

4 grants $650,000.00

### Dr. Mark Nutley – Vascular Surgery

<table>
<thead>
<tr>
<th>Title</th>
<th>Role</th>
<th>Theme</th>
<th>Status</th>
<th>Funding Source</th>
<th>Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research funded with peer-reviewed grant support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research with no funding or non-peer reviewed support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multi-center Same Day Discharge Post Endovascular and Percutaneous Endovascular Aneurysm Repair (EVAR and PEVAR).</td>
<td>national principal investigator</td>
<td>clinical</td>
<td></td>
<td></td>
<td>$0.00</td>
</tr>
</tbody>
</table>

1 grant $0.00
## Dr. Elizabeth Oddone-Paolucci - Surgery

<table>
<thead>
<tr>
<th>Title</th>
<th>Role</th>
<th>Theme</th>
<th>Status</th>
<th>Funding Source</th>
<th>Award</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Research with no funding or non-peer reviewed support</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exploring the learning experiences in the general surgery clerkship.</td>
<td>principal investigator</td>
<td>health services (education)</td>
<td></td>
<td></td>
<td>$0.00</td>
</tr>
<tr>
<td>&quot;Faculty Development and Evaluation.&quot;</td>
<td>co-investigator</td>
<td>health services (education)</td>
<td></td>
<td></td>
<td>$0.00</td>
</tr>
<tr>
<td>&quot;An investigation of the relationship between conformity and communication in medical education.&quot;</td>
<td>co-investigator</td>
<td>health services (education)</td>
<td></td>
<td></td>
<td>$0.00</td>
</tr>
<tr>
<td>&quot;Assessment of Conformity.&quot;</td>
<td>co-investigator</td>
<td>health services (education)</td>
<td></td>
<td></td>
<td>$0.00</td>
</tr>
<tr>
<td>&quot;Formative Curriculum Evaluation of the University of Calgary O&amp;G Clerkship: A Mixed-Methods Case Study.&quot;</td>
<td>co-investigator</td>
<td>health services (education)</td>
<td></td>
<td></td>
<td>$5,000.00</td>
</tr>
<tr>
<td><strong>Research funded with peer-reviewed grant support</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;Boot camp training for pediatric general surgery fellows: Is there a need for it to ease the transition to fellowship?&quot;</td>
<td>principal investigator</td>
<td>health services (education)</td>
<td>New</td>
<td>Calgary Surgical Research Development Fund, Department of Surgery</td>
<td>$602.00</td>
</tr>
<tr>
<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>
<td>co-principal investigator</td>
<td>health services (education)</td>
<td>New</td>
<td>Alberta Innovates - Health Solutions (AIHS)</td>
<td>$25,000.00</td>
</tr>
<tr>
<td>Multi-Source feedback for assessing clinical competence in surgical residents.</td>
<td>co-investigator</td>
<td>health services (education)</td>
<td>New</td>
<td>Dept of Surgery - Calgary Surgical Research Development Fund</td>
<td>$2,900.00</td>
</tr>
<tr>
<td>&quot;Identification of factors related to experiences of conformity in medical education.&quot;</td>
<td>co-principal investigator</td>
<td>health services (education)</td>
<td>New</td>
<td>Dept of Surgery - Calgary Surgical Research Development Fund</td>
<td>$1,900.00</td>
</tr>
<tr>
<td>Local tools to global challenge: Standardizing clinical patient handovers</td>
<td>principal investigator</td>
<td>health services (education)</td>
<td>New</td>
<td>Departments of Medicine &amp; Surgery, University of Calgary</td>
<td>$12,500.00</td>
</tr>
<tr>
<td><strong>10 grants</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$47,902.00</td>
</tr>
</tbody>
</table>

## Dr. May Lynn Quan – General Surgery

<table>
<thead>
<tr>
<th>Title</th>
<th>Role</th>
<th>Theme</th>
<th>Status</th>
<th>Funding Source</th>
<th>Award</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Research with no funding or non-peer reviewed support</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Research funded with peer-reviewed grant support</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Towards better outcomes for young women with breast cancer: A Pan Canadian Collaborative</td>
<td>co-principal investigator</td>
<td>clinical</td>
<td>New</td>
<td>Canadian Institutes of Health Research</td>
<td>$5,695,303.00</td>
</tr>
<tr>
<td>Towards better outcomes for young women with breast cancer: A Pan Canadian Collaborative</td>
<td>principal investigator</td>
<td>clinical</td>
<td>New</td>
<td>Canadian Institutes of Health Research</td>
<td>$25,000.00</td>
</tr>
<tr>
<td>Improving safety in the operating room: Evaluating implementation of the safe surgery checklist</td>
<td>principal investigator</td>
<td>health services</td>
<td>Ongoing / Renewed</td>
<td>MSI Foundation</td>
<td>$100,000.00</td>
</tr>
<tr>
<td><strong>3 grants</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$5,820,303.00</td>
</tr>
</tbody>
</table>
## Dr. Kenneth Romanchuk – Pediatric Surgery - Ophthalmology

<table>
<thead>
<tr>
<th>Title</th>
<th>Role</th>
<th>Theme</th>
<th>Status</th>
<th>Funding Source</th>
<th>Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research with no funding or non-peer reviewed support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A two-year, double-blind, randomized, multicenter, active-controlled study to evaluate the safety and efficacy of fingolimod administered orally once daily versus interferon-?a intramuscularly once weekly in pediatric patients with multiple sclerosis Protocol number CFTY720D2311</td>
<td>co-investigator</td>
<td>clinical</td>
<td>New</td>
<td>Novartis</td>
<td>$10,000.00</td>
</tr>
<tr>
<td>Multinational Collaborative Evaluation of Corneal Confocal Microscopy as a Surrogate Endpoint for the Identification and Prediction of Diabetic Neuropathy in Type 1 Diabetes DP3DK104386-D1</td>
<td>co-investigator</td>
<td>clinical</td>
<td>New</td>
<td>National Institutes of Health Research (NIH US)</td>
<td>$1,106,824.00</td>
</tr>
<tr>
<td>Is Peripheral Neuropathy Occurring in Association with Idiopathic Parkinson's Disease, or an Iatrogenic Complication?</td>
<td>co-investigator</td>
<td>clinical</td>
<td>New</td>
<td>HBI CRU award &amp; Parkinson Society of Canada award</td>
<td>$53,212.00</td>
</tr>
<tr>
<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>
<td>local principal investigator</td>
<td>clinical</td>
<td>Ongoing / Renewed</td>
<td>Pediatric Eye Disease Investigator's Group</td>
<td>$2,000.00</td>
</tr>
<tr>
<td>Intermittent Exotropia Study (IXT2): a randomized clinical trial of observation versus occlusion therapy for intermittent exotropia</td>
<td>co-investigator</td>
<td>clinical</td>
<td>Ongoing / Renewed</td>
<td>Pediatric Eye Disease Investigator's Group</td>
<td>$2,000.00</td>
</tr>
<tr>
<td>Canadian Pediatric Acute Demyelinating Disease Study:</td>
<td>co-investigator</td>
<td>clinical</td>
<td>Ongoing / Renewed</td>
<td>Multiple Sclerosis Research Foundation</td>
<td>$454,709.00</td>
</tr>
<tr>
<td>Corneal Confocal Microscopy: A Rapid Noninvasive Approach to Detect Diabetic Neuropathy In Children With Type I Diabetes.</td>
<td>co-investigator</td>
<td>clinical</td>
<td>Ongoing / Renewed</td>
<td>Juvenile Diabetes Research Foundation</td>
<td>$365,000.00</td>
</tr>
<tr>
<td><strong>7 grants</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$1,993,745.00</td>
</tr>
</tbody>
</table>

## Dr. Anastasio Salazar – Transplant Surgery

<table>
<thead>
<tr>
<th>Title</th>
<th>Role</th>
<th>Theme</th>
<th>Status</th>
<th>Funding Source</th>
<th>Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research with no funding or non-peer reviewed support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IMMUNO - Artificial Immune Systems</td>
<td>principal investigator</td>
<td>basic/biomedical</td>
<td></td>
<td></td>
<td>$0.00</td>
</tr>
<tr>
<td>Research funded with peer-reviewed grant support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cellular Transplantation in Swine: Effect of Bone Marrow Seeding on Graft Rejection, Tolerance, and Survival (Protocol #M03018)</td>
<td>principal investigator</td>
<td>basic/biomedical</td>
<td>Ongoing / Renewed</td>
<td>Department of Surgery</td>
<td>$50,000.00</td>
</tr>
<tr>
<td><strong>2 grants</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$50,000.00</td>
</tr>
</tbody>
</table>
### Dr. Paul Salo – Orthopedic Surgery

<table>
<thead>
<tr>
<th>Title</th>
<th>Role</th>
<th>Theme</th>
<th>Status</th>
<th>Funding Source</th>
<th>Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research with no funding or non-peer reviewed support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research funded with peer-reviewed grant support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Derivation of a Clinical Prediction Guide in the Diagnosis of Facet Joint Mediated Pain in the Cervical Spine</td>
<td>co-investigator</td>
<td>basic/biomedical</td>
<td>Ongoing / Renewed</td>
<td>COREF</td>
<td>$20,000.00</td>
</tr>
<tr>
<td>Biological Augmentation of Ligament and Tendon Healing</td>
<td>co-investigator</td>
<td>basic/biomedical</td>
<td>Ongoing / Renewed</td>
<td>American Orthopaedic Society for Sport</td>
<td>$246,019.00</td>
</tr>
<tr>
<td>Role of the Central Nervous System in Arthritis: The Missing Link in Chronic Arthritis Pain</td>
<td>co-investigator</td>
<td>basic/biomedical</td>
<td>Ongoing / Renewed</td>
<td>McCaig Institute for Bone and Joint Health.</td>
<td>$10,000.00</td>
</tr>
<tr>
<td>Role of the Central Nervous System in Arthritis: The Missing Link in Chronic Arthritis Pain</td>
<td>co-investigator</td>
<td>basic/biomedical</td>
<td>Ongoing / Renewed</td>
<td>Faculty of Veterinary Medicine, University of Calgary, Strategic Research Grant.</td>
<td>$49,000.00</td>
</tr>
<tr>
<td>Investigations of Mechanisms and Treatment in Post-Traumatic Joint Contractures</td>
<td>co-investigator</td>
<td>basic/biomedical</td>
<td>Ongoing / Renewed</td>
<td>Canadian Institutes of Health Research</td>
<td>$100,000.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5 grants $425,019.00</td>
</tr>
</tbody>
</table>

### Dr. Norman Schachar – Orthopedic Surgery

<table>
<thead>
<tr>
<th>Title</th>
<th>Role</th>
<th>Theme</th>
<th>Status</th>
<th>Funding Source</th>
<th>Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research with no funding or non-peer reviewed support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research funded with peer-reviewed grant support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biological Aspects of Tissue Repair</td>
<td>principal investigator</td>
<td>health services</td>
<td></td>
<td></td>
<td>$500,000.00</td>
</tr>
<tr>
<td>Meniscus Interest Group</td>
<td>team grant investigator</td>
<td>health services (education)</td>
<td></td>
<td></td>
<td>$0.00</td>
</tr>
<tr>
<td>Investigating Osteochondral Allografts as a Biological Option to Repair Joint Defects</td>
<td>principal investigator</td>
<td>clinical</td>
<td></td>
<td></td>
<td>$0.00</td>
</tr>
<tr>
<td>Meniscus Transplantation Research Group</td>
<td>co-investigator</td>
<td>basic/biomedical</td>
<td></td>
<td></td>
<td>$0.00</td>
</tr>
<tr>
<td>Soft Tissue Sarcoma Project</td>
<td>co-investigator</td>
<td>clinical</td>
<td></td>
<td></td>
<td>$0.00</td>
</tr>
<tr>
<td>&quot;Establishing a Culture of Mindful Practice in Surgery at a New Orthopaedic Centre&quot;</td>
<td>principal investigator</td>
<td>clinical</td>
<td>New</td>
<td>University of Calgary - Orthopaedic Research</td>
<td>$4,486.40</td>
</tr>
<tr>
<td>Primary Lead in Research Development</td>
<td>principal investigator</td>
<td>basic/biomedical</td>
<td>Ongoing / Renewed</td>
<td>Private Donor</td>
<td>$1,000,000.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7 grants $1,504,486.40</td>
</tr>
</tbody>
</table>
## Dr. Francis Sutherland – General Surgery

<table>
<thead>
<tr>
<th>Title</th>
<th>Role</th>
<th>Theme</th>
<th>Status</th>
<th>Funding Source</th>
<th>Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research funded with peer-reviewed grant support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research with no funding or non-peer reviewed support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preoperative steroid utilization in liver resections: A randomized</td>
<td>co-investigator</td>
<td>clinical</td>
<td></td>
<td></td>
<td>$0.00</td>
</tr>
<tr>
<td>clinical trial</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wound protectors in HPB surgery</td>
<td>co-investigator</td>
<td>clinical</td>
<td></td>
<td></td>
<td>$10,000.00</td>
</tr>
<tr>
<td>2 grants</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$10,000.00</td>
</tr>
</tbody>
</table>

## Dr. Gail Thornton - Surgery

<table>
<thead>
<tr>
<th>Title</th>
<th>Role</th>
<th>Theme</th>
<th>Status</th>
<th>Funding Source</th>
<th>Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research with no funding or non-peer reviewed support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Biomechanical Evaluation of Suture Locking Mechanisms</td>
<td>co-principal investigator</td>
<td>clinical</td>
<td></td>
<td></td>
<td>$15,000.00</td>
</tr>
<tr>
<td>Research funded with peer-reviewed grant support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Role of Mast Cells in Tendinopathy</td>
<td>co-investigator</td>
<td>basic/biomedical</td>
<td>New</td>
<td>Canadian Institutes of Health Research</td>
<td>$100,000.00</td>
</tr>
<tr>
<td>Mechanics of Damage in Biological Soft Tissues</td>
<td>principal investigator</td>
<td>basic/biomedical</td>
<td>Ongoing / Renewed</td>
<td>NSERC</td>
<td>$125,000.00</td>
</tr>
<tr>
<td>Role of Mast Cells in Achilles Tendinopathy</td>
<td>co-investigator</td>
<td>basic/biomedical</td>
<td>New</td>
<td>Canadian Institutes of Health Research</td>
<td>$100,000.00</td>
</tr>
<tr>
<td>4 grants</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$340,000.00</td>
</tr>
</tbody>
</table>

## Dr. Serdar Yilmaz – Transplant Surgery

<table>
<thead>
<tr>
<th>Title</th>
<th>Role</th>
<th>Theme</th>
<th>Status</th>
<th>Funding Source</th>
<th>Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research with no funding or non-peer reviewed support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long-term effects of becoming a living kidney donor study. CIHR</td>
<td>co-investigator</td>
<td>basic/biomedical</td>
<td></td>
<td></td>
<td>$4,840.00</td>
</tr>
<tr>
<td>sponsored study.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research funded with peer-reviewed grant support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Astellas Service Agreement RT703938 FKC Advagraf with IL-2 014</td>
<td>co-principal investigator</td>
<td>basic/biomedical</td>
<td>Ongoing / Renewed</td>
<td>Astellas Pharma</td>
<td>$633,750.00</td>
</tr>
<tr>
<td>Central Biopsy Review for NOVARTIS Study CRAD001AUS92</td>
<td>principal investigator</td>
<td>basic/biomedical</td>
<td>Ongoing / Renewed</td>
<td>Novartis Pharma</td>
<td>$936,813.00</td>
</tr>
<tr>
<td>3 grants</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$1,575,403.00</td>
</tr>
</tbody>
</table>