

DEPARTMENT OF SURGERY ANNUAL REPORT 2012/2013

April 1, 2012 to March 31, 2013



**Alberta Health
Services**



FACULTY OF MEDICINE | UNIVERSITY OF CALGARY

Report Designed, Compiled and Edited
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All Content and Photography (Unless Otherwise Stated)
By Colin McHattie

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

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Colin McHattie

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A Message from The Department Head

The past year will be remembered for two historic events in Calgary - the opening of the South Health Campus and the flood. The South Hospital has brought much needed and welcomed additional capacity to the city. Surgical programs at the site began with the opening of the Bone and Joint Clinic, followed by the Otology ENT clinics in late 2012. Surgical activity began this Spring led by arthroplasty followed soon thereafter by the provision of emergency surgical services. The rollout of the remaining scheduled procedures continues. By the fall, the facility should be fully functional with the addition of obstetrics and gynaecology.

The hospital has also seen the addition of new talent to the city with a cadre of surgeons in orthopaedics, general surgery, otolaryngology and plastic surgery joining our department. The hospital has allowed some ground-breaking re-design to improve care of patients with surgical disorders. Innovative approaches in bone and joint, otology, ano-rectal surgery, are amongst the exciting and new initiatives at the South Health Campus.

The South Health Campus also provided essential capacity during the other event of the year, the flood. The Zone's disaster plan was activated with the establishment of hospital and zone command centres. Hats off to the Zone Executive leadership and all of our colleagues who pitched in and managed the incredible challenges that presented over the days following the flood.

The goal of providing safe, continuing care for those admitted to our facilities, while trying to maintain operations, where possible, were met and exceeded. Approximately 500 patients were transferred within 24 hours of the onset of the flood. The new capacity at the South Health Campus allowed the system to decompress and shut down facilities; all the while supporting the many ongoing clinical operations.

This year's retreat was an important event. It was focussed on education. The primary goal of the retreat was to review competency-based medical education



Dr. John Kortbeek, Head, Department of Surgery

and look at how this important evolution in Canadian surgical education will affect our programs. We gained a great deal of knowledge about competency-based medical education and participating members were enthusiastic about adopting CBME pilot programs in each of their respective residency training programs. The opening of the surgical skills facility this coming year will assist in the adoption of CBME where and when it fits in our curricula.

On the pages of this report you will see brief summaries of the many notable accomplishments by our members. I would like to thank both our members, the surgical executive leadership as well as all of the hospital division chiefs and our executive colleagues for the tremendous work you all do.

Sincerely,

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

Surgical Executive Team

Dr. John Kortbeek, Department Head Surgery

Dr. Mary Brindle, Associate Head,
Department of Surgery

Dr. Eduardo Kalaydjian, Section Chief,
Dentistry and Oral Health

Dr. Francis Sutherland, Section Chief,
General Surgery

Dr. Ken Romanchuk, Section Chief,
Ophthalmology

Dr. Richard Edwards, Section Chief,
Oral Maxillofacial Surgery

Dr. Kevin Hildebrand, Section Chief,
Orthopaedics

Dr. Wayne Matthews, Section Chief,
Otolaryngology

Dr. William Hyndman, Section Chief,
Paediatrics and Site Chief, ACH

Dr. Francois Harton, Section Chief, Podiatry

Dr. A. Robertson Harrop, Section Chief,
Plastic Surgery

Dr. Greg McKinnon, Section Chief,
Surgical Oncology

Dr. Sean McFadden, Section Chief,
Thoracic Surgery

Dr. Anastasio Salazar, Section Chief, Transplant

Dr. Paul Petrasek, Section Chief,
Vascular Surgery

Dr. Kevin Carlson, Section Chief, Urology

Dr. Jason Werle, Facility Chief, RGH

Dr. John Donaghy, Facility Chief, PLC

Dr. Richard Hu, 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. Linda MrKonjic, Physician Lead,
Quality and Safety

Dr. Andrew Kirkpatrick, Medical Director,
Trauma Services

Dr. Maureen O'Brien,
Faculty Ombudsman and Advisor on Diversity

Dr. JN Armstrong, Department Head,
Anesthesia

Ms. Michele Austad, Manager,
Department of Anesthesia

Dr. Doug Wilson, Department Head,
Obstetrics and Gynecology

Dr. Imtiaz Ali, Section Head, Cardiac Sciences

Dr. John Wong, Acting Division Head,
Clinical Neurosciences

Dr. Ken Thomas, Spine Program Lead,
Orthopedics

Ms. Andria Marin-Stephens, Manager,
Department of Surgery

Ms. Christine Bourgeois,
Administrative Assistant to Dr. Kortbeek

Ms. Shawna Syverson, Vice President, FMC

Ms. Denise Brind, Executive Director,
Surgery, FMC

Mr. James Finstad, Communications

Ms. Margaret Fullerton, Director, ACH

Ms. Jill Woodward, Executive Director,
Inpatient Care, Child and Women's Health, ACH

Ms. Debra Harris, OR Manager, ACH

Ms. Janice Stewart, Director, Surgery, RGH

Ms. Susan Reader, OR Manager, RGH

Ms. Val Marsten, Director, Surgery, PLC

Ms. Sara Pereira, Executive Director,
Surgery & Women's Health, SHC

We are a total of 363 members

248 Surgeons
43 Members in Dentistry & Oral Health
15 Members in Oral & Maxillofacial Surgery
11 Members in Podiatric Surgery
2 PhD Appointments
30 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. Jonathan Wong joined the Section of Ophthalmology, December 1, 2011.

Dr. Eldridge Batuyong joined the Section of Orthopaedics, August 15, 2013.

Dr. Stephanie Dotchin joined the Section of Ophthalmology, September 1, 2013.

Dr. Ta Sen Lu joined the Section of Dentistry and Oral Health, June 1, 2013.

Dr. Farrah Yau joined the Section of Plastic Surgery, October 1, 2012.

Dr. Daniel Charland joined the Section of Dentistry and Oral Health, September 1, 2013.

Dr. James Kennedy joined the Section of Plastic Surgery, January 1, 2013.

Dr. Farida Saher joined the Section of Dentistry and Oral Health, July 1, 2013.

Dr. Aaron Bois joined the Section of Orthopaedics, August 15, 2012.

Dr. Tom Wierzbicki joined the Section of Dentistry and Oral Health, March 1, 2013.

Dr. Christina Hiscox joined the Section of Orthopaedics, August 1, 2013.

Appointments

Dr. Mary Brindle accepted the role of Associate Head Department of Surgery.

Dr. Fiona Costello has accepted the position of Director of the Office of Surgical Research in the Department of Surgery.

Dr. Marie-France Guimond accepted the position of Resident Ombudsman for the Department of Surgery.

Dr. A. Robertson Harrop has accepted the role of Section Chief, Plastic Surgery in the Department of Surgery, Alberta Health Services Calgary Zone and the University of Calgary.

Dr. Francois Harton was appointed Section Chief, Podiatric Surgery, Department of Surgery, Alberta Health Services Calgary Zone and the University of Calgary.

Dr. Maureen O'Brien accepted the role of Faculty Ombudsman and Advisor on Diversity.

Promotions

Dr. May Lynn Quan, Section of General Surgery, has been promoted to the rank of Associate Professor.

Dr. Mary Brindle, Section of Pediatric General Surgery, has been promoted to the rank of Associate Professor.

Dr. Kenneth Thomas, Section of Orthopaedics, has been promoted to the rank of Clinical Associate Professor.

Dr. Joseph Warshawski, Section of Otolaryngology, has been promoted to the rank of Clinical Assistant Professor.

Dr. Marcia Clark, Section of Orthopaedics, has been promoted to the rank of Clinical Associate Professor.

Dr. James Brookes, Section of Paediatric Otolaryngology, has been promoted to the rank of Clinical Assistant Professor.

Dr. Ian Le, Section of Orthopaedics, has been promoted to the rank of Clinical Assistant Professor.

South Health Campus Opens

Orthopaedic Surgery

Orthopaedic Surgery at South Health Campus began seeing patients in December of 2012.

Dr. Stephen Miller who works at The Bone and Joint Clinic says, "It's been great."

"We have a new area that's called The Bone and Joint Clinic, and we're located right across the hallway, which is called 'Mainstreet', from the YMCA and on the main floor of the hospital so it's easy for patients," says Dr. Miller.

The great location is ideal for patients heading to The Bone and Joint Clinic, as it is common for patients to have issues with mobility. Dr. Miller describes it as "very convenient".

The beautiful new hospital in Calgary is quite the sight to see on the inside as well as the outside. The inside is very spacious and comfortable for patients.

Dr. Miller says, "It's a large spacious area and it's connected to the minor surgical suite, we have a large cast room and our outpatient clinic area with 16 exam rooms," all to ensure the patient is as comfortable as possible.

Dr. Miller says that Orthopaedic Surgery has gotten progressively busier since the operating rooms opened in April of 2013.

The most recent aspect to be unveiled was the trauma room, which opened in June of 2013.

"In five weeks since we've opened that, we are very, very busy now," says, Dr. Miller.

Looking forward, Dr. Miller says that they have recruited a number of new surgeons. He says that there were four surgeons already practicing in Calgary and they have recruited six more in orthopaedics.



Dr. Stephen Miller, Site Lead, Orthopaedic Surgery, South Health Campus

"It's a beautiful facility and any inconvenience of distance is compensated by the staff, the facility and the newness of it all."

General Surgery

The Section of General Surgery opened for elective as well as emergency cases at the end of May 2013 at South Health Campus.

"We began with two rooms, one is a full day operating room for elective cases, the other day is a morning operating room for elective cases, and an afternoon access room for emergency cases," says Dr. Michael Dunham, Site Lead, General Surgery, SHC.

Dr. Dunham says general surgery at SHC has an emphasis on providing rapid on site access to general surgery emergencies and an anorectal program.



Dr. Mike Dunham, Site Lead, General Surgery, SHC

“It has been excellent,” says Dr. Dunham.

“A great amount of work has been done by Cheryl Cousins-Bell in getting the operating room going and getting General Surgery staffed, instrumented and up and running.”

However, there have been a few difficulties. There was a delay in the instruments, which then caused a delay in getting the instruments imputed into the computer system.

In the future, Dr. Dunham says the biggest thing looking forward and the biggest challenge is looking forward to having a specific General Surgery program at the South Health Campus, which has yet to be determined once further infrastructure has been developed.

“We’re already very busy in terms of our access service, the number of emergency patients has been consistent and they are getting looked after very well and in a very prompt manner, which is the whole design of an access service,” says Dr. Dunham.

Dr. Dunham wished to add that Dr. Wayne Rosen, a colorectal surgeon, deserves to be recognized for his efforts in starting, organizing and leading the anorectal program.

Otolaryngology

The Otolaryngology Section, or ENT started clinics at South Health Campus in December 2012. ENT started gradually with four surgeons each doing one day a week in clinic and then when emergency opened in January 2013 they each began covering a day in emergency for general ENT consults.

The operating rooms opened up in June 2013, with one designated for absolute emergency situations, and since opening have been extremely busy.

Dr. Beth Lange, Site Chief at South Health Campus says, “Just about every day that has been allocated to ENT has been filled and we’ve also done some emergency surgeries as well.”

Dr. Lange says, that along with all the other services, the Section of Otolaryngology does not have any issues with filling their time at the new hospital, and that their rooms are fully booked.

Dr. Lange says that the main problem since the opening of SHC has been travelling. Many surgeons have to travel



Dr. Beth Lange and Dr. Phil Park

around the different hospitals in the city and now that the SHC is open that is just another hospital to travel to. Dr. Lange also does surgeries out of The Children's Hospital requiring her to commute between the two. However, "the people at The Children's Hospital have been really great in covering during the day so if there is a problem we don't have to rush out there."

The ENT surgeons also take turns covering at night on a roster system, says Dr. Lange, and on the weekends they share on-call duty with Rockyview General Hospital, which helps ease a bit of the burden.

"Now that we're pretty well moved over from the other hospitals, it's not so bad," she says.

Dr. Lange says that the only real issue now is the "fine tuning" at SHC. "The staff here are all very experienced and they all knew the equipment but there is still a bit of fine tuning because each surgeon has their own particular set of likes and dislikes," she says.

Dr. Lange praises SHC for their more robust standards in infection prevention and control, which were easier to implement because SHC is a new facility.

"We've gotten great support from our Section Head, Dr. Wayne Matthews and Dr. Doug Bosch, who is in charge of our ENT residency program, has been busy making rosters to enable the residents to come over," she says.

Dr. Lange also wants to thank the Neurosciences Department for helping them get all the equipment together and especially Dr. Phil Park the Site Lead for Otolaryngology at South Health Campus, who did most of the equipment ordering and getting things set up in the operating rooms.

"He kept us informed every step of the way, but when we finally saw it all come together, we were just amazed at the wonderful job he had done," says Dr. Lange.

Plastic Surgery

The Plastic Surgery Section at South Health Campus began doing minor surgery and clinics in January of 2013 and had its first cases in the main operating room in July 2013 says Dr. Robert Lindsay, the Site Lead for Plastic Surgery at South Health Campus.

"The physical facility is excellent," says Dr. Lindsay, who had a hand in the design process for the minor surgical operating rooms and the Hand Clinic at South Health Campus.

"There is some alterations that have to be made for the structure of the Hand Clinic itself, but that's underway," he says.

Dr. Lindsay has also been extremely satisfied with the staff at SHC.

"The staff has been extremely cooperative and well motivated to accommodate our desires and provide the appropriate facilities and personnel to cover the service of plastic surgery, so it's been very impressive."

Moving forward, Plastic Surgery at South Health Campus will be looking to establish its own group of plastic surgeons because right now the plastic surgeons are supplemented from elsewhere around the city who cover call for plastic and hand surgery at SHC.

"All sites have volunteered to do their share of coverage at the South Health Campus until it has its own independent group of plastic surgeons," says Dr. Lindsay.

However, they are not in too big of a hurry at the moment.

"We're recruiting for quality, not just for numbers," says Dr. Lindsay who wants to make sure that there is a good group of plastic surgeons at SHC.

Dr. Lindsay also wanted to thank the administration, the Department of Surgery, and Dr. Beth Lange – the Chief of Surgery at SHC, who have all been very accommodating at listening to all the suggestions and issues that have arose and responding very promptly.



Dr. Robert Lindsay, Site Lead, Plastic Surgery, South Health Campus
Photo Courtesy of Matthew Hayhurst



Interventional Trauma Operating Room

A plan that began development in 2007 has finally come to fruition this year, as the ITOR or Interventional Trauma Operating Room has been opened.

The ITOR is a hybrid operating room that has angiography equipment included. Often angiography equipment is located at another location in the hospital, which would involve having to move the patients to several locations. When dealing with trauma patients time is of the essence so the ITOR offers everything that you might need in one place.

Dr. Andrew Kirkpatrick, the medical director of trauma services at AHS says, “It’s the world’s first purpose hybrid operating room designed for the specific needs of the trauma patient.”

What sets it apart from other operating rooms, aside from the angiography equipment, is that it is twice as big as a typical operating room because at times you may have 40-50 medical professionals working on one patient and there needs to be enough room says Kirkpatrick.

“Chaotic would be a fair word to describe it – a lot of hands, knives and needles.”

The increased size of the operating room will help medical professionals deliver better care to extreme trauma patients.

The idea to start planning to build the ITOR began in 2007, and over the past six years – and 6 million dollars later it is finally open.

The ITOR was primarily funded by donations. Of the 6 million dollars that it cost to build, 1 million came from Calgary Health Trust’s Foothills Hospital Home Lottery, and David and Annie Freeze generously donated another 2 million dollars. The remaining 3 million dollars came from the Government of Alberta’s McCaig Tower Capital Fund Project.

Dr. Kirkpatrick says that they had initially priced out how much it would cost to build the ITOR by retrofitting an old operating room, and found that it was cheaper to build a whole new room.



Dr. Kirkpatrick inside the ITOR

“We were lucky McCaig tower was being built and there was still time to design and to make it available and build the ITOR,” says Dr. Kirkpatrick.

Many design elements need to be included in the building of the ITOR which is why it is cheaper to build it from scratch. The walls need to be lined with lead and you have to make sure the roof can support a lot of weight because the ceiling supports a lot of the equipment in the room.

The ITOR isn’t opened full-time yet though, just what Dr. Kirkpatrick calls, “banker’s hours”.

“We’re worried with utilizing a new resource in the middle of the night, when people aren’t familiar with using it,” he says.

It is complicated to take patients from the emergency room to the ITOR suite in the middle of the night because many of the doors are locked and a doctor

would need a security guard to lead the way and open the doors – which makes it very dangerous to take a trauma patient there in the middle of the night.

“Unfortunately in 2013, hospitals get more locked down all the time, you can’t get around,” says Dr. Kirkpatrick.

To further complicate the issue, the helipad on top of McCaig tower was damaged in the wind-storms six months ago, however once it is fixed and McCaig and the ITOR are opened 24/7, Dr. Kirkpatrick says that the sickest patients will be able to come right off the helicopter and go into the operating room because they are so close.

Dr. Kirkpatrick says, “This is going to redefine our approaches to the most injured patients and this is going to save a small number of lives every year, but these are lives that would have otherwise died.”

“We’re excited about it.”



The University Eye Foundation



The Oddfellows & Rebekahs present a cheque of \$12,000 dollars to be used toward the diode laser.
Photo Courtesy of Dr. Ken Romanchuk

Dr. Rob Mitchell and Dr. Peter Huang incorporated the University Eye Foundation in 1993. The University Eye foundation is a charitable organization with the goal of growing the academic ophthalmology program in Calgary through education and research.

The initial executive members were Dr. Peter Huang as President, Dr. Merv Kirker as Vice-President, and Dr. Stan Smith as the Secretary Treasurer.

When the University Eye Foundation, or UEF was first established there were many goals to be met. The UEF was interested in providing financial support for basic and clinic eye research at the University of Calgary, and performing charitable ophthalmic care, education and research.

The UEF was also responsible for establishing, maintaining, promoting and expanding clinical facilities for all aspects of ophthalmic and related activities, hospitalization, research, teaching, and dissemination of information.

But, of course, one of their most important responsibilities was to promote and encourage public awareness of ophthalmic disorders through education.

The UEF was created before Calgary had an ophthalmology residency program, but once the residency program was started the UEF shifted their focus towards it.

Dr. Kenneth Romanchuk, the current Clinical Section Chief for Ophthalmology says that the UEF began funding projects for medical students and research scientists in ophthalmology once the residency program was established.

The UEF was funding approximately \$12,000 dollars a year in projects for medical students and research scientists in ophthalmology. After the residency program was established, The UEF began to fund more and more projects, and according to Dr. Romanchuk have funded about \$103,000 in resident research projects over the last three years.

The University Eye Foundation funds more than just research projects though. They have also recently funded two major equipment projects.

The first, is a diode laser to treat retinopathy of prematurity which is located at Foothills Hospital. The laser is used to treat premature children who require treatment of their eyes – which is a blinding disease in 50 per cent of untreated cases says Dr. Romanchuk.

The laser had a total cost of about, “\$46,000, and we’ve just received final funding for it,” says Dr. Romanchuk.

The second project is the EyeSi surgical simulator, which will be located at Rockyview General Hospital, where the ophthalmology residency program is located. Dr. Romanchuk says, “The EyeSi surgical simulator is used to stimulate cataract surgery and vitreous surgery which has become the standard for getting the ophthalmology residents up and running.”

The EyeSi comes with a price tag of about \$270,000 and will be most likely funded by the University Eye Foundation as well as The Lions Eye Bank.



Reducing Length of Stay With Clinical Care Pathways

A clinical care pathway has been developed that significantly reduces the cost and amount of time cancer patients have to stay in the hospital after major head and neck surgery, according to Dr. Joseph Dort, the Site Lead of Otolaryngology and Head and Neck Surgery at Foothills Medical Centre.

The pathway began to be developed in 2010 after data was observed that showed that cancer patients who had undergone major head or neck surgery, such as major resections and free flap reconstruction, were hospitalized for over 3 weeks. Aside from the long stay in the hospital there was also a high risk of pneumonia and other lung complications.

This motivated Dr. Dort and his team to develop a more consistent framework for care around the patient. This involved sitting down all the surgeons, nurses and other professionals who looked after the patient, and making sure everyone was on the same page.

“Lots of people help to take care of the patients,” says Dr. Dort

Dr. Dort says that before the pathway was developed, nursing staff was often confused on the best way to handle a patient, because each surgeon had their own preferences. This led to nurses treating patients based on who their surgeon was and not on the needs of the individual patient.

What Dr. Dort and his team did was develop better communication between everyone who cares for the patient. They also sat down and worked out any differences in opinion there might have been on how to best handle patients.

“What the care pathway does is get us to sit down as a group and when we’re designing the pathway we kind of argue with each other and we work it out so that we all agree on what the best way is to manage the patient,” he says.



Dr. Joseph Dort, Director of the Ohlson Research Initiative

It took about a year to develop before they had a pathway they were ready to test. When developing the pathway, the surgeons would look at research to determine the best ways to do things, and when there was no research they would discuss what they thought was best until there was a consensus says Dr. Dort.

There was some interesting findings right from the start. After conducting a study, Dr. Dort had found that the pathway had reduced the length of stay for patients from over 3 weeks, to just 2 weeks. It also caused the risk of pneumonia and other lung infections to drop by half.

Dr. Dort says one of the keys to this was being able to get patients mobilized sooner, because when patients are in bed too long they get weaker and more susceptible to other risks.

Another benefit of the pathway was that nursing staff started to do a more consistent job at delivering antibiotics.

Dr. Dort describes the process as “simple, but not easy.” And those were not the only benefits of the pathway.

“The other thing we’ve really noticed is that the nursing staff and people on the units are much more engaged. People are less confused. When we started this work, the nurses would tell us, ‘You know, we’re really sometimes confused about what to do for a specific patient,’ and rather than looking at what the patient needed their first thought would be ‘whose patient is it?’ says Dr. Dort.

Now everyone is clear on what the patient needs, including the patient and his or her family. There is a copy of the pathway in the patient’s room, so they are aware of the care that they should be receiving.

There was also a cost analysis done that compared treatment with the pathway, to before the pathway was implemented.

Dr. Dort says, “If the average cost of care of a hospitalization for one of these patients, I’ll use an example, is \$20,000 then we’ve been able to reduce that

cost of care by \$5,000-\$6,000, so almost a 30 per cent reduction.”

While the findings have been extremely promising, Dr. Dort still has plans for his pathway. He is hoping to spread the system to the rest of Alberta, specifically Edmonton, in the hopes of getting everyone on the same page.

However, there are still some challenges ahead.

Often times, once these pathways are developed, they are used for a short period of time and then fall by the wayside as doctors go back to their old routines. Dr. Dort says that this is because of poor data collection. If doctors are not informed of the research that has been done on the pathway or the benefits it has caused then they are more likely to go back to their old ways.

“What I think we need to see is the healthcare system step up to the plate and support this in a way that allows it to become sustainable,” he says.

Dr. Dort says that he thinks the health care system can put some time and resources into really developing a strong, real-time measurement system that will show the benefits of the pathway.

He also hopes that they can continue to develop the pathway in the future.

“Right now, when a patient goes home our pathway stops,” says Dr. Dort

“We’re hoping to take the pathway that would follow the patient into the community, so that community health care providers can know what the plan is and really understands what’s supposed to happen.”

The key to a strong pathway and better care of patients is strong communication between all the healthcare professionals that have to deal with the patient. This means that nurses, doctors, physiotherapists, home-care and everyone else that treats a patient will be on the same page. That is the best way to deliver excellent and consistent care.

eSIM - Simulation Centre

Construction has begun on the Advanced Technical Skills Simulation Laboratory, or the ATSSL. The ATSSL will be the biggest part of the eSIM, a provincial medical simulation initiative that has locations all over Alberta.

Construction is now underway on the \$5 million wet lab, which will be located at the Foothills Medical Center, thanks to a grant from AHS.

The ATSSL is four different simulation centers that will include a wet lab, dry lab, anatomy and cadaver preparation room, and an animal resource center.

The wet lab is extremely important and many types of simulations can occur there, from cadaver work, to plastic bone simulation.

The dry lab is where clean mannequins can be worked on, as well as role-play simulation where actors are hired to act as patients so that bedside manner, among other things, can be tested.

An anatomy preparation center will be where the cadavers are kept and prepped. Whatever can not be accommodated in the wet lab will happen here.

There are currently four operating rooms for students to learn valuable skills on animal cadavers, such as suturing.

The wet lab is the first to be constructed and will hopefully be completed by December, 2013. It will cost about \$5 million to build and another \$1.5 million for all the instruments that will be needed.

The total cost of the entire project is approximately \$14-\$15 million dollars and will be completed in stages as the money comes in, says Dr. Jacques Bouchard, the Director of the Office of Surgical Education.

However, old lab space is being repurposed to save money. The old anatomy lab will be remodelled into the new dry lab, and the current cadaver storage area will



Construction is well underway

be refitted to become a cadaver anatomy and simulation center.

The ATSSL will become invaluable in years to come for the training of medical professionals.

“For the post graduate program, it’s not an absolute must right now to have a simulation program, but there is a lot of reading in between the lines that the Royal College is putting more emphasis on it,” says Dr. Bouchard.

The Royal College is planning on initiating a competency based residency program by 2015. In the past it has been time based, so you spend your allotted time on one section and then move on, regardless of whether you know the material or not.

The new competency based program will be set up with milestones, so Residents will need to meet the requirements of a milestone before they can move on to the next section.

The ATSSL will be extremely important in training Residents, because now they will be able to practice

on cadavers and work on their skills before actually operating.

“Simulation can shorten your learning curve,” says Dr. Bouchard.

When a Resident is doing an operation, the supervising surgeon often has a low threshold for completing the procedure. It is common for a supervising surgeon to take over the surgery at the first sign of difficulty, which can often make it difficult for Residents to learn according to Dr. Bouchard.

Simulation allows Residents to work on their skills, and although working on cadavers is not the same as working on real patients, it will help them get their skills up to a level where they are safe. The supervising doctor will be less likely to have to takeover.

These simulations labs will not only be instrumental in keeping up-to-date with what is required for training Residents, but also training better Surgeons in general.

Undergraduate Medical Education Teaching

Medical Skills Course

The Medical Skills Course is the course in which students learn the nuts and bolts of being a doctor, according to Dr. Wayne Rosen – The Chair of the Medical Skills Course. Dr. Rosen also chairs the bioethics board along with Dr. Ian Mitchell.

The Medical Skills Course is a course that begins in the first month of medical school and continues through till the end of the second year.

What is interesting about the Medical Skills Course is that it has a long history of being chaired by surgeons such as Dr. Rosen, and before him, Dr. Gwen Hollaar and Dr. Walley Temple.

“Surgeons seem to just gravitate towards it for some reason,” says Dr. Rosen.

The Medical Skills Course is broken down into several sections, which consist of physical exam instruction, communications, procedural skills, global health, professional physicianship, and bioethics.

Physical Exam Instruction

The physical exam portion of the class is taught in a state of the art facility called the Medical Skill center, where there are double rooms with mirrors, and audio video recording equipment.

Standardized patients are used to help the medical students refine their skills.

“A lot of work goes into training standardized patients,” says Dr. Rosen.

Most of them are actors, who in their free time work with the medical course. They are specially trained on how to respond to questions and provide an appropriate history.

“It’s very cool. They’re really very good and there is a whole program of training these people,” says Dr. Rosen.



Dr. Wayne Rosen, Chair of the Medical Skills Course

Medical Students get to review their interactions with these standardized patients and receive feedback in preparation for their Objective Structured Clinical Examination, or OSCE, which take place at the end of the first year and again at the end of second year.

Dr. Rosen says that there is a massive variation at the beginning but over time students learn to talk to patients and what important questions to ask.

“I think there is a huge change and improvement over the course of the two years. Students really get to watch it happen. At the beginning, they’re laypersons but by the end they are almost pros,” he says.

Communications

Communication helps students to learn how to take a history from a patient but also how to listen properly, and encourage open discussion and communication.

“There is a lot that can be learned by listening to people and we often have to learn how to listen properly,” says Dr. Rosen.

Procedural Skills

This is where students get their first taste of doing actual medical procedures. Students will begin by learning suturing, casting, doing a lumbar puncture and intubating patients.

“They all love it,” says Dr. Rosen.

Global Health

Global Health is an exploration on some of the most common and pertinent issues in global health as it relates to physicians.

For example, students will learn about things like refugee health care in Canada as well as learning about the most significant infectious diseases across the world such as tuberculosis, malaria, and HIV.

Professional Physicianship

This is where students learn the basics of professionalism and physician health. It's about helping the students to explore what it means to be a professional. They also deal with issues of physician health, such as addictions and work/life balance.

Bioethics

Bioethics is the study of biomedical issues as they impact on patients.

Classic examples are:

- Issues of obtaining consent.
- Confidentiality.
- Telling the truth.
- How to deal with someone who tests positive for HIV but asks you not to tell his or her spouse.
- How to deal with someone determined to have a natural birth but has evidence of fetal distress and needs a cesarean section to protect the fetus.

Some other important topics covered include end of life issues, people who request physician assisted suicide, the difference between euthanasia and physician assisted suicide and what is legal in Canada.

“What's interesting about bioethics is that most people don't come to exam taking with preconceived notions, they're blank slates, but people come to bioethics with lots of personal beliefs and almost everyone has an opinion on these matters,” says Dr. Rosen.

Dr. Rosen also says that one of the most important aspects of bioethics is to provide students with the tools to understand and explore the elements of bioethics.

“Part of the role of this course is to help students understand where to get the information about an issue, what rules are placed by the College of Physicians and Surgeons of Alberta, and what are the circumstances on which one should disclose and one shouldn't disclose information,” he says.

Ultimately the role of the bioethics course is not really to change the opinions of the students, but to give them information that allows them to explore it themselves and hopefully arrive at decisions.

“There are some questions that are very personal, such as abortion, and people ultimately just have to make a personal decision on it, but we can certainly provide them with the laws in Canada and how they stand and also provide them with both sides of the position,” says Dr. Rosen.

Almost all of the course are small group sessions and case based so they are presented with an ethical situation and they are asked to discuss it, research it and engage with each other.

“We provide the foundations or the groundwork for developing these skills over a person's career,” says Dr. Rosen about the Medical Skills Course.

“Everyone should at least know the basics of examining a knee, listening to a heart, and should know the basics of professionalism and the like.”

Musculoskeletal

Dr. Carol Hutchison is the Course Director for Course two of the first year of medical school, which focuses on Musculoskeletal Health and Dermatology. She specifically teaches the musculoskeletal section of the course, which includes orthopaedics, rheumatology, and dermatology.

Because it is the second course, it can be a little tougher for medical students to adjust to, over the last few years there has also been an increased number of medical students in the program, which has led to Dr. Hutchison tweaking the class a bit.

Dr. Hutchison has initiated team based learning in her section. Team based learning is an idea borrowed from the business world, where students are put into small groups during the course. Most of the medical schools in Canada have been doing some type of small group learning for quite some time. However, this certainly is not the same as group work.

During group work it is not uncommon to have one or two members of each group stuck with a majority of the work while the rest coast by. Also, group work is often one group lecturing to the rest of the class. This can lead to groups of students only really learning the particular section that they are responsible for.

Dr. Hutchison's class is set up differently and follows four principles:

- 1) Group formation and management is important so how the groups are formed and managed has to be transparent. They have to be fairly equal and managed well.
- 2) Students have to be accountable to themselves and to the group in terms of their learning.
- 3) Feedback needs to be fairly immediate and frequent.
- 4) Application exercises have to be designed very carefully. Not just to deal with the content of information, but also to develop the functions of the group.

Dr. Hutchison began implementing this style into her classes in 2010 and so far it has been quite successful. No medical students have failed her class in the last two years. The students are given a topic, and are also given a

lecture and reading materials based on that topic. They have a week to go through the material. On the day of the team based learning session, they arrive and take their Individual Readiness Assessments Tests (IRAT), which is a multiple-choice test.

As soon as they are done, they hand their tests in and get into their groups. Each group is given a laptop and they do the exact same test again on a laptop, which is called a Group Readiness Assessment Test (GRAT). Before the group can pick an answer the entire group must agree.

If the group is correct they are awarded 3 points per question. If they are incorrect, they must discuss and pick another answer. If they get it right the second time they are only awarded two points, and so on and so forth.

As soon as they are done the IRAT and the GRAT they are graded and given immediate feedback.

Next, comes the class discussion, where each question is discussed. At this point, students have the opportunity to appeal a question if they feel strongly that another option is as correct as the correct answer. Students are then given 48 hours to go back to the literature and construct an argument using evidence from the reading. However, as of right now, no groups have utilized this option.

After the discussion comes application exercises, where the groups take all the knowledge that they learned and apply it to several difficult cases, usually about 3 clinical scenarios.

Dr. Hutchison says one of the most consistent positive comments she has heard about team based learning is that students feel like it has really helped them keep up in the course. However, classes are usually very mixed on if they like team based learning or not.

Dr. Hutchison says that she finds the students to be much more prepared after going through team based learning because they are not just studying for a midterm and a final. They have a mini test every single week that they have to prepare for, and by the time students do

their final exam they usually score much better on her section than other sections.

The information tends to stick with the students because they have to use it in so many different ways, through individual tests, group discussions, and working through clinical scenarios as a group. This really helps to embed the information into their minds.

“I cannot believe the difference in them from the first couple of weeks, to the last couple of weeks. It’s huge,” says Dr. Hutchison.

Aside from the academic benefits, team based learning also has economic benefits according to Dr. Hutchison. This is because they can teach a class of 180 students using only 3 preceptors; other sections need a preceptor for each group. So in classes of 180, if everyone is split up into groups of 5 that is 36 groups. That means the university needs to employ 36 faculty members to sit in on a class as opposed to Dr. Hutchison’s 3.

Dr. Hutchison says, “Economically it makes sense, if you can get the same amount of learning, and I think we actually get better learning.”

VascuBase



Dr. Mark Nutley
Photo Courtesy of Dr. Mark Nutley

By: Dr. Mark Nutley

1. What is VascuBase exactly?

VascuBase 5.9 essentially functions as an electronic means of tracking patient's clinical presentation, diagnostic results, risk factors, interventions, outcomes and follow-up of the vascular surgery operative patient population and the vascular interventional radiology population. This vascular data management system is able to collect, measure and evaluate these various components along the continuum of care.

This system also provides the ability to identify potential problems before they reach a crisis point, monitor the impact of system changes and support ongoing education as well as providing an important tool for quality assurance. In addition, it provides the Section of

Vascular Surgery the ability to report clinically relevant outcomes, identify important factors which may impact outcomes, as well as make meaningful comparisons of various treatments. This data base system also allows for an opportunity to now compare our clinical outcomes with other colleagues and other centre's within the province and across the country.

This vascular data management system was also designed, implemented and supported by the department of Diagnostic Imaging. With this multi-disciplinary approach, we are also now recording outcomes on diagnostic and therapeutic interventional procedures performed in the angio-suites on vascular patients. To date, the VascuBase system has been implemented at the Peter Lougheed Centre and Rockyview hospitals with the view to expand it to all sites. This database will also provide a comprehensive, standardized and structured data pool to support ongoing research, allowing for innovative patient care and international recognition of clinical staff.

2. How has VascuBase helped patients?

By measuring the various aspects of care delivery our Vascular Surgeon's now have the ability to identify potential issues before they reach a crisis point. We are now able to measure the outcomes of our operations as well as the impact of system changes and support program planning. For example, we record all of our postoperative complications in real-time as they are identified on the ward during clinical patient rounds each morning. It should be noted that this is time intensive and only made possible with the assistance of our nurse clinician Christi Findlay. We then review and analyze all complications on a monthly basis. This also allows us to identify trends, such as an increased rate of wound infection for example, so that an immediate response could then be implemented. Understanding and addressing the burden of vascular disease now offers us the potential to improve health care of our Vascular Surgery patient population to help ensure patients are receiving the best possible quality care.

From an educational perspective, VascuBase allows for the identification of patients with complicated outcomes so that these can be discussed in a supportive academic environment with the goals of learning and improvement of practice at all levels of training.

One of the immediate advantages of such a system is the greater ease and ability to engage in meaningful research activities. Currently, there are a number of both prospective and retrospective clinical trials now underway and nearing completion. Such clinical trials involve a significant volume of specific procedural and physiologic data points and thus could only be made possible with such a system in which accurate and reliable data can be entered at the time and place of origin. In addition to evaluating new life prolonging Vascular Surgery procedures and devices we are now also engaging in new multi-disciplinary research initiatives driven by our Radiology colleagues, to evaluate novel Interventional Radiology devices and procedures as well.

3. When was it developed?

In 2009, the leaders in the Section of Vascular Surgery (which at this time included Drs. Paul Petrasek, Randy Moore, Joyce Wong and Greg Samis) recognized the need for a complex, integrated, data support infrastructure dedicated to support research, innovation and education in order to further patient care. With high patient volumes, high acuity and highly specialized care involving changing technology, the Section of Vascular surgery required a robust database to support Quality Assurance (QA) program, research activities and educational needs. Prior to this date there existed a simplified Vascular database but it was not supported by other AHS systems such as SCM and therefore was not robust and was very labor intensive to use. An initial proposal was written in August 2009 by Dr. Paul Petrasek (Section Chief) and Christi Findlay (clinical research nurse for Vascular Surgery). After hundreds of hours work this proposal was ultimately funded by the Department of Surgery with additional support from the Department of Diagnostic Imaging and came on line in October of 2012 after months of beta testing.

4. Has there been any complications?

As with all specialty services there exists an inherent degree of complexity and uniqueness which differs between the various Vascular Surgery services in the ways in which they provide optimal patient care. VascuBase was designed as a very robust, although generic, vascular database. Therefore there were a number of programming modifications which had to be made during the beta testing of the VascuBase software but for the most part these were relatively minor in scope. Fortunately this software is relatively easy to have customized to our specific needs.

5. Will there be any changes to it in the future?

The next phase of this project will be looking towards creating an interface with SCM/Clinibase to receive ADT data and export data for operative reports and discharge summaries. This will align with the AHS objective of integration with other AHS applications. VascuBase has the potential design capability to be implemented by all Vascular Surgery sections within Alberta Health Services including Red Deer and Edmonton. It would be our hope that in the near future we will be collaborating on prospective, multi-centre research trials with our sister cities to the north.

6. Is there anything else you would like to mention about Vascubase?

As a background, it is worth mentioning that Vascular Surgery encompasses the treatment of virtually all circulatory pathology outside the heart and brain. This includes both elective and emergent surgery to treat aortic aneurysms, arterial occlusive disease in the limbs, visceral vessels and carotid disease as well as penetrating and blunt vascular trauma. In Calgary, the Section of Vascular Surgery is one of Alberta Health Services busiest surgical services in ambulatory care with more than 6000 outpatient visits per year. Furthermore, it has one of the country's highest volumes of endo-vascular procedures.

In summary, using data to understand and address the burden of vascular disease offers us the potential to improve health care and ensure patients are receiving quality care in a timely manner while preparing our trainees for the future.

Eyes to the Sky: The Eyes High Initiative

A 2011-2016 Initiative

Eyes High is a strategy and vision that was created by faculty members at the Haskayne School of Business for the University of Calgary. The initiative was designed to “energize and focus the University of Calgary community”.

According to a document put out by the University of Calgary, “The process was developed and implemented by a Strategy Working Group. It is inclusive of all stakeholders and incorporates already active planning documents. The consultation process was streamlined into three phases.”

The first phase organized input from thousands of faculty members, staff and students. This information was obtained through one-on-one conversations, iPad messages, small workshops and three months of social media input.

In phase two, the collected information was combined with information, a number of internal plans and external plans, such as City of Calgary – Economic Outlook, and the Alberta Post-Secondary Learning Act.

The third phase had a Strategy Steering Committee analyze and distill the collected information. The process began with a content analysis and then went into discussion of strategic opportunities and potential goals of the University of Calgary over the next 5 years. Three commitments were captured out of the collected information.

The first is to sharpen focus on research and scholarships. The University of Calgary is ranked the 8th most research-intensive university in Canada, based on direct research funding. The University is dedicated to strengthening its commitment to research by supporting more faculty members with research and increasing funding.

The goal is to become one of Canada’s top 5 research universities by 2016.

The second commitment is to enrich the quality and breadth of learning. The University of Calgary hopes that their focus on research will also have impacts in the classroom. They hope to do this by applying research findings to improve teaching and to shape programs so that they prepare with the characteristics that they will need for success. The University will also engage students in the research experience through a collaborative and community-based culture.

Finally, the third commitment is to fully integrate the University with the community. In their Eyes High document it is stated that with Calgary’s increase in global prominence, the University of Calgary also has an increased expectation. The University of Calgary plans to enhance its global profile through “broad, two-way engagement with the community. This effort will encompass scholarship and research, community leadership and ideas, and the everyday well being and fulfillment provided by sport, culture, youth programs, adult learning and the outdoors.”



Catalys Femtosecond Laser

Calgary is about to make history as it is set to become home to Canada's fourth Catalys Femtosecond Laser. This will be the first in Western Canada, with one being in Toronto and two more being delivered elsewhere in Eastern Canada. It will also be the first in Canada to be available through the public system.

Cataract eye surgery began many years ago. In those days, surgeons would cut the eye in half, squeeze it and out would come the cataract. The patient was required to stay in a hospital for a week and would have to wear thick glasses. This surgery was only done when the patient was completely blind. After the surgery the patient would not be able to see well for about 3 or 4 months and there were many complications that could arise.

Beginning in the 1980's a new method was developed called Phacoemulsification. This method utilized a much smaller wound on the eye. After the incision was made an ultrasonic probe was held against the cataract to break it up using vibrations. The surgeon would then suction the broken pieces of cataract and insert a lens into the eye. This method has improved over the years and is still the standard of care. Patients would no longer have to stay in a hospital and patients will start seeing better within a couple of weeks. However, Phacoemulsification can still have complications. Sometimes the cataracts shatter and fall behind the eye causing the patient to go blind.

Recently, Femtosecond Lasers have been developed. Dr. Rob Mitchell, of Mitchell Eye Centre, where the laser will be housed, says that it works by "producing a pulse of energy that is really, really high".

A femtosecond is one quadrillionth of a second. To put that into perspective that is one millionth of one billionth of a second.

The laser shoots individual pulses by the femtosecond, it is so fast that it looks like a continuous cut says Dr. Mitchell. But the biggest achievement with these machines is not the laser itself, but the computer interface.

There is a big suction cup that is filled with saline that goes against the eye. This reduces discomfort drastically as now the laser does not have to go directly against the eye.

The Catalys Femtosecond Laser also utilized Optical Coherence Tomography (OCT). This is a method of mapping out the eye ball, and it works the same way a CAT scan works.

"When you have this really potent laser you can't just go blasting it into the eye," says Dr. Mitchell.

The mapping process is "amazingly precise", according to Dr. Mitchell, and happens in real time.

"It's instantaneous and 3 dimensional," he says. The OCT works by reflecting off of the cataract and all the different structures of the eye to give an amazing mapped picture of the eye.

"It has revolutionized eye care," says Dr. Mitchell.

The femtosecond laser is then controlled by a computer, which is controlled by the OCT.

The benefits to the patient are enormous. The procedure is quick and when it is done all the surgeon really has to do is suction the cataract and put in a new lens. It will also fix any astigmatism or refractive errors the patient might have had.

The laser is also incredibly precise.

"It is accurate to 4 or 5 microns," says Dr. Mitchell. To put that into perspective a human cell is 5 microns across. A human hair is about a hundred microns in width.

"We could carve your name into the cataract if you wanted," says Dr. Mitchell.

Another benefit to the patient is that it takes the guess work out of choosing a surgeon that they think is the best. It takes every surgeon and makes them the best.

“I’m a really good surgeon, and this instrument will be as good or better than I am on my best day, every single time,” says Dr. Mitchell. Dr. Mitchell also predicts that this machine will have patients seeing better by the next day.

“I think this will make cataract surgery safer, and it’s going to be cheaper,” he says.

Another thing that sets Calgary apart from other centres that have this machine is that it is the first one to be bought with private money to be used for the public. Other Catalys Femtosecond Lasers are in private clinics, but in Calgary patients will have the option to use this or go the more traditional route.

The machine is being leased by the Southern Alberta Eye Centre and patients will be charged \$650 an eye to have the procedure. That money is the amount that it costs to run the machine and will all go towards the lease payments of it.

Once the lease payments are completed it will be owned by the Southern Alberta Eye Centre, and they could potentially start doing the procedures without charge to the patients. However, by that time it is possible that there will be new and better equipment available.

Another advantage the instrument offers is that it may lead to novel approaches for investigating cataracts that have never been done before.

Dr. Mitchell says, “It is the future.”



Dr. Rob Mitchell and his assistant, Krista Wills

Surgeons' Day

Surgeons' Day is an annual event organized by the Office of Surgical Research, where resident and fellow research projects are presented and is followed by a gala event in the evening, complete with dinner and an awards presentation.

However, this year Calgary was struck with massive flooding that left the city devastated. Because of this, the Surgeons' Day presentations were cut short after presenters were told to evacuate. Because not everyone got to present and in order to be fair, no awards were given for presentation this year and the annual banquet and evening dinner was also cancelled.



Special Thanks to our Judges, Dr. William Hodge and Dr. Claire Temple-Oberle



Annual Retreat

The annual retreat took place at the Banff Centre on April 25 and 26, of 2013. This year the main focus was on surgical education where many topics were discussed. One was academic career tracks for surgeons, where there was discussion of ways to enhance the overall quality of teaching provided by surgeons. The primary focus of the retreat was the evolution and adoption of

CBME (Competency Based Medical Education). Local experts included Drs. Marcia Clark and Jocelyn Lockyer, Dr. Lara Cooke provided insight. The pioneering work of the University of Toronto Surgical Program was reviewed. The group consensus was to adopt CBME pilot projects in each discipline. The completion of the Surgical Skills Centre will also support the work.



Photo Courtesy of Diane MacDonald

From the Office of Surgical Education

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

have a local reputation as being highly effective teachers and have done this spontaneously and voluntarily for decades. Others have a National and International reputation and, in addition to teaching locally, are requested to teach at other centres. Many surgeons are participating in research on education topics, and several new recruits have completed additional training and research in education.

Overview

PROGRAM	Physician as Chair	FUNCTION
UME / SUGEC	Dr. Adrian Harvey	Course Chair of the Surgery Clerkship and chairs SUGEC. The section representatives of the Undergraduate Clerkship sit on the Surgical Undergraduate Education Committee (SUGEC).
	Dr. Jacques Bouchard	Sits on the University of Calgary UMEC, and the U of C Clerkship Committee.
PGME / PGSTC	Dr. Rick Buckley	Chairs the Post Graduate Surgical Training Committee and sits on PGME, University of Calgary to represent the Department of Surgery
Fellowships / Traineeships	Dr. Jacques Bouchard	Chairs Departmental Committee Conveys information to the Associate Dean, PGME
CME / CPD	Dr. Ian Anderson	Represents the Department of Surgery on University of Calgary CME / CPD committee, chaired by Associate Dean CME / CPD



Dr. Jacques Bouchard, Office of Surgical Education Physician Lead

Accomplishments and Highlights

Dr. Jacques Bouchard, as Director of the Office of Surgical Education sits on the University of Calgary Undergraduate Medical Education Committee (UMEC) and the Post Graduate Medical Education (PGME) committee at the University of Calgary to represent the Department of Surgery. Dr. Bouchard also chairs a committee of the Fellowship Directors and conveys the information to PGME.

The department is fortunate to have a wide variety of excellent and dedicated surgical teachers at all sites and in every section of Surgery. Many of the surgeons

Undergraduate Medical Education

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

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

Surgery Clerkship

Dr. Adrian Harvey is the Course Chair of the Surgery Clerkship for the Department of Surgery and chairs the Surgical Undergraduate Education Committee (SUGEC). **Dr. Jeanie Kanashiro** is the Evaluation Coordinator, and **Ms. Anita Jenkins** is the Education Coordinator for the surgery clerkship program and the Department of Surgery. **Ms. Jessica Joaquin** is the Administrative assistant in the OSE office.

The educational representatives, from each of the participating sections, sit on the Surgical Undergraduate Education Committee (SUGEC). The mandate of this committee is to revise and improve clerkship experiences in core general surgery, and in all specialties, as well as to guide the experiences that each of our clerks has within the surgical rotations. These rotations consist of compulsory surgical experiences in General Surgery and selectives in other surgical specialties. The clerkship Class of 2013 included a total of 171 clerks. The Department received 20-26 University of Calgary clerks for each of the eight Surgery blocks. The 6 week rotation included 3 weeks in General Surgery, 2 week assignments in either Orthopedic surgery, Plastic Surgery or Urology, as well as a one week 'selective' assignment in any one of Thoracic Surgery, Vascular Surgery, Neurosurgery or Urological Surgery. The number of visiting clerks completing electives has also increased to average 8 - 40 visiting clerks per month from Canadian medical schools.

Seven students from the Class of 2013 matched to surgical residency positions in Calgary. We will look forward to integrating our medical students at the new South Health Campus as the programs expand at that site.

Surgical Undergraduate Education Committee (SUGEC) members

Dr. A. Harvey Clerkship Course Chair
Dr. Jeanie Kanashiro Evaluation Coordinator
Dr. J. Bouchard Director OSE
Ms. Anita Jenkins Clerkship Education Coordinator
Dr. F. Fraulin Plastic Surgery
Dr. S. Grondin Thoracic Surgery
Dr. W. Hader Neurosurgery
Dr. Jay Lee Urology
Dr. Peter Lewkonja Orthopedic Surgery
Dr. G. Samis Vascular Surgery
Dr. Ryan Snelgrove Resident rep

Post Graduate Medical Education

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

PGSTC guides and hosts the core educational activities such as CanMEDS sessions, the Critical Thinking Course and Principles of Surgery teaching sessions, which take place within the first part of all academic half days. The Core Surgical Skills curriculum was again offered to PGY-1 surgical residents to introduce them to core surgical procedural skills, while

integrating the CanMeds roles. This program has begun to provide an important component of surgical training as noted by the RCPS accreditation guidelines. Residents from the following programs were included in the PGY-1 Core Skills Curriculum: General Surgery, Orthopedic Surgery, Otolaryngology, Ophthalmology, Plastic Surgery, as well as Obstetrics and Gynecology.

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

Surgery Residency Programs

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

PROGRAM	PROGRAM DIRECTOR	# of Residents
Colorectal Surgery	Dr. Don Buie	2
General Surgery	Dr. Lloyd Mack	34
General Surgical Oncology	Dr. Greg McKinnon	3
Ophthalmology	Dr. Linda Cooper	9
Orthopedic Surgery	Dr. Simon Goldstein	31
Otolaryngology	Dr. Doug Bosch	7
Pediatric General Surgery	Dr. Andrew Wong	1
Plastic Surgery	Dr. David McKenzie	11
Thoracic Surgery	Dr. Sean Grondin	1
Vascular Surgery	Dr. Joyce Wong	2
Dentistry & Oral Health	Dr. Eduardo Kalaydjian	2
*Cardiac surgery	Dr. William Kidd	5
*Neurosurgery	Dr. J. Hurlbert	12

Asterisks indicate programs managed by more than one department

Fellowships:

The OSE manages the ongoing accreditation and approval of surgery Fellowships within the teaching sections. The number of sections with accredited Fellowships is 3, with the number of Fellows (16) as follows:

Orthopedic surgery	11
General Surgery	2
Ophthalmology	3

The Fellows, both national and international, are raising the awareness of the program of excellence in surgery in Calgary, in addition to building academic clinical units at home which improve surgical care. Financial administration of the fellowships will be examined in the upcoming months.

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

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 informs the various sections about opportunities for continuing professional development. The committee meets monthly and consists of CME representatives from every department in the medical school and the Calgary Zone.

Department of Surgery Annual Retreat 2013

This retreat was held at the Banff Centre on April 25 and 26, 2013 with the main focus on surgical education. One topic of discussion was academic career tracks for surgeons in education where we discussed multiple avenues to enhance the quality of teaching provided by surgeons at large. In addition, discussion included an exploration on ways we can get our new young faculty to pursue Masters or PhD level training in education. The second day of the retreat was focused on Competency Based residency training. All the sections are set to start pilot projects to introduce elements of competency based training in their programs.

Challenges:

Clerkship:

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 are continually working to improve clinical opportunities within existing resources, given the constraints of a 6 week clerkship. Our surgeon preceptors are providing excellent teaching to undergraduate students to enhance their exposure to surgical disciplines.

Post-Graduate:

The absence of dedicated space for simulation training is a challenge that is expected to be corrected with the

building of the ATSSL (see below section). A tremendous amount of work remains to be done to expand the resident and fellowship curriculums to include simulation and to provide Faculty development on the use of these facilities.

Fellowships

The increasing demand for advanced clinical training experiences, from National and International trainees, puts pressure on our clinical faculty and offers competition for our current clinical teaching resources.

Workforce Planning

Future Directions and Initiatives

Simulation:

- eSIM: This is the provincial network that links all of the medical simulation activities in the province. The simulation facilities remain relatively unknown to the medical faculty and students but there are increased resources and funding for simulation based teaching.
- ATSSL: Major progress has occurred in the creation of the Advanced Technical Skills and Simulation Laboratory over the past year. Detailed plans have been completed and funding (5 million dollars) has been secured from AHS for the wet lab of ATSSL. Construction at the HRIC building has started and is predicted to be completed for opening in January 2014. Surgical equipment has been purchased and is in storage until construction is complete. The executive schedules of most of the UME, PGME and CME activities have been drafted for the next few years. Policies for booking, safety, code of conducts and general guidelines have been drafted and are ready for implementation. Job descriptions and classifications for staffing were completed and hiring will start in the fall 2013. Fundraising activities have started both on the U of C and on the AHS side to continue planning of the dry lab and ARC portions of ATSSL and for purchase of equipment for the wet lab. The University, AHS and faculty have been strongly committed to this project.
- Current simulation activities in Surgery: Numerous courses have been offered over the years in makeshift installations including ATLS, ACLS, CPR, PGY-1 basic surgery skills course, surgical exposures anatomy lab, laparoscopy courses, spine advanced course, peripheral nerve course, skull base labs, arthroscopy lab, AO fracture fixation courses.

New simulators have been obtained by ophthalmology and urology. Otolaryngology has opened an expanded temporal bone lab with 4 stations. Neurosurgery continues to lead the world in robotic surgery and simulation in Dr. Garnette Sutherland's laboratory.

The OSE will continue to focus on expansion and improvement of our surgical education programs at all levels by advocating for Faculty development and teacher training to enhance surgical teaching skills. Financial remuneration and recognition for teachers is a focus for recruitment and retention of quality surgical educators at all levels of education. We envision expanding our activities and increasing professional development across the continuum of surgical education, and will require infrastructure and resources to further our goals. We will look forward to integrating our medical students and residents at the South Health Campus over the upcoming year as the surgical programs expand at that site.

Surgical Foundations

New accreditation standards have been approved by the Royal College of Physicians and Surgeons of Canada for the Surgical Foundations which encompass the first 2 years of training in General Surgery, Orthopaedic

Surgery, Plastic Surgery, Cardiac Surgery, Vascular surgery, ENT, Urology, and Neurosurgery. **Dr. Marcia Clark** and **Dr. Richard Buckley** will co-direct Surgical Foundations. Some of the Surgical Foundation activities such as CanMEDS sessions and the Critical thinking course will continue to be coordinated by the PGSTC committee and other activities such as evaluations, PGY-1 skills course and Surgical Foundations curriculum will be taken over by the Surgical Foundations Committee in accordance with the Royal College Accreditation.

Quality Assurance and Innovation

Surgeons in the department have the dual responsibility to provide the highest quality care to their patients and at the same time an optimal educational environment for the trainees. This is primarily accomplished by very close supervision of the work of the trainees and by skillful evaluation of the trainee's strength and weaknesses and the determination of the patient's needs and wishes. Most Quality Assurance activities in the Department involve the trainees as team members. Innovation in teaching is expected to come from several young surgeons currently doing research in education and with expansion of our simulation facilities.

From the Office of Surgical Research

Overview:

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

- Providing direction and support for discipline specific research within sections of the Department of Surgery
- Fostering collaborations between sections within the Department of Surgery and thematically aligned institutes
- Promoting evidence-based introduction of new surgical technology and innovations
- Providing guidance for the procurement of statistical research consultation services
- Enhancing internal grant review processes to optimize chances for funding success at the level of the CIHR and other external sponsoring agencies
- Offering assistance in formulating research policy, direction, goals, and priorities within the Department of Surgery in consultation with the Research and Surgical Executive Committees
- Overseeing the administration of the Surgeon Scientist Program (SSP)
- Administering the Department of Surgery Prizes for Research and Education
- Administering the Calgary Surgical Research Development Fund
- Organizing the annual Surgeons' Day Research Symposium and Dinner

Membership:

The OSR represents and is accessible to all members of the Department of Surgery. Currently, the OSR infrastructure includes: a Director, Associate Director, Administrative Assistant and Department of Surgery Research Committee. The OSR directly reports

to the Department Head (Dr. John Kortbeek) and to the City-Wide Surgical Executive Committee.

In January 2013, Dr. Rob Harrop completed his five year term as Director of the OSR and Dr. Fiona Costello was newly appointed to this position.

Therefore effective January 2013, the OSR personnel include:

Director:

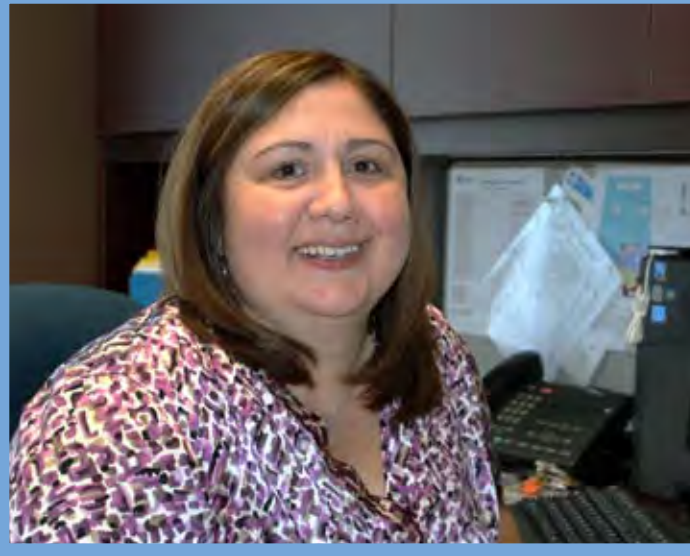
Fiona Costello, MD, FRCP
Associate Professor, Departments of Clinical Neurosciences and Surgery (Ophthalmology)
University of Calgary Clinician-Scientist,
Hotchkiss Brain Institute



Dr. Fiona Costello, Director OSR

Associate Director:

Dr. Elizabeth Oddone Paolucci, PhD
Assistant Professor, Departments of Surgery and Community Health Sciences
Chair, Office of Medical Education



Dr. Elizabeth Oddone Paolucci, PhD, Associate Director OSR

Administrative Assistant:

Mrs. Afnan Musameh

Department of Surgery Research Committee (Members):

Dr. C. Brauer, Dr. C. Temple-Oberle, Dr. C. Blackmore, Ms. Kimberly Carcary, Ms. Emi Sanders, Dr. F. Costello, Dr. E. Oddone Paolucci, Ms. Afnan Musameh, Dr. D. Nickerson, Dr. D. Buie, Dr. C. Doherty, Dr. J. Kortbeek, Dr. J. Wong, Dr. P. Petrasek, Dr. W. Matthews, Dr. G. Williams, Dr. S. Goldstein, Dr. A. Wong, Dr. L. Mack, Dr. L. MrKonjic, Dr. J. Edwards, Dr. J. Bouchard, Dr. C. Ball, Dr. D. McKenzie, Dr. R. Moore, Dr. G. McKinnon, Dr. B. Donnelly, Dr. L. Harmer, Dr. P. Poulin, Dr. A. Safarpour, Dr. M. Quan, Dr. M. Deutschmann, Dr. Miller Smith, Dr. Lisa Lagrou, Dr. D. Drummond, Dr. G. Gelfand, Ms. Viona Lam, Mr. Ramin Servatyari, Ms. Christi Findlay

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 more than 12 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 20 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 provide the knowledge, attitudes and technical competence 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 Physicians and Surgeons of Canada (RCPSC).** 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 (not abroad). For further details regarding the CIP program, interested parties can review this handbook <http://www.ucalgary.ca/cip/files/cip/cip-handbook-final-feb2013.pdf> and/or contact the Director of the CIP, Dr. Zelma Kiss.

Surgeon Scientist Program (SSP): The SSP is a highly competitive, degree-based program for research training of residents within the Department of Surgery. The program provides the opportunity for residents

to develop effective skills to conduct high-quality basic and/or clinical surgical research. Over the years, the SSP has supported a number of highly motivated residents who have successfully completed the program and in turn continued to produce excellent research within the Department of Surgery. Prospective applicants for the upcoming year are encouraged to submit their proposals by January 30th, 2014.

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. By providing research assistance and training to our Department members, the OSR is in a privileged position of encouraging and developing respectful and collaborative relationships with its research members, as well as learning how to serve our members better. For more information on the services offered by the OSR please visit our website: <http://www.albertahealthservices.ca> / <http://www.albertahealthservices.ca/4456.asp>

Surgery Prizes for Research and Education:

The Surgery Prizes for Research (\$75,000) and Education (\$25,000) reward excellence, innovation, and the potential for future success and impact on the Department of Surgery. All faculty members of the Department of Surgery are welcomed to submit their applications, although preference is given to those early in their investigative careers.

Surgical Foundations Postgraduate Surgical Training Committee (PGSTC)

(Lead: **Dr. Richard Buckley**)

Department of Surgery Mentorship Program

(Lead: **Dr. Duncan Nickerson**)

Department of Surgery, Ethics Program

(Lead: **Dr. Linda MrKonjic**)

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. The HT&I Office has designed and offered workshops in the field of Critical Appraisal Skills and putting Health Technology Assessment into practice to a wide variety of Alberta Health Services managers, as well as primary care physicians. (Lead: **Dr. Lea Austen**)

Internal Grant Review Committees:

Several additional committees are required for the review of programs administered by the OSR. These review committees are assembled through the recommendation of the Department of Surgery Research Committee and Chair, Dr. Fiona Costello. Review committees complied and active over the last year include: The Calgary Surgical Research Development Fund Review Committee; The Surgery Research Prize Review Committee; The Surgery Education Prize Review Committee; The Surgeon-Scientist Program Review Committee; and The Medicine and Surgery Research Development Fund Competition Committee.

Accomplishments and Highlights

The 2013 Awards Gala was cancelled due to the flood. These individuals will be honored at the 2014 Gala.

Distinguished Service Awards:

Over the past decade, the Department of Surgery has offered annual recognition to exceptional members who have made outstanding contributions in academic achievement and surgical innovations. In 2013 the following individuals were named recipients of the Distinguished Service Awards:

Dr. William Hyndman,
Site: Rockyview General Hospital

Dr. John Heine, Site: Peter Lougheed Hospital

Dr. Allan Narvey, Site: Alberta Children's Hospital

Dr. Norman Schachar, Site: Foothills Medical Centre

Education:

The Department of Surgery recognizes members therein who demonstrate excellence in resident teaching on an annual basis. Every year residents from the Department of Surgery nominate a surgical preceptor from their own section (Educator Award); and from outside their section (Ectopic Award) to be honored for accomplishments in education. In 2013 the following award recipients were named:

Educator of the Year Award: Dr. Shannon Puloski

Ectopic Educator of the Year Award:

Dr. Donald Buie

Innovation:

In 2007, The Department of Surgery created the Health Technology and Innovation Program to support surgical excellence and provide an infrastructure to support surgical innovation. Every year, the Surgical Innovation Award is awarded to the individual or group who creates the most innovative program or initiative within the Department. In 2013 the recipients of this award were:

Dr. Anastasio Salazar & the Live Donor Program Team:

Ms. Sherry Buckle

Ms. Cheryl Davis

Ms. Alison Gilmour

Ms. Heather Hannaford

Ms. Theresa Trottman

Research:

The OSR oversees several internally funded grant competitions and surgery research awards yearly:

The Calgary Surgical Research Development Fund (CSRDF): The CSRDF has been created to encourage, promote, and provide financial support for high quality, scientifically valid research activities within the University of Calgary Surgical Training

Programs. The CSRDF provides small grants ranging in amount from \$1,000 to \$4,000. There is an annual competition for these grants which involves the submission of a structured abstract including a clear description of the roles of all project investigators on the team. In the 2013 funding year, three research projects across all divisions were supported:

Title: The use of wound protectors to prevent surgical site infection in patients undergoing pancreatoduodenectomy with intrabiliary stents: a randomized controlled trial.

Team: Dr. Janet P. Edwards (Resident), Dr. Chad G. Ball (PI), and Dr. Elijah Dixon.

Title: Effect of antibiotic impregnated middle meatus spacers in post-operative wound healing: a randomized, double-blind, placebo-controlled trial.

Team: Dr. Derrick Randall (Resident) and Dr. Brad Mechor.

Title: Boot Camp Training for Pediatric General Surgery Fellows: Is there a Need for it to ease the Transition to Fellowship?

Team: Dr. Christopher Blackmore (Resident), Dr. Steve Lopushinsky (PI), Dr. Elizabeth Oddone-Paolucci, and Dr. Jocelyn Lockyer.

The Department 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 13 applications considered and we were able to fund 2 projects:

Clinical/Basic Science Category:

Title: Improving the Microbiologic diagnosis of orthopedic device associated infections (\$12500)

Team: Dr. Shannon Puloski, Dr. Deirdre Church, Dr. Michael Parkins, Elizabeth Henderson RT, PhD, and Dr. Kristen Brown.

Quality Improvement/Knowledge Transfer Category:

Title: Iterative Development of an Electronic Intensive Care Unit Discharge Tool (\$12500)

Team: Dr. Tom Stelfox, Dr. William Ghali, and Dr. Andrew Kirkpatrick.

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 2013, the recipient and honorable mention for the Peter Cruse Memorial Award were:

Award Recipient: Ms. Kyla D. Huebner, University of Calgary, Faculty of Medicine.

Honorable Mention: Mr. Adam Schofield, University of Calgary, Faculty of Medicine.

Surgeon's Scientist Program (SSP):

The 2013 SSP recipient is **Dr. Monica Hoy**, PGY 5, Section of Otolaryngology. Masters of Science-Medical Education Program at the University of Calgary.

Surgery Research Prize (\$75,000):

The 2013 Surgery Prize for Research is **Dr. Chad Ball**, Section of General Surgery. **Title of Proposal:** "Preoperative Glucocorticoid use in Hepatectomy – A randomized Controlled Trial."

Surgery Education Prize (\$25,000):

The 2013 Surgery Prize for Education Award Recipient is **Dr. Claire Temple-Oberle**, Section of Plastic Surgery. **Title of Proposal:** "Leadership Skills to Enhance Personal Effectiveness as an Educator"

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. This year, the Research Day Symposium was held at the Libin Theater, Foothills Hospital, Health Sciences Centre on June 21, 2013. The visiting judge and McPhedran Lecturer was **Dr. William Hodge**, Chair, Department of Ophthalmology for the Schulich School of Medicine & Dentistry and City-Wide Chief of Ophthalmology for the London Health Sciences Centre & St. Joseph's Health Care. Dr. Hodge's research pursuits have been in peer reviewed clinical trials, health service research, systematic reviews/economic analysis and population projections of eye disease in Canada. Dr. Hodge holds or has held an NIH grant for a systematic review, three CIHR grants for health service research and both a PSI grant and a CIHR grant for an ophthalmic randomized clinical trial. He has published over 200 journal articles and book chapters. The title of his McPhedran lecture today in 2013 was scheduled to be "**Surgeon-Researchers, Top 5 Lessons Learned.**"

The McMurtry Lecturer and co-judge at the Surgeons' Day Research Symposium was **Dr. Claire Temple-Oberle**. Dr. Temple-Oberle joined the Faculty of Medicine at the University of Calgary as an Associate Professor in the Departments of Oncology and Surgery in 2012, with a special interest in reconstructive plastic surgery. Prior to relocating to Calgary, Dr. Temple-Oberle worked in the Departments of Surgery and Oncology at University of Western Ontario from 2003 to 2011. During this time, she completed an MSc in Epidemiology at the Harvard School of Public Health. Her clinical research interests include quality of life in breast reconstruction and novel therapies for in transit melanoma. Her surgical education interests include

microsurgical skills acquisition and evaluation, and critical appraisal. The scheduled McMurty lecture to be presented by Dr. Temple-Oberle was: **“Quality of Life for Patients and Surgeons: a Plastic Surgeon’s Perspective.”**

There were several other members of the Department of Surgery who graciously agreed to serve in various capacities, to make our 31st Annual Research Day a success. These included our **Poster Session Chair, Dr. Rob Harrop**; and **Session Chairs: Dr. Linda Mrkonjic (Section of Orthopaedic Surgery), Dr. Luke Rudmik (Section of Otolaryngology), Dr. Beth Lange (Section of General Otolaryngology), and Dr. Amin Kherani (Section of Ophthalmology)**. We also received generous support from the following sponsors: Olympus; AMT –Electro Surgery; KLS Martin LP; Integra; Ethicon Johnson+Johnson; and Covidien.

In 2013, the OSR received a record number of resident abstracts and manuscripts for review, with 23 platform talks selected for presentation. **Regrettably, this past year was also noteworthy for the historic flooding, which paralyzed the city of Calgary. Therefore, despite valiant efforts on behalf of members of the Department of Surgery to run The 31st Surgeons’ Day Research Symposium, participants were unceremoniously told to cease proceedings and evacuated by security shortly before noon on June 21, 2013.** Because only a handful of residents and fellows had the opportunity to present their work; and in the spirit of fairness to all participants we opted not to formally award winners for: Best Overall Research; Honorable Mention, Overall Research; Best Paper by a Surgical Fellow; and Best Poster Presentation. Because of the aforementioned flooding, the Surgeons’ Day Annual Banquet scheduled to be held at Sheraton Suites Calgary Eau Claire was cancelled on the evening of June 21, 2013. **We have contacted the recipients of the Distinguished Service Awards; Educator of the Year Award; Ectopic Educator of the Year Award; and Surgical Innovation Award and informed them that they will be honored at the Annual Surgeons’ Day Banquet scheduled to be held on June 13, 2014.** We will also present Dr. Rob Harrop with an Appreciation Award at this event. Finally, in 2014, we will have the pleasure of unveiling the new minted, McPhedran Research Award to the resident with the most creative research.

Challenges and Future Directions

The OSR continues to face the challenge of managing demands for service in the face of constrained financial resources. Still, we continue to work towards building the infrastructure needed to facilitate high caliber surgical research and remain vigilant in communicating our members’ needs and activity both within the Department and to the larger external research community. Several specific issues have come to light which we will aim to address in the next year.

Grants Funding and Accountability: We estimate that, over the last decade, approximately \$30,000 in funds have been allocated to CSRDF projects that have not been initiated, and will not likely be completed. We intend to discuss the status of these projects with the principal investigators, and determine whether funds should be returned to the OSR or remain allocated to the existing grant holders. Prudent governance of grant funding is an important priority for the OSR. Going forward we will be implementing a process whereby regular project reports will be required for the duration of the study.

Forging Alliances with Existing Institutes:

Over the past year, the need for stronger academic alliances between clinical teams and thematically aligned institutes (including the McCaig Institute for Bone and Joint Health, the Institute of Public Health, and the Hotchkiss Brain Institute) has been identified as a challenge by our membership. The OSR, in concert with Sectional representatives from the Department of Surgery Research Committee has taken the initiative to meet with institutional leads; and will endeavor to solidify collaborations over the upcoming academic year.

Translating Internal Grant Success to External Grant Funding:

The OSR is dedicated to supporting high quality research by our members. Over the upcoming year, we will determine how to translate the results of pilot studies funded internally by the Department of Surgery to successful grant applications funded by external agencies. To this end, we will be establishing a committee made up of members of the Department of Surgery, and individuals outside our Department. The mission of this committee will be to

provide specific expertise in a variety of domains needed for successful external grant applications including: grant writing; statistics; trial design; knowledge transfer; budget compilation; and account management. We intend to establish a mechanism whereby grant applications put forth by our members are subject to internal review by this committee (and its extended members) prior to being submitted to external agencies.

Research Development Fund: To build upon our existing infrastructure, and expand our operations to better meet the needs of our membership, the OSR needs to take a more proactive role in fund-raising. We are currently evaluating strategies to establish an OSR Development Fund, so that we can better support research initiatives at the Departmental and Sectional level. We will be discussing a variety of fund-raising options at the next scheduled Department of Surgery Research Committee in September 2013.

Cultivating Research Expertise – Partnering with the Clinical Investigator Program (CIP): Since becoming Director of the Office of Surgical Research, Dr. Fiona Costello has been fortunate to have the opportunity to attend the CIP research seminars and

sit on the CIP Committee. The content of these seminars is very informative; and would be highly beneficial to resident members of the Department of Surgery with an interest in the Surgeon-Scientist career path. Dr. Zelma Kiss, Director of the CIP Program has graciously invited any resident with an interest in research to attend these seminars. Over the upcoming year, Dr. Costello will approach Program Directors within the Department of Surgery to identify and invite interested residents within their Sections to participate in the CIP Seminar Series.

Health Information Act: In 2013, Dr. Fiona Costello and Dr. Elizabeth Oddone Paolucci met with Ms. Suzanne Vorvis (Director, Provincial Research and Privacy Initiatives, Research Capacity and Support from AHS Research) to discuss strategies needed to optimize compliance with the Health Information Act as it pertains to surgical research. Several members of the Department of Surgery Research Committee have spearheaded work in this area. The findings from their report and recommendations will be disseminated within the Department of Surgery in the year to come.

From the Office of Health Technology & Innovation



Dr. Lea Austen, HTI Physician Lead
Photo Courtesy of Dr. Lea Austen

Section Structure and Organization

Surgery Operational Clinical Network (SOCN) Decision-Support Program for Technology Appraisal and Education

- **Programs:** The SOCN is using an evidence-informed Decision-Support Program when introducing new health technologies with respect to the health needs of the Surgery OCN'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 OCN.

- **Current Committee Membership:** The current members of the SCN-HTAI committee include: Dr. Lea Austen & Dr. Trevor Schuler, Co-Chairs, Dr. Paule Poulin, Dr. William Cole, Dr. Heather Cox, Dr. Don Juzwishin, Kelly Chapman, Kenny Davidson, Myra Campbell and Stacy Kozak

Accomplishments and Highlights

- **Clinical Service:** During the past year, the Surgery OCN worked on more than a dozen technology appraisals, mostly with external collaborators including the Canadian Agency for Drugs and Technologies in Health, the University of Calgary and the University of Alberta. Other collaborators included internal AHS groups including SCNs, Infection Prevention Control, Quality & Health Care Improvement, Health Technology Assessment & Innovation, Contracting Procurement & Supply Management and Finance. Some of these projects resulted in province-wide protocol standardization and implementation strategies to ensure that the recommendations from the appraisals are put in practice throughout the province. Others resulted in the preparation of scientific manuscripts (one by invitation) for publication as well as the preparation of research grant proposals for funding consideration.



Dr. Paule Poulin, PhD, HTI Administrator
Photo Courtesy of Dr. Paule Poulin

• **Education:** To engage and educate physicians and managers throughout the province in the use of the Decision-Support Program appraisal and recommendation process, the Surgery OCN 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 research appraisal and innovation concepts to real clinical cases 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 appraisal and recommendation process.

• **Research:** This year, the team collaborated with other researchers to submit grant proposals to Alberta Innovate Health Solutions Knowledge to Action Grant (KTA) Competition January 2013. The KTA Grant opportunity is intended to support the uptake of research evidence into health policy, practice and commercial development of products; and to help build on the growing body of evidence for the most effective ways to approach knowledge translation (KT). The KTA Grant is a competitive, peer-reviewed award to a maximum of \$25,000. Of 44 submissions, 9 projects were approved including our project entitled “From Education to Engagement to Action: A dynamic, interactive and integrated knowledge translation approach to bring evidence into practice for introducing new health technologies”. Another currently active project is our OR & Unit Manager Research Education Project entitled: “Interactive Health Technology Assessment (HTA) Education Workshops for Health Care Practitioners and Managers in Surgical Services”. This project is scheduled to conclude this year.

Challenges:

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

- Response to Issues
- Ongoing Matters and Plan of Action
- Future Risks

Workforce Planning N/A

- Future Needs
- Goals and Strategies
- Impact on other departments and zonal resources

Quality Assurance, Quality Improvement, and Innovation

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

Future Directions and Initiatives

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

Section Update

Dentistry and Oral Health

Section Structure and Organization

Division of Adult Dentistry

Division members representing Adult Dentistry in the following committees

- Corrections Health – **Dr. A. Paladino**
- ADA&C Hospital Committee – **Dr. E. Kalaydjian**
- ZMAC (Zone Medical Advisory Committee) – **Dr. E. Kalaydjian**
- SAIT Dental Assisting Program – **Dr. E. Kalaydjian, Dr. G. Yates, Dr. A. Houghton**
- Surgical Foundations PGSTC – **Dr. E. Kalaydjian**
- Calgary Zone Surgical Executive Committee – **Dr. E. Kalaydjian**
- Combined FMC OR Committee – **Dr. E. Kalaydjian**
- Dental NHSF Committee – **Dr. A. Tung, Dr. A. Paladino, Dr. E. Kalaydjian**
- Dental CE Committee – **Dr. E. Kalaydjian, Dr. A. Paladino**
- Dental General Practice Residency Program Training Committee – **Dr. E. Kalaydjian, Dr. A. Paladino, Dr. T. Yu, Dr. G. Shariff, Dr. S. Switzer**
- Provincial Head and Neck Tumour Team Executive 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**
- ACH Leadership 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**
- Royal College of Dentists of Canada (Councillor) – **Dr. R. Barsky**
- Canadian Dental Specialists Association (Treasurer) – **Dr. R. Barsky**
- ADA&C Hospital Committee – **Dr. R. Barsky**
- Alberta Academy of Pediatric Dentistry (President) – **Dr. S. Hulland**
- Western Society of Pediatric Dentistry – **Dr. S. Hulland**
- Oral Health initiative for the Calgary Backpack Program (Director) – **Dr. S. Hulland**
- Sponsorship Committee, Calgary and District Dental Society – **Dr. S. Hulland**
- Dentistry for All (Executive Director) – **Dr. B. Krusky**
- Dental NHSF Committee – **Dr. Warren Loeppky**
- Chairman of the Board and Executive Director, Healthy Mouth Healthy Body. (Non-profit charitable organization dedicated to assisting children in growing up in a healthy fashion by eradicating ECC, the most common of childhood chronic diseases.) – **Dr. L. Smith**
- ACH Institute for Maternal and Child Health Research – **Dr. L. Smith**



Dr. Eduardo Kalaydjian, Dentistry and Oral Health Section Chief

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 – collaboration between Oral and Maxillofacial Surgery and FMC General Practice Residency (GPR) Program

FMC DENTAL CLINIC

- Adult Special Needs Dentistry Clinic
- Dental Oncology Clinic
- Sedation Dentistry Clinic
- Dental Hygiene Clinic
- Speciality Clinics including:
 - (a) Oral Medicine
 - (b) Endodontics
 - (c) Periodontics
 - (d) Oral and Maxillofacial Surgery

FMC DENTAL GENERAL PRACTICE RESIDENCY (GPR) PROGRAM

- Hosted at Foothills Hospital Dental Clinic
- Enrolment: 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, Northeast (Sunridge Mall); and a satellite clinic: Airdrie Community Health Centre.

Membership

Division of Adult Dentistry

- As of June 9, 2012, Adult Dentistry Division membership composed of
- 34 privileged members (Most members hold privileges based entirely on their affiliation with the provision of surgical dental services at the NHSF)
- Dr. A. Paladino is the Chief of Adult Dentistry and the Clinical Director of the FMC Dental Clinic

FMC DENTAL GENERAL PRACTICE RESIDENCY (GPR) PROGRAM

- Dr. E. Kalaydjian is the Program Director of the Dental Residency Program
- Dr. A. Paladino is the Site Director of the Dental Residency Program
- Enrollment: two residents 2012-2013
- Preceptors for FMC Dental Residency Program
- general dentists
- specialists
 - (a) Oral and Maxillofacial Surgeons (OMFS)
 - (b) Periodontists
 - (c) Oral Medicine
 - (d) Endodontist

CORRECTIONS DENTISTRY

- 1 casual dentist

FMC DENTAL CLINIC

- 3 full time dentists, in March we were decreased to two dentists with the departure of Dr. V. Lekhi.
- several casual general dentists
- several specialist preceptors for dental residents

DIVISION OF PEDIATRIC DENTISTRY

- There are currently 19 pediatric dentists in Calgary 15 have AHS privileges: **Drs. Robert Barsky, Christine Bell, Marie-Claude Cholette, Sarah Hulland, J. Bradley Krusky, Orest Pilopowicz, Warren Loeppky, Allan Narvey, Leonard Smith, Kari Stein, Sandra Schwann, Timothy Seto, Shirin Sheiny, Michele Thal and Rory Vinsky,**
- **Drs. Allan Narvey and Len Smith** have senior status and are planning to retire within the next year from the AHS.
- **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** (1.0 FTE)
- **Dr. Marie-Claude Cholette** (0.8 FTE)

Casuals:

- **Dr. Sarah Hulland** (0.1 FTE)
- **Dr. Tim Seto** (0.2 FTE)
- **Dr. Michele Thal** (0.1 FTE)
- **Dr. Shirin Sheiny** (0.1 FTE) – Maternity leave
- Staff orthodontist: **Dr. Darrell Kemp** (1/2 day q 2 months)
- Staff Oral & Maxillofacial Surgeon: **Dr. Miller Smith** (1/2 day q 2 months)

Division of Community Dentistry/Dental Public Health Clinic Program

- **Dr. Adebayo Olowe, Dr. Heidi Rabie; Dr. Luke Shwart; Dr. Sylla Skaria; Dr. Sheila Varshney**

- **Dr. L. Shwart** is the Dental Public Health Officer
- **Dr. H. Rabie** is the Chief of Community Dentistry and the Manager/Clinical Director of the Dental Public Health Clinics.

Accomplishments and Highlights
Clinical Service

Division of Adult Dentistry

FMC DENTAL GENERAL PRACTICE RESIDENCY (GPR) PROGRAM

- Continues to maintain its accreditation from the Commission on Dental Accreditation of Canada (CDAC)
- Plans completed to add a third dental resident for the 2013-2014 academic year
- Surgical Implant Program (development continues)
- Continued partnership between FMC GPR PROGRAM and OMFS for after hours on-call program for Adult Dentistry

FMC DENTAL CLINIC

- Continues to maintain its accreditation the Commission on Dental Accreditation of Canada (CDAC)
- Surgical Implant Program (development continues)
- Improved fiscal profile of dental clinic
- New Manager for the dental clinic started on December 20, 2012.
- The FMC Dental Clinic was selected to participate in the Access Improvement Measures (AIM) Program in September 2012.
- **Dr. E. Kalaydjian** was selected to be a member of the Dental Internship/Health Facilities Committee for the CDAC
- **Drs. A. Paladino and E. Kalaydjian** participated in a two drug IV sedation training program. They plan to introduce the service to the dental clinic in 2013-2014.

NHSF

- Continue to stay within allocated budget.

CORRECTIONS DENTISTRY

- Continue quality care for inmates.

DIVISION OF PEDIATRIC DENTISTRY

- Expansion of dental specialty multi-disciplinary services with the recruitment of Dr. Miller Smith, oral & maxillofacial surgeon has been successful.
- The in-hospital delivery of speech appliance (pharyngeal bulb obturator or palatal lift) in the ACH Dental Clinic has also been successful. This service is a joint initiative and will continue to involve close collaboration with VPI Clinic and Speech therapy services.
- The ACH Dental Clinic continues to successfully offer NAM therapy.
- ACH Dental maintains accreditation by the Commission on Dental Accreditation of Canada (CDAC)

**DIVISION OF COMMUNITY DENTISTRY/
DENTAL PUBLIC HEALTH CLINIC PROGRAM**

- Project Homeless Connect: During the year people who are homeless were screened for oral disease at these special events. They received information and resources to prevent and control dental disease, and received free dental care for urgent conditions.
- Margaret Chisholm Resettlement Centre: Eligibility changes in the Interim Federal Health insurance program have affected dental care access for impoverished refugees. The Dental Public Health Clinic program cooperated with this centre to provide urgent dental care for many refugees.
- Upgrade to vacuum sterilizer at the Chumir Dental Clinic: The vacuum sterilizer replaced an aging gravity-displacement sterilizer – which are being phased out but remain as contingency back-ups in reserve.

Education**DIVISION OF ADULT DENTISTRY****Residents:**

- (July 20012- June 2013) Fifth year for the FMC Dental GPR program
- Enrollment: 2 residents
- Once again we noted a large increase in the number of qualified candidates applying
- Plans for the addition third FMC Dental GPR Program Resident for the 2013-2014 academic year
- Maintain accreditation status (accreditation obtained Sept 2009) by Commission on Dental Accreditation of Canada.

Fellows: None**Dental Students:**

Academic year 2012-2013, Foothills Hospital Dental hosted a total of nine 3rd year dental students from University of Alberta doing elective rotation in “Hospital Dentistry”.

DIVISION OF PEDIATRIC DENTISTRY

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

**DIVISION OF COMMUNITY DENTISTRY/
DENTAL PUBLIC HEALTH CLINIC PROGRAM****Residents:**

The two FMC Dental General Practice residents each worked for 10 days in the Dental Public Health Clinics; receiving orientation and experience under the preceptorship of the clinic dentists.

Staff:

Participated in the AHS Safety Learning Course
Attended the AHS Tobacco Cessation Conference

Professional Guidance:

Burns Fund: The Section Chief provides professional opinion and guidance in dental matters to this philanthropic fund. The main involvement is helping to triage orthodontic needs for disadvantaged children.

Research**DIVISION OF ADULT DENTISTRY**

- Canadian Optically Guided Approach for Oral Lesions Surgical Trial (COOLS Study) with The Terry Fox Research Institute – (Clinical Lead in the Calgary Zone is Dr. Dort). Dr.Kalaydjian is an FV specialist and co-investigator in AHS Calgary Zone.
- Clinical Trial (SWOG S0307). 'Phase III Trial of Bisphosphonates as adjunctive therapy for Primary Breast Cancer.' (Clinical Lead is Dr.Patterson, Tom Baker Cancer Centre).
- Clinical Trial (RTOG 1016). 'Phase III Trial of Radiotherapy plus Cetuximab versus Chemotherapy in HPV-Associated Oropharynx Cancer.'

Challenges

- Response to Issues

DIVISION OF ADULT DENTISTRY

- Quality Assurance
- Introduction of peer-lead QA strategies for Dental Cases (i.e. M&M Rounds)
- Application for re-accreditation from the CDAC

FMC DENTAL CLINIC**IPC**

Dental Implants– working with IPC experts at Foothills Hospital and manufacturer to address outstanding concerns before making implant system operational.

IPC Audit – working with IPC experts to address concerns identified in IPC audit , improvements are being made within constraints of system (eg. limited physical space, limited money)

- Recruitment and Retention
- Attracting qualified casual dentists remains a challenge

- hard to recruit & retain
- those already recruited have limited availability
- Staffing Shortages
- 1.0 FTE Staff Dentist remained on restricted duties and restricted scheduling: worked as 0.7 FTE. In March, this dentist resigned.
- Graduating residents hired as casuals/ preceptors to help with shortage.
- Plan to introduce third resident (July 2013).
- Efficiency and Access Improvements
- Participation in the AIM Program
- OR Access
- Lack of OR access to our Special Needs patients at the FMC has forced us to pick up scramble time when available. This has caused an increase in wait-times for our patient population.

FMC DENTAL GENERAL PRACTICE RESIDENCY (GPR) PROGRAM

- Recruitment and Retention
- attracting qualified preceptors for dental residency program remains a challenge
- hard to recruit & retain
- those already recruited have limited availability

CORRECTIONS DENTISTRY

- IPC Audit – in collaboration with IPC experts and Corrections Health Managers concerns identified in the IPC audit are being addressed, improvements are being made within the constraints of the system (eg. limited physical space, limited money)

DIVISION OF PEDIATRIC DENTISTRY

- The greatest challenge has been the Division's inability to post for a full time pediatric dentist position for the ACH Dental Clinic due to significant delays in completion of AHS compensation review for dentists. Although the review is underway, there has been no resolution and the posting is still on hold.

We are also continue to have issues with lack of provincial funding for dental services in the Calgary Zone. We hope that the ADA&C Hospital Committee will address this ongoing issue.

The hospital-based dental services receive 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 for further negotiation with ADSC for increase in fees.

The increased cost for staff compensation and the delivery of services to increasing number of pediatric patients which are medically compromised or have disabilities has made it a challenge to provide optimal care within our target times when adequate funding is not available.

DIVISION OF COMMUNITY DENTISTRY/ DENTAL PUBLIC HEALTH CLINIC PROGRAM

- Recruiting Staff Dentists: It is challenging to recruit dentists to our programs when compensation is inadequate when compared to private practice.
- Dental Accreditation: Extensive documentation prepared and submitted for the May 2013 CDAC visit.
- Ongoing Matters and Plan of Action

DIVISION OF ADULT DENTISTRY

1. SPACE SHORTAGE AT FMC DENTAL CLINIC

- Continue to investigate opportunities to move forward plans at South Health Campus and create a dental clinic at newly announced Calgary Cancer Centre Building at the FMC Campus.

2. DENTIST STAFF SHORTAGES

- Vacated 1.0 FTE Dentist position.
- recruit to fill this position
- Casual/Replacement Dentists
- continue recruitment efforts from pool of graduating dental residents
- Preceptors for GPR
- continue recruitment efforts from pool of graduating dental residents
- continue recruitment efforts from pool of retiring dentists & specialists in Calgary area that may want to continue with part-time commitment

- continue recruitment efforts for OMFS through privileging process
- ##### 3. LACK OF DEDICATED OR TIME AT FOOTHILLS HOSPITAL
- Performing procedures at the FMC Dental Clinic under conscious sedation that would better be managed under GA; staff lost time due musculoskeletal injuries related to holding combative patients during sedation
 - Audit of cases on OR waitlist being completed
 - plan to challenge present OR allocation (Dentistry receiving zero OR blocks)
 - proposal for usage of OMFS unused OR time at the PLC was not successful.
 - Chief of Dentistry continues to represent Adult Dentistry at Surgical Executive Meetings and OR Committee meetings to raise awareness of issue.
 - Continued use of scramble OR time.

DIVISION OF COMMUNITY DENTISTRY/ DENTAL PUBLIC HEALTH CLINIC PROGRAM

- The Dental Public Health Clinic Program (Airdrie Dental Clinic, Chumir Dental Clinic, Northeast Dental Clinic) is part of the Population and Public Health portfolio. The dentists report up through the Clinical Department of Surgery in the Calgary Zone and the Clinical Department of Public Health. The clinical dentists continue to receive privileges through the Calgary Zone Section of Dentistry and Oral Health, and maintain strategic linkages with FMC and ACH Dental Clinic Programs through shared accreditation planning, software programs, Infection Prevention and Control oversight, and routine meetings.

Future Risks

DIVISION OF ADULT DENTISTRY

- Dentist compensation model/review needs to be completed to attract dentist staff.
- Change in dentist compensation model.
- Partnerships cease.

DIVISION OF COMMUNITY DENTISTRY/ DENTAL PUBLIC HEALTH CLINIC PROGRAM

- Conforming to revised infection prevention and control protocols has added supply and staffing time costs to the clinic.
- No expected additional funding in the near future, so maintaining capacity in the face of rising costs may be challenging.
- The dentist compensation review is still incomplete and continues to make hiring dentists difficult.

Future Needs

DIVISION OF ADULT DENTISTRY

- Limit privileges to dentist members (Adult Dentistry) that offer professional services to Acute Care Sites (FMC, and SHC)
- Limit privileges to dentist members (Adult Dentistry) working in rural areas wanting to service clients at NHSF or rural OR's.

FMC DENTAL GENERAL PRACTICE RESIDENCY (GPR) PROGRAM

- Preceptors Required
 - i) Oral Maxillofacial Surgeon
- OMFS – 1 or 2 additional members; each provides 0.5 day per month minimum
 - ii) Prosthodontist (0.5 day per month minimum)
 - iii) General Dentist/Special Needs Dentist (casual, replacements)
 - iv) Periodontist – 1 or 2 additional members; each provides 0.5 day per month minimum

FMC DENTAL CLINIC

- FMC Dentists
 - i) Recruitment for vacated 1.0FTE Dentist
 - ii) Recruitment of casual dentists (based on clinical need) to replace days when staff dentist on leave

DIVISION OF PEDIATRIC DENTISTRY

- ACH Dental Clinic: 1.0 FTE Pediatric dentist
- Community workforce: Proposal to increase current workforce by one additional community-based pediatric dentist.

In order to support the recruitment of 1.0 FTE hospital-based pediatric dentist, the Division would require more o.r. time at the ACH.

DIVISION OF COMMUNITY DENTISTRY/ DENTAL PUBLIC HEALTH CLINIC PROGRAM

The Dental Public Health Clinics continue to employ dentists with an interest in serving members of the community who are disadvantaged. Casual dentist numbers have eroded in the past few years, mainly through loss to private practice (e.g. opening their own clinic). Retention of competent staff is an issue. Hiring dentists is difficult under the current outdated compensation scale. The new dentist compensation review needs to be completed to aid in recruitment.

Goals and Strategies

DIVISION OF COMMUNITY DENTISTRY/ DENTAL PUBLIC HEALTH CLINIC PROGRAM

The Dental Public Health Clinic Program provides pain relief, preventive and restorative dental care to low-income patients at a reduced fee.

- The goals of the program are:
 1. to reduce impacts of dental disease on the acute care system
 2. to improve the health and quality of life of target population.
- The Program has begun consultations with Primary Care Networks (PCN) to facilitate transfer of low-income patients for dental care and to refer the dental patients with chronic disease who are not currently receiving regular medical care to PCNs.
- The Dental Public Health Clinics foresee a network of related clinics across the province. These plans are still in early development phase.
- 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 work to reduce the impact of dental disease on Sheldon Chumir's Urgent Care, the HPTP clinic and the Emergency Rooms by delivering care to disadvantaged people before they require assistance from these acute care sites.

Quality Assurance, Quality Improvement, and Innovation

DIVISION OF ADULT DENTISTRY

- Quality Assurance
- Introduction of peer-lead QA strategies for Dental Cases (i.e. M&M Rounds)
- Application for re-accreditation from the CDAC

FMC DENTAL CLINIC

- IPC
- Dental Implants– working with IPC experts at Foothills Hospital and manufacturer to address outstanding concerns before making implant system operational
- IPC Audit - working with IPC experts to address concerns and make service improvements within constraints of system (eg. limited physical space, limited money)
- Efficiency and Access Improvements
- Participation in the AIM Program

CORRECTIONS

- IPC
- IPC Audit – working with IPC experts to address concerns and make service improvements within constraints of system (eg. limited physical space, limited money)

DIVISION OF COMMUNITY DENTISTRY

DENTAL PUBLIC HEALTH CLINIC PROGRAM

- Dental Public Health Clinic Program has a membership in the Organization for Safety and Asepsis Procedures (dentistry's resource for infection control and safety information) to continue facilitating quality assurance and improvement in infection control
- Dental Public Health Clinic Program is accredited by the Commission on Dental Accreditation of Canada every 5 years. The process will take place again in 2013.
- Access of Family Physicians to specialists

DIVISION OF ADULT DENTISTRY

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

DIVISION OF COMMUNITY DENTISTRY

DENTAL PUBLIC HEALTH CLINIC PROGRAM

- Some family physicians fax or call the program for urgent cases where the patient has dental infection and no coverage.
- The dental hygienists with Mosaic Primary Care Network (MPCN) collaborate with the Dental Public Health Clinic Program and refer patients who have low-income. The MPCN patient navigators are upgrading their awareness and refer appropriate patients
- The Foothills PCN is developing a protocol to have member physicians refer low-income patients to the Public Health Dental Clinics.
- Patient flow through the Emergency Department

DIVISION OF ADULT DENTISTRY

- During business hours, dental patients can access urgent care through hospital emergency or directly through FMC Dental Clinic.
- After hours service: dental patients in need of urgent care can access through Regional On Call Program (Adult Dentistry & Oral Health) through a partnership with OMFS and FMC Dental Residency Program.
- Dental Presentation to Rural Emergency Physician Group Feb 2013: Dental and Maxillofacial Urgencies and Emergencies Presented by **Drs. N. Makhoul** and **Dr. A. Paladino** University of Calgary, Faculty of Medicine Continuing Education, Emergency Medicine for Rural Hospitals

DIVISION OF COMMUNITY DENTISTRY

DENTAL PUBLIC HEALTH CLINIC PROGRAM

- Sheldon Chumir's Urgent Care Clinic screens low-income patients with dental problems and refers them to the Chumir Dental Clinic. This cooperative agreement resulted from joint planning by the Chiefs of both departments, and has improved patient flow through emergency department. Referral protocol documentation is planned.
- The Emergency Departments of the RGH and PLC and the HPTP refer low-income patients to the Dental Public Health Clinics.

Future Directions and Initiatives

DIVISION OF ADULT DENTISTRY

- Enhanced participation and engagement of members in divisional activities (eg. attending quarterly meetings, M&M Rounds, Region Wide Dentistry Rounds)

FMC DENTAL CLINIC

- Collaborate with FMC Clinic Manager in Dyad management structure to assist with program and manpower planning
- Maintain fiscal health of FMC Dental Clinic
- continue with development of HEALTHY PATIENT CLINIC
- Continue with the development of a Dental Implant Surgery Program.
- Continue with the AIM Program
- Completion of the Dentist Compensation Review
- Recruit a general dentist for the vacated 1.0FTE position.
- Maintain current standing with Commission on Dental Accreditation of Canada (CDAC). Accreditation Review planned for 2013.

FMC DENTAL GENERAL PRACTICE RESIDENCY (GPR) PROGRAM

- Expand program to include a third resident by July 2013
- Recruit prosthodontist as preceptor
- Recruit additional OMFS preceptors
- Recruit additional periodontist preceptors
- Recruit additional general dentist preceptors
- Introduce dental implant surgery to the program
- Maintain current standing with Commission on Dental Accreditation of Canada (CDAC). Accreditation Review planned for 2013.

CORRECTIONS DENTISTRY

- Collaboration with executive management team for Corrections Health to develop provincial guidelines for dental program

DIVISION OF PEDIATRIC DENTISTRY

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

DIVISION OF COMMUNITY DENTISTRY

DENTAL PUBLIC HEALTH CLINIC PROGRAM

- Maintain current standing with Commission on Dental Accreditation of Canada (CDAC). Accreditation Review planned for 2013.
- Continue discussions with Health Canada, MOH office and Elbow River Healing Lodge to fund a dental team at Chumir Clinic to deliver care to First Nations people.
- Monitor changes in IFH refugee program, and respond to needs as possible.
- Develop and align with a network of clinics providing dental care to underprivileged clients in the province.
- Continue strengthening links with other Public Health programs, Family physicians, PCNs, and Acute Care to improve awareness of each other's services and to facilitate hand-off of patients between programs.
- Add a dental chair to Chumir clinic when financially possible.

Section Update General Surgery



Dr. Francis Sutherland, General Surgery Section Chief

Our section has had a standout year. All of our residents were successful on their exams and are pursuing further fellowship training including Vascular, Thoracics and MIS. Congratulations to all. Under the direction of **Dr. Mack** the residency program has continued to forge a high quality education product.

Under the support of **Dr. Ball** our residency research program has had success. For a change we had our research day at Sunshine Ski Area and interrupted the academics with rushes of skiing and snowshoeing. **Dr. Doug Evans** was our Roy Preshaw lecturer and judge. His talk entitled "The challenge of pancreatic cancer: combining neoadjuvant therapy with personalized medicine" was well received. Basic science talks took up the remainder of time over the weekend.

This year we also reinstituted our Faculty Academic Day. The response by staff was amazing with a full slate of talks presented at the Hyatt Hotel in November. It was important for us to hear the passion and commitment of our colleagues in their area of expertise. The topics ranged from bariatrics and ethics of research to the results of a clinical trial on pancreas stump reconstruction. Concise talks were rewarded with free parking for the presenter.

This year I would like to highlight the contributions of three members of our section, **Dr. Gwen Hollaar**, **Dr. Mike Dunham** and **Dr. Wayne Rosen**.

Dr. Gwen Hollaar has been a member of our section for over a decade. She has taken her masters of public health and applied it to International Surgery, working hard on projects that educate local doctors to provide service in communities from Uganda to Lao. She has mentored a cadre of students and staff in trips to these locations. She developed a hernia repair course to improve on very high recurrence rates in the developing world. Gwen organized and chaired the Bethune Conference in Calgary several years ago. She has also held many other leadership positions in international surgery and was given the Clarence Guenter Award in International Health in 2010. Locally she has contributed to the faculty of medicine by chairing the clinical skills course, leading our office of international surgery and is now serving as Assistant Dean in Global Health Education Development. **Dr. Hollaar** is taking a well deserved sabbatical this year to work on her international health initiatives.

Dr. Mike Dunham has been a member of our section since 2006. He has been a true worker bee for us in General Surgery, Trauma and Critical Care. He has matured into a well regarded teacher and clinician. Our section has been significantly challenged over the last year with providing a new service at the South Heath Campus. Cobbling together a team to provide service in a new hospital with very few surgical beds has proven to

be a challenge. Further, opening in-patient beds and the Intensive Care Unit prior to the operating room threw a curve in our direction. **Dr. Dunham** stepped up to take on the division head job at the South Health Campus, first organizing a critical OR facility to cover the in-patients while the operating rooms were under development. He cajoled and organized surgeons from our other adult care hospitals and locums to provide acute care surgery services starting in February, 2013. Our services are now coming together at SHC thanks to his dedication.

Dr. Wayne Rosen has continued to do more than be the “best dressed surgeon” in our section. He has worked as a colorectal surgeon since 2001 and has taken an interest in medical ethics, receiving his Masters of Science in Ethics in 2005. He has contributed significantly to the Faculty of Medicine chairing the undergraduate bioethics curriculum and the Medical Skills Course since 2011.

More recently he has taken on the task of developing an Anorectal Clinic at the South Health Campus. For years the Calgary Zone has been significantly under serviced in the area of anorectal disorders. Many of these patients have suffered for years before managing to receive care. **Dr. Rosen** saw an opportunity to provide this service at the new South Health Campus and put together an outstanding program. Patients can now be referred through central triage to see a number of participating surgeons in a clinic that offers comprehensive assessment endoscopy, hemorrhoid banding and excision. Patient education with handouts is a central part of this clinic. This program is unique in Western Canada.

With help, faculty managed a win against the residents in the annual soccer tournament, overcoming a loss in softball. Congratulations to all our section members on an outstanding year.

Section Update Ophthalmology

Section Structure and Organization

Current Committees:

- Monthly business meetings (all ophthalmologists\ with privileges in the Calgary Health Zone, 3 neuro-ophthalmologists, 1 affiliated vision research scientist, and guests)
- Recruitment & Retention subcommittee chaired by the Section Chief Dr. K Romanchuk, with one representative from each subspecialty (except two when recruiting to that subspecialty) and three comprehensive ophthalmologists
- On-call subcommittee chaired by Dr. Nand Goel
- Residency Program Committee chaired by our Residency Program Director, Dr. Linda Cooper
- Fellowship Program subcommittee chaired by Dr. Andy Crichton
- Undergraduate Medical Education subcommittee chaired by Dr. John Huang
- Sectional Research subcommittee chaired by Dr. Feisal Adatia & Dr. Fiona Costello
- Grand Rounds subcommittee chaired by Dr. Andy Crichton
- Research Day subcommittee chaired by Dr. Bryce Ford
- ophthalmology, ocular oncology, retina, solid organ transplant eye clinic, & urgent eye
- Retinopathy of prematurity screening service to the Neonatal Intensive Care Units at Alberta Childrens Hospital, Foothills Medical Centre, Peter Lougheed Centre and Rockyview General Hospital
- 31,913 patients visits & 108,889 procedures/tests at Rockyview General Hospital Eye Clinic in fiscal 2012-2013
- 16,338 patient visits annually at Alberta Children's Hospital Vision Clinic in fiscal 2012-2013
- 12,589 cataract surgeries & 3,965 non-cataract eye surgeries in the contracted non-hospital surgical facilities of the Calgary Zone, Alberta Health Services in fiscal 2012-2013
- 1,935 eye surgeries at Rockyview General Hospital and 550 pediatric eye surgeries at Alberta Children's Hospital in fiscal 2012-2013

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 & Secretary-Treasurer Dr. Stan Smith)
- Calgary Ophthalmic Medical Technology Training Program at Rockyview General Hospital
- Subspecialty clinics at Rockyview General Hospital: cornea, glaucoma, Marfan syndrome-connective tissue disorders eye clinic, neuro-



Dr. Ken Romanchuk, Ophthalmology Section Chief

Membership:

Membership in the Section of Ophthalmology 2012-13			
F	Adatia	J	Huang
A	Al Ghoul	P	Huang
J	Anand	J	Kassab
ME	Ashenhurst	A	Kherani
WF	Astle	F	Kherani
AE	Ball	AH	Kirk
T	Bech-Hansen [#]	GE	Kirker
J	Bhamra	R	Lang
BP	Chow	JA	McWhae
L	Cooper	P	Mitchell
F	Costello*	RJ	Mitchell
AC	Crichton	K	Punja
RC	Culver	KG	Romanchuk
T	Demong	PR	Savage
G	Douglas	CM	Skov
AL	Ells	SS	Smith
WA	Fletcher*	S	Subramaniam*
B	Ford	JA	van Westenbrugge
PF	Gibson	KL	Verstraten
HV	Gimbel	E	Weis
N	Goel	RG	Williams
J	Gohill	J	Wong
R	Gordon	JP	Wyse
V	Hill	R	Yau
*neuro-ophthalmology			
[#] affiliated vision research scientist			

Accomplishments and Highlights

Clinical Service:

- **Dr. Jamie Bhamra** was the recipient of Master Teacher Award for 2012 in Ophthalmology.
- **Dr. Fiona Costello** was appointed the Director of the Office of Surgical Research for the Department of Surgery.
- **Dr. Howard Gimbel** received the Charles Elliot Weniger Award for Excellence at Loma Linda University in 2012.
- **Dr. Howard Gimbel** was the recipient of the Alumnus of the Year Award at Loma Linda University, Loma Linda, California on March 4, 2013.
- **Dr. John Huang** was the recipient of the 2012 Queen Elizabeth II Diamond Jubilee medal.
- **Dr. Ken Romanchuk** was the recipient of the 2012 Queen Elizabeth II Diamond Jubilee medal.
- **Dr. Bonnie Skov** received the 2012 Female Master Cross Country & Road Running Athlete of the Year Award from Athletics Alberta.
- **Dr. Stan Smith** was the recipient of the 2012 Queen Elizabeth II Diamond Jubilee medal.
- **Dr. Suresh Subramaniam** received the Associate Dean's Letter of Excellence for teaching excellence in Course 5 (Neurosciences) for medical undergraduates in the Faculty of Medicine, University of Calgary.

Education:

- **Residents:**

Residents in Ophthalmology in 2012-2013					
PGY1	F	Kassam	PGY4	M	Gooi
PGY1	M	Luong	PGY5	T	Gonder
PGY2	V	Lekhi	PGY5	S	Wood
PGY3	L	Lagrou	PGY5	A	Safarpour
PGY3	A	Muzychuk			

- **Fellows:**

Fellows in Ophthalmology in 2012-2013					
Neuro-ophthalmology (to July 31, 2012)	S	Subramaniam	Refractive (August 13, 2012 – July 26, 2013)	S	Bali
Neuro-ophthalmology (to October 4, 2012)	E	Sokolova	Retina (to December 31, 2012)	K	Hammanji
Oculoplastic Surgery	C	Archibald	Retina (from July 1, 2012)	K	Warrian
Refractive	D	Chan			

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

- **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, the number of which have increased dramatically over the years, especially since we started our residency program in ophthalmology in 2006. Many members of the section participate with these electives. Mentorship continues for several medical undergraduates undertaking small research projects.

- *Participation in local, provincial, national & international organizations:*

- **Dr. Feisal Adatia** is co-director of our sectional Research subcommittee, a reviewer for the *British Journal of Ophthalmology*, a reviewer for the *Canadian Journal of Ophthalmology*, and a reviewer for *Journal of Medical Case Reports*
- **Dr. Ahmed Al-Ghoul** performed cataract surgery teaching at Montego Bay, Jamaica with Vision Care Canada. He is a member of Vision Care Canada, Light for Sight International, the Canadian Coalition of Eye Care Professionals, and the Cataract and Corneal wet lab Instructional Training Committee of the Canadian Ophthalmological Society.
- **Dr. Michael Ashenhurst** is a member of the Advisory Board of the Canadian Ophthalmological Society, and both the Bylaws Committee and the IRNV review committee of the Eye

Physicians & Surgeons of Alberta. He is a referee for the *Canadian Journal of Ophthalmology*

- **Dr. Bill Astle** is a referee for the *Journal of the American Association for Pediatric Ophthalmology & Strabismus*, the *Journal of Cataract & Refractive Surgery*, and the *Journal of the Canadian Pediatric Society*. He is the Chair of the Allied Health Committee of the International Council of Ophthalmology, and is a member its Refractive Error Committee, Allied Health Task Committee, Evaluation Committee and Committee on Training. He is also Chair of the Colin B Glassco foundation for Children, and is a member of the Canadian national retinoblastoma strategy committee. He is also a member of the operating room committee at Alberta Children's Hospital, and also continues as a member of the advisory committee for the Calgary Ophthalmic Medical Technology Training Program at Rockyview General Hospital.
- **Dr. Jamie Bhamra** continues to participate on the Corneal Tissue Committee and Working Group of the Canadian Blood Services, as well as a medical team advisor for A Better World Canada: Ophthalmology, Kenya, and has lectured at the Banff Rural Medicine courses and Calgary Urban Medicine courses.
- **Dr. Bill Chow** continues to be an examiner for the Part 2 (LMCCQEII) process of the Medical Council of Canada, a Comprehensive Ophthalmologist Member of the Alcon Glaucoma Advisory Committee, and continues to be a member of the executive committee of the Eye Physicians & Surgeons Association of Alberta.
- **Dr. Linda Cooper** continues as the residency program director for ophthalmology at the University of Calgary and is a member of the Specialty Committee of Ophthalmology of the Royal College of Physicians & Surgeons of Canada.
- **Dr. Fiona Costello** was appointed as the Director of the Office of Surgical Research for the Department of Surgery. She continues as an oral examiner for the Royal College of Physicians and Surgeons of Canada. She is co-director of the NeuroProtection and Repair Evaluation Unit (NPREDU) of the Arresting MS Program (HBI), is co-director of our sectional research committee, a co-director of PITNET (an inter-departmental, multi-disciplinary team-based approach to optimizing neurosurgical,

visual and endocrinological treatment outcomes for patients with pituitary lesions at the University of Calgary), and a founding member of the Calgary Optic Neuritis Research Group. She is on the Editorial Boards of the *ISRN Neurology*, *Neurological Disorder Journal* and *Frontiers of Neurology*.

- **Dr. Andy Crichton** continues as an examiner in Ophthalmology for the Royal College of Physicians & Surgeons of Canada, and as a referee for the *Canadian Journal of Ophthalmology*, and the *European Journal of Ophthalmology*. He is member of the Global Glaucoma Advisory Board. He is the organizer of our annual Glaucoma Day in Calgary.
- **Dr. Thad Demong** continues as the Medical Director of the Lions Eye Bank of Southern Alberta, and is a founding and ongoing member of the Canadian Cataract Institute.
- **Dr. Gordon Douglas** organizes our monthly sectional interesting case rounds.
- **Dr. Anna Ells** continues to be the Chair of the International NO-ROP Group, the Co-Chair of the Childhood Blindness Subcommittee of the International Agency for the Prevention of Blindness in Latin America, a member of the Clinical Practice Guideline Expert Committee of the Canadian Ophthalmological Society, and was a member of the Scientific Program Committee for the World Retinopathy of Prematurity Congress III in 2012 in Shanghai, China.
- **Dr. Bill Fletcher** is Associate Head of the Division of Neurology. He is Chair of the Royal College Specialty Committee in Neurology, a member of the Neuro-Ophthalmology Research Disease Investigator Consortium (NORDIC). He was a referee for the *Journal of Neuro-Ophthalmology* and the *Canadian Journal of Neurological Sciences*.
- **Dr. Bryce Ford** continues as the chair of the University of Calgary Visual Sciences Research Day, and is an ongoing reviewer for the *Canadian Journal of Ophthalmology*, the *American Journal of Ophthalmology* and the *Journal of Glaucoma*, and is the glaucoma representative on the INRV fees review committee of the Alberta Association of Eye Physicians & Surgeons.
- **Dr. Howard Gimbel** is on the editorial board of *Clinical & Surgical Ophthalmology*, *Ophthalmology Times*, *Ocular Surgery News* and the *Video Journal of Ophthalmology*. He is a member of the Canadian subcommittee of the fellow/resident committee of the International Society of Refractive Surgery, and

is on the Board of Directors of the LASIK Institute, the advisory board to Nidek Medical and Mastel Precision Medical, and an honorary member of the Board of Directors for Operation Eyesight Universal. He is a regular referee for the *Journal of Cataract & Refractive Surgery*. He continues as Head of Ophthalmology at Loma Linda University.

- **Dr. Nand Goel** has spent many hours in 2012-2013 continuing to update the on-call in-patient consultation system in the Calgary Zone.
- **Dr. Jit Gohill** was a Visiting Professor at Dalhousie University. He participated in "Biometry U" at the Canadian Cataract Institute, and also serves on the Executive and Planning Committee of the Canadian Cataract Institute. He is a reviewer for the *Canadian Journal of Ophthalmology*. He continues as a member of the advisory committee for the Calgary Ophthalmic Medical Technology Training Program at Rockyview General Hospital.
- **Dr. Robert Gordon** is an inspector of non-hospital surgical facilities for the College of Physicians & Surgeons of Alberta, usually five times a year.
- **Dr. Vivian Hill** continues as co-chair of the ophthalmology teaching for undergraduate education at the University of Calgary (UME Course 5 Teaching Program), as a member of the course V undergraduate education planning committee of the Faculty of Medicine of the University of Calgary, as an examiner in Ophthalmology for the Royal College of Physicians & Surgeons of Canada, as a physician examiner for the Medical Council of Canada, and both as a member of the IRNV review committee and as a member of the Executive of the Eye Physicians & Surgeons of Alberta.
- **Dr. John Huang** is Chair of the Government Affairs Committee of the Alberta Medical Association, a member of the Physician Action Group of the Alberta Medical Association, a member of the Senate of the University of Calgary, a member of the Government Relations Committee of the Senate of the University of Calgary, the representative for Ophthalmology for the Department of Surgery Surgical Undergraduate Education Committee, a member of the planning committee for the University of Calgary Faculty of Medicine annual Calgary Therapeutics Course, a member of the national council for undergraduate medical directors of the Canadian Ophthalmological Society, Vice-President of the University Eye Foundation, a Board Member of Nepal Vision Charity, a trustee

for the Dr. Daniel Lupin Memorial Scholarship of the Faculty of Medicine at the University of Alberta, and a member of the executive committee of the Eye Physicians & Surgeons Association of Alberta.

- **Dr. Peter Huang** gave courses on modern management of cataracts, advanced phacoemulsification techniques to junior ophthalmologist and residents, corneal transplant and DSAEK surgery, corneal diseases, modern applications of laser refractive surgery, management of eye trauma, and glaucoma at the Lumbini Eye Institute in Bhairawa, Nepal. He also continues to serve on the Program Curriculum Committee of Joint Commission of Allied Health Personnel for Ophthalmology, and is a member of its Board. He is also a member of the Executive Committee of the American Society of Cataract and Refractive Surgery. He is a member of the advisory committee for the Roy & Joan Allen Professorship of the Faculty of Medicine, University of Calgary, and also serves on the Board of Directors of Nepal Vision Charity.
- **Dr. Amin Kherani** is President of the University Eye Foundation, the Assistant Residency Program Director in Ophthalmology at the University of Calgary, co-director of the retinal fellowship program at the University of Calgary, and Chair of the Retina Society of Alberta. He is also an organizer of the yearly Southern Alberta Retina Retreat for ophthalmology residents from U of C and U of A, retinal fellows and faculty.
- **Dr. Femida Kherani** is a reviewer for the *Canadian Journal of Ophthalmology* and the *Journal of the American Association for Pediatric Ophthalmology and Strabismus*. She also continues as a member of the American Society of Oculofacial, Plastic & Reconstructive Surgery Education Committee, and continues to serve as an oral examiner for the American Society of Oculofacial, Plastic & Reconstructive Surgery. She is a SEE international volunteer surgeon.
- **Dr. John McWhae** shares the running of the ocular oncology clinic at Rockyview General Hospital with Dr. Ezekiel Weis.
- **Dr. Patrick Mitchell** continues his work on establishing a pediatric vitreoretinal surgery service in Calgary, and is a member of the executive committee of the Eye Physicians & Surgeons Association of Alberta.
- **Dr. Rob Mitchell** continues his work in international ophthalmology.
- **Dr. Karim Punja** continues as a member of the Fees Advisory Committee of the Alberta Medical

Association and as a member of the advisory committee for the Calgary Ophthalmic Medical Technology Training Program at Rockyview General Hospital.

- **Dr. Ken Romanchuk** continues as a member of the Royal College of Physicians & Surgeons of Canada Credentials Committee, a member of the RCPSC Specialty Committee in Ophthalmology, a member of the RCPSC Regional Advisory Committee Region 1, and a member of the RCPSC Professional Development Committee. He stepped down as chair of the Maintenance of Certification of the Canadian Ophthalmological Society in June, 2012, but continues as a member of this committee. He continues as a member of the executive of the Alberta Ophthalmological Society. He performed an external review of the Department of Ophthalmology at Queen's University in October of 2012, served as a reviewer for the *Journal of the American Association for Pediatric Ophthalmology & Strabismus*, a reviewer for *Ophthalmology Case Reports*, and was grant reviewer for the Physician's Services Incorporate Foundation of Ontario.
- **Dr. Paul Savage** is very actively involved in the teaching of students enrolled in the Calgary Ophthalmic Medical Technology Training Program at Rockyview General Hospital. He is a reviewer for the *Canadian Journal of Ophthalmology*. He was an entirely voluntary Visiting Consultant to the Ho Chi Minh Eye Hospital and Cho Ray Hospital in Saigon, Vietnam in November of 2012, giving lectures and performing clinics and surgery.
- **Dr. Bonnie Skov** was Chairman of the Conjoint Accreditation Survey Team for the Canadian Medical Association of the Kingston Ophthalmic Training Centre for Ophthalmic Medical Technology on April 14-17 2012. She also received the 2012 Female Master Cross Country & Road Running Athlete of the Year Award from Athletics Alberta.
- **Dr. Stan Smith** continues as the Secretary-Treasurer of the University Eye Foundation.
- **Dr. Suresh Subramaniam** joined the neuro-ophthalmology clinics (which now run daily) at Rockyview General Hospital in August of 2012, but also as neuro-otologist in the neuro-vestibular program at the South Health Campus and a stroke neurologist in the Calgary Stroke Program at Foothills Medical Centre.
- **Dr. John van Westenbrugge** continues to serve as a reviewer for the *Journal of Refractive Surgery*.
- **Dr. Karin Verstraten** is co-chair (with Dr. Vivian Hill)

of the ophthalmology teaching for undergraduate education at the University of Calgary (UME Course 5 Teaching Program), is an examiner for the Medical Council of Canada, and is a member of the Canadian Glaucoma Clinical Research Council of the Canadian National Institute for the Blind.

- **Dr. Ezekiel Weis** continues as the provincial medical director for the ocular brachytherapy program for Alberta, and travels from Edmonton to share the running of the ocular oncology clinic in Calgary with Dr. J McWhae. He is the Section Editor for the epidemiology section of the *Canadian Journal of Ophthalmology*, and is a referee for the *Canadian Journal of Ophthalmology*, *Ophthalmology*, and the *British Journal of Ophthalmology*. He is the academic coordinator for the annual Scientific Meeting of the Eye Physicians and Surgeons of Association of Alberta held in Banff in February of each year. He received the Surgical Teacher of the Year Award for the Ophthalmology Residency at University of Alberta in 2012.
- **Dr. Geoff Williams** continues as the Site Lead for Ophthalmology at Rockyview General Hospital and continues as a member of its Laser Safety Committee, as well as co-director of the retinal fellowship program at the University of Calgary. He is also a reviewer for the *Canadian Journal of Ophthalmology*. He is also an organizer of the yearly Southern Alberta Retina Retreat for ophthalmology residents from U of C and U of A, retinal fellows and faculty.
- **Dr. Pat Wyse** remains a member of the non-hospital surgical facility committee of the College of Physicians and Surgeons of Alberta. He also holds specialized eye clinics for Marfan's/connective tissue disorders and also for solid organ transplants at Rockyview General Hospital. He is an active member of the Research subcommittee of the University Eye Foundation, and this year he spearheaded a drive to raise over \$140,000 towards the EyeSi surgical simulator.
- **Dr. Ryan Yau** took the initiative and gives an Optics Review Course to residents in ophthalmology at the University of Calgary and University of Edmonton, and serves as a comprehensive ophthalmology member of the Alberta Health & Wellness expert advisory group studying corneal collagen cross-linking procedures.

Faculty Presentations

(April 1, 2012 – March 31, 2013):

- **F Adatia.** "Giant Retinal Tears: The Fourth Port Perspective". Meeting of the Canadian Retina Society, Banff, Alberta, March 3, 2013.
- **F Adatia.** "Wet AMD: The Rare Rotten RPE Perspective". Meeting of the Canadian Retina Society, Banff, Alberta, March 1, 2013.
- **F Adatia.** "AMD Primer". FYI Optometrists Meeting, November 29, 2012.
- **F Adatia.** "Inflammatory Membranes: Surgical Solutions". Southern Alberta Retina Retreat, Calgary, Alberta, October 20, 2012.
- **F Adatia.** "Inflammatory Membranes: Surgical Solutions". Retina Canada, Niagara-on-the-Lake, Ontario, September 30, 2012.
- **F Adatia.** "Endophthalmitis". Retina Canada, Niagara-on-the-Lake, Ontario, September 29, 2012.
- **K Hammamji, N Premji, F Adatia, A Kherani & RG Williams.** "To evaluate whether optical coherence tomography (OCT) features of epiretinal membranes can predict surgical outcome". 30th Annual Surgeons' Day Research Symposium, Calgary, Alberta, June 15, 2012.
- **F Adatia.** "Combating AMD with Nutrients". Optometry/Ophthalmology Dinner Meeting, Calgary, Alberta, May 29, 2012.
- **K Hammamji, N Premji, F Adatia, A Kherani & RG Williams.** "Visual prognosis of epiretinal membrane peeling based on pre-operative optical coherence tomography findings". Ophthalmology and Visual Sciences Research Day, Calgary Alberta, May 14, 2012.
- **A Al-Ghoul.** "Chemical Burns and Limbal Stem Cell Transplant". Presentation at the Technical Session of the Annual Meeting of the Eye Physicians and Surgeons Association of Alberta, Banff, Alberta, February 23, 2013.
- **F Adatia.** Panel presentation at the Calgary Optometric Society Ophthalmology/Optometry Christmas Meeting, Calgary, Alberta, December 10, 2012.
- **A Al-Ghoul.** "Pediatric Corneal Transplantation: Current and Future Prospects". The Olga, Constance and Ludwig Kaye Annual Lecture, Department of Ophthalmology, University of Saskatchewan, Saskatoon, Saskatchewan, November, 2012.
- **AR Al-Ghoul & J Doulla.** "Simultaneous descemet stripping automated endothelial keratoplasty and phacoemulsification with intraocular lens insertion through sutureless clear corneal incision: effect on post-operative astigmatism". Update on Surgical Cornea: Advances and challenging cases. Meeting of the Canadian

- Cornea, External Disease & Refractive Surgery Society, Annual Meeting of the Canadian Ophthalmological Society, Toronto, Ontario, June 29, 2012.
- **A Muzychuk, G Rocha & A Al-Ghoul.** “Corneal morphological changes of corneal collagen crosslinking in Canada”. Update on Surgical Cornea: Advances and challenging cases. Meeting of the Canadian Cornea, External Disease & Refractive Surgery Society, Annual Meeting of the Canadian Ophthalmological Society, Toronto, Ontario, June 29, 2012.
 - **A Muzychuk, V A Penner, G Rocha & A Al-Ghoul.** “Higher order aberration outcomes of corneal collagen crosslinking in Canada”. Update on Surgical Cornea: Advances and challenging cases”. Meeting of the Canadian Cornea, External Disease & Refractive Surgery Society, Annual Meeting of the Canadian Ophthalmological Society, Toronto, Ontario, June 29, 2012.
 - **A Muzychuk, V Penner, A Al-Ghoul, M McCarthy & G Rocha.** “Corneal Collagen Cross-Linking in Western Canada”. Ophthalmology and Visual Sciences Research Day, Calgary Alberta, May 14, 2012.
 - **V Penner, A Muzychuk, G Rocha & A Al-Ghoul.** “Effects of Corneal Collagen Cross-Linking as Observed with Oculus Pentacam”. Ophthalmology and Visual Sciences Research Day, Calgary Alberta, May 14, 2012.
 - **A Al-Ghoul & J Doulla.** “Astigmatic and Refractive Outcome after Descemet-Stripping Automated Endothelial Keratoplasty using a clear corneal approach”. American Society for Cataract & Refractive Surgery, Chicago, Illinois, April 21, 2012.
 - **A Al-Ghoul & J Doulla.** “Descemet-Stripping Automated Keratoplasty in the presence of an anterior chamber intraocular lens”. Poster presentation at the American Society for Cataract & Refractive Surgery, Chicago, Illinois, April 21, 2012.
 - **W Astle.** “The role of the allied health professional – ophthalmic technicians”. Presentation to “Innovations in Eye Care Delivery: Embracing New Challenges: sponsored by the Irish College of Ophthalmologists, Dublin, December 6, 2012.
 - **W Astle.** “Can the refractive surgeon help? PRK, LASEK and LASIK in children”. Presentation to the Cataract and Refractive Surgery in Children Symposium of the 2nd World Congress of Pediatric Ophthalmology and Strabismus (WCPOS) and the meeting of the European Society for Cataract and Refractive Surgery (ESCRS), Milan, Italy, September 9, 2012.
 - **W Astle.** “How Sulcoflex can be used effectively in children”. Presentation to the European Society for Cataract and Refractive Surgery (ESCRS), Milan, Italy, September 8, 2012.
 - **W Astle.** “Making Sense of Ocular Motility Part I” and “Making Sense of Ocular Motility Part II”. Webinars for the International Joint Commission of Allied Health Personnel in Ophthalmology. 2012.
 - **W Astle.** “Laser Refractive Surgery in Children”. Webinar for the International Joint Commission of Allied Health Personnel in Ophthalmology. 2012.
 - **W Astle.** “Advances in Pediatric Cataract Surgery”. Presentation to the South Central operating room nurses. 2012.
 - **W Astle & P Huang.** “Can the Refractive Surgeon Help? PRK, LASEK & LASIK in Children”. Presentation to the Symposium on Cataract and Refractive Surgery in Children, meeting of the European Society for Cataract and Refractive Surgery, Milan, Italy, September 9, 2012.
 - **J Bhamra.** “Common Ophthalmology Problems”. Presentation at the University of Calgary Urgent Care Program, Calgary, Alberta, October 20, 2012.
 - **J Bhamra.** “Innovative technologies and techniques in Dry Eye”. Presentation to the Calgary Society of Optometrists, Calgary, Alberta, June 19, 2012.
 - **A Safarpour & J Bhamra.** “Safety and efficacy of a new approved, corneal crosslinking (CXL) protocol”. Ophthalmology and Visual Sciences Research Day, Calgary Alberta, May 14, 2012.
 - **J Bhamra.** “Red Eye Differential and Clues”. Presentation at the Alberta Society of Ophthalmic Medical Assistants Meeting, Calgary, Alberta, April 17, 2012.
 - **J Bhamra.** “Ophthalmology Practice Techniques and Slit Lamp” and “Ocular Trauma”. Presentations at the Banff Emergency Medicine for Rural Hospitals Course. January 21, 2012.
 - **M Lafontaine, C Simms, C Barbary & G Carter.** “Tips and tricks for more effective patient testing”. Canadian Society of Ophthalmic Medical Personnel, Annual Meeting of the Canadian Ophthalmological Society, Toronto, Ontario, June 29, 2012.
 - **L Cooper.** “Albinism”. Presentation to the inaugural meeting of the Canadian Chapter of the National Organization for Albinism and Hypopigmentation, May 2012.
 - **L Cooper.** “Pediatric Ophthalmology”. Presentation at the Alberta Society of Ophthalmic Medical Assistants Meeting, Calgary, Alberta, November 20, 2012.
 - **F Costello.** Guest Speaker. Canadian Retina Society meeting, Banff, Alberta, March 7-10, 2013.
 - **F Costello.** Keynote Speaker. Top 100 Summit Event, Women’s Executive Network, Calgary Alberta, February 28, 2013.

- **F Costello.** Chair of “Refining the Clinical Localization of Neuro-Ophthalmic Diagnoses: What Test is Best?”. Meeting of the North American Neuro-Ophthalmology Society, Snowbird, Utah, February 14, 2013.
- **F Costello.** “The Eye Sees What the Mind Believes”. Visiting Professor, Department of Neurology, University of Saskatchewan, Saskatoon, Saskatchewan, October 26, 2012.
- **F Costello.** “The Eye Sees What the Mind Believes”. Bachelor of Health Sciences Program Research Symposium, University of Calgary, Calgary, Alberta October 4, 2012.
- **F Costello.** “What can Ophthalmologists Teach Neurologists about the Brain?” Lecture at the Methodist Hospital, Houston, Texas, September 21, 2012.
- **F Costello.** “The Eye is Window to the Soul: Using the Afferent Visual Pathway as a Model for CNS Diseases”. Hotchkiss Brain Institute Research Day, Calgary, Alberta, June 4, 2012.
- **F Costello.** “Can’t Take the Pressure: Raised intracranial hypertension”. Canadian Society of Ophthalmic Medical Personnel, Annual Meeting of the Canadian Ophthalmological Society, Toronto, Ontario, June 29, 2012.
- **F Costello.** “Dire Diplopia”. Canadian Society of Ophthalmic Medical Personnel, Annual Meeting of the Canadian Ophthalmological Society, Toronto, Ontario, June 29, 2012.
- **F Costello.** “The Fundus Examination”. Neuro-Ophthalmology/Neuro-Vestibular Laboratory, Skills Transfer Course, American Academy of Neurology, New Orleans, Louisiana, April 24, 2012.
- **M Luong, M Deschenes, N Lodha, F Costello, G Williams & A Kherani.** “Risk factors associated with post-vitrectomy nonarteritic anterior ischemic optic neuropathy”. Poster presentation at the Annual Meeting of the Canadian Ophthalmological Society, Toronto, Ontario, June 25-30, 2012.
- **S Wood, F Costello & Y Starreveld.** “Optical coherence tomography in predicting visual recovery following decompression surgery for pituitary adenomas”. Ophthalmology and Visual Sciences Research Day, Calgary Alberta, May 14, 2012.
- **A Crichton.** “AquaFlow”. Presentation at Glaucoma Day, Calgary, Alberta March 15, 2013.
- **A Crichton & A Muzychuk.** “S3 (Pediatric) Ahmed valves for the surgical management of glaucoma in advanced age”. Presentation to the Annual Scientific Meeting of the Eye Physicians and Surgeons Association of Alberta, Banff, Alberta, February 23, 2013.
- **A Crichton.** Moderator at New Perspectives in Ophthalmology: Insight, Calgary, Alberta, November 3, 2012.
- **A Crichton.** Presentation at Insight Symposium, Montreal, Quebec. September 8, 2012.
- **A Crichton.** “Clinical Applications of New Tonometers”. Presentation at Atlantic Eye symposium, Halifax, Nova Scotia, September 28, 2012.
- **A Crichton.** “Integrating New Surgical Technique into Clinical Practice”. Presentation at Atlantic Eye symposium, Halifax, Nova Scotia, September 28, 2012.
- **A Crichton.** “Review of New Tonometers”. Presentation at Atlantic Eye symposium, Halifax, Nova Scotia, September 28, 2012.
- **F Si, SS Kent, C Hutnik, C Birt, KF Damji, PJ Harasymowycz, W Hodge, Y Pan & A Crichton.** “A randomized clinical trial of selective laser Trabeculoplasty versus argon laser trabeculoplasty in open angle glaucoma and ocular hypertension secondary to pseudoexfoliation”. Canadian Glaucoma Society, Annual Meeting of the Canadian Ophthalmological Society, Toronto, Ontario, June 27, 2012.
- **A Crichton.** “Navigating through the fog of glaucoma”. Presentation at Victoria, B.C., May 3, 2012.
- **FS Francie, S Kent, CM Hutnik, CM Birt, K Damji, P Harasymowycz, WG Hodge, Y I Pan & A Crichton.** “A prospective randomized clinical trial of selective laser trabeculoplasty versus argon laser trabeculoplasty in open angle glaucoma and ocular hypertension secondary to pseudoexfoliation” Presentation at the Meeting of the Association for Research in Vision and Ophthalmology, Fort Lauderdale, Florida. May 10, 2012.
- **A Ells.** Co-Chair of the Screening and Imaging Session of the World Retinopathy of Prematurity Congress III in Shanghai, China, October 15, 2012.
- **A Ells.** “Laser Treatment for retinopathy of prematurity”. Presentation to the World Retinopathy of Prematurity Congress III, Shanghai, China, October 16, 2012.
- **F Oloumi, R Rangayyan & A Ells.** “Computer-aided Diagnosis of Proliferative Diabetic Retinopathy. Presentation at the International Conference of IEEE Engineering in Medicine and Biology Society. Sand Diego, California. August 29, 2012.
- **K Sabri, S Shivananda, F Farrokhyar, K Whelan, W Seidlitz, A Ells & S Lee.** “An update from the Canadian Neonatal Network on the Seminal Canadian Recommendations for Evidence-based Examination of Neonates for ROP (SCREEN-ROP) study”. Clinical Update: Pediatrics, Annual Meeting of the Canadian Ophthalmological Society, Toronto, Ontario, June 29, 2012.

- **F Oloumi, R Rangayan & A Ells.** "A graphical user interface for measurement of the openness of the retinal temporal arcade". Presentation to the conference of Medical Measurements and Applications (MeMeA), Budapest, Hungary, May 18, 2012.
- **F Oloumi, R Rangayan & A Ells.** "A graphical user interface for measurement of temporal arcade angles in fundus images of the retina". Presentation at the Canadian Conference on Electrical and Computer Engineering (CCECE), Montreal, Quebec, April 29, 2012.
- **B Ford.** "Canaloplasty". Presentation at Glaucoma Day, Calgary, Alberta March 15, 2013.
- **B Ford.** "Pseudoexfoliation Surgery". Canadian Ophthalmology Practice Patterns, Calgary, Alberta, November 28, 2012.
- **B Ford.** "Is Imaging the Standard of Care?". Presentation at New Perspectives in Ophthalmology: Insight, Calgary, Alberta, November 3, 2012.
- **B Ford.** "Pseudoexfoliation syndrome: How it contrast with POAG". Clinical Update: Glaucoma. Annual Meeting of the Canadian Ophthalmological Society, Toronto, Ontario, June 28, 2012.
- **B Ford.** "Associate in a group practice". Canadian Ophthalmology Residents Society, Annual Meeting of the Canadian Ophthalmological Society, Toronto, Ontario, June 29, 2012.
- **HV Gimbel.** "Complex Cataract and Late Complication Management". Presentation at the 25th Ophthalmology Alumni Postgraduate Symposium, Loma Linda University, Loma Linda, California March 3, 2013.
- **HV Gimbel.** "The Way I Do Primary and Secondary Lens Related Surgery". Workshop at the Hawaiian Eye Meeting, Waikoloa, Hawaii, January 22, 2013.
- **HV Gimbel.** "Suture refixation and recentration of subluxated Cionni Ring-Bag-IOL complex". Video presentation at the meeting of the European Society of Cataract and Refractive Surgeons, Milan, Italy, September 9, 2012.
- **HV Gimbel.** "Incidence of cataract extraction and IOL placement after copolymer phakic IOL implantation". Presentation at the meeting of the North American Vision Excellence Group (NAVEG), August 19, 2012.
- **HV Gimbel.** "Incidence of cataract extraction and IOL placement after copolymer phakic IOL implantation". Presentation at the meeting of the American Society of Cataract and Refractive Surgery, Chicago, Illinois, April 23, 2012.
- **J Gohill.** "Intraocular lens dysphotopsias". Presentation at the Technical Session of the Annual Meeting of the Eye Physicians and Surgeons Association of Alberta, Banff, Alberta, February 23, 2013.
- **J Gohill.** "Tear Film Biochemistry". Presentation to the annual meeting of the Alberta Association of Optometrists. Calgary, Alberta. October 19, 2012.
- **J Gohill.** "Astigmatic Management". Presentation to the annual meeting of the Alberta Association of Optometrists. Calgary, Alberta. October 18, 2012.
- **J Gohill.** Moderator of the Update on Surgical Cornea: Advances and challenging cases. Meeting of the Canadian Cornea, External Disease & Refractive Surgery Society, Annual Meeting of the Canadian Ophthalmological Society, Toronto, Ontario, June 29, 2012.
- **T Gonder & J Gohill.** "Comparing methods for determining power and axis of intraocular lenses". Ophthalmology and Visual Sciences Research Day, Calgary Alberta, May 14, 2012.
- **D Rootman & T Gonder.** Moderators of Canadian Ophthalmology Residents Society, Annual Meeting of the Canadian Ophthalmological Society, Toronto, Ontario, June 29, 2012.
- **J Huang & P Huang.** "Ophthalmology Potpourri for the Psychiatrist". Update in Medicine for the Psychiatrist, Calgary, Alberta, September 22, 2012.
- **J Huang & P Huang.** "Common Eye Problems". Update in Medicine for the Psychiatrist, Calgary, Alberta, September 22, 2012.
- **J Huang, P Huang & N Goel.** "Ophthalmology Examination Skills". Evening Course Program for Family Physicians, Calgary, Alberta, September 22, 2012.
- **J Huang, P Huang & P Huang.** "Glaucoma: Current Trends and Advancements in Medical Therapeutics". Presentation to the Joint Commission of Allied Health Personnel in Ophthalmology at the Annual Meeting of the American Society of Cataract and refractive Surgery, Chicago, Illinois, April 20, 2012.
- **A Kherani & K Hammamji.** "OCT prognostication for epiretinal membranes". Novartis Research Meeting. November, 2012.
- **ME Seamone, K Milton, M Deschenes, M Hanna, A Kherani, M Fielden, & RG Williams.** "A direct comparison of spectra domain optical coherence tomography (SD-OCT) and multifocal electroretinography (mfERG) findings in early-stage hydroxychloroquine retinopathy". Presentation at Leaders in Medicine Annual Research Symposium, University of Calgary, Calgary, Alberta, October 2012.
- **A Kherani.** "Wet AMD". Presentation at Retina Canada meeting, Niagara-on-the-Lake, Ontario, September 28-30, 2012.

- **A Kherani.** "Practicing Retinal in Canada". Presentation at Retina Canada meeting, Niagara-on-the-Lake, Ontario, September 28-30, 2012.
- **AKherani.** "DiabeticRetinopathy: PracticalManagement Issues". Presentation at Retina Canada meeting, Niagara-on-the-Lake, Ontario, September 28-30, 2012.
- **A Kherani.** Moderator of "Retinal Vein Occlusion" session at Retina Canada meeting, Niagara-on-the-Lake, Ontario, September 28-30, 2012.
- **A Kherani.** "PHPV". Case presentation at Retina Canada meeting, Niagara-on-the-Lake, Ontario, September 28-30, 2012.
- **A Kherani.** "AF in AMD". Reina Imaging Workshop. Annual Meeting of the Canadian Ophthalmological Society, Toronto, Ontario, June 27, 2012.
- **A Kherani.** "Macular Holes post Retinal Detachment". Presentation at Club Vit, Banff, Alberta, June 30, 2012.
- **ME Seamone, K Milton, M Deschenes, M Hanna, A Kherani, MFielden, & RG Williams.** "A direct comparison of spectra domain optical coherence tomography (SD-OCT) and multifocal electroretinography (mfERG) findings in early-stage hydroxychloroquine retinopathy". Poster presentation at Ophthalmology and Visual Sciences Research Day, Calgary Alberta, May 14, 2012.
- **MJ Fritzel, A Fitzgerald, A Kherani, RG Williams, O Ziouzina, M Gooi, M Deschenes & M Hannah.** "Autoantibodies and Related Biomarkers in Autoimmune Eye Disease". Ophthalmology and Visual Sciences Research Day, Calgary Alberta, May 14, 2012.
- **CM DeBacker, SM Goldstein, F Kherani, DE Holck, JA Foster & WW Lee.** "Lotions, Potions, Botulinum Toxin and Fillers: Nonlaser Rejuvenation for the Ophthalmologist". Instruction Course 423 at the annual meeting of the American Academy of Ophthalmology, Chicago, Illinois, November 12, 2012.
- **SM Goldstein & F Kherani.** "Ophthalmic Dermatology: Periocular Skin Lesions". Instruction Course 514 at the annual meeting of the American Academy of Ophthalmology, Chicago, Illinois, November 13, 2012.
- **F Kherani.** "Congenital Ptosis". Canadian Ophthalmic Pathology Society, the Annual Meeting of the Canadian Ophthalmological Society, Toronto, Ontario, June 26, 2012.
- **V Lekhi.** "Journal Articles: Five year risk of progression of primary angle closure suspects to primary angle closure: a population based study". Presentation at Glaucoma Day, Calgary, Alberta March 15, 2013.
- **V Lekhi.** "Emergency Cases: A review" and "Efficiencies in Practice". Presentation at the Technical Session of the Annual Meeting of the Eye Physicians and Surgeons Association of Alberta, Banff, Alberta, February 23, 2013.
- **P Mitchell.** "Retinal Vein Occlusion". Teleconference presentation to optometrists. April 25, 2012.
- **P Mitchell.** "Pediatric Retinal Detachments/Vitrectomy Trocars & Equipment". Sothern Alberta Retina Retreat, Calgary, Alberta, October 19, 2012.
- **RMitchell.** "Glaucoma control with the gold shunt". Poster presentation at the meeting of the American Society for Cataract & Refractive Surgery, Chicago, Illinois, April, 2012.
- **RJ Mitchell.** "The Gold Shunt: An Alternative to Trabeculectomy". Poster presentation at the annual meeting of the American Academy of Ophthalmology, Chicago, Illinois, November 12, 2012.
- **R Mitchell & R Yau.** "Contrast sensitivity study with intraocular lenses". Poster presentation at the meeting of the American Society for Cataract & Refractive Surgery, Chicago, Illinois, April, 2012.
- **A Muzychuk.** "Secondary Angle Closure". Presentation at Glaucoma Day, Calgary, Alberta March 15, 2013.
- **BS Korn, D Kikkawa, MS McCracken, KG Punja, CC Annunziata, S-R Oh & N Wanumkarng.** "Optimizing Outcomes and Minimizing Complications in Oculofacial Plastic Procedures: A Case-Based Approach". Instructional Course 421 at the Annual Meeting of the American Academy of Ophthalmology, Chicago, Illinois, November 12, 2012.
- **Course Director: A Perry; Course Instructors: BR Becker, JP Edelstein, AR Harrison, ML Meldrum-Aaberg, B Bowden, KG Punja, SM Goldstein, CC Annunziata & AS Hassan.** "Workshop in Techniques of Lacrimal Intubation" Sills Transfer Course LAB306, the Annual Meeting of the American Academy of Ophthalmology, Chicago, Illinois, November 12, 2012.
- **Course Directors: C Burkat & MJ Lucarelli; Course Instructors: A Jian-Amadi, R Angrist, RK Dortzbach, R Gausas, S Goel, G Griepentrag, A Kahana, D Kikkawa, N Kim, BS Korn, DB Lyon, J McGetrick, KG Punja, NA Ramey, JG Rose Jr, JP Shovlin, MM Thakker & E Wladlis.** "Oculoplastic Surgery Anatomic Foundations, Surgical Techniques and Enhanced Results". Skills Transfer Course LAB252, the Annual Meeting of the American Academy of Ophthalmology, Chicago, Illinois, November 11, 2012.
- **K Punja.** "Orbital cellulitis – medical vs. surgical treatment". Canadian Society of Oculoplastics & Reconstructive Surgery: Oculoplastic Topics for the Comprehensive Ophthalmologist. The Annual Meeting of the Canadian Ophthalmological Society, Toronto, Ontario, June 27, 2012.

- C Archibald, **K Punja** & A Oryshak. "Granulomatous eyelid swelling". Canadian Ophthalmic Pathology Society, the Annual Meeting of the Canadian Ophthalmological Society, Toronto, Ontario, June 26, 2012.
- Moderator: B Stankovic. Panellists: S Farzavandi, JM Hwang, BGMohney, **KG Romanchuk**, JJSloper & HSteffen. "Round Table Discussion: Management of Intermittent Exotropia". 35th Meeting of the European Strabismological Association, Bucharest, Romania September 4, 2012.
- CT Scialfa, S Cordazzo, K Bubric & J Lyon. "Aging and Visual Crowding". Poster presentation at Ophthalmology and Visual Sciences Research Day, Calgary Alberta, May 14, 2012.
- **B Skov**. "Adult Strabismus Surgery". Presentation to the Calgary Society of Optometrists, Calgary, Alberta, April 3, 2012.
- **S Subramaniam** & **W Fletcher**. "Reversing Vision Loss and Preventing Optic Atrophy in Leber's Hereditary Optic Neuropathy". Poster presentation at the 39th Annual Meeting of the North American Neuro-Ophthalmology Society, Snowbird, Utah, February 9 – 14, 2013.
- **S Subramaniam**. "Optic Neuropathies". Presentation to the Ophthalmic Technologists Seminar, Calgary, Alberta, January 16 2013.
- **S Subramaniam**. "A Practical Approach to Acute Vertigo in the Emergency Room". Presentation to the Department of Emergency Medicine, Calgary, Alberta, September 6, 2012.
- **S Subramaniam**. "Ischemic Disorders of the Retina and Optic Nerve: Different Animals". Presentation to the Department of Clinical Neurosciences, Calgary, Alberta, May 11, 2012.
- **E Weis**. "The Evidence for Treatment of Lacrimal Epithelial Tumors". Presentation at the Session on Ocular Tumors: Evidence-Based Rationale for Treatment, at the combined meeting of the American Academy of Ophthalmology and the American Association of Ophthalmic Oncologists and Pathologists, November 13, 2012, Chicago, Illinois.
- **E Weis**. "Ocular Oncology". Saskatchewan Melanoma Guidelines Meeting, Regina, Saskatchewan, September 2012.
- C Waite & **E Weis**. "A predictive model for temporal artery biopsies". University of Alberta Department of Ophthalmology resident research day, Edmonton, Alberta, June, 2012.
- S Wood, A Oryshak, S Rasmussen & **E Weis**. "An acute blind painful eye with an intraocular mass". Canadian Ophthalmic Pathology Society, the Annual Meeting of the Canadian Ophthalmological Society, Toronto, Ontario, June 26, 2012.
- **K Warrian** & **RG Williams**. "Persistent subretinal fluid following successful scleral buckling surgery". Presentation to the Southern Alberta Retina Retreat, Calgary, Alberta, October 20, 2012.
- **RG Williams**. "Ophthalmic Diagnostics". Presentation at Retina Canada, Niagara-on-the-Lake, Ontario, September 29, 2012.
- **RG Williams**. "Practicing Retina in Canada – National & Provincial Issues". Presentation at Retina Canada, Niagara-on-the-Lake, Ontario, September 29, 2012.
- **RG Williams**. "Vitreoretinal Surgery". Presentation at Retina Canada, Niagara-on-the-Lake, Ontario, September 29, 2012.
- **RG Williams**. "Diabetic Retinopathy – Practical Issues". Presentation at Retina Canada, Niagara-on-the-Lake, Ontario, September 29, 2012.
- **RG Williams**. "Vitreotomy surgeries". Canadian Society of Ophthalmic Medical Personnel, Annual Meeting of the Canadian Ophthalmological Society, Toronto, Ontario, June 29, 2012.
- **L Lagrou**, **RG Williams** & **A Kherani**. "Macular hole development following vitrectomy for retinal detachment: a retrospective chart reviews". Ophthalmology and Visual Sciences Research Day, Calgary Alberta, May 14, 2012.
- **L Lagrou**, M Deschenes, **G Williams** & **A Kherani**. "Macular hole development following vitrectomy for retinal detachment". Surgical Retina. The Canadian Retina Society. Annual Meeting of the Canadian Ophthalmological Society, Toronto, Ontario, June 27, 2012.
- **L Lagrou**, **RG Williams** & **A Kherani**. "Macular hole development following vitrectomy for retinal detachment: A retrospective chart review". 30th Annual Surgeons' Day Research Symposium, Calgary, Alberta, June 15, 2012.
- **JP Wyse**, **A Kherani** & **RG Williams**. "The Surgical Time Machine – Retinal Surgeon Time Costs HSF vs. NHSF: A software facilitated model of data collection and analysis". Poster presentation at Ophthalmology and Visual Sciences Research Day, Calgary Alberta, May 14, 2012.
- **R Yau**. "Corneal Lesions & Corneal Surgery". Presentation to Alberta Optometric Association, Red Deer, Alberta, November 28, 2012.
- **M Munroe** & **R Yau**. "Maffucci Syndrome and Intracranial Chondrosarcomas: A Case Report Featuring Spontaneous Resolution of Sixth Nerve Palsy". Poster presentation at Ophthalmology and Visual Sciences Research Day, Calgary Alberta, May 14, 2012.
- **J Wong**. "Surgical Management of Angle Closure Glaucoma". Presentation at Glaucoma Day, Calgary, Alberta March 15, 2013.

- **J Wong.** “Glaucoma Surgery Update”. Presentation to Comprehensive Ophthalmology Update, Calgary, Alberta, November 15, 2012.
- **J Wong.** “Review of Glaucoma Medications”. Presentation at the Alberta Society of Ophthalmic Medical Assistants Annual Scientific Meeting, April 17, 2012.
- **P Wyse.** “Whey and Eye Clinic for Solid Organ Transplant Patients? A tapestry of co-morbidities” . Presentation at the Technical Session of the Annual Meeting of the Eye Physicians and Surgeons Association of Alberta, Banff, Alberta, February 23, 2013.
- **W Astle & LM Cooper.** HTS1: Glasses vs. observation for moderate hyperopia in young children. Pediatric Eye Disease Investigator’s Group. Funding per patient. 2012 to present.
- **W Astle & LM Cooper.** CITS: Convergence insufficiency treatment study, effectiveness of home-based therapy for symptomatic convergence insufficiency. Pediatric Eye Disease Investigator’s Group. Funding per patient. 2012 to present.
- **W Astle.** CO2: Pediatric cataract surgery Outcomes registry. Pediatric Eye Disease Investigator’s Group. Funding per patient. 2012 to present.

Faculty Research Grants (April 1, 2012 – March 31, 2013):

- **A Al-Ghoul, A Muzychuk, V Penner, G Rocha & M McCarthy.** Corneal Collagen Cross-Linking in Western Canada: A Review of Outcomes. 2007-present.
- **A Al-Ghoul A Muzychuk & G Rocha.** Pentacam Analysis of Corneal Cross Linking. University Eye Foundation. 2009-2012.
- **A Al-Ghoul.** Novel Technique for Anterior Lamellar Keratoplasty. 2012-present.
- **F Adatia (P-I), A Chandra, D Charteris, A Kherani, G Williams, P Savage, P Mitchell & K Hammamji.** The Genetic Associations of primary rhegmatogenous retinal detachment and related predisposing conditions. University Eye Foundation \$10,000 and Lions Foundation \$7,500. 2012-2014.
- **K Hammamji, N Premji, F Adatia, A Kherani, & RG Williams.** The visual prognosis of epiretinal membrane peeling on preoperative findings OCT features Sept 2011 to current.
- **F Adatia, M Modabber, S Arora & KF Damji.** Critical Review of High Quality Ophthalmology Educational Web Resources Targeting Trainees. 2012 to present.
- **F Adatia, S Kletke, S Arora, & KF Damji.** Educational and vision-assistive smartphone apps for patients: quantitative evaluation. 2012 to present.
- **F Adatia, F Kassam, GR Williams, M Fielden, P Mitchell & A Kherani.** Improving access, efficiency and communication using digital triage in a large group retina practice. 2012 to present.
- **F Adatia, J MacDonald, RG Williams, MC Deschenes, A Kirker & A Kherani.** Outcomes and Complications of Densiron 68 Intraocular Tamponade for Retinal Detachment Repairs: A Retrospective Chart Review. 2011 – present.
- **F Adatia (P-I), M Fielden (P-I) & S Teja (Co-I).** A Prospective Cohort Study of Intravitreal Ranibizumab in Chronic Central Serous Chorioretinopathy. Novartis. 2012 – present.
- **W Astle.** Outcomes of persistent fetal vasculature cataracts with primary intraocular lens implantation. 2012 to present.
- **W Astle (P-I).** Laser-assisted sub-epithelial keratectomy (LASEK) for the treatment of infantile nystagmus syndrome. 2011 to present.
- **W Astle.** Quality assurance appraisal of postoperative glaucoma incidence following primary intraocular lens implantation in infants for congenital/developmental cataracts. 2011 to present.
- **W Astle, LM Cooper & K Romanchuk.** IXT2: A randomized clinical trial of observation vs. occlusion therapy. Pediatric Eye Disease Investigator’s Group. Funding per patient. 2010-2015.
- **W Astle (P-I).** Laser-assisted epithelial keratectomy for the treatment of nystagmus associated with optic nerve hypoplasia. 2010 to present.
- **W Astle & P Huang.** Photorefractive keratoplasty (PRK) and laser-assisted subepithelial keratectomy (LASEK) for myopia and astigmatism following penetrating keratoplasty in adults. 2010 to present.
- **W Astle (P-I).** Comparison of intraocular lens power calculation formulae in pediatric eyes. 2010-2012.
- **W Astle, LM Cooper & K Romanchuk.** ATS16: Augmenting atropine treatment for amblyopia. Pediatric Eye Disease Investigator’s Group. Funding per patient. 2009 to present.
- **W Astle, LM Cooper & K Romanchuk.** X01: Correction of refractive error amblyopia. Pediatric Eye Disease Investigator’s Group. Funding per patient. 2009 to present.
- **W Astle, LM Cooper & K Romanchuk.** ATS15: Increasing patching for amblyopia. Pediatric Eye Disease Investigator’s Group. Funding per patient. 2009 to present.
- **W Astle (P-I).** Ahmed valve implants as a primary procedure in pediatric glaucoma patients. 2009 to present.

- **W Astle.** Intraocular lens database. 2009 to present.
- **W Astle & K Romanchuk.** Examining corneal hysteresis in diabetic vs. non-diabetic patients. 2007 to present.
- **W Astle (P-I), LM Cooper (P-I) & K Romanchuk K (P-I).** Down Syndrome Database. University Eye Foundation. \$5,000. 2007 to present.
- **W Astle (P-I), LM Cooper (P-I) & K Romanchuk (P-I).** Trial to establish normative pediatric ophthalmological reference values at Alberta Children's Hospital. 2007 to present.
- **W Astle & A Ells.** AT1: Extended follow-up of occlusion vs. pharmacologic therapy for moderate amblyopia (in 15 year follow-up period). Pediatric Eye Disease Investigator's Group. Funding per patient. 2000 to present.
- **F Costello (P-I).** OCTiMS Study #CFTY720D2319: A 3-year, multi-center study to evaluate optical coherence tomography as an outcome measure in patients with multiple sclerosis. Novartis. \$50,000. 2012-2015.
- **F Costello (Local P-I).** A Randomized, Double-Blind, Parallel-Group, Placebo-Controlled Study to Assess the Efficacy, Safety, Tolerability and Pharmacokinetics of BIIB033 in Subjects with First Episode of Acute Optic Neuritis Protocol No. 215ON201. Biogen Idec. 2012-2015.
- **F Costello.** The Influence of Hormonal Contraceptive Use and Reproductive Hormone Levels on Optic Neuritis in Women. University Research Grants Committee (URGC). \$16,091. 2012-2015
- **J Mah (P-I) & F Costello (C-I).** A Multicenter Collaborative Study on the Clinical Features, Expression Profiling and Quality of Life in Pediatric Fascioscapulohumeral Muscular Dystrophy (EID 24052). US FSH-Society and Muscular Dystrophy Canada. USD\$96,600. 2011-2013.
- **S Furtado (P-I), F Costello (P-I), A Lange (Co-I), J Barton (Co-I) & J Stoessl (Co-I).** Use of optical coherence tomography (OCT) in the study of Parkinson's disease and other parkinsonian syndromes. Hotchkiss Brain Institute, \$80,000.00 (\$20,000/year), 2010 – 2014.
- **F Costello (P-I), S Furtado (PI-), J Barton (C-I), A Lange (C-I) & J Stoessl (C-I).** Use of optical coherence tomography in the study of Parkinson disease and other parkinsonian syndromes. Hotchkiss Brain Institute. \$80,000. 2010-2014
- **F Costello & J Burton.** Vitamin D and baseline optical coherence tomography features of optic neuritis (VitaDON). May 2011 - December 2012.
- **F Costello (P-I).** Assessment of the Performance and Reliability of Newly Built multifocal Visual Evoked Potential Systems by Vision Sight. Biogen Idec. \$15,000. 2011 -2012.
- **F Costello (P-I), M Hill (Co-I), M Goyal (Co-I), J Mah (Co-I), J Davenport (Co-I) & R Frayne (Co-I).** Determining the relationship between chronic cerebrospinal venous insufficiency (CCSVI) and multiple sclerosis (MS): A cross-sectional, case control study comparing ultrasonography (US) and magnetic resonance venography (MRV) measures of venous patency to structural and functional outcomes in a heterogeneous MS cohort. Multiple Sclerosis Society of Canada, \$200,000.00, 2010 – 2012.
- **B Banwell, J Mah, F Costello & A Reginald.** The clinical-demographic, epidemiology, pathobiology, neuroimaging features and outcome of acute demyelination in Canadian children. Multiple Sclerosis Society of Canada \$3,273,466. 2009–2012.
- **Mah J (P-I), Costello F (Co-I), Romanchuk K (Co-I), Astle W (Co-I), Slick D (Co-I), AbouReslan W (Co-I), Wei, X-C (Co-I), Burton J (Co-I), Tellier R (Co-I), & Metz L (Co-I).** The clinical-demographic, epidemiology, pathobiology, neuroimaging features and outcome of acute demyelination in Canadian children. Multiple Sclerosis Research Foundation \$454,709, 2010 to present.
- **A Crichton & B Ford.** APOLLO: A Multicenter, Paired-Eye Comparison, Dose-Escalation, Single Dose, 24-month Study of Safety and Efficacy and Bimatoprost Preservative Free Intracameral Drug Delivery System (Bimatoprost PF 1C DDS) in Patients with Open-Angle Glaucoma. Allergan Inc, \$222,428. February 2012 to present.
- **A Crichton, B Ford & G Douglas.** ILLUMINATE: A 12-week Evaluation of Bimatoprost 0.01% (Lumigan RC) or Fixed-Combination Travoprost 0.004%-Timolol 0.05% (Duo Trav) in Patients Switched from Travoprost 0.004% (Travatan Z) Monotherapy Requiring Further IOP Reduction. Allergan Inc. \$523,000. December 2011 to present.
- **C Hutnik, C Birt, Damji, M Nicoleta & A Crichton.** A randomized clinical trial of selective laser trabeculoplasty (SLT) in medically uncontrolled open angle glaucoma who have been previously treated with complete SLT. Canadian Institute for Health Research. \$756,474. October 2012 to present.
- **A Muzychuk & A Crichton.** Clinical Utility of Tonometers: A comparative chart review of Goldmann applanation tonometry, the Tonopen, the Ocular Response Analyzer and the Pascal tonometer. June 2012 to present.
- **A Muzychuk & A Crichton.** S3 Ahmed Valves for the Surgical Management of glaucoma in advanced age. July 2012 to present.
- **T Demong.** Phakic Intraocular Lens: Canadian

- Clinical Study of Acrysof® Angle-Supported Phakic Intraocular Lenses. Alcon Research, \$20,418.94. June 2005 to September 30, 2012.
- **T Demong.** Extension to Cachet study. Alcon Research. \$2,840. 2012 ongoing.
 - K Sabri (P-I), A Lodha (P-I), **A Ells** (Co-I), **P Mitchell** (Co-I) & **A Kherani** (Co-I). The First National Retinopathy of Prematurity Survey Formulating Evidence-Based Screening Guidelines. SCREEN-ROP Study. Canadian Institute of Health Research, Ontario Ministry of Health and Long-Term Care, and Department of Surgery, McMaster University. \$600,000. 2012-2015
 - J Robitaille, **A Ells** et al. Genetic Analysis of Frizzled-4 (FZD4) and its Influence on Familial Exudative Vitreoretinopathy (FEVR), Severe Retinopathy of Prematurity (ROP), and other Associated Retinal Diseases. March of Dimes Grant, 2009-2013.
 - G Quinn (P-I), M Repka, **A Ells** & **P Mitchell**. Telemedicine Approaches to Evaluating Acute Phase Retinopathy of Prematurity – eROP. EY017014. National Institute of Health/National Eye Institute. \$15,000,000. July 2010 – June 2014.
 - **W Fletcher, F Costello & S Subramaniam.** NORDIC I₂HT₂: A multicenter, double-blind, randomized, placebo-controlled study of weight-reduction and/or low-sodium diet plus acetazolamide vs. diet plus placebo in subjects with idiopathic intracranial hypertension with mild visual loss. NORDIC Network Sites/National Institute of Health. 2011-2013.
 - **HV Gimbel.** A Multi-Centre, Double-Masked, Randomized Study to Compare the Safety, Efficacy and Acceptability of Two Investigational Eye Drop Formulations with Refresh Tears® for 3 months in Subjects with Dry Eye Disease. Protocol Number: 10078X-001. Allergan. December 2010 to October 2012.
 - **J Gohill** & S Teja. A retrospective chart review of macular schisis in postoperative pseudophakia. \$500.00. January 21, 2011 to present.
 - **J Gohill.** Manual versus automated keratometry for aligning toric intraocular lenses. March 2012 to present.
 - **P Huang, PYC Huang, W Astle & J Huang.** Comparison of results with and without intraoperative Mitomycin-C in LASEK surgery after cornea transplantation. University Eye Foundation. \$3,200. 2009-12.
 - **Kherani A** (P-I) & **Williams RG** (Co-I). A randomized, double masked active controlled Phase III study of the efficacy, safety and tolerability of repeated doses of intravitreal VEGF Trap in subjects with neovascular age-related macular degeneration (VIEW 1). Protocol #VGFT-OD 0605. Regeneron. \$84,000. 2007-2011 & 2012 to present (0910 Extension).
 - **Kherani A** (Co-I), **Williams RG** (Co-I) & Fielden M. A multicenter study of the efficacy and safety of the human anti-TNF monoclonal antibody adalimumab as maintenance therapy in subjects requiring high dose corticosteroids for active non-infectious intermediate uveitis, posterior-uveitis, or pan-uveitis. Protocol M10-877. Abbott Laboratories. \$8,000. 2010 – present.
 - **Kherani A** (Co-I), **Williams RG** (Co-I) & Fielden M. A multicenter study of the efficacy and safety of the human anti-TNF monoclonal antibody adalimumab in subjects with inactive non-infectious intermediate uveitis, posterior uveitis or pan-uveitis. Protocol M10-880. Abbott Laboratories. \$8,000. 2010 – present.
 - **Kherani A** (Co-I), **Williams RG** (Co-I) & Fielden M. VISUAL III: A multicenter study of the efficacy and safety of the human anti-TNF monoclonal antibody adalimumab in subjects with non-infectious intermediate uveitis, posterior uveitis or pan-uveitis. Protocol M11-327. NCT01148225. Abbott Laboratories. \$8,000. 2010 – present.
 - RG Williams & A Kherani. VISUAL II: Efficacy and Safety of Adalimumab in Subjects with Inactive Uveitis. NCT01124838. Abbott Laboratories. 2012 to present.
 - **A Kherani, A Kirker, RG Williams, M Fielden F Adatia & N Premji.** Outcomes and Complications of Densiron 68 intraocular tamponade for retinal detachment repairs. April 2011 to present.
 - **A Kherani, M Fielden, RG Williams, F Adatia & P Mitchell.** Optical Coherence Tomography as a prognostic tool for age-related macular degeneration. Ongoing.
 - **A Kherani, M Fielden & F Adatia.** Geographic Atrophy Study. Pfizer. 2012 to present.
 - **A Kherani, P Mitchell, RG Williams, M Fielden, & D Hardy.** Ophthalmic and gastrointestinal surgical outcomes of 2 patients on Pradaxa. December 2011 – present.
 - **A Kherani, RG Williams & M Fielden.** Ozurdex Case Series. February 2012 to present.
 - **M Fielden, A Kherani, RG Williams, F Adatia & P Mitchell.** A 24-month, Phase IIb, open-label, single arm, multicenter study assessing the efficacy and safety of an individualized, stabilization criteria-driven prn dosing regimen with 0.5-mg ranibizumab intravitreal injections applied as monotherapy in patients with visual impairment due to macular edema secondary to central retinal vein occlusion (CRVO). CRFB002E2401. Novartis. 2012 to present.
 - **M Fielden, A Kherani, RG Williams, F Adatia & P Mitchell.** A 24-month, Phase IIb, open-label, randomized, active-controlled, 3-arm, multicenter study

- assessing the efficacy and safety of an individualized, stabilization criteria-driven prn dosing regimen with 0.5mg ranibizumab intravitreal injections applied as monotherapy or with adjunctive laser photocoagulation in comparison to laser photocoagulation in patients with visual impairment due to macular edema secondary to branch retinal occlusion (BRVO). CRFB002E2402. Novartis. 2012 to present.
- **L Lagrou, A Kherani & RG Williams.** Macular Hole Development following Vitrectomy for Retinal Detachments: A Retrospective Study. University Eye Foundation. October 2010 – present.
 - **F Kherani (P-I) & J Katowitz.** Gene screening for micro-ophthalmia & anophthalmia. University Eye Foundation. 2005 – present.
 - **F Kherani & H Sarnat.** Histopathology of congenital ptosis. 2012.
 - **R Mitchell & V Lekhi.** Glaucoma control with the “gold shunt”. March 2011 to present.
 - **R Mitchell, R Yau & N Premji.** Contrast sensitivity study with intraocular lenses. June 2011 to present.
 - **K Punja, C Archibald & A Oryshak.** Oro-facial Granulomatosis – A Spectrum of Disease. August 2011 to present.
 - **K Punja, S Teja & S Rasmussen.** Isolated lacrimal gland tuberculosis. January 2011 to present.
 - **D Pacaud (PI/PD), J Mah Co-PI/PD), R Malik (Co-PI/PD), D Zochodne, KG Romanchuk (Co-PI/PD), WF Astle (Co-PI-PD) & A Nettle-Aguirre (Co-PI/PD).** Corneal confocal microscopy to detect diabetic neuropathy in children. Juvenile Diabetes Research Foundation. \$362,358.00. 2011 – present.
 - **KG Romanchuk (PI).** Intermittent Exotropia Study 1 (IXT1): A randomized trial of Bilateral lateral Rectus Recession Versus Unilateral lateral Rectus Recession with Medial Rectus Resection for Intermittent Exotropia; Pediatric Eye Disease Investigator’s Group. Funding per patient. 2011 to present.
 - **C Toth, P Podgorny, D Wile, S Furtada, R Ranaway, O Szychowsky & K Romanchuk.** “Is Peripheral Neuropathy occurring in association with Idiopathic Parkinson’s Disease, or an Iatrogenic Complication? HBI CRU award & Parkinson Society Canada award. \$53,212. 2012 to present.
 - **K Damji (P-I), K Verstraten (Co-I), G Douglas (Co-I) & M Edwards (Co-I).** Comparison stereo slide/2D/stereo digital photography to evaluate the optic nerve head in patients with glaucoma.
 - **E Weis.** Alberta Ocular Brachytherapy Operating Grant, Alberta Cancer Foundation. \$235,000. 2011-2012.
 - **Williams RG (P-I), Kherani A (Co-I) & Fielden M.** A multicenter, double-masked, parallel group, placebo-controlled study to assess the efficacy and safety of voclosporin as therapy in subjects with active non-infectious intermediate, posterior and pan-uveitis. NCT01243983. Lux Biosciences Inc. 2010 – present.
 - **RG Williams (P-I), A Kherani (Co-I) & Fielden M (Co-I).** A Canadian 12 month prospective, randomized, open label, multicenter, laser controlled Phase IIb study assessing the efficacy, safety and cost-efficacy of ranibizumab (monotherapy or combination with laser) in the treatment of diabetic macular edema (DME). NCT01135914 (RESPOND study), (Lucentis in DME). Novartis. \$60,000. 2010 – present.
 - **RG Williams, M Fielden & A Kherani.** CRYSTAL: Ranibizumab Intravitreal Injections in Patients with Visual Impairment due to Macular Edema Secondary to Central Retinal Vein Occlusion. NCT01535261. Novartis. 2012 to present.
 - **RG Williams, M Fielden & A Kherani.** BRIGHTER: Efficacy and Safety of Ranibizumab with or without Laser in Comparison to Laser in Branch Retinal Vein Occlusion. NCT01599650. Novartis. 2012 to present.
 - **RG Williams, A Kherani & M Fielden.** A direct comparison of high speed ultra-high resolution optical coherence tomography (SD-OCT) and multifocal electroretinography findings in early stage hydroxychloroquine retinopathy. January 2012 – present.
 - **RG Williams, A Kherani & M Fielden.** Choroidal neovascularization (CNV) secondary to pathological high myopia – burden of illness study. Syreon and Novartis. November 2011 – present.
 - **M Fielden, RG Williams, A Kherani & F Adatia.** Vogt-Koyanagi-Harada Disease in Southern Alberta population, a retrospective chart review. Ongoing.
 - **J Wong, M Leite, RN Wenreb, C Girkin, J Liebmann & FA Medeiros.** Confirmation of “Likely Progression” in Standard Automated Perimetry using Guided Progression Analysis. January 2011 to present.
 - **E Kaisra, S Wood, JY Wong, A Crichton & A Kherani.** Safety and Efficacy of Phacotrabeculectomy in Uveitic Glaucoma. 2011-2012.
 - **DR Almeida, JY Wong, M Belliveau, J Rayat and J Gale.** Anatomical and Visual Outcomes of Macular Hole Surgery with Short-Duration 3 day Face-Down Positioning. 2010-2012.

Workforce Planning:

Future Needs:

Section of Ophthalmology Human Resource Tracking & Planning				
changes in 2007	Cornea	2007	Dr. Tony Carlsson	resigned (now practices in Medicine Hat)
	Comprehensive ophthalmology	2007	Dr. Ellen Anderson Perno	resigned (office & laser practice in Calgary)
recruits in 2007	Neuro-ophthalmology	2007	Dr. Fiona Costello	
	Retina	2007	Dr. Jag Anand	
	Pediatric Ophthalmology	2007	Dr. Linda Cooper	
changes in 2008	Comprehensive ophthalmology	2008	Dr. Angus Kirk	became a senior surgeon (2008-12)
recruits in 2008	Cornea	2008	Dr. Ahmed Al-Ghoul	
changes in 2009	Comprehensive ophthalmology	2009	Dr. Merv Kirker	retired/last year as a senior surgeon in 2013
	Comprehensive ophthalmology	2009	Dr. Robert Gordon	retired
	Cornea	2009	Dr. Ron Jans	deceased in 2009
recruits in 2009	Glaucoma	2009	Dr. Gordon Douglas	office practice only
	Ocular Oncology	2009	Dr. Ezekiel Weis	travels from Edmonton part-time to split ocular oncology clinic with Dr. John McWhae at RGH
changes in 2010	Cornea	2010	Dr. Thad Demong	became a senior surgeon (2010-14)
	Comprehensive ophthalmology	2010	Dr. Patrick Wyse	became a senior surgeon (2010-14) & retiring from practice in 2016
recruits in 2010	Comprehensive ophthalmology	2010	Dr. Ryan Yau	
	Cornea	2010	Dr. Jamie Bhamra	
changes in 2011	Comprehensive ophthalmology	2011	Dr. Stan Smith	last year as senior surgeon (2007-11)
	Comprehensive ophthalmology	2011	Dr. Robert Lang	last year as senior surgeon (2007-11)
recruits in 2011	Vitreoretinal Surgery	2011	Dr. Feisal Adatia	
	Vitreoretinal Surgery	2011	Dr. Patrick Mitchell	
	Glaucoma	2011	Dr. Jonathan Wong	
	Ocular oncology	2011	1 position	unable to fill
changes in 2012	Comprehensive ophthalmology	2012	Dr. Peter Gibson	last year as a senior surgeon (2008-12)
	Comprehensive ophthalmology	2012	Dr. Angus Kirk	last year as a senior surgeon (2008-12)
	Comprehensive ophthalmology/ocular oncology	2012	Dr. John McWhae	off call in 2012
	Pediatrics	2012	Dr. Ken Romanchuk	became a senior surgeon (2012-16)
recruits in 2012	Neuro-ophthalmologist	2012	Dr. Suresh Subramanian	recruited through Neurology
changes in 2013				
recruits in 2013 advertised in 2012	Comprehensive ophthalmology	2013	Dr. Stephanie Dotchin	to start September 1, 2013
	Urgent Eye	2013	interview process presently underway for 2 candidates	re-advertised in 2013
recruits still planned for 2013	Comprehensive ophthalmology	2013		advertise in 2013 if approved
	Comprehensive ophthalmology	2013		advertise in 2013 if approved
	Glaucoma	2013		advertise in 2013 if approved
	Pediatric Ophthalmology	2013		advertise in 2013 (pending AFP approval for pediatric surgery at ACH) all AFP positions frozen in February 2013
	Ocular Oncology	2013		plan for 2013 pending AFP approval for 2 positions
recruits planned until 2015 (plan for one comprehensive for every 30,000 growth in population)	?Comprehensive ophthalmology	2014		
	?Pediatric ophthalmology	2014		
	?Comprehensive ophthalmology	2015		

Goals and Strategies:

- regular survey of the section of ophthalmology for recruitment needs
- recruitment is advertised, with an open & transparent recruitment 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 less resources than those incoming

Quality Assurance, Quality Improvement, and Innovation:○ *General:*

- continued Morbidity & Mortality rounds
- investigation of patient concerns brought to the attention of Section Chief by the Office of Patient Concerns, Calgary Zone, Alberta Health Services
- there are 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 at all four existing neonatal intensive care units, with plans for expansion when the neonatal intensive care unit opens at the South Health Campus 2013 and the expansion opens for the neonatal intensive care unit at Alberta Childrens Hospital; funds have been raised for the imminent purchase of an indirect diode laser for treatment of retinopathy of prematurity in the neonatal intensive care unit at Foothills Medical Centre
- funds are being raised for the EyeSi surgical simulator for residents in ophthalmology
- Dr. Fiona Costello is spearheading efforts to establish a Visual Research Unit based at Rockyview General Hospital and with links to the Hotchkiss Brain Institute to develop translational models of brain injury using ocular models of disease (multiple sclerosis, brain tumors, Parkinson disease, and neurodegenerative diseases of the aging brain)

○ *Access of Family Physicians to specialists:*

- has been improved through recruitment to positions in comprehensive ophthalmology and changes in RAAPID

○ *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 & statutory holidays in the Eye Clinic at RGH

Future Directions and Initiatives:

- our section requires additional space at RGH to accommodate expanding clinical, teaching & research needs
- we are still working towards creating our first endowed chair in ophthalmology (evolving from the current Roy & Joan Allen fund)

Section Update

Oral & Maxillofacial Surgery

Membership

The Section of Oral and Maxillofacial surgery (OMFS) has thirteen members and is consolidated at the Peter Lougheed hospital. **Dr. S. Bureau, Dr. R. Edwards, Dr. R. Goos, Dr. B. Habijanac, Dr. L. Kroetsch, Dr. M. Smith, Dr. S. Touchan, Dr. D. Vincelli and Dr. C. Young** provide call coverage while **Dr. T. Summers, Dr. D. Wakeham, Dr. B. Whitestone and Dr. H. Williams** are senior surgeons. The division provides call coverage to the Calgary zone (all five hospitals and urgent care centres) as well as southern Alberta and the Crowsnest Pass area. **Dr. N. Makhoul** has left our division and has moved to McGill University in Montreal.

Current OMFS committees

- The non-hospital surgery committee (NHSF) which manages outpatient oral and maxillofacial surgery in non-hospital surgical facilities.
- Search and selection committee regarding OMFS manpower issues.
- Hyberac oxygen committee for oral and maxillofacial surgery HBOT requirements.
- Alberta head and neck cancer committee

Clinics

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

Education

The general practice dental residents from the Foothills hospital dental clinic (**Dr. Natasha Nazarli** and **Dr. Cindy Nagel**) rotated through our service (hospital and office). Plastic surgery resident **Dr. Arezoo Astanshee** (R1) did a one month rotation through our service

this year and **Murtuzza Amirali** is a medical student at the University of Calgary who did his evidence based medical class (Medicine 440) in our division.

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 with ENT and Plastic surgery in treating head and neck cancer patients and craniofacial deformity patients.



Dr. Richard Edwards, Oral and Maxillofacial Section Chief

Section Update Orthopaedic Surgery

Section Structure and Organization

- 1.1 **Current Committees:** The Section of Orthopaedics has the following committees: Clinical Operations; Education; Research; Orthopaedic Surgery Residency Training Committee, Fellowship Committee; On-Call Committee; Full Section; various sub-committees of the Divisions listed below.
- 1.2 **Divisions and/or Programs:** The Section of Orthopaedics has the following clinical divisions: Core Orthopaedics, Orthopaedic Trauma, Joint Reconstruction/Arthroplasty, Upper Extremity, Orthopaedic Oncology, Foot and Ankle, Spine, Sport Medicine, and Pediatric Orthopaedics, as well as our Education, Research and Administration portfolios.
- 1.3 **Membership:** The Section of Orthopaedics has 53 members, which includes 7 GFT's, plus 6 retired/semi-retired orthopaedic surgeons (who provide service in our education and clinical service delivery portfolios), 7 basic scientists and 3 neurosurgeons.

Accomplishments and Highlights

- 2.1 **Clinical Service – Orthopaedics 2012-2013:** The Section welcomed four new members in the summer of 2012: Marcia Clark Joint Reconstruction, Neil White Hand and Wrist (both at FMC), Aaron Bois Shoulder and Elbow Reconstruction (PLC) and Raul Kuchinad Joint Reconstruction (RGH).

Interviews were held for positions in Academic Joint Reconstruction (2), Shoulder Reconstruction, Hand/Wrist, and Shoulder/Knee Sport Medicine recruitment in 2012/2013. The Section recruited Hand/Wrist surgeon Christina Hiscox, Shoulder/Knee surgeon Stephen French, and Academic Joint Reconstruction surgeon Eldridge Batuyong; the three new surgeons are joining the staff in the summer of 2013. The Section has also recruited a Shoulder Reconstruction

surgeon Justin LeBlanc who will be starting in the winter of 2014. Negotiations are on-going with a second Academic Joint Reconstruction candidate. The Section of Orthopaedic Surgery was designated a major tenant in the South Health Campus. Dr. Steve Miller is currently the Site Chief for Orthopaedic Surgery at South Health Campus. The South Health Campus opened successfully with clinics beginning December of 2012 and minor surgery opening in February 2013. Surgeons transferred from other sites, including 5 from FMC/McCaig (Bowen, Dhaliwal, White, Miller and Clark) and 1 from PLC (Mackenzie).



Dr. Kevin Hildebrand, Orthopaedic Surgery Section Chief
Photo Courtesy of Matthew Hayhurst

2.1.1 Faculty Accomplishments: A number of Orthopaedic Faculty received appointments, awards and grants in 2012-2013.

Dr. Maureen O'Brien was appointed the Faculty Ombudsman and Advisor on Diversity in 2012 for the Department of Surgery.

Dr. Linda Mrkonjic was the recipient for the Emergency Medicine Off Service Preceptor Award, June 2012

Dr. Walter Herzog was awarded the Killam Memorial Chair & Killam Graduate Supervision and Mentoring Award in 2012.

Dr. Cy Frank received the following appointments and awards as follows: The Killam Research Leader Award, 2012; Appointed Chief Executive Officer Alberta Innovates Health Sciences Appointed Health Council Canada Alberta Representative.

Dr. Kevin A. Hildebrand received the 2012 Andrew J. Weiland Medal for Outstanding Research in Hand Surgery from the American Foundation for Surgery of the Hand in September 2012.

Dr. Jason Werle appointed as the Zone Clinical Facility Site Chief, Rockyview General Hospital September 2012.

Dr. Carol Hutchinson, received the Goldstar Jersey Award from Undergraduate Medical Education, University of Calgary 2013.

Dr. Ken Thomas appointed Division Spine Program Chief, Section of Orthopaedics September 2012

Dr. Peter Lewkonja appointed Clerkship Director, Section of Orthopaedics 2013

Dr. Raul Kuchinad appointed Fellowship Director, Section of Orthopaedics 2013

2.2 Education

Undergraduate Medical Education

MSK

- 2012 MSK evaluations were up from 88% in 2011, to 93.2% in 2012. The overall Scores for this course have also risen from 2.39 two years ago, to 3.53 one year ago, to 3.81 in 2012. The course has seen a 100% pass rate for the past two years.

Medical Students

- There were 46 electives and 91 selectives scheduled in orthopaedic surgery during the last fiscal year.

Postgraduate Medical Education

Residents

- Six residents successfully passed the Royal College Exams: Mark DaCabra, Cinzia Gaudelli, Jeremy Lamothe, Justin LeBlanc, Ryan Martin and Brendan O'Neill. This is eleven consecutive years that all orthopaedic residents have passed the Royal College Exams.
- We had six new residents start on July 1st, 2012: Jennifer Leighton, Devin Lemmex, Chris Nielsen, Jessica Page, Natalie Rollick and Ed Schwartzenger.
- The Orthopaedic Surgery Residency Program enjoyed the following Visiting Professor and Travelling Fellow in the 2012 academic year, enhancing the resident learning experience: Dr. Timothy Daniels from the St. Michaels Hospital, University of Toronto in conjunction with the 39th Annual Alberta Orthopaedic Resident Research Day

Fellowship

- Dr. Jim Powell, orthopaedic fellowship Program Director, has eight active fellowship programs.
- Raul Kuchinad started in March, 2013 as the new Fellowship Director.
- Fellows in the orthopaedic fellowship program from April 1st, 2012 – March 31st, 2013 were as follows:

O'Brien, Catherine	Banff Sport Medicine
Alsulaimany, Hani	Combined Spine
Amritanand, Rohit	Combined Spine
Goldstein, Christina	Combined Spine
Huang, Eric	Combined Spine
Oh, Jacob	Combined Spine
Rawall, Saurabh	Combined Spine
Shamji, Mohammed	Combined Spine
Spiess, Michael	Combined Spine
Suttor, Sean	Combined Spine
Hamdi, Amre	Hand & Wrist
Alshehri, Mohammed	Joint Reconstruction
Bali, Kamal	Joint Reconstruction
Chettiar, Krissen	Joint Reconstruction
Gatha, Mark	Joint Reconstruction
Alsayegh, Samir	Paediatric Spine
Okusanya, Olanrewaju	Paediatric Spine
Alsayegh, Samir	Paediatrics
Alqahtani, Ghazi	Trauma
Arastu, Mateen	Trauma
Hunt, Stephen	Trauma
Grange, Simon	Upper Extremity

- Arthroplasty Case Rounds are held every Wednesday of the month with the 2nd Wednesday of each month being dedicated to Arthroplasty Fellowship Rounds. These rounds take place in room 0467B of the McCaig Tower and are transmitted via telehealth to the PLC, RGH and SHC.

Continuing Medical Education

- The 15th Annual Glen Edwards Day: May 25th, 2012 at the Health Sciences Centre; hosted by General Orthopaedics Division. 2012 Glen Edwards Day had 45 attendees. 2013 will be hosted by the Trauma Division.
- Afternoon in Arthroplasty: Monday, October 1, 2012, at the Radisson Hotel. This public Education course for patients waiting for or curious about Hip and Knee Replacement Surgery was well attended.
- The 40th Annual Paediatric Orthopaedic Seminar and Townsend Lecture: Friday, October 26th, 2012 at the Alberta Children's Hospital with guest speakers Dr. Simon Kelley (Toronto) and Dr. Harry Kim (Dallas) and local speakers Dr. Douglas Hedden giving the RD Dewar Lecture.
- Citywide Orthopaedic Surgery Rounds are held the third Friday of every month except July and August.
- 2012 Canadian Orthopaedic Resident Forum (CORF) was included in last years' report and 2013 Canadian Orthopaedic Resident Forum (CORF) is scheduled for April 5th – 8th at the Fairmont Palliser Hotel.

Research Highlights

The Section of Orthopaedic Surgery has been very active in research, producing 101 publications, 123 abstracts, and securing 9 new grants to the sum of \$348,725 in 2012.

In 2012 and 2013 the Research Portfolio Committee approved and awarded a total of \$77,439 in COFEF research grants.

- \$20,000 in COREF research grant available to members of Orthopaedic Surgery.
- The Research Portfolio partnered with the Spine program and awarded \$20,000 in spine research.
- The Research Portfolio partnered with the Eagles' Paediatric Scoliosis Foundation awarded \$25,000 for paediatric spine research.
- A total of \$12,529 was awarded to support resident research.

Faculty COREF Research Awards:

Dr. Rich Boorman

2012 COREF Grant Award \$20,000.00

Predicting the Outcome of Non-Operative Treatment for Chronic, Full Thickness Rotator Cuff Tears

Dr. Carmen Brauer

COREF & Eagle's Paediatric Spine Grant \$24,215

Quality Indicators in Scoliosis: A Scoping Review and Meeting of Experts

Dr. Jacques Bouchard, Dr. Ken Thomas, and Dr. Rick Hu

COREF & Spine Program Grant \$20,000

An Examination of Community Performance Before and After Total Disc Replacement Surgery for Degenerative Disc Disease: The use of Computerized Activity Monitors

Resident Research Awards

Dr. Prism Schneider

1st Place Award - Surgical Management for Non-Syndromic Congenital Patella Dislocation

2012 Alberta Orthopaedic Resident Research Day

Dr. Herman Johal

2nd Place Award - The Cost Effectiveness of Direct Lateral Interbody Fusions for the Treatment of Adult Degenerative Scoliosis

2012 Alberta Orthopaedic Resident Research Day

Dr. Randa Lawrence

2012 COREF Grant Award, \$3,320

Acute Knee Injuries: the Development of Quality Indicators

Dr. Michaela Kopka
2012 COREF Grant Award, \$309
Tryptase as a Biomarker of Post Traumatic Elbow Contracture

Dr. Spencer McLean
2012 COREF Grant Award, \$1,500
Evaluation of Hip Quality of Life Questionnaire in Active Patients Undergoing Elective Hip Arthroplasty

Dr. Luke Harmer
2012 COREF Grant Award, \$1,100
The Ethics of Surgical Care Delivery in Low and Middle Income Countries by Short Term Teams: Can we do Better?

Dr. Brendan Sheehan
2012 COREF Grant Award, \$2,200
Validation of a Wound Assessment Tool for Incisional Wound Healing in Arthroplasty Patients.

Dr. Lisa Phillips
2012 COREF Grant Award, \$4,100
Quality Indicators in the Management of Supracondylar Humeral Fractures in Children: A Family Centred Analysis of Care

Fellows' Research Awards:

The 5th Annual Fellows Research Symposium took place on Wednesday, May 9th, 2012. Presentations were given by 10 of the current fellows. It was a very successful event. Our guest adjudicator was Dr. Robert Bourne from the University of Western Ontario. Local adjudicators were Dr. Gurpreet Dhaliwal and Dr. Fabio Ferri-de-Barros. Dr. Kiefer and Dr. Le moderated the event.

The awards were as follows:

- 1st Place and recipient of the Norman Schachar Research Award was Samir Alsayegh who is a Paediatric Spine Fellow.
- 2nd Place was Christina Goldstein who is one of the Combined Spine Fellows.
- 3rd Place was Eric Huang who is also a Combined Spine fellow.

The Research Portfolio is enhancing collaboration with the McCaig Institute. Music in Motion was organized on September 18, 2012 to raise funds for bone and joint research. Part of proceeds from this fund raiser will be used to establish an organ donor program by way of purchasing bone cutting equipment.

A Faculty Research Symposium was organized in June 2013. There were 12 research presentations by orthopaedic surgeons doing research as well as a CIF presentation by a principal investigator from the McCaig Institute.

Through the McCaig Institute's annual business meeting (May 2013) equipment from the McCaig Institute was showcased to orthopaedic surgeons as a means to attract users and increase collaboration.

Challenges

3.1 Response to Issues: The Section of Orthopaedics has processes in place to deal with any issues in all domains. We endeavour to respond to these issues in a timely fashion.

3.2 Ongoing Matters and Plan of Action: Our primary challenge is with regard to resources and recruitment of staff. Recruitment of Clinician-scientists with GFT positions is a challenge in the environment today with AIHS stopping support of faculty.

3.3 Future Risks: The unknown future regarding lateral moves of staff and resources between current sites and future sites (SHC) presents challenges for recruitment. Orthopaedic residency training numbers may need to be adjusted as the increased numbers of medical students has not been matched with increased numbers of resources for the number of surgeons graduated.

We have an aging Section with retirements beginning to occur within the next 3-5 years. This demands proactive planning around recruitment.

Workforce Planning

4.1 Summary of Recruitment and Future Needs:

Orthopaedic patient volumes will continue to grow at about 5-10% per year and this will force on-going recruitments for clinical service alone. In addition, we have increasing academic needs for recruitment as our education and research programs expand. We need many more academic FTEs (ideally hard money). We believe that we should be recruiting at least 2-3 orthopaedic surgeons per year for the foreseeable future. Many, if not all, of our graduates have an interest in returning. In the fall of 2013 and beginning of 2014 we will be interviewing for positions in Trauma (2), Spine, Pediatric Orthopaedics and MSK Oncology.

4.2 Goals and Strategies: To further develop a multidisciplinary bone and joint health program in all of our portfolios (education, research [basic biomedical and clinical], clinical service delivery and administration).

4.3 Impact on other departments and regional resources: We will work with other departments as required to meet the needs of our patients (i.e.: such as the formation of the Regional Bone and Joint Health Clinical Operations Committee which comprises membership from many different departments/divisions)

Quality Assurance, Quality Improvement, and Innovation

5.1 General: The Section of Orthopaedics works with the Department of Surgery using their policies regarding this area.

The Section is in collaboration with the Bone & Joint Strategic Clinical Network to develop and implement

pathways in hip & knee arthroplasty, hip fractures, acute knee injuries and spine disorders. There are Orthopaedic Section members in active leadership roles in these pathways (Drs. Hildebrand, Werle, Mohtadi, Lewkonja, and Bouchard). In conjunction with the Bone & Joint Strategic Clinical Network there will be further development of pathways in spine (operative and non-operative streams), osteoporosis and the acute knee injury clinic.

5.2 Access of Family Physicians to specialists:

At various times through the year, individual orthopaedic surgeons must close their practice for any new referrals due to significant waitlists. The central intake and assessment model has been developed and implemented to alleviate wait lists. However waits still remain greater than 1 year to see most Orthopaedic surgeons.

5.3 Patient flow through the Emergency Department:

The orthopaedic surgeons will work with their emergency physician colleagues on this issue.

Future Directions and Initiatives

The Section of Orthopaedics will continue to work with AHS on plans for the McCaig Tower and South Health Campus facilities.

There will be a need to recruit more surgeons, but also opportunities to deliver care in new ways building on the Hip and Knee project, the Caleo clinic and the acute knee injury clinic models. We will continue to build our research and education portfolios to meet required needs.

There will be collaboration around the CFI that was newly awarded to the McCaig Institute. This entails developing a physical space and infrastructure to support future research.

Section Update Otolaryngology

Section Structure and Organization

Current Committees:

- Section Executive Committee – Chair Dr. TW Matthews
- Membership – Drs. P Park, J Dort, D Bosch, J Warshawski and D Drummond
- Resident Training Committee – Chair Dr. Doug Bosch
- Membership – Drs. S Chandarana, J Warshawski, J Brookes, J Chau, A Hui, TW Matthews (ex officio)
- Undergraduate Director – Dr. Paul Marck (R Burke)
- CME Director – Dr. J Warshawski
- Research Director – Dr. D Drummond
- Simulation Committee – Chair Dr. J Brookes
- Membership Drs. J Chau, P Park

Programs:

- Resident Training Program – the program currently accepts one and two residents on alternating years through the CaRMS process.
- Head and Neck Surgical Oncology Program
- Bone Anchored Hearing Aid Program
- Cochlear Implant Program (Adult and Children)

Accomplishments and Highlights

Professional Service

- Dr. Robert Burke served as President of the Canadian Society of Otolaryngology – Head and Neck Surgery May 2011 – May 2012
- Dr. Tom Gillis was the guest of honor at the 2012 CSO-HNS AGM and recognized as the Rockyview General Hospital distinguished Surgeon 2012.
- Dr. Beth Lange was appointed the South Health Campus Department of Surgery Site Leader and has done an excellent job establishing surgery in the new hospital.

- Dr. Park has done outstanding work in establishing Otolaryngology at the South Health Campus. The South Health Campus Otolaryngology Clinic opened in the first quarter of 2013. The first Otolaryngology surgeries are scheduled to begin June 24, 2013. The organization of services is very much patient focused and an excellent model to pursue for the Section.
- Dr. Joseph Dort became a Royal College of Physicians and Surgeons - Otolaryngology - Head and Neck Surgery Examination Board member.
- Dr. Wayne Matthews served as Royal College of Physicians and Surgeons Specialty Committee - Otolaryngology - Head and Neck Surgery, Vice Chair
- Dr. SJ Warshawski was promoted to Clinical Assistant Professor, Surgery
- Dr. J Brookes was promoted to Clinical Assistant Professor, Surgery



Dr. Wayne Matthews, Otolaryngology Section Chief

Education:**Residents**

- Dr. Monica Hoy (PGY5) graduated June 2013
- Dr. Michael Deutschman (PGY4)
- Drs. Derek Randall (PGY3)
- Dr. Deiter Fritz (PGY3)
- Dr. Jon Dautremont (PGY2)
- Dr. Kristine Smith (PGY1)
- Dr. Carrie Liu (PGY1)
- Dr. Devon Livingstone from the University of Calgary is our new PGY1 resident starting July 1, 2013

Medical Students

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

- Michael Chiu U of Calgary
- Andrew Isaac U of Alberta
- Graeme Mulholland U of Alberta
- Jennifer Amyotte U of Calgary
- Ronke Babatunde U of Alberta
- Maleka Ramji U of Alberta
- Sarah McDonald U of Ottawa
- Devon Livingstone U of Calgary
- Yashar Tashakkor UBC
- Anene Cheung U of Manitoba
- Ivy Zudhof U of Alberta
- DaveRich Pahwa U of Saskatchewan
- Mayoorendra Ravichandiran UWO
- John Basmaji Schulich School of Dentistry
- Ben Taylor Memorial University
- Lindsey MacDonald U of Manitoba
- Jonathan Yip U of Toronto
- Harshdeep Mangat U of A

Research:

The Ohlson Research Initiative (ORI) has continued to grow its program while maintaining its focus on clinical outcomes, understanding tumour biology and imaging innovation.

The ORI program has a core group of researchers as follows:

Calgary-based core

- Dr. Joseph Dort MSc, MD (Otolaryngologist – Head & Neck Surgeon, Director ORI)
- Dr. Shamir Chandarana MD (Otolaryngologist – Head & Neck Surgeon)
- Dr. T. Wayne Matthews MD (Otolaryngologist – Head & Neck Surgeon)
- Dr. John Lysack MD (Radiologist – Head & Neck Imaging)
- Dr. Mark Hudon MD (Radiologist – Head & Neck Imaging)
- Dr. Nigel Brockton PhD (Molecular Epidemiologist)
- Dr. Alex Klimowicz PhD (Functional Tissue Imaging)
- Dr. Aru Narendran MD, PhD (Medical Oncology, drug library interrogation)
- Dr. Karl Riabowol PhD (Molecular Genetics)
- Dr. Pinaki Bose PhD (Molecular Biology, postdoctoral research fellow)
- Dr. Marc Webster MD, PhD (Medical Oncology)
- Mr. Steve Nakoneshny BSc (Data Management)
- Ms. Elizabeth Kornaga MSc (Functional Tissue Imaging)
- Ms. Michelle Cavanaugh (Administrative Assistant)
- Ms. Amy Hobbs (MSc student)
- Mr. Michael Lang (MSc student)
- Ms. Mong Dang (MSc student)

University of Lethbridge Core

- Dr. Igor Kovalchuk (molecular genetics)
- Dr. Olga Kovalchuk (molecular epigenetics)

Other Academic Affiliations / Collaborations

University of British Columbia

- Dr. Catherine Poh DDS, PhD
(oral oncology, molecular biology)
Erasmus University (Rotterdam)
- Dr. Robert Baatenburg de Jong MD
(Otolaryngologist – Head & Neck Surgeon)
- Ms. Martine de Herdt MSc (student)

H. Lee Moffitt Cancer Centre (Tampa, Fl, USA)

- Dr. Tony Magliocco

The ORI, in less than 5 years of operation, is rapidly increasing the quantity and quality of its work. The collaborative, interdisciplinary model is bearing fruit as demonstrated by the increasing number of publications, research grants and students. The ORI is gaining recognition as a provincial, national and international leader in head and neck oncology research.

The academic activity of the Section faculty and residents is broadly based at all hospital sites and subspecialty areas. Research output continues to improve in quantity and quality due to the efforts of the established and newly recruited faculty. Dr. Luke Rudmik in particular is involved in a number of multi-centred clinical trials regarding the management of sinonasal disorders and is establishing this a second major research focus for the Section at the University of Calgary. Dr. Warren Yunker was awarded the 2012 University of Calgary – Department of Surgery Research Prize – \$75,000 to fund his project “Characterization of the Pediatric Upper Airway Microbiome”.

2. Section Grants, Presentations and Invited Lecturer April 2012 - March 2013

Presentations

Matthews TW, Dort JC, McDonough A: Practical Application of Fibre-optic Evaluation of Swallowing (FEES) in Head and Neck Oncology. Workshop Presentation, Annual meeting of the Canadian Society of Otolaryngology – Head and Neck Surgery, Toronto, ON. May 2012.

Liu CC, Hoy M, **Matthews TW**, Guggisberg K, Chandarana SPC: Pilomatrix Carcinoma of the Head and Neck: Case Report and Review of the Literature. Canadian Society of Otolaryngology-Head and Neck Surgery Annual Meeting. Toronto Ont. May 22, 2012 (poster presentation).

Chandarana, SP, Brockton NT, Bose P, Klimowicz AC, Kornaga E, Nakoneshny S, **Matthews TW**, Magliocco A, Guggisberg K, Dort JC: CaIX Predicts Lymph Node Metastases and Poor Survival in Surgically Treated Oral Cavity Squamous Cell Carcinoma. 8th Int. Conf. on Head and Neck Cancer. Toronto, Ontario, July 2012. (poster presentation).

Bose P, Klimowicz AC, Thakur SS, Brockton NT, Kornaga E, Nakoneshny S, **Matthews TW**, Dort JC, Riabowol KT: Cytoplasmic ING1 Expression Measured by Aquanalysis is an Independent Prognostic Marker in Oral Squamous Cell Carcinoma. 8th Int Conf on Head and Neck Cancer. Toronto, Ontario, July 2012 (poster presentation).

Randall DR, Lysack JT, Hudon ME, Nakoneshny S, **Matthews TW**, Dort JC, Chandarana SP: Diagnostic Accuracy and Radiologic Features Predictive of Lymph Node Extracapsular Spread in Oral Cavity Squamous Cell Carcinoma – A Case Control Analysis. 8th Int Conf on Head and Neck Cancer. Toronto, Ontario, July 2012 (poster presentation).

Dr Warren Yunker

Publications:

Yunker WK, Hassan SF, Ferrell LB, Hicks MJ, Giannoni CM, Wesson DE, Cassady, CI, Hernandez, JA, Brandt, ML, Lopez, ME. Needle Core Biopsy in the Diagnosis of Pediatric Thyroid Neoplasms: a Single Institution Retrospective Review. Pediatric Surgery International. 2013 (Accepted January 23, 2013 – Manuscript No. PSI-D-12-00196R1

Abstracts (Poster & Oral Presentations)

Hoy M, Drummond D, Yunker WK. Medicine and Pediatric Trainee Perceptions of the Role of Pediatric Otolaryngology. 66th Canadian Society of Otolaryngology – Head & Neck Surgery Annual Meeting, Toronto, ON, May 2012. Page 4.

Research Grants

2012 University of Calgary – Department of Surgery Research Prize – \$75,000 Characterization of the Pediatric Upper Airway Microbiome

Dr. James Brookes

Deutschmann MW, Livingstone D, Cho JJ, Vanderkooi OG, **Brookes JT**. The significance of Streptococcus anginosus group in intracranial complications of pediatric rhinosinusitis. JAMA Otolaryngol Head Neck Surg. 2013 Feb;139(2):157-60. doi: 10.1001/jamaoto.2013.1369.

Tollefson TT, White D, **Brookes J**, Goudy S. Velopharyngeal insufficiency and cleft. Int J Otolaryngol. 2012;2012:864069. doi: 10.1155/2012/864069. Epub 2012 Nov 8

The significance of Streptococcus anginosus group in intracranial complications of pediatric rhinosinusitis Presented by Devon Livingston at 2012 University of Calgary Surgeon's Day. Devon Livingston was winner DR. PETER CRUSE MEMORIAL AWARD.

Dr. Doug Bosch

Workshop participant Canadian Society of Otolaryngology Head and Neck Surgery Annual Meeting May 20-22, 2012- Early Glottic Cancer

Workshop Chair- The Difficult Airway- Canadian Society of Otolaryngology Head and Neck Surgery Annual Meeting May 20-22, 2012

Dr. Shamir Chandarana

Lysack, JT, Hoy MH, Hudon ME, Nakoneshny SC, **Chandarana S**, Matthews TW, Dort JC. Impact of Neuroradiologist Second Opinion on Staging and Management of Head and Neck Cancer. (J Otolaryngol Head and Neck Surg – In Press)

Cho J, Taylor RC, Deutschmann M, Chandarana S, Marck PA. Polyethylene Implants in Nasal Septal Restoration. JAMA Facial Plast Surg. 2013 Jul;15(4):275-9.

Deutschmann M, Khalil M, Bhayana S, **Chandarana S**. Occult multifocal papillary thyroid microcarcinoma presenting as a supraclavicular mass containing anaplastic thyroid carcinoma. JAMA Otolaryngology Head Neck Surg. 2013 Apr; 139(4):415-8.

Chin CJ, Franklin JH, Turner B, Moukarbel RV, **Chandarana S**, Fung K, Yoo J, and Doyle PC.

A Novel Tool for the Objective Measurement of Neck Fibrosis: Validation in Clinical Practice. J Otolaryngol Head Neck Surg. 2012 Oct;41(5):320-6.

Chandarana S, Chanowski EJP, Casper KA, Wolf GT, Bradford CB, Worden FP, Eisbruch A, Chepeha DB. Osteocutaneous Free Tissue Transplantation for Mandibular Osteoradionecrosis. Journal of Reconstructive Surgery 2012 Oct; Epub ahead of print DOI: 10.1055/s-0032-1326731

Klimowicz AC, Bose P, Nakoneshny SC, Dean M, Huang L, **Chandarana S**, Magliocco AM, Matthews TW, Brockton NT, Dort JC. Basal Ki67 expression measured by digital image analysis is optimal for prognostication in oral squamous cell carcinoma. European Journal of Cancer 2012 Sep; 48(14):2166-74.

Chandarana S, Lee JS, Chanowski EJP, Sacco AG, Bradford CR, Wolf GT, Prince ME, Moyer JS, Eisbruch A, Worden FP, Giordano T, Kumar B, Cordell KG, Carey TE, Chepeha DB. Prevalence and Association with Outcome of p16 and EGFR in Surgically Treated Oropharyngeal and Oral Cavity Cancer Head and Neck 2012 Aug; Epub ahead of print DOI: 10.1002/hed.23087.

Bose P, Klimowicz AC, Kornaga E, Petrillo SK, Matthews TW, **Chandarana S**, Magliocco AM, Brockton NT, Dort JC. Bax expression measured by AQUA analysis is an independent prognostic marker in oral squamous cell carcinoma. BMC Cancer 2012 Aug; 12(1):332.

Chandarana S. Practical Approach: Head and Neck Cancer: Red Flags in the Family Practice Setting. Canadian Journal of Diagnosis. 2012 Aug;29(7):53-55.

Brockton NT, Klimowicz AC, Bose P, Petrillo SK, Konno M, Rudmik L, Dean M, Nakoneshny SC, Matthews TW, **Chandarana S**, Lau HY, Magliocco AM, Dort JC: High stromal carbonic anhydrase IX expression is associated with nodal metastasis and decreased survival in patients with surgically-treated oral cavity squamous cell carcinoma. Oral Oncology 2012 Jul; 48(7):615-22.

Chandarana S, Yoo J, Fung K, Franklin J, Nichols A, Doyle PC. The Use of autologous platelet and plasma products in salvage neck dissections: A blinded prospective clinical trial evaluating early and late wound healing. *Journal of Biological Regulators and Homeostatic Agents* 2012 Apr;26(2):63-70

Abstracts and Presentations

Deutschmann M, Pasioka J, Chandarana S et al. Exploring Central Neck Dissection for Well Differentiated Thyroid Cancer Amongst Surgeons in Alberta.

- 2nd World Congress on Thyroid Cancer. Toronto, ON. 2013

Deutschmann M, Pasioka J, Chandarana S et al. Practice Patterns among Thyroid Cancer Surgeons in Alberta: Extent of Central Lymph Node Dissection.

- Alberta Society of Otolaryngology – Annual General Meeting. Banff, AB. 2013
- Canadian Society of Otolaryngology – Annual General Meeting. Banff, AB. 2013

Deautremont J, Chandarana S, Dort J et al. Cost-effectiveness analysis of a post-operative clinical care pathway in head and neck surgery with microvascular reconstruction.

- Alberta Society of Otolaryngology – Annual General Meeting. Banff, AB. 2013
- Canadian Society of Otolaryngology – Annual General Meeting. Banff, AB. 2013

Bose P, Dort J, Chandarana S, et al. p16 Expression Measured by AQUA is an Independent Prognostic Factor in Oral Squamous Cell Carcinoma.

- Canadian Society of Otolaryngology – Annual General Meeting. Banff, AB. 2013

Bose P, Klimowicz AC, Chandarana S, et al. Basal Ki67 Expression Measured by Digital Image Analysis is Optimal for Prognostication in Oral Squamous Cell Carcinoma

- 8th International Conference on Head and Neck Cancer. Toronto, ON. 2012

Lysack, JT, Hoy MH, Hudon ME, Nakoneshny SC, Chandarana S, et al. The impact of reinterpretation of imaging studies on the staging and management of patients with head and neck cancer

- 8th International Conference on Head and Neck Cancer. Toronto, ON. 2012

Randall D, Lysack J, Chandarana S. Diagnostic utility of central node necrosis in predicting extracapsular spread among oral cavity squamous cell carcinoma

- Canadian Society of Otolaryngology – Annual General Meeting. Toronto, ON. 2012

Abstracts and Posters

Deutschmann M, Pasioka J, Chandarana S et al. Indications and Implications of Central Neck Dissection for Well-Differentiated Thyroid Cancer Amongst Surgeons in Alberta

- American Thyroid Association Annual Meeting – Puerto Rico. 2013

Chin-Lenn L, Chandarana S, Pasioka J et al. How Well Does a “Real-Time” MACIS Calculator Compare with the Pathologically Calculated MACIS Score for Papillary Thyroid Cancer?

- American Association of Endocrine Surgeons – Annual Meeting. Chicago, IL. 2013

Bose P, Klimowicz AC, Chandarana S, Magliocco AM, Brockton NT, Dort JC et al. Bax Expression Measured by AQUA Analysis is an Independent Prognostic Marker in Oral Squamous Cell Carcinoma

- Canadian Society of Otolaryngology Annual Meeting. Toronto, ON. 2012

Deutschmann M, Khalil M, Bhayana S, Chandarana S. A case of micropapillary thyroid carcinoma presenting with a neck mass containing anaplastic and papillary thyroid carcinoma

- Canadian Society of Otolaryngology Annual Meeting. Toronto, ON. 2012

Liu C, Hoy M, Guggisberg K, Matthews TW, Chandarana S. Pilomatrix carcinoma of the head and neck: Case report and review of the literature

- Canadian Society of Otolaryngology Annual Meeting. Toronto, ON. 2012

Invited Speaker

Chandarana S, Seikaly H, Hart R, O'Connell D.
Panel Discussion: Widespread Adaptation of the
Harmonic Scalpel in Head and Neck Surgery, in What
Procedures Is It Worth It?

- Canadian Society of Otolaryngology Annual Meeting. Banff, AB. 2013

Chandarana S

University of Calgary Continuing Medical Education
Podcast

Red Flags in Head and Neck Cancer: When to Worry

- University of Calgary Medical School. Calgary, AB. 2013

Chandarana S

University of Calgary Continuing Medical Education
for Rural Family Physicians:

When to worry about Head and Neck Cancer

- University of Calgary Medical School. Calgary, AB. 2012

Chandarana S, Dort JC, Nichols A, Lui, F.
Panel Discussion: The emerging role of biomarkers
in head and neck cancer Canadian Society of
Otolaryngology Annual Meeting. Toronto, ON. 2012

Residents Research publications, presentations, and postersDr. Monica Hoy

JT LYSACK, **M HOY**, M HUDON, S NAKONESHNY,
SP CHANDARANA, TW MATTHEWS, JC DORT.
(2013) The Impact of Neuroradiologist Second Opinion
Reporting on Staging in Head and Neck Cancer.
J Otolaryngol Head and Neck Surg. (submitted)

M HOY, A DOMER, EK PLOWMAN, R LOCH,
P BELAFSKY (2012) Causes and Diagnosis of
Dysphagia in a Tertiary Swallowing Center. Annals
of Otolaryngology & Laryngology (accepted)

LR RUDMIK, **M HOY**, SCHLOSSER R, HARVEY
R, WELCH K, LUND V, SMITH T (2012) Topical
Therapies in the Management of Chronic Rhinosinusitis:
An Evidence Based Review with Recommendations.
International Forum of Allergy & Rhinology. Epub Oct 8

Presentations

M HOY, J DORT, M HUDON, S NAKONESHNY,
J LYSACK (2012) The Impact of Neuroradiologist
Second Opinion Reporting on Head and Neck Cancer
Management. 8th International Conference on Head
and Neck Cancer. American Head and Neck Society.

M HOY, D DRUMMOND, WK YUNKER (2012)
Family Medicine and Pediatric Trainee Perceptions of the
Role of Pediatric Otolaryngology. Canadian Society of
Otolaryngology–Head and Neck Surgery Annual Meeting

M HOY, A DOMER, EK PLOWMAN, R LOCH,
P BELAFSKY (2012) Causes and Diagnosis of
Dysphagia in a Tertiary Swallow Center. American
Bronchoesophagological Association Meeting-
Combined Otolaryngological Spring Meetings.

Posters

CC LIU, **M HOY**, TW MATTHEWS, K GUGGISBERG,
S CHANDARANA (2012) Pilomatrix Carcinoma
of the Head and Neck: Case Report and Review of
the Literature. Canadian Society of Otolaryngology-
Head and Neck Surgery Annual Meeting.

Dr. Michael Deutschmann

Deutschmann MW, Livingstone D, **Cho JJ**, Vanderkooi
O, Brookes JT. The Significance of Streptococcus
milleri in Intracranial Complications of Pediatric
Rhinosinusitis. Poster presentation American Society of
Pediatric Otolaryngology Meeting, San Diego, CA, 2012.

Deutschmann MW, Livingstone D, **Cho JJW**,
Vanderkooi OG, Brookes JT. The Significance of
Streptococcus milleri in Intracranial Complications
of Pediatric Sinusitis. Poster Presentation American
Society of Pediatric Otolaryngology Annual
Meeting (ASPO) San Diego, California, USA, 2012.

Rudmik LR, Mace J, Mechor B **Deutschmann
MW**. Effect of an Ethmoid Cavity Dexamethasone
Sinu-Foam™ Mixture on Endoscopic Sinus Surgery
Outcomes in patients with Chronic Rhinosinusitis
without Nasal Polyposis: A Randomized, Double-Blind,
Placebo-controlled Trial. American Rhinologic Society
Annual Meeting San Diego, California, USA, 2012.

Livingstone DM, **Deutschmann MW**, Warshawski SJ. Forestier's Disease: A Rare Cause of Dysphagia Poster Presentation Canadian Society of Otolaryngology – Head & Neck Surgery Annual Meeting Toronto, Ontario, May 2012.

Deutschmann MW, Livingstone D, Cho JJW, Vanderkooi OG, Brookes JT. The Significance of Streptococcus anginosus group in Intracranial Complications of Pediatric Sinusitis. JAMA Otolaryngol Head Neck Surg. 2013; 139(2):157-160. Cho JJW, Taylor RC, **Deutschmann MW**, Chandarana SP, Marck PA. Nasal Septal Perforation Repair Using Medpor® (Polyethylene) Implants. JAMA Facial Plast Surg 2013. Epub; ahead of print.

Deutschmann MW, McDonough A, Dort JC, Dort E, Nakoneshny S, Matthews TW. Assessing the Safety of FEES in the Head & Neck Cancer Population. Head Neck 2012 June. Epub; ahead of print.

Dr. Kristine Smith

Presentations

Smith K, Rudmik L: Impact of Continued Medical Therapy on Chronic Rhinosinusitis. Alberta Society of Otolaryngology Annual Meeting, Banff AB, March 2013.

Dr. Carrie Liu

Liu CC, Hoy M, Matthews TW, Guggisberg K, Chandarana SPC: Pilomatrix Carcinoma of the Head and Neck: Case Report and Review of the Literature. Canadian Society of Otolaryngology-Head and Neck Surgery Annual Meeting. (poster presentation)

Dr. Derrick Randall

Derrick R. Randall, John T. Lysack, Mark E. Hudon, Kelly Guggisberg, Steve C. Nakoneshny, Joseph C. Dort, T. Wayne Matthews, and Shamir P. Chandarana. "Diagnostic utility of central node necrosis in predicting extracapsular spread among oral cavity squamous cell carcinoma." Manuscript in preparation for Head & Neck.

Derrick R. Randall, Luke R. Rudmik, Chad G. Ball, and J. Douglas Bosch. "Airway Control and Operative Management of Traumatic External Laryngotracheal Injuries: Experience from a Large Canadian Centre." Revisions pending from The Laryngoscope, May 15, 2013.

Derrick R. Randall, Marcelo Fandiño, Sylvie Langlois, Frederick K. Kozak. "The Role of V37I Homozygosity

at the GJB2 Locus in Congenital Sensorineural Hearing Loss Progression." Submitted to International Journal of Pediatric Otorhinolaryngology.

Presentations:

Derrick R. Randall, John T. Lysack, Mark E. Hudon, Kelly Guggisberg, Steve C. Nakoneshny, Joseph C. Dort, T. Wayne Matthews, and Shamir P. Chandarana. "Diagnostic utility of central node necrosis in predicting extracapsular spread among oral cavity squamous cell carcinoma." University of Calgary Surgeon's Day, Calgary, AB, June 15, 2012. (Podium)

Derrick R. Randall, Luke R. Rudmik, Chad G. Ball, and J. Douglas Bosch. "Laryngeal Trauma in Southern Alberta: A population-based analysis." Canadian Society of Otolaryngology Annual Meeting, Toronto, ON, May 20 – 22, 2012. (Podium)

Derrick R. Randall, John T. Lysack, Mark E. Hudon, Kelly Guggisberg, Steve C. Nakoneshny, Joseph C. Dort, T. Wayne Matthews, and Shamir P. Chandarana. "Radiologic Accuracy of Lymph Node Extracapsular Spread in Oral Cavity Squamous Cell Carcinoma—A Case-Control Analysis." Canadian Society of Otolaryngology Annual Meeting, Toronto, ON, May 20 – 22, 2012. (Podium)

Posters:

Justin T. Lui, **Derrick R. Randall**, and Luke R. Rudmik. "Reducing the Pre-operative Ecologic Footprint in Otolaryngology." University of Calgary Surgeons Day, Calgary, AB, November 2, 2012.

Derrick R. Randall, John T. Lysack, Mark E. Hudon, Kelly Guggisberg, Steve C. Nakoneshny, Joseph C. Dort, T. Wayne Matthews, and Shamir P. Chandarana. "Diagnostic Accuracy and Radiologic Features Predictive of Lymph Node Extracapsular Spread in Oral Cavity Squamous Cell Carcinoma—A Case-Control Analysis." 8th International Conference on Head & Neck Cancer, Toronto, ON, July 21 – 25, 2012.

Derrick R. Randall and Justin C.K. Chau. "Systematic Review of Medical Management Options in Adult-onset Otitis Media with Effusion." Canadian Society of Otolaryngology Annual Meeting, Toronto, ON, May 20 – 22, 2012.

Kristine Smith, **Derrick R. Randall**, and Luke R. Rudmik. "Isolated fracture of the hyoid bone following blunt neck trauma." Canadian Society of Otolaryngology Annual Meeting, Toronto, ON, May 20 – 22, 2012.

Challenges

Response to Issues:

- Improved access to general otolaryngology care in adults and children is being addressed through recruitment of a general otolaryngologist to the PLC and ACH in mid 2013.
- Rationalization and expansion of clinical care is being addressed by establishing an otology-neurotology focused service at the SHC in early 2013. Onsite ambulatory clinics and dedicated operating rooms are key components.

Ongoing Matters and Plan of Action:

- An aging workforce coupled with limited recruitment opportunities may stress the members of the division. The opening of the SHC operating rooms will allow recruitment of two additional Otolaryngologist –Head and Neck Surgeons to the each PLC in mid 2013. Recruitment of an additional surgeon to the SHC is planned for July 2014.

Future Risks:

- The opening of the SHC and inter-hospital transfer of 4 surgeons from the existing adult sites will result in the faculty and residents being geographically “stretched thin” and challenges in providing hospital emergency department and inpatient consultations at the adult hospitals. This will be partially addressed by recruitment to the SHC and PLC in 2013 and 2014.

Workforce Planning

An Otolaryngology Section physician resource plan 2012 – 2017 has been submitted to the Department of Surgery. This includes: Recruiting to the PLC/ACH 2013. The potential areas of practice for this recruitment have been identified as general otolaryngology (adults and children).

Recruitment of an additional otologist to the SHC for July 2014.

Recruitment of an additional surgeon to each of FMC and RGH in 2015-2016 as part of the succession of existing senior surgeons and to serve anticipated population needs. The order of the recruitment is dependent on the operating room resources at each site. The new otolaryngologists' skill sets will complement

the subspecialty focus of the site (see below) as well as the current clinical and academic priorities. Recruitment of 1-2 additional otolaryngologists to the adult hospitals in 2016 -2017.

Goals and Strategies:

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

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

Impact on other departments and regional resources:

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

Quality Assurance, Quality Improvement, and Innovation

- Significant adverse events are reviewed quarterly at Morbidity and Mortality Rounds with the goal of minimizing repetition of similar occurrences in the future. The use of real time electronic documentation of events (T-Res) has resulted in much more complete capture of significant adverse events.
- A clinical pathway to manage patients after major head and neck surgery has been developed and implemented at the FMC and has resulted in improved patient care and earlier discharge to the community.

Future Directions and Initiatives

The section is currently engaged in surgical simulation of temporal bone (middle and inner ear) surgery in the Temporal Bone (wet) Lab. Three additional drilling stations have been acquired (total of 4 stations) using funds received from the Campbell McLaurin Foundation. The lab is located in space provided by Neurosurgery in the HRIC second floor. We have acquired the equipment to allow similar cadaveric simulation of endoscopic sinus surgery and plan to locate this in the new surgical simulation facility.

Section Update

Paediatric Surgery

Section Structure and Organization

Section Executive Committee

Chair: Dr. William Hyndman Zone Clinical Section Chief, Pediatric Surgery

Membership:

- Dentistry: **Dr. M.C. Cholette**
- General Surgery: **Dr. M. Brindle**
- Neurosurgery: **Dr. W. Hader**
- Ophthalmology: **Dr. W. Astle**
- Orthopaedic Surgery: **Dr. E. Joughin**
- Otolaryngology: **Dr. D. Drummond**
- Paediatric Gynecology: **Dr. P. Brain**
- Plastic Surgery: **Dr. F. Fraulin**
- Urology: **Dr. A. Cook**

Dr. William Hyndman will continue his role as Zone Clinical Section Chief, Paediatric Surgery, until the fall of 2013.

There were 10,332 surgical procedures done at the Alberta Children's Hospital in the year 2012-2013, similar to 10,427 the year before.

The Section of Pediatric Surgery had a successful year, clinically, academically and with teaching at the University of Calgary. Members are actively involved with the teaching of Medical students and Residents.

In September 2012, the Section had an OR Retreat including; anesthesia, nursing and administrative assistants, to address some of the difficulties with respect to the OR; in particular, a shortage of pediatric anesthesiologists. This was a very informative retreat, and expanded into other areas where suggestions for improving the efficiency of the operating room were discussed. These included start times, finishing times and overall efficiency of the operating room. Since this retreat, we have had an increased number of Pediatric Anesthesiologists. There are 2 full time paediatric anesthesia fellows and a potential for recruiting an additional two anesthesiologists, who are presently in the Anesthesiology Residency Program.

Dr. Hyndman sent a proposal to the Alberta Children's Hospital Foundation, for financial support for NISQIP, the National Surgical Quality Improvement Plan for Paediatric Surgery. This would formalize quality control and follow-up.

Summer activities last year were managed, as previously, with two urgent rooms during the week, one on a Tuesday and one on a Friday, with an ability to deal with urgent cases and cancer cases which presented during the summer months. The operating room was reduced, by 50 percent in July and August, with reallocation of block booking time being done by individual division heads.



Dr. William Hyndman, Paediatric Section Chief
Photo Courtesy of Nicole Amyotte

Dentistry

Section Structure and Organization

Membership:

- There are currently 19 pediatric dentists in Calgary, 15 have AHS privileges and 2 with pending privileges:
 - Drs. Robert Barsky, Christine Bell, Marie-Claude Cholette, Sarah Hulland, J. Bradley Krusky, Orest Pilopowicz, Warren Loeppky, Allan Narvey, , Kari Stein, Sandra Schwann, Timothy Seto, Shirin Sheiny, Leonard Smith, Michele Thal and Rory Vinsky.
 - Drs. Charland and Saher: pending
- Dr. Cholette is the Interim Division Chief and Clinical Director of the ACH Dental Clinic (2011-present). Dr. Cholette had previously been the Division Chief from 1996-2008.
- Dr. Allan Narvey retired March 31st 2013.
- Dr. Len Smith has senior status and will be retiring this fall.
- Director of the Oral Health initiative for the Calgary Backpack Program through the CBE
- Chair of the Sponsorship Committee - Calgary and District Dental Society
- Dr. Bradley Krusky
 - Executive Director of Dentistry For All
- Dr. Warren Loeppky
 - Examiner, Royal College of Dentists of Canada
- Dr. Leonard Smith,
 - Chairman of the Board and Executive Director, Healthy Mouth Healthy Body. (Non-profit charitable organization dedicated to assisting children in growing up in a healthy fashion by eradicating ECC, the most common of childhood chronic diseases.)
 - Has achieved life member status for the American Board of Pediatric Dentistry as well as life member status for the American Academy of Pediatric Dentistry.
 - Associate member of the ACH Institute for maternal and child health research

Current committees

- Dr. Marie-Claude Cholette
 - Zone Division Chief and Director ACH Dental Clinic
 - Member ACH O.R. Committee
 - Member ACH Pediatric Surgery Executive Committee
 - Member ACH Leadership Committee
 - Examiner, Royal College of Dentists of Canada
- Dr. Christine Bell
 - Member of the Dental CE Committee
- Dr. Robert Barsky
 - Councillor and Examiner for the Royal College of Dentists of Canada
 - Member of the ADA&C Hospital Committee.
 - Treasurer, Canadian Dental Specialists Association
- Dr. Sarah Hulland
 - President of Alberta Academy of Pediatric Dentistry
 - Alberta representative to the Western Society of Pediatric Dentistry (WSPD)

Programs:

The outpatient pediatric dental clinic at the Alberta Children's Hospital offers care to infants, children, and adolescents who present unique dental/oral challenges, behavioral issues and/or more complex special care needs. Treatment modalities include communicative behavior guidance/ non-pharmacological behavior modification, minimal/moderate oral sedation or general anesthesia in the Alberta Children's Hospital operating room. Community pediatric dentists with privileges also provide dental care for children under general anesthesia at AHS contracted Non-Hospital surgical Facilities and participate in after-hour call services. ACH Dental Clinic 2012-2013 Workforce (2.3 FTE)

- Dr. Christine Bell (1.0 FTE).
- Dr. Marie-Claude Cholette (0.8 FTE)
- Casuals:
 - Dr. Sarah Hulland (0.1 FTE)
 - Dr. Tim Seto (0.2 FTE)
 - Dr. Michele Thal (0.1 FTE)
 - Dr. Shirin Sheiny (0.1 FTE)

- Staff orthodontist: Dr. Darrell Kemp (1/2 day q 2 months)
- Staff Oral & Maxillofacial Surgeon: Dr. Miller Smith (1/2 day q 2 months)

Accomplishments and Highlights

Clinical Service

- Expansion of dental specialty multi-disciplinary with recruitment of Dr. Miller Smith, oral & maxillofacial surgeon.
- A proposal was presented in 2011 and approved in February 2012 for the in-hospital delivery of speech appliance (pharyngeal bulb obturator or palatal lift) in ACH Dental Clinic. This service is a joint initiative between pediatric dentistry and Cleft Palate Clinic and will continue to involve close collaboration with VPI Clinic and Speech therapy services.
- The ACH Dental Clinic continues to offer NAM therapy (2005- present).
- ACH Dental maintains its accreditation by the Commission on Dental Accreditation of Canada (CDAC).

Education

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

Challenges

The greatest challenge has been the Division's inability to post for a third full time pediatric dentist position for ACH Dental Clinic due to significant delays (> 4 years) in completion of the AHS Compensation Review for dentists. Although the review is underway, there has been no resolution and posting is still on hold.

We also continue to have issues with lack of provincial funding for dental services in the Calgary Zone. We hope that the ADA&C Hospital Committee will address this serious ongoing issue.

The hospital-based dental services receive 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 challenge with inadequate funding for our services is that with the increase in cost for staff compensation, and the increase in cost of delivering services to increasing number of pediatric patients with medical compromise or disability is to deliver optimal care in within our target times.

Limited funding to support the clinical activities of the community-based Pediatric Dentists at the non-hospital surgical facility is restricting recruitment of community-based pediatric dentists by limiting access to the NHSF for insured services.

Workforce Planning

- ACH Dental Clinic: need to recruit 1.0 FTE Pediatric dentist in 2013-2014
- Community workforce: increase current workforce plan by one additional community-based pediatric dentist; under consultation.

In order to support the recruitment of 1.0 FTE hospital-based pediatric dentist, the Division of Pediatric Dentistry would require more o.r. time at the ACH.

Future Directions and Initiatives

- Completion of the Dentist Compensation Review
- Recruitment of 3rd full-time hospital-based pediatric dentist
- Goal to reduce wait time at ACH Dental Clinic by increasing workforce
- Develop a one-year post-graduate Pediatric Dentistry residency program (GPR or Fellowship)

- The ACH Dental Clinic continues to look for areas where specialized pediatric dentistry services can expand. Future areas of interest:
 - o Comprehensive Orthodontic Clinic for Special Needs patients
 - o Saliva/drooling Clinic

This year's recipient of the Distinguished Service Award for the Alberta Children's Hospital was Dr. Allan Narvey. This was to be presented at the Surgeon's Day dinner on June 21, 2013.

Dr. R. Barsky was recently asked by the Canadian Institute of Health Information to join an expert panel to provide pan Canadian information, on the use of day surgery for early childhood caries.

General Surgery

The Division of Pediatric Surgery has been productive from an educational and research point of view. Dr. Brindle has assumed the role of Division Head for The Division of Pediatric Surgery. She has also taken on the role of Associate Head of the Department of Surgery.

Dr. Richy Lee, the pediatric surgery fellow was recognized by the department of pediatrics for his teaching- receiving the off service fellows award- the first time this has been given to a surgical fellow. Dr. Wong and Dr. Lopushinsky were both recognized by the University for their contributions to undergraduate teaching.

Dr. Lopushinsky was recognized as a Master Teacher and he has acted as a mentor in medical education research. Dr. Lopushinsky continues to organize the monthly Paediatric Surgery Grand Rounds. Dr. Wong continues to act as Program Director for the Division of Pediatric General Surgery.

The ECLS program which was developed in partnership with surgery celebrated its first anniversary. As well, ongoing guidelines for the care of surgical patients have been developed and published. The division continues to have increasing emergency and elective clinical workload.

In research, Dr. Paul Beaudry was Co-PI for a \$750,000 AHIS CRIO research grant awarded: "Immunotherapy for cancer: repurposing targeted therapies with oncolytic viruses". Dr. Mary Brindle was Co-PI for a \$100,000 CIHR grant "CIHR Secondary Analysis of Databases: Canadian Pediatric Surgery Network (CAPSNet)".

Dr. Brindle also completed her Masters of Public Health in Boston and has published three papers, all as senior author. An additional paper, on which Dr. Brindle was co-author the previous year, she received recognition this year from the American Pediatric Surgical Association, as a paper of note.

All Division members have mentored numerous trainees, who have presented their research locally, nationally and internationally.

Dr. D. Sigalet has resigned as the Associate Head of the Department of Surgery and accepted a position in Doha Qatar as the Clinical Chief of Surgery of Sidar Medical and Research Center. He is in the process of recruiting for and starting up the Department of Pediatric Surgery.

Dr. W. Truong became a part of the Pediatric Surgery Department to support the Division of General Surgery until the end of August.

Gynecology

Dr. P. Brain wishes to expand her adolescent gynecological clinic at the Alberta Children's Hospital and to include the South Health Campus.

Neurosurgery

Dr. W. Hader continues as the Division Head for the division of Neurosurgery.

Dr. O. Ajani started as a Fellow in July 2012 and played very active role in the Division of Paediatric Neurosurgery over the last year.

Dr. P. Mercier, Neurosurgery Resident was awarded a Leadership Scholarship at the Outstanding Clinician Awards 2012, in recognition of his exceptional leadership qualities.

Dr. C. Gallagher continues to do cranial facial vault remodeling along with Dr. R. Frank, Plastic Surgery.

Ophthalmology

Dr. William F Astle

- Division Head for Paediatric Ophthalmology
- Working with international committees such as The International Joint Commission on Allied Health Personnel in Ophthalmology and The Colin Glassco Foundation

Dr. Ken Romanchuk

- Section Head, Division of Ophthalmology, Department of Surgery, Faculty of Medicine, University of Calgary
- Chair- Ophthalmology recruitment & retention committee
- Credentials committee, Royal College of Physicians & surgeons of Canada.
- Awarded the Queen Elizabeth II Diamond Jubilee Medal

Dr. Linda L. Cooper

- Residency Program Director, Division of Ophthalmology, Department of Surgery, University of Calgary
- Clinical & surgical teaching to ophthalmology residents as well as sitting on the Resident Selection Committee.

Accomplishments and Highlights

Clinical Service

- Retinal exams at NICU's at Alberta Children's Hospital & Peter Lougheed Hospital
- 10,886 visits to ophthalmologists in 2012

Education

- Residents
 - Ongoing teaching of 5 ophthalmology residents
 - Ongoing shadowing for pediatric residents
- Fellows
 - None at this time
- Medical Students
 - Ongoing electives of medical students
 - Research

Dr. Astle:

1. Ongoing research with the Pediatric Eye Disease Investigator Group.
2. Pediatric Cataract Surgery and Intraocular lenses
3. Refractive surgery in children
4. Pediatric Glaucoma Surgery

Dr. Romanchuk:

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

Dr. Cooper:

1. Ongoing research with the Pediatric Eye Disease Investigator Group
2. Corneal Confocal Microscopy. Juvenile Diabetes Research

Challenges

Access for urgent referrals and in-patient consults remains an on-going challenge, with wait times for non-urgent referrals to be more than one year.

Access to the OR remains a challenge as Pediatric Ophthalmologists could use more OR time. New OR time for a full-time 4th Ped Ophthalmologist will also be required

Our Ped Ophthalmologic staff is challenged by the increasingly large numbers of ROP (retinopathy of prematurity) evaluations required at all NICU sites in the city – we are short of manpower to adequately cover all hospital sites. Retcams at all NICU hospital sites would help with our manpower issues and would allow for tele ROP evaluations, thus reducing manpower strains.

In addition, a Full-Time Nurse Coordinator for ROP and other urgent consults would be helpful.

Quality Assurance, Quality Improvement, and Innovation

Pediatric Ophthalmology is part of the Vascular Birthmark Team that assess and treats children with various lesions that could affect a child's vision. These children come from Southern Alberta, British Columbia and Saskatchewan. Pediatric Ophthalmology as a team evaluate all at-risk children for ROP screening at all NICU's in Calgary. The Vision clinic has numerous specialty clinics including Vascular Birthmark evaluations, ROP follow-up, and ophthalmic plastics clinics, to augment the more general on-going Ophthalmologic and Optometric clinics.

A new Vitrectomy/Cataract machine has been purchased for the OR, and a new Retcam for the Vision Clinic has recently been approved. These two new instruments will help assess and treat our patients more effectively.

Workforce Planning

- Future Needs
Need a 4th Full-Time Pediatric Ophthalmologist with appropriate OR time

Future Directions and Initiatives

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

Orthopaedic Surgery

Dr. E. Joughin is the Head of Paediatric Orthopaedic Surgery and is involved in the Outreach Program. Dr. F. Ferri-de-Barros and Dr. David Parson continue to perform spinal surgery. Dr. S. Goldstein continues to serve as the Director of Orthopaedic Residency Training Program at the University of Calgary. Dr. D. Parsons continues to co-chair for the Royal College Examination in Orthopaedics. Dr. Ferris-de-Barros has received his Masters Degree in Health Policy - Bioethics.

Dr. G. Kiefer is involved with the Alberta Medical and Canadian Medical Association. Dr. J. Harder is taking call and is partially retired but is supporting the department when needed.

Otolaryngology

Dr. D. Drummond continues as the head of ENT. Dr. W. Yunker was awarded the University of Calgary – Department of Surgery Research Prize in 2012 and continues his research as to why some children develop large tonsils and after infections. Dr. M. Choy and Dr. J. Chau are joining the division to assist with the on-call roster.

Plastic Surgery

Section Structure and Organization

- Current Committees
- Programs: Division of Pediatric Plastic Surgery
- Membership:
 - Dr. F. Fraulin, Clinical Assistant Professor, Division Head of Pediatric Plastic Surgery
 - Dr. A.R. Harrop, Clinical Associate Professor, Section Chief of Plastic Surgery
 - Dr. D. McPhalen, Clinical Assistant Professor
 - Dr. J. Dilay, Clinical Lecturer
 - Dr. R. Frank, Clinical Lecturer

Accomplishments and Highlights

Clinical Service

- The Division of Pediatric Plastic Surgery continued its busy clinical service seeing increasing volumes in all outpatient clinics: General Plastic Surgery Clinic, Cleft Palate Clinic, and Vascular Birthmark Clinic. In addition to these weekly clinics, members of the Division are involved in other multidisciplinary clinics including: Burn Clinic, Brachial Plexus Clinic, Complex Upper Extremity Clinic, Craniofacial Clinic, Microtia Clinic, and Pediatric Gynecology Clinic.
- Dr. Ryan Frank completed his double Executive MBA from Queen's University and Cornell University. He was the inaugural recipient of the Mamdani Family Pediatric Plastic Surgery Award which helped fund his MBA. We are hopeful that Dr. Frank will be able to translate the knowledge that he has learned in his MBA to provide a solution oriented approach to patient care, both in the Plastics Clinics and in the Operating room.

Education

- The Division has seen a steady increase in the number of residents (from Plastic Surgery and other disciplines) training in Pediatric Plastic Surgery.
- Dr. Harrop was once again involved in teaching at the Spine and Peripheral Nerve Course and the Critical Thinking Course for PGY1 residents. He also gave a lecture to the Faculty of Medicine Clinical Investigator program.
- Drs. Fraulin and McPhalen were again involved in teaching at the PGY1 Core Surgical Skills Curriculum.
- On a national level, Dr. Fraulin participates in the Senior Residents Review Course.
- Dr. McPhalen completed his sixth year as an Examiner for the Royal College of Surgeons
- Medical Students
- The Division has also seen a steady increase in the number of medical students at all levels spending time in Pediatric Plastic Surgery as: shadowers, elective observers, AEBM 440 students, clinical clerks and elective clerks.
- Dr. Fraulin continues as the Plastic Surgery member on the Surgical Undergraduate Education Committee. He received the Gold Star Teaching Award for Surgery Clerkship again this past year.
- Dr. McPhalen was once again a Master Teacher and contributed over 250 hrs to teaching at the Medical School.

Research

- The Vascular Birthmark Clinic Database was integral to identifying patients treated with Beta Blockers and led to a study and publication: Sharma VK, Fraulin FOG, Dumestre D, Harrop AR, Beta-blockers for the treatment of problematic hemangiomas. Can J Plast Surg, 21 (1) 23-28, 2013.
- Dr. R. Harrop, as Director of the Office of Surgical Research was co-organizer of the 30th Annual Surgeon's Day, June 15, 2012.
- Dr. Harrop served on the PHD supervisory committee for Jacinda Larson and also as an external examiner for the PHD defense by Bhaget Singh.

- Dr. Harrop was involved in the writing of a book chapter: Gupta SK, Alassaf N, Harrop AR, Kiefer GN. Principles of Rotationplasty. Journal of the American Academy of Orthopaedic Surgeons 20(10):657-67, 2012

Administrative

- Dr. R. Harrop became the new Section Chief of Plastic Surgery in January 2013 as Dr. Robert Lindsay completed his term. Dr. Harrop finished his term in January 2013 as Director, Office of Surgical Research and Chairman, Department of Surgery Research Committee. He continues to serve on the Canadian Society of Plastic Surgeons Education Foundation as Secretary-Treasurer and as a member on the Board of Directors. He continues on many university committees.
- Dr. Fraulin became the new Division Head of Pediatric Plastic Surgery. He continues as Secretary-Treasurer for the Alberta Society of Plastic Surgery and as a Reviewer for the Canadian Journal of Plastic Surgery. He is also a member of the Plastic Surgery Executive Committee and the Plastic Surgery Residency Training Committee.

Challenges

- Response to Issues
- Ongoing Matters and Plan of Action
- Future Risks
 - Current challenges include patient volumes in the outpatient clinics. We have seen an increase in the number of urgent referrals from the Emergency room. This has displaced spots for elective referrals, which results in increased wait times for elective patients. Also, these emergency patients are often hand injuries which require splinting by the hand therapists.
 - The Members have responded to this problem by trying to increase the number of patients seen by holding an extra emergency clinic weekly. Administration has helped by increasing the LPN support and reorganizing a clerk to help flow of patients and bookings. Despite this response, lack of space, understaffing of nursing, no increase in hand therapist support, and non replacement of staff who are on sick leave, or have left for another position, provide ongoing challenges.

Workforce Planning

- Future Needs
- Goals and Strategies
- Impact on other departments and zonal resources
- Presently we have a full complement of plastic surgeons at ACH. No retirements are anticipated in the next 5 years. No recruitment is underway currently.

Quality Assurance, Quality Improvement, and Innovation

- General
- Access of Family Physicians to specialists
- Patient flow through the Emergency Department
- We have improved the flow of patients in our outpatient Plastics Clinics. We have adding a clerk in the clinic to help organize follow up appointments for patients. This prevents a phone call to our administrative assistants which had been a problem due to the volume of phone calls received.

Future Directions and Initiatives

- INTERNATIONAL WORK - Project Outreach International Children Charity: Project Peru
Dr. Fraulin and McPhalen have gone to Peru on 2 occasions for 12 day trips that include 6 days of operating on children with burn scar contractures. In 2012, they took 2 Plastic Surgery Residents as part of the 14 member team. The plan is to continue to take the 4th year Residents each year.

Pediatric Urology

Membership:

- **Dr. William Hyndman**, Clinical Associate Professor; Zone Clinical Section Chief, Pediatric Surgery; Zone Clinical Facility Chief, Alberta Children's Hospital
- **Dr. Anthony Cook**, Clinical Associate Professor; Section Chief, Pediatric Urology
- **Dr. Bryce Weber**, Clinical Associate Professor

Accomplishments and Highlights

Clinical Service

- The Division of Pediatric Urology continues to be extremely busy with respect to its clinical service and

urologic care of the children of Calgary and Southern Alberta. Additionally, members of the Division of Urology are involved with multi-disciplinary clinics including the Myelomeningocele Clinic as well as the Nephrology/Urology Joint Clinic, encompassing urological sequelae of myelomeningocele and nephro/urological disorders respectively.

- There is now a separate Paediatric Urology Call schedule from the Adult Call schedule for the Alberta Children's Hospital.

Education

- The Pediatric Urology Fellowship program continues with the arrival of Dr. Carolina Fermin in February 2013 for at least two years completing a clinical and research Pediatric Urology Fellowship.
- Further educational opportunities include medical students as well as visiting residents from other programs throughout Western Canada.
- Dr. Weber continues his involvement teaching in the PGY1 Core Clinical Surgical Skills curriculum. Furthermore Dr. Weber was involved at the national level with a Canadian Urology Association laparoscopic surgical course on an annual basis.

Research

- All the members of the Division continue to be active from a research perspective. A number of publications have either come to fruition or are pending publication at the present time.

Challenges

- Response to Issues
- Currently, the immense patient volume within Pediatric Urology continues to grow. Fortunately the Division of Urology is the first and only surgical division to acquire clinical time at the new South Health Campus, and clinics have started as of August 2013 on a at least weekly basis, serving children from the southern aspect of the city, as well as Southern Alberta. This should further facilitate streamlining of the clinical volume and enable the members of the Division of Urology to continue to see patients referred from primary care practitioners as well as other specialists in a timely fashion.

Section Update Plastic Surgery

Section Structure and Organization

Plastic Surgery Executive

- Section Head – Rob Harrop
- Resident Training Program Director – David McKenzie
- Research Director – Claire Temple-Oberle
- CME Director – Doug Humphreys
- Undergraduate Medicine Director – Frankie Fraulin
- FMC Site Chief – William de Haas
- RGH Site Chief – Mark Haugrud
- PLC Site Chief – Alan Lin
- ACH Site Chief – Frankie Fraulin
- SHC Site Chief – Robert Lindsay

Plastic Surgery Resident Training Committee

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

Membership

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

Accomplishments and Highlights

Clinical Service

- **Dr. C. 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; a cadaver simulation for hand transplantation was carried out and was attended by **Drs. C. Schrag, D. Nickerson, R. Lindsay, V. Bowen, G. Dhaliwal, R. Harrop, C. Temple-Oberle, J. Kennedy, D. McKenzie**

- **Dr. J. Dawes** opened the Calgary Mohs Surgical Centre in November, 2012; since then he has treated more than 750 skin cancer lesions with Mohs Surgery



Dr. Rob Harrop, Plastic Surgery Section Chief

- New additions to our faculty are **Dr. Farrah Yau** and **Dr. James Kennedy**. **Dr Yau** completed her plastic surgery residency and the University of British Columbia and a microsurgery fellowship at the Buncke Clinic in San Francisco. She practices at the PLC. **Dr Kennedy** completed his plastic surgery training at the University of Calgary and a fellowship in hand surgery and microsurgery at the University of Southern California. Dr. Kennedy practices at the SHC.

Education

Residents

- 2 residents are accepted to the plastic surgery training program each year.
- **Drs. Jennifer Matthews** and **Chris Doherty** successfully completed their FRCSC specialty

examinations in plastic surgery. **Dr Doherty** is now beginning a fellowship in Hand and Upper Extremity Surgery in London, Ontario. Dr Matthews is engaged in a locum in Plastic Surgery at the FMC after which she plans to pursue fellowship training in breast reconstruction

- **Dr. C. Schrag**, with the assistance of other plastic surgery faculty again oversaw the Microsurgical Skills Simulation Course on April 15-19, 2013 for the plastic surgery residents
- **Drs. C. Schrag** and **R. Harrop** (in collaboration with faculty from Clinical Neurosciences) again served as faculty in the Spine and Peripheral Nerve Course held on January 9, 2013
- **Dr. R. Harrop** served as faculty for the Faculty of Medicine Clinical Investigator Program lecture series
- **Dr. R. Harrop** served as faculty for the Department of Surgery 2012 Critical Thinking Course

Fellows/Graduate Students

- **Drs. D. McPhalen** and **R. Harrop** 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”

Medical Students

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

National and International Representation

- **Dr. E. Campbell** is presently the Chairman of the Membership Committee of the American Society of Plastic Surgeons
- **Dr. E. Campbell** served as the Chairman of the Local Host Committee for the Canadian Society of Plastic Surgeons 2013 Annual Meeting
- **Dr. G. Waslen** is presently the President of the Canadian Society of Aesthetic Plastic Surgeons
- **Dr. D. Nickerson** is serving as Co-Chairman of the Royal College of Physicians and Surgeons Plastic Surgery Exam Development Committee
- **Drs. D. Nickerson** and **D. McPhalen** serve as Oral Examiners for the Royal College of Physicians and Surgeons Plastic Surgery Exam Committee

- **Dr. D. Nickerson** is a lecturer for the Canadian Forces Health Services Advanced Military Trauma Resuscitation Program
- **Dr. D. McPhalen** is Medical Director for the Kananaskis Public Safety and Mountain Rescue Program
- **Dr. F. Fraulin** served as faculty for the 2013 Canadian Plastic Surgery Resident Review Course
- **Drs. F. Fraulin** and **D. McPhalen** continue to participate in the “Project Outreach International Charity Program” an annual mission which provides burn reconstruction surgery to children in an underserved area in Peru. The 4th year plastic surgery residents from the University of Calgary accompanied the team this year
- **Dr. D. Nickerson** participated in a “Project Medishare” mission to Haiti, serving as a visiting surgeon at the Hopital Bernard Mevs in Port-au-Prince
- **Dr. R. Harrop** serves as Secretary-Treasurer for the Canadian Society of Plastic Surgeons

Research

- **Dr. R. Frank** successfully completed his Executive MBA at Cornell-Queen’s Universities, during which he completed a major project entitled “Optimizing Trauma Room Utilization at the Alberta Children’s Hospital.”
- **Dr. C. Temple-Oberle** with the professional assistance of Jared Temple-Oberle (from the Clinical Quality Improvement Team at AHS) conducted a half-day retreat for Plastic Surgery Faculty and Residents resulting in a document entitled “Cultivating Evidence-Based Plastic Surgeons;” this document will serve as guide for future research initiatives in the Section of Plastic Surgery
- **Dr. C. Temple-Oberle** holds a research operating grant from the Canadian Breast Cancer Foundation - Ontario Chapter for the study “The use of human acellular dermal matrix in one-stage implant breast reconstruction: a multicentre, randomized, controlled trial (\$58,000 - 2012-2015).

Publications

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Dumestre D, Nickerson D. The use of cyanide antidotes in burn patients with suspected inhalation injuries in North America: a cross-sectional survey. *Journal of Burn Care and Rehabilitation*, In press.

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Temple-Oberle C, Cook E, Mychailyshyn N, Naeem H, Betger-Hahn M, MacDermid J. Development of a Breast

Reconstruction Satisfaction Questionnaire (BRECON-31): Principal Components Analysis and Clinimetric Properties. *J Surg Oncol* 2012 106 (7): 799-806.

Temple-Oberle C, Cook E, Mychailyshyn N, Naeem H, Betger-Hahn M, MacDermid J. Development of a Breast Reconstruction Satisfaction Questionnaire (BRECON-31): An Affirmative Analysis. *J Surg Oncol* 2013 107 (5): 451-455.

Challenges

- A reduction in access to time in both the main operating rooms and minor surgery clinic at the FMC in the face of reallocation of resources to the SHC has become a significant challenge. The FMC remains the primary site for programs in adult trauma, oncologic surgery, neurologic surgery, cardiac surgery and complex medical patients. These groups of patients in turn frequently require the assistance of the plastic surgical service on an urgent basis. Given the recent reductions in plastic surgery Main Operating Room time and Minor Surgery Clinic operating time, and the related problem of being unable to recruit new plastic surgeons to the FMC due to these shortages, it is becoming increasingly difficult to provide reconstructive surgery services for these programs. Furthermore the academic plastic surgeons at the FMC are having difficulties protecting themselves from clinical responsibilities in order to pursue their academic activities. Possible solutions for these problems are being examined. These include strategies for triaging these complex patients amongst the available staff surgeons and possibly repurposing some OR time at the FMC for urgent surgery and in turn moving lower acuity surgery to other acute care sites. These strategies may in turn require greater fluidity of staff surgeons between different acute care sites.
- Obtaining sufficient access to OR time for trauma and other urgent cases at all of acute care sites continues to be challenging
- Due to high clinical volumes, it has been difficult to protect the time of academic section members for research and education activities, however we are looking into novel methods of sharing patient care in an attempt to deal with this challenge.
- Recruitment of new staff for the SHC has proven to be challenging due to changing operational timelines at the site and the need to recruit both experienced plastic surgeons as well as new graduates.

- Increasing the number of academic plastic surgery faculty is a high priority for the Section, however this currently remains difficult due to unavailability of new Geographic Full-Time positions or Alternate Relationship Plans.
- Providing resident education in the area of aesthetic plastic surgery remains challenging for a variety of reasons. Drs M Haugrud, P Whidden, D. McKenzie, R Frank and R Harrop are exploring 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

- We are actively recruiting plastic surgeons for the SHC and hope to have 4 plastic surgeons in place at the SHC by the end of 2013.

Goals and Strategies

- We are looking at various means of increasing the number of academic plastic surgery faculty however as mentioned above this remains difficult without available GFT or ARP funding
- 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

- The ACH Vascular Birthmark Clinic database continues to function well and now contains demographic, treatment and outcome data on close to 1000 patients.
- A Breast Reconstruction Database is in the development phase.
- In collaboration with our Otolaryngology colleagues the Head and Neck Cancer Database

continues to collect outcomes data pertaining to patients undergoing major head and cancer resection and reconstruction. These patients also continue to receive operative and postoperative care as prescribed by a standardized clinical care pathway, which in turn has resulted in improved patient outcomes, reduced complication rates and earlier discharge from hospital

- Ethics approval has been granted for implementation of a database for identifying potential hand and face allotransplantation recipients
- We have been experimenting with various videoconferencing options in an effort to increase faculty participation in plastic surgery and hand surgery academic rounds
- In collaboration with our oncologic colleagues we are developing a more formalized and efficient process for referral of oncologic patients requiring immediate reconstruction following cancer resection
- A triage process for referral of pediatric patients from the various Emergency Departments has been working well at the ACH; we are considering expanding this to the other acute care sites
- With the assistance of colleagues in Trauma Services, Dr. D. Nickerson has implemented a Burn Database which collects demographic and outcome data on all patients admitted to the Burn Unit at FMC

Future Directions and Initiatives

While we view our Section as one which exhibits excellence in clinical care, resident education and collegiality across the entire spectrum of plastic surgery, we also recognize the need to increase our academic profile nationally and internationally. In this regards, and in the face of continually increasing volumes of complex patients, we feel that it is essential to increase our complement of academic plastic surgery faculty and also to examine novel models of clinical management which in turn would protect our members' abilities to pursue their academic interests in a more predictable manner.

Section Update

Podiatric Surgery



Dr. Francois Harton, Podiatry Section Chief
Photo Courtesy of Nicolle Amyotte

Section Structure and Organization

There are currently 11 members in the Section of Podiatric Surgery. Five of those members are taking 1:5 calls for PLC, RGH and FMC. Calls from Urgent Care centers in the area are also directed to the five podiatrists on calls. 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 were a Journal Club and Case Discussion Session is done then we proceed to business discussion.

Accomplishment and Highlights

The accomplishment done so far was attempting to finish plans that had been set in motion by our previous chief of section, Dr. Haverstock. Dr. Haverstock is irreplaceable and we only hope at this point to be able to carry forward the work that he started in his last year at the helm of our section.

Challenges

Challenges are numerous at this point. We all know too well the reality of the currently budget and expending without the financial support is currently the biggest challenge that we have to face. Our section needs residents both for present and the future of our section and profession

in this country and province. There is a lack of ability to be able to push this residency through different layers of committees and responsible persons. Our physicians are few and have private offices so no one seems to be able to really be involved to start this residency program.

Currently we are hoping to be able to open a Center for Excellence for the Diabetic Foot. That center would help centralize patient that need direct access to a Podiatric Surgeon. PLC clinics have space and physical resources but financial resources for personel has not been approved. The center does need an assistant for 2 days a weeks for calls, paperwork and referrals.

Workforce Planning

Currently I am meeting with the leaders of the South Campus and we will be discussing the possibility of our section covering this center. The person on call would have to cover all 4 hospitals making this impossible. I would like to plan on dividing the section in 2 so that there would be a south and north section. The problem again would be to have financial support to pay for someone else to be on call. The ideal situation would be to keep the current podiatrist and give them FTP for the week they are on call so this was they can close their clinic that week and would be able to see patient at all hospitals.

Quality Assurance and Improvement.

Our section this year started self reporting post op complications and issues for NHSP. We have changed the way we do our Section meeting by discussing cases that may have had complications and we changed the way we pass our patient after a week of round to avoid having patient fall though care.

Overall there has already been quite a few changes done in the past 5 months. If I was given one wish for my section it would be to have the Center for Excellence for the diabetic foot. This would allow such a better flow through of patient and would merge HPTP, Chronic Disease clinic and Internal Medicine together to bring patient with diabetic foot issue to a level of prevention rather that surgical consults for limb salvage procedure. It would make at very little cost a much better and much more efficient preventive system.

Section Update Surgical Oncology

SECTION HIGHLIGHTS

Dr. Walley Temple stepped down as Section Chief after a long and spectacularly successful tenure. He continues to head Cancer Surgery Alberta. Dr. Temple-Oberle was recruited in 2011 and has been successful in implementing a strategy to improve oncologic reconstruction. Dr. Quan has taken over leadership of the Zonal Breast Program and is working to build a comprehensive breast center.

STRATEGIC PLANNING - Synopsis

General surgical oncology: In the next five years at least two and preferably three general surgical oncologists will be required to maintain current levels of service, assuming no unexpected attrition. Recruitment priorities and clinical focus will depend on the available personnel, but could include cancer-focused colorectal surgery.

Other specialties: Within the Department of Oncology, Division of surgical oncology, comprehensive cancer care requires the commitment of other cancer focused surgical specialties including urologic oncology, head and neck oncology, plastic surgery and thoracic surgery. The present day inclusion of an oncology focused plastic surgeon provides an attractive template that could be replicated with other specialties. The five-year plan requires: one further plastic surgeon, two urologic oncologists, one thoracic surgeon and two head and neck surgeons. The new Cancer Center provides the opportunity to build the infrastructure for these staff members and in return, the Cancer Care system will receive commitment to cancer patients, leadership of clinical programs, active research programs and collaboration with other team members including translational researchers.

RESEARCH HIGHLIGHTS

Section members continue to be active in publishing and speaking on their various areas of clinical expertise. Dr. Temple holds several large grants to continue his work in Cancer Surgery Alberta and

synoptic operative reports. Dr. Bathe spent a 6 month sabbatical working on metabolomics research. Dr. Quan continues to hold several large grants for breast cancer research as well as patient safety.

PROGRAM - Synopsis

Surgical Oncology is providing leadership of the breast program. Expansion to a new comprehensive care venue should happen in 2014. Plans include incorporation of an academic infrastructure.

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

Cancer Surgery Alberta was created by Dr. Temple and the Division of Surgical Oncology and although it has expanded to a national program, its center will remain the TBCC. There are now over 26,000 patients in the database.



Dr. Greg McKinnon, Surgical Oncology Section Chief
Photo Courtesy of Dr. Greg McKinnon

The surgical oncology section provides leadership to cutaneous, sarcoma, hepatobiliary and advanced G.I. clinics. Dr. Bathe is now the provincial tumor group leader for G.I. and Dr. Mack of the provincial Sarcoma group.

EDUCATION PROGRAMS:

Training Programs:

a) Graduate: Dr. Lloyd Mack continues as program director for general surgery.

b) Postgraduate: Dr. McKinnon continues as program director for surgical oncology. The Surgical Oncology program is certified by both the Society of Surgical Oncology as well as the Royal College. Two fellows graduated in 2013 and have taken up academic positions in Melbourne and University of British Columbia. The program continues in the international match for approved programs and continues to receive large numbers of Canadian and international applicants.

Section Update Thoracic Surgery

The section remains at four members, Dr. McFadden acts as Head, Dr. Grondin continues in his role as Program Director, Dr. Graham works as Office Manager and Dr. Gelfand coordinates Quality Assurance. Administrative staff continues to work tirelessly to support the four surgeons. One notable change with staff has Nancy moving onto other work in AHS and Teresa joining, best wishes and welcome.

The Section would like to acknowledge and welcome the trainees in the program. Dr. Poon is slated to complete his training next June and is actively seeking further training. Dr. Edwards joins the program having successfully completed her General Surgery training. The Section appreciates and understands their commitment. We would also like to acknowledge the support from the many residents and students that we are fortunate to have had on the service over the last 12 months.

Section members continue to participate in many areas to maintain and improve the level of care for patients. Monthly Quality Assurance meetings continue with our colleagues on Unit 61, enhancing and supporting the development of specialized care. Provincial programs to improve access to consultation and the operating room remain a priority for the team. Thoracic Surgery remains committed to the Alberta Thoracic Oncology Program improving lung cancer care for the province and aCATS improving access to surgical services.

Numerous challenges exist for the Section. We have had to modify and monitor our central triage referral system. The four members are stretched to cover the many administrative duties required. Call coverage though complete again this year steadily provides a challenge for only 4 members.



Dr. Sean McFadden, Thoracic Surgery Section Chief
Photo Courtesy of Nicolle Amyotte

Given the above challenges we have actively started to look at the possibility for recruitment for a fifth surgeon, planning is very early at this time.

The Section looks forward to another very active and productive year of clinical, academic and administrative work.

Section Update

Transplant Surgery

Section Structure and Organization

Current Committees

1. Policy and Procedure Committee
2. Multidisciplinary Transplant Organ Allocation Committed
3. Transplant Research rounds
4. Multidisciplinary Living donor Committed
5. High Risk Transplant committee
 - Programs
 - Fellowship Program
 - Live donor Program
 - Membership



Dr. Anastasio Salazar, Transplant Surgery Section Chief
Photo Courtesy of Nicolle Amyotte

Accomplishments and Highlights

- Increase in Kidney Transplant activity by 95% (from 35 in 20011-2012 fiscal year, to 66 in 2012-2013 Kidney transplants)
- Initiation of Good Samaritan donation (3)
- Continually assessing for local chains – one was performed July 2012 and another chain in July 2013
- Involvement in chains from Canadian Blood Services – Matching takes place four times a year. We had one patient transplanted in February 2013
- ABO transplant performed in July 2013

Education

Residents

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

Fellows

- No surgical fellow for this year but a Nephrology fellow still being trained in collaboration with nephrology.

Medical Students

- Shadow in a regular basis from the IMG Program as well as seasonal students, one from Ontario for summer shadowing.
- Support also for training Nurse students in the OR in a regular basis
- Staff in the Transplant Program, Dialysis Program and on Unit 37
- Support and training for staff when new procedures and initiatives are introduced
- Research The 3 members of the division actively involved in Clinical, theoretical and basic science research projects some Pharmacy industry sponsored.

Challenges

- Response to Issues
- We responded to the decline in cadaver donation with an aggressive business plan to increase our live donor pool. This change resulted in successfully addressing the tendency of decreasing transplant activity in the section.

As a part of the decline in organ donation we are working with Intensive Care Medicine and the Southern Alberta Organ and tissue Program within the framework of ALTRA and its medical director, to implement DIC donation, this is an important challenge however if implemented it will increase our donor pool by approximately 20 more kidney transplants at year.

We have experienced a decline in vascular access surgery with a concomitant increase in the numbers of patients on central catheters for Haemodialysis. At the same time we do not have enough patients to fill our OR schedules due to cancellations and lack of referral. This constitutes a paradox, since patients are not getting access to the service and the resources are being wasted in OR time loss for lack of occupation. We identified problems with the process of referral as well as booking for surgery. The first step was to take control by the section of the booking process for surgery which immediately leads to a decrease on cancellations and OR days not full. This optimisation work is underway in collaboration with the Department of Nephrology.

Ongoing Matters and Plan of Action

- We are implementing a review of the way we manage our clinical activities in collaboration with the Department of nephrology, since several issues have emerge indicating a cumbersome process which needs to be corrected. The first steps had been taken by the recovery of the surgery booking now in control of our section, The goal of this process is to made the system more patient, nurse and physician friendly and more important safe medically for the patient and legally for the medical staff. This is an ongoing endeavour, however the results start to appear as less OR time lost due to cancellations and an increase numbers of referrals and patients book for surgery start to show.
- We start implementing the ABO incompatible kidney transplants in collaboration with the Aphaeresis clinic, (first transplant book for the week this report is being written); this will be followed by the Cross Match positive immunological high risk kidney transplants in the near future.

Future Risks

- Our Waiting list for cadaver organs has increase dramatically and at the same time the cadaver donors are status quo. This represents multiple problems. First these patients are now experiencing waiting times up to 5 to 8 years. The expenses in caring for this patients no only on dialysis costs but also in keeping them suitable for transplant (evaluations, updating studies, nursing overseeing

all this aspects, etc) is an increasing phenomenon with no solution in sight. This potentially can generate the case that the transplant program is busier and more resources given to keep this list than to invest in actual transplants. There is also the potential that these patients on the waiting list will start to complain for the lack of access to transplantation generating a political PR problem.

Future Needs

If we continue our trend of increasing transplants and vascular access activities, we will be in a need of more man power force. In the case of surgeons we should increase the efficiently of each surgeon in the section by making the process less cumbersome so surgeon time is efficiently occupied in clinic and OR duties. Once this efficiently has reached the maximum and the work load continues to increase we will required a 4th. Surgeon. This is dependent on the increase or decrease on the surgical activity. This also applies to the administrative support staff as we have already increased their work load. Since this section works with \$0 Budget, we relied exclusively in what is given by UCMG for each member and the Department of surgery. If any need is required at this time it is support in this area.

Goals and Strategies

- Our Goal is to provide our patient population with access to transplantation and dialysis access surgery which will be at the highest professional level possible with the best possible technology available in a safe and expeditious manner.
- To accomplish this goal we need to work toward more professionalization in the way we conduct our duties, we need to decrease the bureaucracy and at the same time increase our efficiency, economy and patient satisfaction. Our strategy is to review all the processes and without radical changes improve what is possible and proper, and implement where it is needed.
- Bringing simplicity to the whole process, which should be compatible with other sections and departments practice and in line with legal and professional regulations dictated by the CPSA.
- Impact on other departments and zonal resources
- Not in our knowledge.

Quality Assurance, Quality Improvement, and Innovation

- There has been an innovation in the live donor process which was awarded this year from the department of surgery. This is our most important innovation for this period.
- We start offering buried PD catheters as an option for our nephrologists referring patients to us.
- We implement a Pager Hot line for Peritoneal and Haemodialysis consultation which can be accessed at any time with no interruption all year around 24 hours at day (Pg. # 11858). This pager is answered by the surgeon on call directly.

Access of Family Physicians to specialists

- Our referrals are seldom from Family physicians since our patients are referred to nephrology and live donors need to refer themselves directly to avoid pressure to donate.
- Patient flow through the Emergency Department

- We have 24 hour all year coverage for emergencies both for transplant patients as well as vascular and PD catheters. Consultations by Emergency Department are attended in a call basis in the more expeditious way.

Future Directions and Initiatives

Our Direction is to continue improvement in the clinical setting. We wish to implement more research and educational activities in the near future once clinical services work at optimum. Pending are Donation after Cardiac death (DIC) High sensitized transplants and isolated Pancreas transplants.

Section Update

Urology

SECTION STRUCTURE AND ORGANIZATION

Current Committees

Section Chief	Dr. Kevin Carlson
QA Director	Dr. Richard Baverstock
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/Recon	Dr. Kevin Carlson/Dr. Richard Baverstock

Programs

- Prostate Cancer Centre (PCC) - Rapid Access Clinics (RAC) for Prostate Cancer
 - RAC I: screening, diagnosis (established)
 - RAC II: education for newly diagnosed patients (established)
 - RAC III: early post-treatment follow-up and support (established)
 - RAC IV: sexual and urinary function post-treatment (in development)
 - RAC V: active surveillance (newly established)
 - RAC VI: advanced disease, survivorship and bone care (in development)
- Alberta Bladder Centre (vesia) – diagnostic testing, medical management and treatment of Urinary Incontinence
 - Multidisciplinary collaborative care model with urology, urogynecology, family medicine, nursing, physiotherapy



Dr. Kevin Carlson, Urology Section Chief
Photo Courtesy of Matthew Hayhurst

ACCOMPLISHMENTS AND HIGHLIGHTS

Clinical Service:

- 52,000+ patient visits to SAIU (includes the Alberta Bladder Centre)
- 2700 new referrals per month
- 11,289 outpatient urology procedures
- >5500 surgical procedures
- 10000+ patients visits to the Prostate Cancer Centre (includes Rapid Access Clinics)

Membership

The section of urology has a total of 17 Urologists, 14 Adult and 3 Pediatric

- Dr. Kevin Carlson and Dr. Richard Baverstock were recently recognized (June 2012) with the Surgical Innovation Award for their work with the Alberta Bladder Centre (vesia). The centre is a model of innovation where primary care physicians, nursing, physiotherapy work along side the specialist to provide timely access to care, diagnosis and treatment. The Bladder Centre model will be the foundation that other urology programs will be built and expanded upon.
- Dr. Eric Hyndman established the Active Surveillance Clinic ("RAC V") to standardize and study men with low risk prostate cancer who do not require immediate invasive treatment. The Clinic opened its doors in June 2012.

Education

- Dr. Geoffrey Gotto was awarded the University of Calgary Faculty of Medicine Class of 2014 (Hellbender) Teaching Award - Awarded 2/26/13
- Dr. Bryce Weber is fellowship director for pediatric urology fellowship
- Dr. Kevin Carlson and Dr. Richard Baverstock will introduce a new fellowship program in Functional Urology in July, 2013

Research

- See attached documents for publications and active research projects.
- The Section of Urology led the first research and learning project through the Physician Learning Program (PLP) Office at the University of Calgary. A pilot study of antibiotic prophylaxis use in patients undergoing TURP was completed in 2011/12, wherein 513 patients were reviewed. The project was led by Dr. Kevin Carlson from urology and Dr. Ingrid Vicas from the PLP office.
- The Research Unit of the PCC supports industry- and investigator-initiated trials, most recently in the fields of prostate cancer, BPH, incontinence, overactive bladder, andrology and erectile dysfunction. Basic science research is also conducted there.

CHALLENGES

Response to Issues

- The section is continually challenged in managing the volume of patients in each practice, number of new referrals and resource allocation.
 - Working closely with Unit 82 and the Emergency department at the Rockyview the section continues to develop and revise clinical pathways to ensure efficiency and patient flow is maintained.
 - The group has actively pursued a model of inpatient care that would include Nurse Practitioners, and this will become a reality in late 2013. The group would also welcome Physician Assistants in the future.
 - The collaborative care model led by the Alberta Bladder Centre has also proven effective in decanting some of the non-surgical work of our high volume specialty.
 - More than 11000 cystoscopies are performed at the outpatient cystoscopy clinic at RVH, making it the busiest and most efficient in the country. Despite this, numbers and wait-lists are growing, sterilization processes are changing, and capacity is maxed out. The Section is working closely with Site Leadership on plans to expand the cystoscopy unit to meet current and future demand.
- Provision of city-wide on-call services remains a constant challenge, given our unique reality of being a service based at a single adult site, working without residents or extenders, and providing basic but urgently needed services (eg. Foley catheter insertion). Last year we separated adult and pediatric on-call services. The greatest challenge of 2013 will be the need to cover the South Health Campus in addition to the other 3 adult sites. Having a site-based NP will assist us in out coverage, but we will also need to re-organize our call schedule and/or maintain an on-site presence at the SHC. At the time of this

report we remain in active discussions with Site and Department leadership as we work towards a formal strategy.

- As a group in rapid growth and evolution, it is critical to have executive and administrative support to maintain momentum with our goals in clinical programming, research and education, and to execute an effective manpower strategy. We were sad to lose our newly appointed executive director in the spring, and hope to fill that position soon.

Ongoing Matters and Plan of Action

- See above
- An aggressive plan to support the improvement of patient outcomes for urological patients in the Calgary zone was discussed by the group as part of its third annual retreat held in March 2013.
- The section is committed to developing four key priority programs, Uro-Oncology, Bladder/Sexual Function, Stones, and Men's Health. The programs will support innovative care models to increase patient access, diagnosis and treatment of disease but will also focus on prevention and after care support.
- Patient care and education will be enhanced by the introduction of NP's and Fellows moving forward.

Future Risks

- Inadequate infrastructure by way of Operating Room access, and ambulatory clinic resources (esp. cystoscopy) present the biggest challenge for Urology. As above, the outpatient facilities are at capacity within their current allowable footprint. Over 11000 outpatient procedures were performed last year with year over year increases in the 10-12% for the past 5 years. Open urological procedures are also on a similar growth curve however a significant shift towards urgent and emergent cases is at 60% of the total case volume. Managing the growth of new cancers and ever increasing patient volumes will present a major challenge for the section as with other sections within the department of surgery

- Cost of service delivery continues to increase with the rapid development of new technologies in our field, particularly robotics. Careful monitoring of outcome measures will be paramount to ensuring that patients are benefiting from the investment, and the Section supports the efforts of the Department and Site to implement such outcomes reporting. These technologies are also critical to making us competitive in our recruiting efforts going forward.
- As above, the section of urology, while benefiting from centralization at the Rockyview site is also challenged to provide citywide coverage. This challenge increases each year with the population growth, and the opening and growth of the SHC will further challenge us.
- Advancing sub-specialization in the Section makes us stronger from research, education and recruitment standpoint; however, creates a challenge in ensuring that the general urology needs of the population are met.

WORKFORCE PLANNING

Future Needs

- With several retirements occurring over the next 3-5 years the focus of this year's retreat included development of a formal workforce plan within the context of current resources and program service.
- Emerging needs will include the subspecialty areas of pediatrics, endo-urology and female/reconstructive urology.
- A recent manpower study by the Canadian Urological Association suggests that we have the second highest ratio of population-to-urologist in Canada, highlighting a need for new growth; however, our ability to do so remains dependent on acquisition of operating room and outpatient facility resources.

Goals and Strategies

- Future recruitment for the section will be based on the new program map with the goal being that all programs will incorporate innovative

care models to increase patient access, diagnosis and treatment of disease. A multidisciplinary approach to optimize care models will also support the prevention and after care aspect of programs

QA, QI, AND INNOVATION

General

- Dr. Richard Baverstock continues to lead the section in Quality Assurance
- Drs. Baverstock, Carlson, Donnelly, Gotto and Kawakami have all completed outcomes/QA research projects in the past year.
- The first phase of our PLP project was completed this year (see above).
- The Prostate Cancer Centre (PCC) and vesia [Alberta Bladder Centre] are national leaders in developing innovative clinical care models, with demonstrated improvements in access and quality of care. The PCC will publish its results later this year on the impact of its RAC III program in reducing 90-day readmission rates and morbidity, while the Bladder Centre was awarded a research grant to study the impact of its model on health outcomes for patients with overactive bladder.
- The Bladder Centre received the Department of Surgery Innovation Award for 2012.
- The Section of Urology is participating in the aCATS pilot project

Access of Family Physicians to Specialists

- The RAC I clinic of the PCC aims to improve access to urology for assessment of men with an elevated PSA blood test and/or abnormal DRE. The clinic's goal is to facilitate a referral-to-biopsy time of 4 weeks or less.
- The Alberta Bladder Centre offers central intake for patients with lower urinary tract conditions, and triages patients by referral reason to be seen by nursing, physiotherapy, family medicine, urology or urogynecology. Wait lists for urology appointments have been reduced from 10 months to under 3 months.

- No other central intake exists at this time; however, there is consistency in triaging patients by referral reason amongst the Section, and there is expedited subspecialty referral within the group stemming from the fact that all specialists are located in the same office space. Furthermore, unparalleled access to an efficient cystoscopy clinic means that patients with urgent and semi-urgent conditions such as hematuria and bladder tumors are seen in a timely manner.

Patient Flow through the Emergency Department

- Having the urology program based at the Rockyview allows for a strong partnership with our colleagues in the emergency department. The section has one of the fastest response times from "consult request to decision" at the Rockyview
- Patients arriving at ER's of the other adult sites require transfer to RVH. While most of these cases can be expedited through a direct admission process, inpatient bed capacity at RVH can be a limiting factor
- New models of care, specifically The Rapid Access Clinic 3 and Alberta Bladder Centre models are saving numerous patient visits to the Emergency Departments
- The section has begun work on developing a multidisciplinary Stone Clinic to reduce patient visits to the Emergency Departments
- The arrival of NP's to the service, along with the P2H project, may enhance our flow-through even further

Future Directions and Initiatives

The section has had another challenging and successful year. The year ahead will be intensified by the immediate challenges of SHC integration, outpatient cystoscopy expansion, and executing our near-term manpower strategy. We are excited to welcome fellows and nurse practitioners onto our team, and to see the fruits of the labors of our young researchers. Building on the successes of the Alberta Bladder Centre (vesia)

and the Prostate Cancer Centre (PCC), the Southern Alberta Institute of Urology will continue its focus on becoming a Canadian and World leader in delivering comprehensive urologic care.

COMMITTEES

Dr. R. Barr

Education Committee UofC PGY1
Prostate Cancer Centre Medical Advisory Board

Dr. R. Baverstock

Director of Quality Assurance Dept of Surgery,
Division of Urology
Search and Selection Committee
(3 new Urologists and Chief of Urology)
Dept of Surgery,
Division of Urology
Director Alberta Bladder Centre
Alberta Spinal Cord Initiative Working Group:
Best Practices for the Treatment and Prevention of
UTI in the spinal cord injured population
Prostate Cancer Centre Medical Advisory Board

Dr. K. Carlson

OR Committee Member Jan 2011 Present RGH
Urology
Regional Department-Surgery Executive Committee
M Jan 2011 Present RGH Urology
Fellowship Director, Functional Urology Fellowship,
Section of Urology, Department of Surgery
The Canadian Continence Foundation
National Director
Prostate Cancer Centre, Medical Advisory Board
Prostate Cancer Foundation Board Member
Continuing Professional Development Committee,
Canadian Urological Association National
Western Society of Pelvic Medicine Western Canada
Scientific Committee
Canadian Urology Forum, National
Director - Alberta Bladder Centre
Alberta Spinal Cord Initiative Working Group: Best
Practices for the Treatment and Prevention of UTI in
the spinal cord injured population
Canadian Urological Association, Guidelines
Committee for Urinary Incontinence
Scientific Committee 2012 CUA Annual Meeting

Dr. A. Cook

OR Committee ACH Urology
Regional Department Surgery Executive Committee
ACH Urology
Prostate Cancer Centre Medical Advisory Board

Dr. B. Donnelly

Department of Surgery Research Committee
Prostate Cancer Foundation - Chairman
Prostate Cancer Centre - Board Member
Doc Seaman Research Chair- Prostate Cancer Centre
Prostate Cancer Centre Medical Advisory Board

Dr. M. Duffy

Prairie Urological Association - President
Alberta Section of Urology - Secretary
CUA National Meeting Organizing Committee -
local events Chair
Prostate Cancer Centre Medical Advisory Board

Dr. J. Dushinski

Prostate Cancer Foundation Board Member
Prostate Cancer Centre Board Member
Prostate Cancer Centre Medical Advisory Board/
Calgary Zone Laser Safety Committee
Canadian Urological Association (CUA)
Executive Committee
CUA Guidelines Committee

Dr. G. Gotto

Surgical Outcomes Leader - Section of Urology
Cancer Care Clinical Network

Dr. E. Hyndman

Prostate Cancer Centre - Medical Advisory Board
Bladder Cancer Canada Board Member
Prostate Cancer Active Surveillance Committee

Dr. C. W. Hyndman

Block Booking Committee
Department of Surgery Research Committee
Residency Training Committee
OR Committee ACH
ACH Surgical Executive Committee Chair
Regional Department-Surgical Executive Committee
Alberta Children's Hospital Foundation Committee

Child Health Advisory Council
Child Health Safety Committee
Canadian Paediatric Surgical Wait Time Project
Steering Committee
Child & Women's Health Joint Portfolio Committee
Child & Women's Health Quality Council
Family Centred Care Committee Joint Paediatric/
Adult Committee
PCIS Committee M; Remax-ACHF Fellowship
Committee M OR Executive Committee C April
2008 Ongoing ACH Pediatric Surgery

Dr. J. Kawakami

Residency Training Committee Urology,
Canadian Urologic Association Scholarship
Committee
International Urology Society - Local Organizing
Committee
Prostate Cancer Centre Medical Advisory Board

Dr. G. Kozak

AMA Urology section President
AMA rep forum representative
Surgical Robotics Program - Chair
Prostate Cancer Centre Medical Advisory Board

Dr. J. Lee

Canadian Male Sexual Health Council National
Canadian Society for the Study of the Aging Male
Patient Information Committee CUA National
Nomination Committee CUA National
Scientific Committee 2012 CUA Annual Meeting
Chair
CUA Continuing Professional Development
CUA Astellas Grant Awards Committee
Prostate Cancer Centre Medical Advisory Board
Surgical Undergraduate Education Committee Dept of
Surgery, Faculty of Medicine

Dr. J. Leong

Prostate Cancer Centre Medical Advisory Board

Dr. D. Metcalfe

Prostate Cancer Centre Medical Advisory Board

Dr. B. Weber

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

Dr. R. P. Wilkin

Prostate Cancer Centre Medical Advisory Board+A1

Section Update Vascular Surgery

The Section of Vascular Surgery provides care for vascular diseases to all of southern Alberta, southeastern BC (Creston, Cranbrook, East Kootenay mountains and Invermere) and southeastern Saskatchewan. Six vascular surgeons participate in a tertiary care service that leads Canada in the use of endovascular technologies. The PLC has amongst the highest volume of vascular surgery of any hospital in Canada

What's new this year for vascular surgery is RCPSC approval of our application for a new, direct-entry residency programme, in addition to our existing subspecialty training programme. The RCPSC is transitioning vascular surgery to direct entry, from subspecialty status (which formerly required 2 years of training after completion of a general surgery or cardiac surgery residency). Calgary currently has two subspecialty Fellows (Dr. Mary Macdonald, who completed general surgery at Dalhousie University and Dr. Nicholas Peti, who completed general surgery at the University of Saskatchewan). We are hoping to accept our first direct-entry candidate in the coming year. Congratulations to Dr. Joyce Wong and her Residency Training Committee, who worked tirelessly on the application for this programme, including authoring a new curriculum!!

Additional news is that our long-anticipated infrastructure project has completed its design phase and will be commencing construction in the fourth quarter of this year. This \$25 million project will give vascular surgery two new state-of-the-art "hybrid" endovascular operating rooms in the new East Tower of PLC and a new combined inpatient unit/step down unit and ambulatory care centre, on the 5th floor of the East Tower. We anticipate opening of the inpatient and ambulatory units in late 2014 and opening the ORs in early 2015. The Calgary Health Trust has been a key partner in co-funding this project; in February they hosted the funny bone Comedy Night at the Petroleum Club, including a concert given by Jann Arden and a silent auction that raised over \$350,000 for the vascular redevelopment. Total CHT donations for the project this year alone are over \$1 million. Our vascular team is very grateful to the PLC Development Council and Mrs. Ann McCaig, who

have championed fundraising for our redevelopment. We are also proud of the PLC Unit 53 nursing staff, who won the PLC Amazing Race fundraiser this year and garnered \$7500 for the new inpatient unit!!

From a research perspective, in the past year we have inaugurated a new QA database ("VascuBase"), which replaces a less sophisticated MS-Access database and will allow us to track short and long-term outcomes more efficiently and with greater flexibility, as treatment technologies evolve. We are grateful to our Research coordinator Christi Findlay, whose hard work over many years has brought the new database to operation. Current active clinical research projects include a new study on the feasibility of same-day discharge after endovascular aortic surgery, led by Dr. Mark Nutley. Key for this trial is the use of a totally percutaneous approach to aortic aneurysm repair, which all of the Section has now adopted. In the coming year, we look forward to adopting further new technologies, adding patients to an existing research trial led by Dr. Randy Moore on the use of a branched endovascular graft to treat perirenal aneurysms, and a new trial of drug-eluting balloon angioplasty of distal arterial disease, in partnership with our colleagues in Interventional Radiology.



Dr. Paul Petrusek, Vascular Surgery Section Chief
Photo Courtesy of Matthew Hayhurst

Appendices

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2.0 Activity Reports

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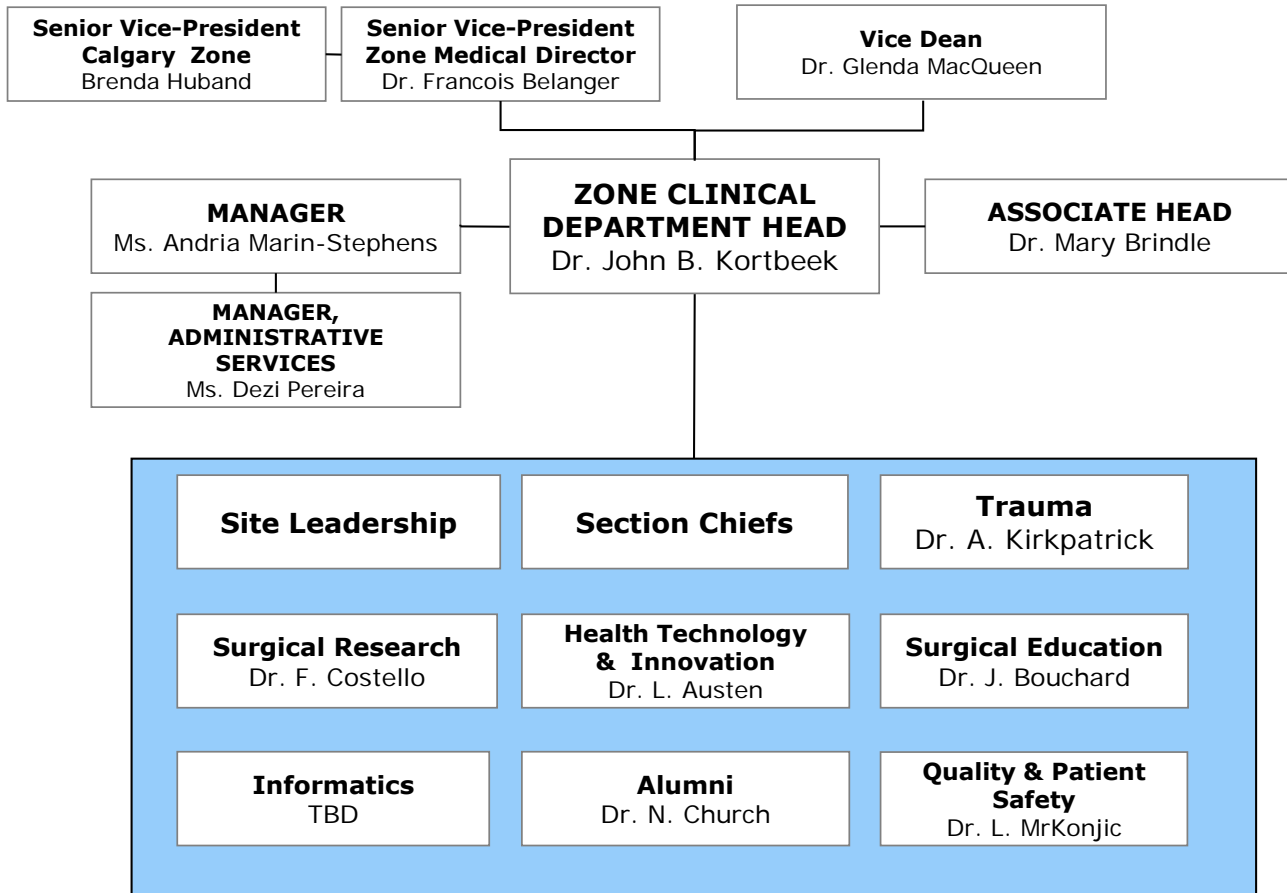
3.0 Research from Within the Department

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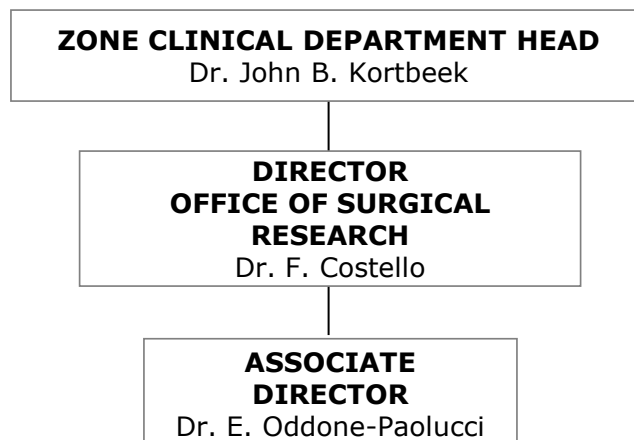
1.0 Department Structure

1.1 Governance

Leadership – Department of Surgery

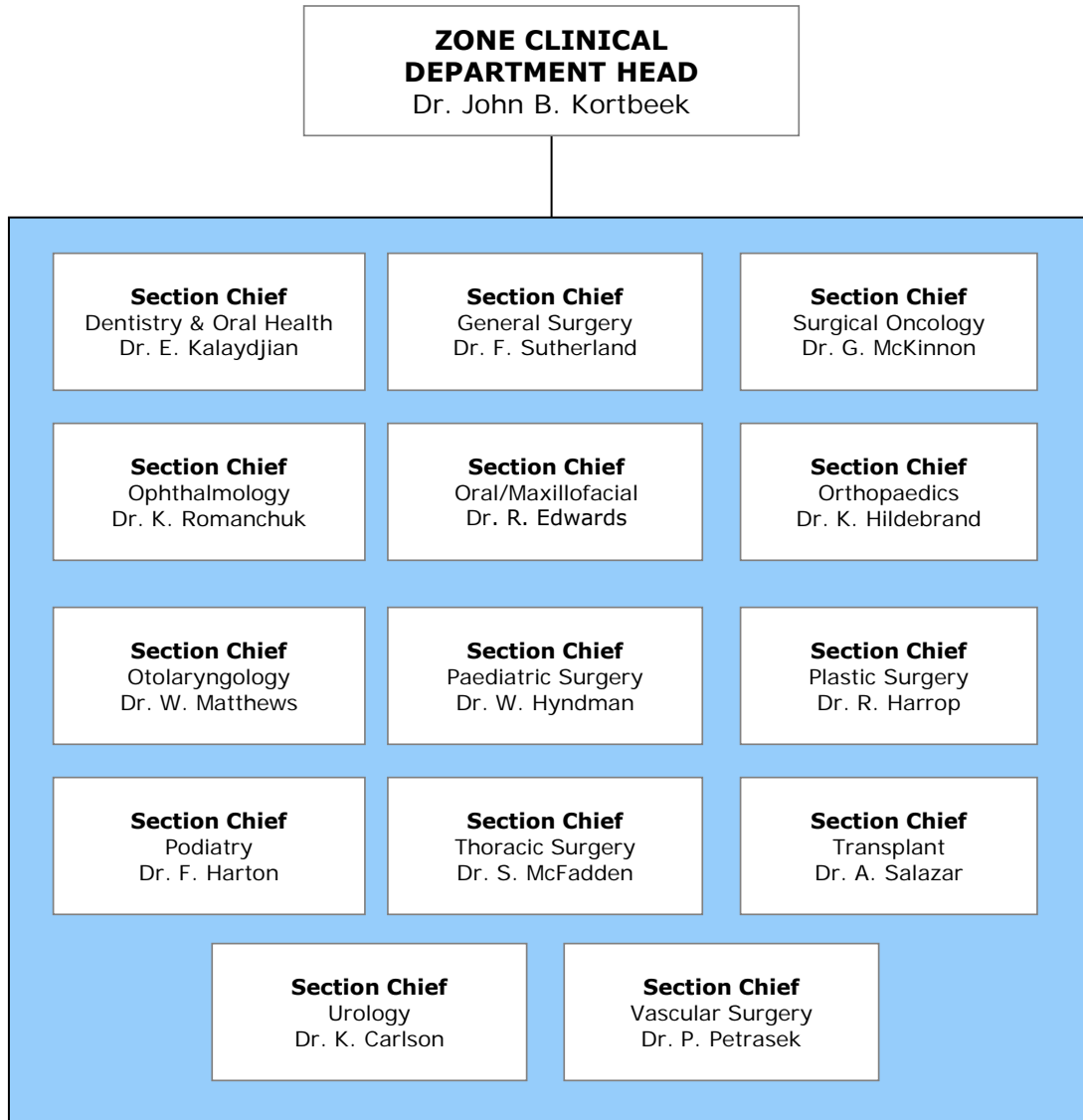


Surgical Research – Department of Surgery



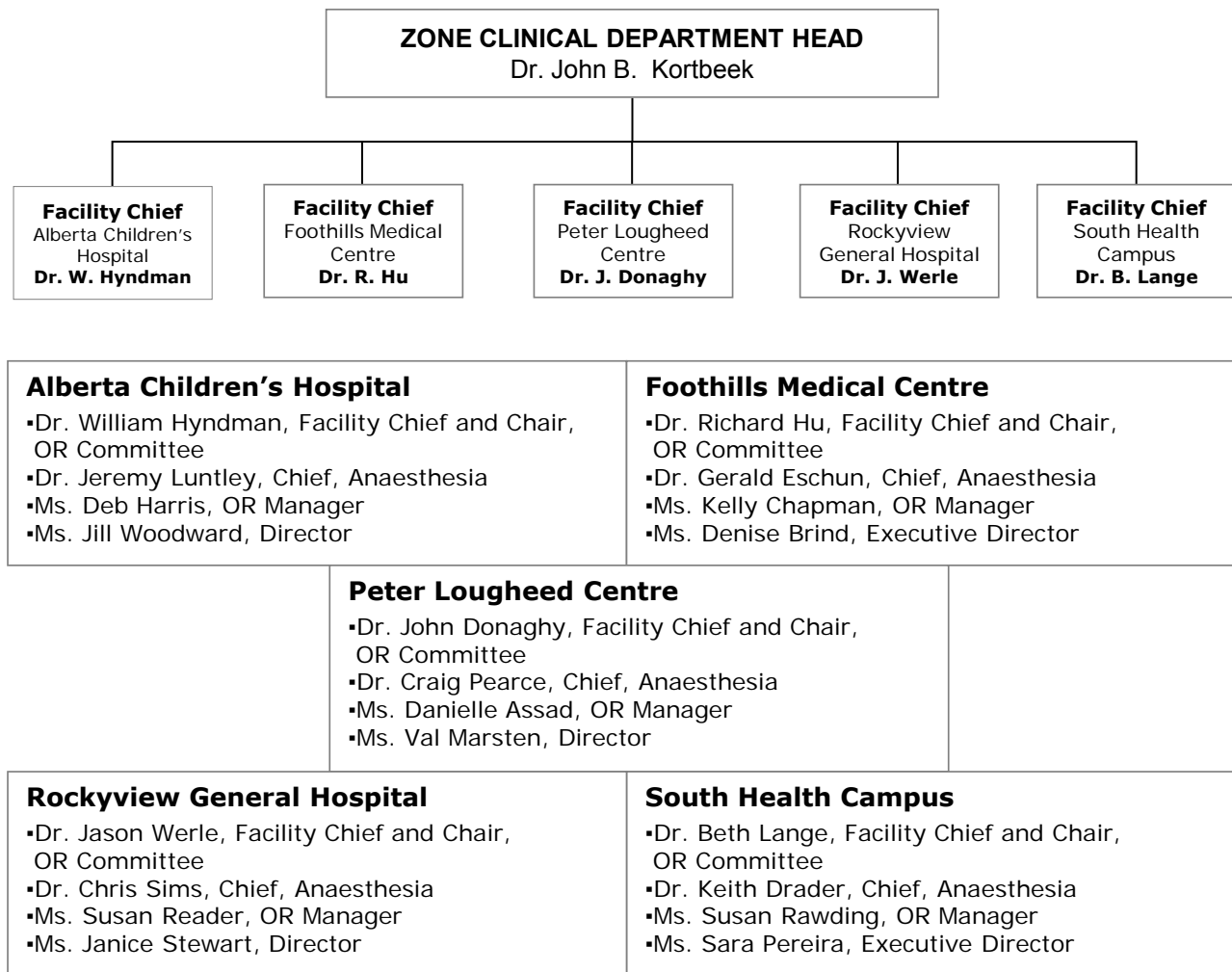
1.1 Governance Continued

Section Chiefs – Department of Surgery

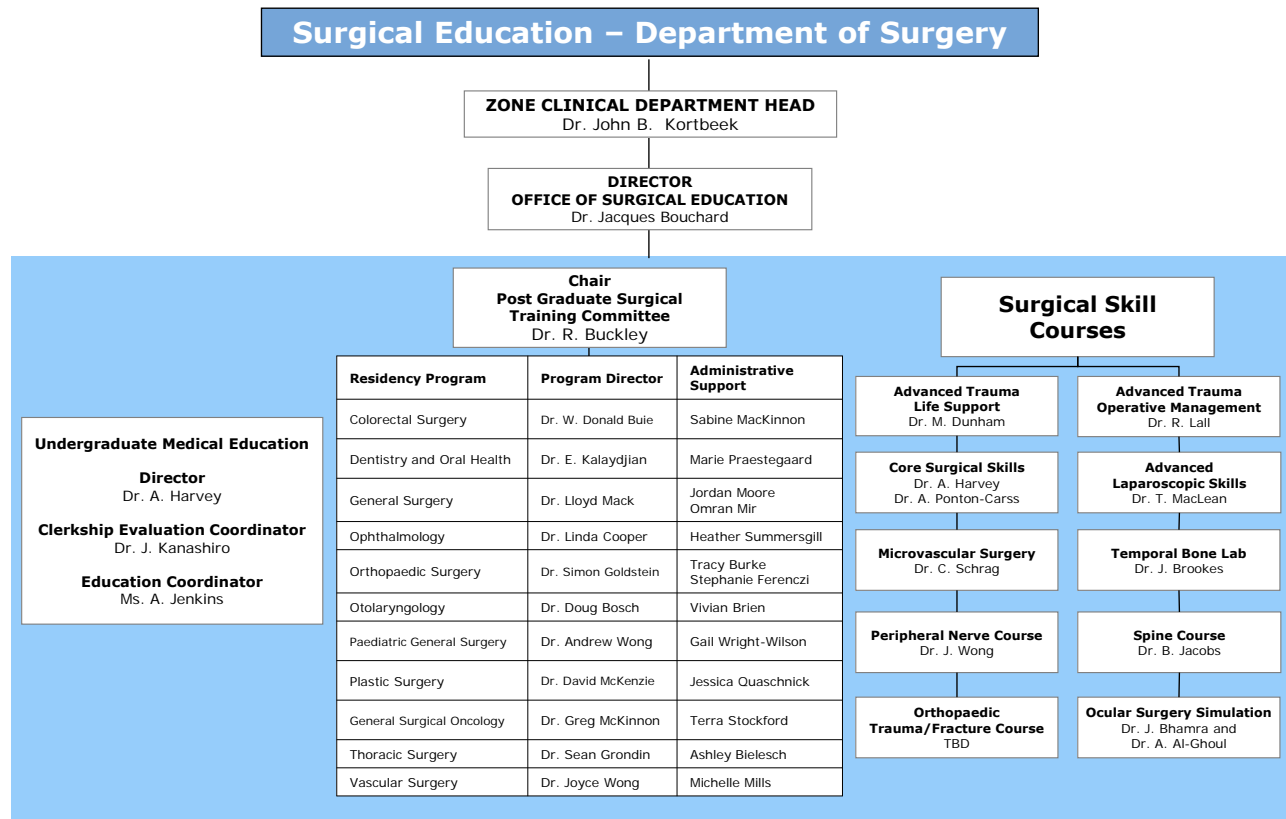


1.1 Governance Continued

Site Leadership – Department of Surgery



1.1 Governance Continued



1.2 Department Committees

Department of Surgery Executive Committee

Chair: Dr. John Kortbeek

Site OR Committees (ACH, FMC, PLC, RGH, SHC)

Chair: Facility Chiefs

Site Leadership Committee

Chair: Dr. John Kortbeek

Block Booking Committee

Chair: Dr. Jeff Way

Health, Technology and Innovation

Chair: Dr. Lea Austen

Surgical Education

Chair: Dr. Jacques Bouchard

Safety

Chair: Dr. Linda MrKonjic

Surgical Research

Chair: Dr. Fiona Costello

Educational Executive

Chair: Dr. John Kortbeek

Postgraduate Surgical Training Committee

Chair: Dr. Richard Buckley

Undergraduate Medical Education

Chair: Dr. John Graham

1.3 Department Members - 2012/2013

Section of Dentistry and Oral Health

Kalaydjian, Eduardo; Section Chief,

Clinical Associate Professor

Abougoush, Joel
 Abougoush, Tallel
 Barsky, Robert (primary in pediatric surgery)
 Bell, Christine (primary in pediatric surgery)
 Bindman, Michael (primary in pediatric surgery)
 Brown, Duncan
 Choi, Susan
 Cholette, Marie-Claude; Clinical Associate Professor
 (primary in pediatric surgery)
 Chow, Kuen A.
 Dabagh, Shatha
 Dalla Lana, Eugene
 David, Dionysius
 Donais, Tanya
 Dyck, Willy
 Frydman, Albert
 Houghton, Alan
 Hulland, Sarah (primary in pediatric surgery)
 Hussein, Jabeen
 Jivraj, Munira
 Kemp, Darrel
 Kim, Jungsoo
 Kopec, Perry
 Krusky, J. Bradley
 Kuruliak, Russell
 Lakhani, Moez
 Lawton, David
 Lee, Morley
 Loeppky, Warren (primary in pediatric surgery)
 Lovick, David
 Mehra, Tarun (primary in pediatric surgery)
 Olowe, Adebayo
 Paladino, Antonietta; Clinical Lecturer
 Petty, Trey; Adjunct Associate Professor
 Pilipowicz, Orest (primary in pediatric surgery)
 Quach, Quoc
 Rabie, Heidi
 Schwann, Sandra (primary in pediatric surgery)
 Seto, Timothy
 Shariff, Galib
 Shwart, E. Luke

Skaria, Sylla
 Smith, Leonard (primary in pediatric surgery)
 Stein, Kari (primary in pediatric surgery)
 Suri, Amreek (Ricky); Clinical Lecturer
 Switzer, Samuel
 Tamminen, John
 Tetteh-Wayoe, Mercy
 Thal, Michelle
 Tung, Albert
 Varshney, Sheila
 Vinsky, Rory (primary in pediatric surgery)
 Yaholnitsky, Stephen
 Yates, Gregory
 Yu, Thomas, Clinical Lecturer

Section of General Surgery

Sutherland, Francis R.; Section Chief, Professor

Anderson, Ian B.; Clinical Assistant Professor
 Armstrong, C. Paul; Clinical Lecturer
 Austen, Lea; Clinical Assistant Professor
 Ball, Chad, Clinical Assistant Professor
 Bathe, Oliver F.; Professor
 Brzezinski, Wojciech; Clinical Lecturer (Medicine Hat)
 Buie, W. Donald; Associate Professor
 Church, Neal G.; Clinical Assistant Professor
 Datta, Indraneel; Clinical Assistant Professor
 Debru, Estifanos; Clinical Assistant Professor
 Dixon, Elijah; Associate Professor
 Dunham, Michael B.; Clinical Assistant Professor
 Graham, John S.; Clinical Assistant Professor
 Hagerman, Neil
 Harvey, Adrian; Clinical Assistant Professor
 Heine, John A.; Clinical Assistant Professor
 Hollaar, Gwendolyn; Associate Professor
 Ibbottson, Geoff, Clinical Lecturer (Grande Prairie)
 Jenken, Daryl
 Johnson, Douglas R.E.; Clinical Assistant Professor
 Kanashiro, Jeanie; Clinical Assistant Professor
 Kirkpatrick, Andrew W.; Professor
 Kortbeek, John B.; Professor and Head
 Lafreniere, Rene; Professor
 Lall, Rohan N.; Clinical Assistant Professor
 Lewkonja, Peter, Clinical Assistant Professor
 (primary in pediatric surgery)

1.3 Department Members Continued

Lopushinsky, Steven; Clinical Assistant Professor
(primary in Pediatric Surgery)
Lui, Robert C.K.; Clinical Assistant Professor
Mack, Lloyd; Assistant Professor
MacLean, Anthony R.; Clinical Associate Professor
Martin, Steven
McKinnon, J. Gregory; Professor
Mew, Daphne J.Y.; Clinical Assistant Professor
Mitchell, Philip C.; Clinical Assistant Professor
Mulloy, Robert H.; Clinical Associate Professor
Nixon, James A.; Clinical Assistant Professor
Papenkopf, Cort W.; primary in Rural Medicine
Pasiaka, Janice; Clinical Professor
Quan, May Lynn; Associate Professor
Reso, Artan; Clinical Lecturer
Rosen, Wayne S.; Clinical Assistant Professor
Rothwell, Bruce C.; Clinical Assistant Professor
Temple, Walley J.; Professor
Topstad, Dawnelle R.; Clinical Lecturer (Red Deer)
Way, Jeffrey C.E.; Clinical Assistant Professor
Wong, Andrew L.; Clinical Associate Professor
(primary in Pediatric Surgery)

Section of Ophthalmology

Romanchuk, Kenneth G.; Section Chief, Professor (primary in Pediatric Surgery)

Adatia, Feisal; Clinical Assistant Professor
Al-Ghoul, Ahmed R.; Clinical Lecturer
Anand, Jag; Clinical Lecturer
Ashenhurst, Michael E.; Clinical Associate Professor
Astle, William F.; Professor
(primary in Pediatric Surgery)
Ball, Arlene E.; Clinical Lecturer
Bhamra, Jamie; Clinical Lecturer
Chow, Bill; Clinical Lecturer
Cooper, Linda; Associate Professor
(primary in Pediatric Surgery)
Crichton, Andrew C.S.; Clinical Professor
Culver, Ronald L.; Clinical Assistant Professor
Demong, Thaddeus T.; Clinical Lecturer
Dotchin, Stephanie; Clinical Lecturer
Douglas, Gordon; Clinical Assistant Professor
Ells, Anna; Clinical Professor
Ford, Bryce; Clinical Assistant Professor

Gibson, Peter F.; Clinical Assistant Professor
Gimbel, Howard V.; Clinical Professor
Goel, Nand K.; Clinical Assistant Professor
Gohill, Jitendra; Clinical Assistant Professor
Gordon, Robert; Clinical Assistant Professor
Hill, Vivian E.; Clinical Assistant Professor
Huang, John T.; Clinical Associate Professor
Huang, Peter T.; Clinical Professor
Kassab, Jacinthe; Clinical Lecturer
Kherani, Amin; Clinical Associate Professor
Kherani, Femida; Clinical Assistant Professor
Kirk, Angus; Clinical Associate Professor
Kirker, G.E. Mervyn; Clinical Associate Professor
Lang, Robert M.; Clinical Assistant Professor
McWhae, John A.; Clinical Associate Professor
Mitchell, Patrick; Clinical Assistant Professor
Mitchell, Robert J.; Clinical Assistant Professor
Punja, Karim; Clinical Assistant Professor
Savage, Paul R.G.; Clinical Assistant Professor
Skov, Carolyn M.B.; Clinical Lecturer
(primary in Pediatric Surgery)
Smith, Stanley S.; Clinical Assistant Professor
Van Westenbrugge, John A.; Clinical Lecturer
Verstraten, Karin L.; Clinical Assistant Professor
Weis, Ezekiel; Clinical Assistant Professor
Williams, R. Geoff; Clinical Associate Professor
Wong, Jonathan; Clinical Lecturer
Wyse, J. Patrick; Clinical Associate Professor
Yau, Ryan; Clinical Assistant Professor

Section of Oral Maxillofacial Surgery

Edwards, Richard; Section Chief, Clinical Assistant Professor

Bureau, Stephen
Goos, Ryan
Habijanac, Brett
Kroetsch, Lorne
Makhoul, Nicholas; Clinical Lecturer
Skulsky, Francis
Smith, Miller; Clinical Assistant Professor
Summers, Terence
Touchan, Simon; Clinical Lecturer
Vincelli, Douglas J.; Clinical Assistant Professor
Wakeham, Donald

1.3 Department Members Continued

Whitestone, Brian; Clinical Lecturer
Williams, Hedd-Wyn
Young, Carl Wayne

Section of Orthopaedic Surgery

Hildebrand, Kevin A.; Section Chief, Professor

Abelseth, Gregory A.; Clinical Assistant Professor
Batuyong, Eldridge; Clinical Lecturer
Bauman, John; Clinical Assistant Professor
Bazant, Francis J.; Clinical Assistant Professor
Bell, Douglas; Clinical Associate Professor
Bering, Michael P.; Clinical Lecturer (Medicine Hat)
Bois, Aaron; Clinical Lecturer
Boorman, Richard S.; Assistant Professor
Bouchard, Jacques A.; Clinical Professor
Bowen, Vaughan; Clinical Professor
Brauer, Carmen; Assistant Professor
(primary in Pediatric Surgery)
Bray, Robert C.; Professor
Buchko, Gregory; primary in Rural Medicine
Buckley, Richard E.; Clinical Professor
Burkart, Brian C.; Clinical Assistant Professor
Cho, Roger K.N.; Clinical Assistant Professor
Clark, Marcia; Clinical Associate Professor
Cundal, Cory S.; Clinical Lecturer
Dhaliwal, Gurpreet Singh, Clinical Lecturer
De Souza, F. Kelley; Clinical Assistant Professor
Donaghy, John J.; Clinical Assistant Professor
Dougall, Hugh R.; Clinical Associate Professor
Duffy, Paul J.; Clinical Assistant Professor
Edwards, Glen E.; Clinical Professor
Ferri de Barros, Fabio; Clinical Assistant Professor
(primary in Pediatric Surgery)
Frank, Cyril B.; Professor
Goldstein, Simon G.; Clinical Assistant Professor
(primary in Pediatric Surgery)
Harder, James A.; Clinical Associate Professor
(primary in Pediatric Surgery)
Hart, David A.; Professor
Heard, S. Mark; primary in Rural Medicine
Hiemstra, Laurie A.; primary in Rural Medicine
Hiscox, Christina; Clinical Lecturer
Hollinshead, Robert M.; Clinical Professor
Hu, Richard W-C; Clinical Professor

Hutchison, Carolyn R.; Associate Professor
Johnston, Kelly D.; Clinical Lecturer
Joughin, V. Elaine; Clinical Assistant Professor
(primary in Pediatric Surgery)
Kennedy, James; Clinical Lecturer
Kiefer, Gerhard N.; Clinical Associate Professor
(primary in Pediatric Surgery)
Korley, Robert; Clinical Lecturer
Kuchinad, Raul; Clinical Lecturer
Le, Ian; Clinical Assistant Professor
Lo, Ian K.Y.; Assistant Professor
Longino, David; Clinical Assistant Professor
Mackenzie, James R.; 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
(primary in Pediatric Surgery)
Penner, Darrell A.; Clinical Lecturer
Powell, James N.; Clinical Associate Professor
Puloski, Shannon K.T.; Clinical Lecturer
Rendall, Edward; Clinical Lecturer
Russell, Iain S.; Clinical Assistant Professor
Salo, Paul T.; Professor
Schachar, Norman S.; 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

Section of Otolaryngology –

Head and Neck Surgery

Matthews, T. Wayne; Section Chief, Associate Professor

Bosch, J. Douglas; Clinical Assistant Professor
Brookes, James; Clinical Assistant Professor
(primary in Pediatric Surgery)
Burke, Robert; Clinical Associate Professor
Chau, Justin K.; Clinical Assistant Professor

1.3 Department Members Continued

Chandarana, Shamir; Clinical Assistant Professor
 Dort, Joseph C.; Professor
 Drummond, Derek S.; Clinical Assistant Professor
 (primary in Pediatric Surgery)
 Gillis, Thomas M.; Clinical Assistant Professor
 Hoshowsky, Borys O.; Clinical Lecturer
 Huang, Ian T.
 Hui, Anita; Clinical Assistant Professor
 Lange, Elizabeth J.; Clinical Associate Professor
 Marck, Paul A.; Clinical Associate Professor
 Mechor, Brad; Clinical Assistant Professor
 Park, Phillip S.; Clinical Assistant Professor
 Rudmik, Luke; Clinical Assistant Professor
 Shandro, W.G. (Bud)
 Wagner, Garth A.L.; Clinical Associate Professor
 Warshawski, S. Joseph; Clinical Assistant
 Yunker, Warren; Clinical Assistant Professor
 (primary in Pediatric Surgery)
 Zakhary, Kristina; Clinical Assistant Professor

Section of Pediatric Surgery

Hyndman, C. William; Section Chief, Clinical Assistant Professor

Ashenhurst, Michael E.; Clinical Associate Professor
 (primary in Ophthalmology)
 Astle, William F.; Professor
 Barr, Richard; (primary in Urology)
 Baverstock, Richard; (primary in Urology)
 Beaudry, Paul; Clinical Assistant Professor
 Bell, Christine
 Bosch, J. Douglas; Clinical Assistant Professor
 (primary in Otolaryngology)
 Brauer, Carmen; Assistant Professor
 Brindle, Mary E.; Associate Professor
 Brookes, James; Clinical Assistant Professor
 Burke, Robert; Clinical Associate Professor
 (primary in Otolaryngology)
 Campbell, Earl A.D.; Clinical Assistant Professor
 (primary in Plastic Surgery)
 Carlson, Kevin; Clinical Assistant Professor
 (primary in Urology)
 Cholette, Marie-Claude; Clinical Assistant Professor
 Cook, Anthony J.; Clinical Assistant Professor
 Cooper, Linda; Associate Professor

Dilay, Jocelyn E.
 Donnelly, Bryan J.; Clinical Assistant Professor
 (primary in Urology)
 Dotchin, Stephanie; Clinical Lecturer
 (primary in Ophthalmology)
 Drummond, Derek S.; Clinical Assistant Professor
 Dushinski, John W.; Clinical Assistant Professor
 (primary in Urology)
 Duffy, Martin; Clinical Lecturer (primary in Urology)
 Eccles, Robin C.; Clinical Assistant Professor
 Ferri de Barros, Fabio; Clinical Assistant Professor
 Frank, Ryan, Clinical Lecturer
 Ford, Bryce; Clinical Assistant Professor
 (primary in Ophthalmology)
 Fraulin, Frankie; Clinical Assistant Professor
 Gelfand, Gary A.J.; Clinical Assistant Professor
 (primary in Thoracic Surgery)
 Gillis, Thomas M.; Clinical Assistant Professor
 (primary in Otolaryngology)
 Goldstein, Simon G.; Clinical Assistant Professor
 Harder, James A.; Clinical Associate Professor
 Hoshowsky, Borys O.; Clinical Lecturer
 (primary in Otolaryngology)
 Huang, Ian T. (primary in Otolaryngology)
 Hui, Anita; Clinical Assistant Professor
 (primary in Otolaryngology)
 Harrop, A. Robertson; Clinical Associate Professor
 Hulland, Sarah
 Humphreys, Douglas (primary in Plastic Surgery)
 Joughin, V. Elaine; Clinical Assistant Professor
 Kiefer, Gerhard N.; Clinical Associate Professor
 Kherani, Femida; Clinical Assistant Professor
 (primary in Ophthalmology)
 Kirk, Angus; Clinical Associate Professor
 (primary in Ophthalmology)
 Kirker, G.E. Mervyn; Clinical Associate Professor
 (primary in Ophthalmology)
 Kozak, Gregory N.; Clinical Assistant Professor
 (primary in Urology)
 Lange, Elizabeth J.; Clinical Associate Professor
 (primary in Otolaryngology)
 Lau, Henry; Clinical Lecturer
 Lee, Jay; Clinical Assistant Professor
 (primary in Urology)

1.3 Department Members Continued

Leong, James (primary in Urology)
 Loepky, Warren
 Lewkonja, Peter; Clinical Assistant Professor
 Lopushinsky, Steven; Clinical Assistant Professor
 McKenzie, C. David; Clinical Assistant Professor
 (primary in Plastic Surgery)
 McPhalen, Donald F.; Clinical Assistant Professor
 Mehra, Tarun
 Metcalfe, Donald G.; Clinical Assistant Professor
 (primary in Urology)
 Park, Phillip S.; Clinical Assistant Professor
 (primary in Otolaryngology)
 Parsons, David L.; Clinical Associate Professor
 Pilipowicz, Orest
 Romanchuk, Kenneth G.; Professor
 Savage, Paul R.G.; Clinical Assistant Professor
 (primary in Ophthalmology)
 Schwann, Sandra
 Skov, Carolyn M.B.; Clinical Lecturer
 Shandro, W.G. (Bud) (primary in Otolaryngology)
 Smith, Leonard
 Stein, Kari
 Vinsky, Rory
 Wagner, Garth A.L.; Clinical Associate Professor
 (primary in Otolaryngology)
 Warshawski, S. Joseph; Clinical Lecturer
 (primary in Otolaryngology)
 Weber, Bryce, Clinical Assistant Professor
 Wong, Andrew L.; Clinical Associate Professor
 Yunker, Warren; Clinical Assistant Professor

Section of Plastic Surgery

**Harrop, A. Robertson; Section Chief,
 Clinical Associate Professor
 (primary in Pediatric Surgery)**

Beveridge, John A.; Clinical Lecturer
 Birdsell, Dale C.; Clinical Professor
 Campbell, Earl A.D.; Clinical Assistant Professor
 Dawes, Jeffrey, Clinical Lecturer
 De Haas, William G.; Clinical Assistant Professor
 Dilay, Jocelyn; (primary in Pediatric Surgery)
 Frank, Ryan, Clinical Lecturer
 (primary in Pediatric Surgery)

Fraulin, Frankie; Clinical Assistant Professor
 (primary in Pediatric Surgery)
 Hall-Findlay, Elizabeth; primary in Rural Medicine
 Hamilton, George D.; Clinical Assistant Professor
 Haugrud, Mark J.
 Humphreys, Douglas
 Lee, Jonathan; Clinical Lecturer
 Lin, Alan; Clinical Assistant Professor
 Lindsay, Robert L.; Clinical Associate Professor
 Magi, Enzo; Clinical Associate Professor
 McKenzie, C. David; Clinical Assistant Professor
 McPhalen, Donald F.; Clinical Assistant Professor
 (primary in Pediatric Surgery)
 Nickerson, Duncan A.; Clinical Assistant Professor
 Perron, Wayne
 Schrag, Christiaan; Clinical Assistant Professor
 Sinclair, Thomas M.; primary in Rural Medicine
 Sutton, Frank
 Waslen, Gregory D.; Clinical Assistant Professor
 Whidden, Paul G.R.; Clinical Lecturer
 Yau, Farrah; Clinical Lecturer

Section of Podiatric Surgery

**Harton, Francois; Section Chief,
 Clinical Lecturer**

Bulanda, Catherine S.; Clinical Lecturer
 Feldman, Ziv S.; Clinical Lecturer
 Gurevitch, Darryl; Clinical Lecturer
 Gurevitch, Jason; Clinical Lecturer
 Haverstock, Brent D.; Clinical Assistant Professor
 Humble, R. Neal; Clinical Assistant Professor
 Ledoux, Ronald G.; Clinical Lecturer
 Lelievre, Phillip M.; Clinical Lecturer
 Newsom, Russell
 Paul, Darrell
 Purych, Megan
 Somer, Gregory
 Unger, Kenneth
 Zivot, Mark L.; Clinical Assistant Professor

Section of Surgical Oncology

J. Gregory McKinnon; Section Chief, Professor
 Arlette, John; Clinical Associate Professor
 Ball, Chad; Clinical Assistant Professor
 (primary in General Surgery)

1.3 Department Members Continued

Bathe, Oliver F.; Professor
(primary in General Surgery)
 Buie, W. Donald; Associate Professor
(primary in General Surgery)
 Bosch, J. Douglas; Clinical Assistant Professor
(primary in Otolaryngology)
 Chandarana, Shamir; Clinical Assistant Professor
(primary in Otolaryngology)
 Dawes, Jeffrey; Clinical Lecturer
(primary in Plastic Surgery)
 Dixon, Elijah; Associate Professor
(primary in General Surgery)
 Dort, Joseph C.; Professor
(primary in Otolaryngology)
 Gelfand, Gary A.J.; Clinical Assistant Professor
(primary in Thoracic Surgery)
 Graham, Andrew J.; Clinical Associate Professor
(primary in Thoracic Surgery)
 Lafreniere, Rene; Professor
(primary in General Surgery)
 Lindsay, Robert L.; Clinical Associate Professor
(primary in Plastic Surgery)
 Mack, Lloyd; Assistant Professor
(primary in General Surgery)
 MacLean, Anthony R.; Clinical Associate Professor
(primary in General Surgery)
 Magi, Enzo; Clinical Associate Professor
(primary in Plastic Surgery)
 Matthews, T. Wayne; Associate Professor
(primary in Otolaryngology)
 McFadden, Sean; Clinical Assistant Professor
(primary in Thoracic Surgery)
 Mew, Daphne J.Y.; Clinical Assistant Professor
(primary in General Surgery)
 Pasieka, Janice; Clinical Professor
(primary in General Surgery)
 Quan, May Lynn; Associate Professor
(primary in General Surgery)
 Schachar, Norman S.; Professor
(primary in Orthopedic Surgery)
 Sutherland, Francis R.; Professor
(primary in General Surgery)
 Temple, Walley; Professor
(primary in General Surgery)
 Temple-Oberle, Claire; Associate Professor
(primary in Department of Oncology)

Section of Thoracic Surgery **McFadden, Sean; Section Chief,** **Clinical Assistant Professor**

Gelfand, Gary A.J.; Clinical Assistant Professor
 Graham, Andrew J.; Clinical Associate Professor
 Grondin, Sean C.; Clinical Associate Professor

Section of Transplant Surgery **Salazar, Anastasio; Section Chief,** **Associate Professor**

Monroy, F. Mauricio; Associate Professor
 Yilmaz, Serdar; Associate Professor

Section of Urology **Carlson, Kevin; Section Chief,** **Clinical Assistant Professor**

Barr, Richard
 Baverstock, Richard
 Cook, Anthony J.; Clinical Assistant Professor
(primary in Pediatric Surgery)
 Donnelly, Bryan J.; Clinical Assistant Professor
 Duffy, Martin; Clinical Lecturer
 Dushinski, John W.; Clinical Assistant Professor
 Gotto, Geoffrey; Clinical Assistant Professor
 Hyndman, C. William; Clinical Assistant Professor
(primary in Pediatric Surgery)
 Hyndman, Matthew Eric; Clinical Assistant Professor
 Kawakami, Jun; Clinical Assistant Professor
 Kozak, Gregory N.; Clinical Assistant Professor
 Lee, Jay; Clinical Assistant Professor
 Leong, James
 Metcalfe, Donald G.; Clinical Assistant Professor
 Shields, William R.; (Lethbridge)
 Weber, Bryce; Clinical Assistant Professor
(primary in Pediatric Surgery)
 Wilkin, R. Peter; Clinical Assistant Professor

1.3 Department Members Continued

Section of Vascular Surgery

Petrasek, Paul F.; Section Chief, Associate Professor

Guimond, Marie-France; Assistant Professor
Moore, Randy D.; Associate Professor
Nutley, Mark; Assistant Professor
Samis, Gregory A.; Assistant Professor
Wong, Joyce; Clinical Assistant Professor

Department of Surgery

Krawetz, Roman; Assistant Professor
Oddone Paolucci, Elizabeth; Assistant Professor
Thornton, Gail M.; Associate Professor, Engineering

Joint Appointments

Appoo, Jehangir; Clinical Assistant Professor,
Cardiac Sciences
Bayes, Alexander J.; Clinical Associate Professor,
Cardiac Sciences
Biernaskie, Jeffrey A.; Assistant Professor,
Veterinary Medicine
Bech-Hansen, N. Torben; Professor,
Medical Genetics
Burgess, John J.; Clinical Associate Professor,
Cardiac Sciences
Casha, Steven; Assistant Professor,
Clinical Neurosciences
Clark, Andrea; Assistant Professor,
Kinesiology
Costello, Fiona; Clinical Assistant Professor,
Clinical Neurosciences
Dobson, Gary M.; Associate Professor, Anaesthesia
Duplessis, Stephan J.; Clinical Assistant Professor,
Clinical Neurosciences
Fedak, Paul W. M.; Assistant Professor,
Cardiac Sciences
Fletcher, William A.; Professor, Clinical Neurosciences
Gabriel, Vincent; Clinical Assistant Professor,
Clinical Neurosciences
Gregg, Sean; Clinical Lecturer, General Surgery
(Red Deer)
Hamilton, Mark; Associate Professor,
Clinical Neurosciences

Hayry, Pekka; Clinical Professor,
Pathology and Laboratory Medicine
Hurlbert, R. John; Associate Professor,
Clinical Neurosciences
Kidd, William T.; Clinical Assistant Professor,
Cardiac Sciences
Jena, Debakanta; Clinical Assistant Professor,
Family Medicine
Kline, Donald W.; Professor, Psychology
Kurwa, Habib; Clinical Associate Professor,
Medicine/Oncology
MacEachern, Paul R.; Clinical Assistant Professor,
Medicine/Oncology
Lysack, John; Clinical Associate Professor,
Radiology/Clinical Neurosciences
Maitland, Andrew; Associate Professor,
Cardiac Sciences
McColl, Ryan; Clinical Lecturer,
General Surgery (Lethbridge)
Muldrew, Kenneth B.; Assistant Professor,
Cell Biology & Anatomy
Prieur (Kieser), Teresa M.; Associate Professor,
Cardiac Sciences
Rothschild, John; Clinical Associate Professor,
Cardiac Sciences
Stell, William K.; Professor, Cell Biology & Anatomy
Subramaniam, Suresh; Clinical Assistant Professor

Adjunct Appointments

Barabas, Arpad Z.; Adjunct Associate Professor
Bultz, Barry D.; Adjunct Professor
Duncan, Neil A.; Adjunct Associate Professor
Herzog, Walter; Adjunct Associate Professor
McGann, Locksley E.; Adjunct Professor
Nigg, Benno M.; Adjunct Professor
Plaas, Anna H.K.; Adjunct Associate Professor
Ponton-Carss, Alicia; Adjunct Assistant Professor
Poulin, Paule; Adjunct Assistant Professor
Rangayyan, Rangaraj M.; Adjunct Professor
Shrive, Nigel G.; Adjunct Professor
Sigalet, David L.; Adjunct Professor
Wishart, Paul M.; Adjunct Assistant Professor
Zernicke, Ronald F.; Adjunct Professor

2.1 Surgical Activity Reports

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

Current Year Activity 2012-2013																							
Service	09/10	10/11	11/12	Apr	May	Jun	Q1	Jul	Aug	Sep	Q2	Oct	Nov	Dec	Q3	Jan	Feb	Mar	Q4	YTD	change	Variance	%
ANA	15	0	13	1	2	1	4	1	2	2	5	0	3	0	3	1	2	3	6	18	0.38	.5	
CAR	70	70	84	0	3	0	3	1	3	0	4	4	8	1	11	2	4	3	9	27	-0.39	-17	
COH	1296	1232	1355	118	129	132	379	29	107	110	395	128	128	101	355	114	97	111	322	1354	0.00	4	
DEN	1101	1005	1029	94	94	88	276	70	74	90	233	104	94	87	295	102	98	91	291	1085	0.05	56	
ENT	812	963	870	76	70	90	236	33	58	11	162	77	75	53	205	58	88	65	191	794	-0.08	-75	
GEN	5983	5965	6159	512	542	605	1659	334	404	498	1230	579	581	488	1648	549	478	525	1653	6005	-0.01	-64	
GI	13038	13812	14276	1221	1236	1224	3681	975	1075	1106	3156	1328	1167	1101	3580	1145	1114	1144	3403	13856	-0.03	-440	
GYN	528	642	658	45	87	45	157	41	46	50	137	58	56	35	149	61	52	51	164	607	-0.08	51	
MED	7294	7027	6896	635	670	639	1944	485	422	579	1446	631	614	514	1759	706	592	580	1878	7097	0.06	371	
NEU	55	64	58	4	8	4	16	7	5	6	18	4	9	4	8	6	2	10	18	58	0.00	0	
OBIL	1742	1886	1965	162	169	170	501	126	127	141	354	159	171	164	494	168	156	174	518	1817	-0.02	-68	
OPH	1915	2041	2149	134	168	186	508	123	179	189	491	223	196	180	589	185	155	190	510	2108	-0.02	-41	
ORA	2322	2384	2342	214	248	223	683	172	152	320	550	253	204	170	632	215	201	200	633	2487	0.06	145	
ORT	308	369	385	29	35	48	112	28	25	35	88	47	36	21	104	41	35	31	107	411	0.07	26	
PLS	12208	12791	13090	1141	1231	1188	3559	950	977	1107	3040	1268	1214	1051	3573	1264	1114	1185	3567	13758	-0.02	-212	
POB	3348	3230	3411	275	312	275	862	240	228	291	760	228	317	247	790	270	251	250	811	3222	-0.06	-169	
POB	304	473	410	35	22	24	81	21	11	31	63	29	36	20	83	9	20	20	48	275	-0.33	-135	
PSY	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	0	
RAD	282	431	481	41	45	37	123	32	65	23	120	46	47	40	142	68	49	44	169	650	0.14	89	
RES	104	84	86	11	14	12	37	6	12	5	23	6	8	8	22	4	8	7	15	97	0.10	9	
SATP	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	0	
THO	814	628	587	44	57	48	149	34	38	48	121	55	50	38	144	53	41	44	138	452	-0.06	-35	
TRN	481	511	470	31	39	40	110	33	34	54	121	58	44	39	131	49	41	42	129	481	0.04	21	
URIQ	6293	6340	7050	523	587	633	1943	592	659	627	1778	717	659	547	1923	733	632	616	1981	7625	0.08	575	
VAS	765	761	818	74	78	87	239	55	75	80	210	93	75	82	291	87	90	73	250	850	0.16	134	
Total	61189	62502	65252	5620	5939	5787	17259	4454	4678	5368	14901	6095	5778	5033	16907	5886	5325	6513	16708	65369			

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

Srv	Admit Type	10/11	11/12	12/13	Apr	May	Jun	Q1	Jul	Aug	Sep	Q2	Oct	Nov	Dec	Q3	Jan	Feb	Mar	Q4	YTD change	%
Current Year Activity 2013-2014																						
+	Elective	3	3	8	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0.00
	Emergency	4	4	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
	Urgent	2	6	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
	Total	9	13	18	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	
ANA	Elective	5	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
	Emergency	58	41	23	6	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	6	0.00
	Urgent	7	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
	Total	70	44	27	6	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	6	
CAR	Elective	647	717	720	64	0	0	64	0	0	0	0	0	0	0	0	0	0	0	0	64	3.23
	Emergency	122	145	158	11	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	11	-31.25
	Urgent	482	492	473	36	0	0	36	0	0	0	0	0	0	0	0	0	0	0	0	36	-10.00
	Total	1232	1355	1340	111	0	0	111	0	0	0	0	0	0	0	0	0	0	0	0	111	
COH	Elective	38	22	32	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0.00
	Emergency	222	214	234	17	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	17	-10.53
	Urgent	745	793	820	63	0	0	63	0	0	0	0	0	0	0	0	0	0	0	0	63	12.16
	Total	1005	1029	1086	101	0	0	101	0	0	0	0	0	0	0	0	0	0	0	0	101	
DEN	Elective	903	827	749	62	0	0	62	0	0	0	0	0	0	0	0	0	0	0	0	62	-13.89
	Emergency	27	16	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
	Urgent	33	27	29	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3	0.00
	Total	963	870	794	65	0	0	65	0	0	0	0	0	0	0	0	0	0	0	0	65	
GI	Elective	542	545	485	57	0	0	57	0	0	0	0	0	0	0	0	0	0	0	0	57	-39.02
	Emergency	62	71	74	6	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	6	100.00
	Urgent	38	42	46	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	100.00
	Total	642	658	605	65	0	0	65	0	0	0	0	0	0	0	0	0	0	0	0	65	
GYN	Elective	4901	4726	5004	491	0	0	491	0	0	0	0	0	0	0	0	0	0	0	0	491	9.31
	Emergency	1219	1095	971	101	0	0	101	0	0	0	0	0	0	0	0	0	0	0	0	101	27.85
	Urgent	907	873	1095	91	0	0	91	0	0	0	0	0	0	0	0	0	0	0	0	91	-14.95
	Total	7027	6695	7071	683	0	0	683	0	0	0	0	0	0	0	0	0	0	0	0	683	
MED	Elective	37	38	24	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	-33.33
	Emergency	17	14	13	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0.00
	Urgent	9	6	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
	Total	64	58	59	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4	
NEU	Elective	820	878	852	76	0	0	76	0	0	0	0	0	0	0	0	0	0	0	0	76	5.56
	Emergency	424	424	416	27	0	0	27	0	0	0	0	0	0	0	0	0	0	0	0	27	-15.63
	Urgent	622	663	549	79	0	0	79	0	0	0	0	0	0	0	0	0	0	0	0	79	38.60
	Total	1866	1965	1817	182	0	0	182	0	0	0	0	0	0	0	0	0	0	0	0	182	
OBS	Elective	1441	1531	1510	123	0	0	123	0	0	0	0	0	0	0	0	0	0	0	0	123	18.04
	Emergency	485	514	360	30	0	0	30	0	0	0	0	0	0	0	0	0	0	0	0	30	150.77
	Urgent	105	104	234	16	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	16	6.67
	Total	2031	2149	2104	169	0	0	169	0	0	0	0	0	0	0	0	0	0	0	0	169	
OPH	Elective	1484	1372	1386	141	0	0	141	0	0	0	0	0	0	0	0	0	0	0	0	141	11.90
	Emergency	515	512	518	37	0	0	37	0	0	0	0	0	0	0	0	0	0	0	0	37	-7.50
	Urgent	365	456	585	61	0	0	61	0	0	0	0	0	0	0	0	0	0	0	0	61	27.08
	Total	2364	2342	2489	239	0	0	239	0	0	0	0	0	0	0	0	0	0	0	0	239	
ORA	Elective	324	305	323	36	0	0	36	0	0	0	0	0	0	0	0	0	0	0	0	36	-33.33
	Emergency	42	76	30	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0.00

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

Srv	Admit Type	10/11	11/12	12/13	Apr	May	Jun	Q1	Jul	Aug	Sep	Q2	Oct	Nov	Dec	Q3	Jan	Feb	Mar	Q4	YTD change	%
ORA	Urgent	3	4	58	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3	50.00
	Total	369	385	411	41	0	0	41	0	0	0	0	0	0	0	0	0	0	0	0	41	
ORT	**	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
	Elective	7534	8551	8496	813	0	0	813	0	0	0	0	0	0	0	0	0	0	0	0	813	8.00
	Emergency	3154	3105	2238	178	0	0	178	0	0	0	0	0	0	0	0	0	0	0	0	178	5.95
	Urgent	2103	2263	3018	267	0	0	267	0	0	0	0	0	0	0	0	0	0	0	0	267	29.81
	Total	12791	13950	13743	1258	0	0	1258	0	0	0	0	0	0	0	0	0	0	0	0	1258	
PLS	Elective	2277	2276	2202	208	0	0	208	0	0	0	0	0	0	0	0	0	0	0	0	208	10.05
	Emergency	515	538	425	33	0	0	33	0	0	0	0	0	0	0	0	0	0	0	0	33	-5.71
	Urgent	438	597	596	45	0	0	45	0	0	0	0	0	0	0	0	0	0	0	0	45	-11.76
	Total	3230	3411	3223	286	0	0	286	0	0	0	0	0	0	0	0	0	0	0	0	286	
POD	Elective	263	248	157	14	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	14	-12.50
	Emergency	193	148	29	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	-87.50
	Urgent	17	14	88	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5	-54.55
	Total	473	410	275	20	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	20	
PSY	Elective	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
	Total	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
RAD	Elective	107	113	144	18	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	18	50.00
	Emergency	291	354	378	38	0	0	38	0	0	0	0	0	0	0	0	0	0	0	0	38	35.71
	Urgent	33	14	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
	Total	431	481	550	56	0	0	56	0	0	0	0	0	0	0	0	0	0	0	0	56	
RES	Elective	12	17	18	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	-50.00
	Emergency	34	25	29	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3	-67.50
	Urgent	38	46	50	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	100.00
	Total	84	88	97	6	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	6	
SATP	**	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
	Emergency	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
	Total	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
THO	Elective	49	32	30	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	-50.00
	Emergency	56	40	23	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0.00
THO	Urgent	521	515	499	61	0	0	61	0	0	0	0	0	0	0	0	0	0	0	0	61	52.50
	Total	626	587	552	64	0	0	64	0	0	0	0	0	0	0	0	0	0	0	0	64	
TRN	Elective	94	96	344	53	0	0	53	0	0	0	0	0	0	0	0	0	0	0	0	53	57.14
	Emergency	92	69	90	7	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	7	250.00
	Urgent	325	305	58	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4	-50.00
	Total	511	470	492	64	0	0	64	0	0	0	0	0	0	0	0	0	0	0	0	64	
URO	**	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
	Elective	3635	3550	3596	333	0	0	333	0	0	0	0	0	0	0	0	0	0	0	0	333	10.26
	Emergency	1927	2351	2625	222	0	0	222	0	0	0	0	0	0	0	0	0	0	0	0	222	16.84
	Urgent	778	1148	1402	147	0	0	147	0	0	0	0	0	0	0	0	0	0	0	0	147	12.21
	Total	6340	7050	7624	702	0	0	702	0	0	0	0	0	0	0	0	0	0	0	0	702	
VAS	Elective	377	327	405	35	0	0	35	0	0	0	0	0	0	0	0	0	0	0	0	35	20.89
	Emergency	207	241	203	11	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	11	-45.00
	Urgent	177	248	343	22	0	0	22	0	0	0	0	0	0	0	0	0	0	0	0	22	-12.00
	Total	761	816	951	68	0	0	68	0	0	0	0	0	0	0	0	0	0	0	0	68	
**		3	4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Elective		36475	37484	37233	3527	0	0	3527	0	0	0	0	0	0	0	0	0	0	0	0	3527	
Emergency		14827	15353	13597	1105	0	0	1105	0	0	0	0	0	0	0	0	0	0	0	0	1105	
Urgent		11197	12418	14560	1300	0	0	1300	0	0	0	0	0	0	0	0	0	0	0	0	1300	
Summary		62502	65259	65395	5932	0	0	5932	0	0	0	0	0	0	0	0	0	0	0	0	5932	

Inpatient/Outpatient Cases Surgical Statistical Activity by Patient Type All Hospitals (FMC, RGH, PLC, ACH)

Srv	Type	09/10	10/11	11/12	Apr	May	Jun	Q1	Jul	Aug	Sep	Q2	Oct	Nov	Dec	Q3	Jan	Feb	Mar	Q4	YTD
Current Year Activity 2012-2013																					
ANA	InPatient	12	5	9	1	2	0	3	0	2	1	3	0	3	0	3	1	2	2	5	14
	OutPatient	3	3	4	0	0	1	1	1	0	1	2	0	0	0	0	0	0	1	1	4
	Subtotal	15	8	13	1	2	1	4	1	2	2	5	0	3	0	3	1	2	3	6	18
	InPatient	70	65	44	0	2	0	2	1	2	0	3	4	8	1	11	1	4	3	8	34
CAR	OutPatient	0	5	9	0	1	0	1	0	1	0	1	0	0	0	0	1	0	0	1	3
	Subtotal	70	70	44	0	3	0	3	1	3	0	4	4	8	1	11	2	4	3	9	37
	InPatient	864	877	514	87	87	78	250	50	88	72	190	75	81	68	228	70	68	72	298	878
	OutPatient	432	405	441	21	29	56	126	36	39	38	118	49	45	33	127	44	31	36	114	483
COH	Subtotal	1296	1282	1355	108	126	132	376	86	107	110	308	124	126	101	355	114	97	111	322	1359
	InPatient	1100	1004	1028	94	94	88	278	70	74	66	233	104	80	87	284	102	98	91	291	1064
	OutPatient	1	7	1	5	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
	Subtotal	1101	1011	1029	94	94	88	278	70	74	66	233	104	80	87	285	102	98	91	291	1065
DEN	InPatient	62	81	53	4	2	7	13	3	3	3	9	8	5	3	19	7	3	3	13	51
	OutPatient	750	852	817	72	68	83	223	30	55	68	153	69	70	50	189	51	69	62	178	743
	Subtotal	812	933	870	76	70	90	236	33	58	71	162	77	75	53	208	58	72	65	191	794
	InPatient	1297	1271	1285	143	104	134	381	90	112	109	311	124	122	100	348	126	111	134	373	1411
ENT	OutPatient	4668	4714	4874	305	438	471	1278	244	292	389	805	455	459	383	1302	421	307	391	1179	4684
	Subtotal	5965	5985	6159	512	542	605	1659	334	404	498	1116	579	581	483	1650	547	478	525	1552	5695
	InPatient	8220	8640	9081	778	768	772	2318	678	753	711	2142	820	719	726	2275	715	688	754	2157	8890
	OutPatient	4618	4972	5215	443	470	452	1385	287	322	365	1014	509	448	365	1321	430	425	350	1246	4946
GEN	Subtotal	13038	13612	14276	1221	1236	1224	3693	975	1075	1106	3156	1329	1167	1101	3596	1145	1114	1104	3403	13836
	InPatient	118	118	118	4	12	5	21	12	8	10	30	10	14	7	31	6	10	4	20	102
	OutPatient	410	523	542	41	55	40	136	29	34	40	107	48	42	28	118	55	42	47	144	506
	Subtotal	528	641	660	45	67	45	157	41	42	50	137	58	56	35	149	61	52	51	164	607
GYN	InPatient	5444	3310	3188	318	291	308	917	237	231	262	780	329	305	260	903	347	285	294	826	3506
	OutPatient	3850	3717	3510	317	379	331	1027	248	191	287	726	302	309	245	858	359	307	286	852	3561
	Subtotal	7294	7027	6698	635	670	639	1944	485	422	549	1506	631	614	505	1761	706	592	580	1678	7067
	InPatient	21	33	23	1	2	2	5	2	3	3	8	0	0	0	5	1	0	3	4	17
MED	OutPatient	54	31	35	3	4	2	9	5	2	3	10	4	0	4	8	5	2	7	14	41
	Subtotal	55	64	58	4	6	4	14	7	5	6	18	4	0	4	13	6	2	10	18	58
NEU	InPatient	1547	1568	1700	138	154	144	437	116	112	124	302	144	148	147	439	146	170	160	478	1704
	OutPatient	165	189	215	23	15	26	84	10	15	17	42	15	23	17	55	22	18	14	52	213
	Subtotal	1712	1757	1915	161	169	170	521	126	127	141	344	159	171	164	494	168	188	174	528	1917
	InPatient	775	770	809	48	75	90	213	48	72	74	194	85	76	70	231	89	87	86	222	860
OBS	OutPatient	1140	1221	1290	85	113	96	308	78	107	115	297	128	120	110	363	96	88	104	288	1248
	Subtotal	1915	2041	2149	134	188	186	521	126	179	189	491	223	196	180	594	165	155	190	514	2108
	InPatient	589	600	583	46	44	82	155	57	45	87	170	43	38	41	128	43	43	56	142	586
	OutPatient	1733	1754	1759	185	202	261	526	115	108	159	389	204	196	134	594	172	158	150	480	1892
OPH	Subtotal	2322	2354	2342	214	246	223	681	172	162	226	559	247	234	175	722	215	201	206	622	2487
	InPatient	329	302	318	21	28	37	86	27	23	28	78	40	29	14	83	32	29	18	80	327
	OutPatient	67	67	69	8	7	11	28	1	2	7	10	7	7	7	23	9	8	12	27	84
	Subtotal	396	369	385	29	35	48	114	28	25	35	88	47	36	21	106	41	37	31	107	411
ORT	InPatient	6391	9123	10262	775	906	871	2582	738	751	801	2280	906	880	811	2627	939	845	813	2697	10150
	OutPatient	3817	3688	3668	306	325	315	806	218	228	306	750	332	334	280	948	325	299	276	879	3572
	Subtotal	12208	12791	13930	1081	1231	1186	3388	956	979	1107	3030	1238	1214	1091	3575	1264	1144	1189	3567	13722
	InPatient	1675	1594	1614	146	159	138	448	144	132	147	423	186	153	120	379	122	120	137	379	1628
PLS	OutPatient	1673	1636	1587	127	153	132	417	96	96	144	336	120	164	127	411	148	121	153	432	1596
	Subtotal	3348	3230	3411	273	312	270	865	240	228	291	759	306	317	247	790	270	241	290	811	3222
	InPatient	338	323	267	25	15	21	81	12	7	16	35	15	22	14	51	8	11	17	34	181
	OutPatient	168	150	143	10	7	3	20	8	4	15	28	13	13	8	32	2	9	3	14	94
POC	Subtotal	504	473	410	35	22	24	101	21	11	31	63	28	35	20	83	8	20	20	48	275
	InPatient	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	OutPatient	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Subtotal	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RAD	InPatient	101	233	205	35	34	28	97	28	22	16	86	34	38	40	112	52	43	43	135	440
	OutPatient	91	86	86	6	11	9	26	4	13	9	24	15	9	8	30	10	9	5	30	110
	Subtotal	282	431	481	41	45	37	123	32	35	25	110	49	47	48	142	62	49	48	165	550
	InPatient	85	71	68	8	10	8	27	8	11	3	20	8	7	5	17	4	3	7	14	78
RES	OutPatient	19	13	20	2	4	4	10	0	1	2	3	1	1	3	5	0	1	0	7	19
	Subtotal	104	84	88	11	14	12	37	8	12	5	23	9	8	8	22	4	4	7	15	97
	InPatient	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	OutPatient	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SATP	Subtotal	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Inpatient/Outpatient Cases Surgical Statistical Activity by Patient Type All Hospitals (FMC, RGH, PLC, ACH) Continued

Srv	Patient Type	09/10	10/11	11/12	Apr	May	Jun	Q1	Jul	Aug	Sep	Q2	Oct	Nov	Dec	Q3	Jan	Feb	Mar	Q4	YTD
THO	Subtotal	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	InPatient	575	599	537	40	64	45	139	33	33	41	107	43	47	35	125	43	36	36	115	486
	OutPatient	39	29	55	4	3	3	10	1	6	7	14	12	3	4	19	10	9	8	23	65
	Subtotal	614	628	592	44	67	48	149	34	39	48	121	55	50	39	144	53	41	44	138	552
TRN	Subtotal	156	189	140	4	16	18	40	22	15	21	58	26	15	12	53	19	17	22	58	209
	InPatient	325	322	330	27	21	22	70	11	19	33	63	32	29	17	78	27	24	20	71	282
	OutPatient	481	611	470	31	39	40	110	33	34	54	121	58	44	29	131	46	41	42	129	491
URO	Subtotal	3776	3771	4452	378	430	402	1210	429	354	418	1201	467	409	359	1235	454	395	381	1231	4877
	InPatient	2517	2569	2593	245	257	231	733	963	205	209	577	250	250	186	688	279	236	235	750	2746
	OutPatient	5293	6340	7040	623	887	633	1943	592	589	627	1778	717	659	547	1923	733	632	616	1981	7625
VAS	Subtotal	567	625	703	62	84	70	196	52	66	67	188	78	58	60	198	66	58	60	184	786
	InPatient	201	136	113	12	14	17	43	3	6	13	22	15	18	22	55	21	32	13	68	186
	OutPatient	768	761	816	74	78	87	239	55	75	80	210	93	70	52	281	87	90	73	250	950
Summary																					
	InPatient	34203	35326	37885	3163	3353	3326	9842	2855	2933	3113	8901	3506	3268	2995	9773	3373	3102	3297	9772	38263
	OutPatient	26959	27174	27377	2357	2586	2471	7414	1509	1746	2255	5600	2580	2511	2034	7134	2493	2224	2216	5933	27061
	Total	61169	62502	65262	5520	5939	5797	17256	4454	4679	5368	14501	6095	5779	5033	16907	5866	5326	5513	16705	65369

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

Current Year Hours 2012-2013																									
Service	09/10	10/11	11/12	Apr	May	Jun	Q1	Jul	Aug	Sep	Q2	Oct	Nov	Dec	Q3	Jan	Feb	Mar	Q4	YTD	change	Var			
*	14	10	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.31	-3.67			
ANA	78	82	46	0	2	0	0	2	1	2	0	3	8	5	0	11	1	8	2	8	28	-5.00	-98.18		
CAR	2102	2169	2365	207	219	223	650	174	177	208	559	206	244	172	621	204	177	164	545	2377	0.00	11.12			
COH	4685	4472	4720	446	440	453	1339	377	339	439	1155	511	457	411	1378	489	440	457	1367	5262	0.11	641.84			
DEN	1102	1322	1208	109	107	134	351	44	84	99	228	112	108	71	261	91	97	100	288	1161	-0.06	-47.08			
ENT	6268	6235	6344	612	523	606	1742	403	443	571	1415	602	594	515	1712	598	524	500	1712	5583	0.04	238.50			
GEN	22702	23885	24045	2135	2188	2161	6483	1771	1905	1598	5674	2342	2043	1879	6265	1999	1913	2062	5865	24392	-0.22	-653.91			
GI	487	522	554	29	51	39	120	33	33	43	108	46	53	32	135	50	46	35	142	508	-0.52	-485.05			
GYN	7774	7775	7867	783	783	793	2359	564	574	682	1820	787	721	608	2116	643	711	715	2270	8547	0.09	679.16			
MED	51	54	37	5	9	5	15	4	4	5	13	6	3	5	11	1	3	5	10	55	0.46	17.27			
NEU	6683	6884	7254	595	633	674	1822	472	424	563	1460	657	641	571	1870	639	664	648	1952	7106	-0.02	-542.75			
OBS	1741	1804	2120	125	181	172	478	122	172	188	483	224	186	173	564	170	161	200	531	2078	-0.01	-462.08			
OPH	2624	3048	3024	259	300	301	861	223	205	300	729	308	233	218	760	275	336	280	774	3126	0.03	501.78			
ORA	953	918	911	95	94	108	267	74	73	87	235	116	91	50	256	87	78	75	240	1000	0.10	88.96			
ORT	23408	24825	27387	2156	2374	2275	6806	1935	1855	2160	5951	2546	2435	2088	7081	2437	2228	2264	6852	25743	-0.15	-664.95			
PLS	7144	6838	7126	589	657	588	1834	473	486	616	1575	500	894	475	1630	622	546	610	1775	6830	-0.04	-285.47			
POC	632	589	529	53	26	34	111	26	16	35	80	30	43	25	108	13	24	29	60	367	-0.01	-869.13			
PSY	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	0.00			
RAD	256	372	426	34	38	35	108	31	57	18	107	41	41	43	125	80	45	40	154	497	0.17	70.58			
RES	189	169	183	19	25	24	68	13	21	8	43	13	20	14	56	8	14	20	42	211	0.15	27.88			
SATP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	0.00			
THO	1812	1767	1784	148	156	158	462	124	108	137	369	188	152	125	434	159	140	145	445	1712	-0.04	-171.08			
TRN	690	972	868	44	81	83	209	87	82	103	272	113	103	80	277	99	71	91	251	1011	0.16	342.80			
URO	6268	6363	7407	649	715	619	1983	587	544	623	1754	745	869	552	1670	742	633	648	2024	7734	0.04	327.02			
VAS	2287	2475	2547	229	254	268	752	212	233	247	699	308	225	236	760	279	338	249	762	2977	0.17	429.84			
Total	190356	193362	199609	9242	9659	9707	28868	7753	7844	9135	24732	10286	9730	8313	26420	8860	9062	9424	28286	110321					

2.2 NHSF Surgical Indicator Report

NHSF Surgical Indicator Report

	Fiscal	Fiscal	Fiscal	Fiscal	Fiscal 2012-2013																Fiscal	Fiscal 2013-2014		
NHSF Activity	2008/09	2009/10	2010/11	2011/12	Apr	May	June	1 QT	July	Aug	Sept	2 QT	Oct	Nov	Dec	3 QT	Jan	Feb	Mar	4 QT	2012/13	Apr	May 'TD	2013/14
Cataracts	8,498	9,291	12,204	12,955	1,054	1,118	1,091	3,263	884	888	975	2,747	1,235	1,232	867	3,334	1,033	1,038	1,192	3,263	12,607	1,180	1,184	2,364
Non-Cataracts	3,261	3,464	2,331	3,681	328	337	318	983	299	276	287	862	380	396	284	1,060	398	347	315	1,060	3,965	339	370	709
Ophthalmology Total	11,759	12,755	14,535	16,636	1,382	1,455	1,409	4,246	1,183	1,164	1,262	3,609	1,615	1,628	1,151	4,394	1,431	1,385	1,507	4,323	16,572	1,519	1,554	3,073
Oral Maxillofacial Surgery	514	535	761	854	91	84	86	261	54	78	61	193	120	115	60	295	89	69	77	235	984	84	77	161
Podiatry	776	764	823	860	84	71	46	201	47	51	96	194	110	98	51	259	97	98	98	293	947	100	108	208
Restorative Dentistry	679	569	409	484	45	48	47	140	44	37	37	118	52	50	49	151	42	39	38	119	528	52	38	90
Vestibular Testing	155	178	239	229	11	31	28	70	30	17	6	53	14	19	12	45	20	25	21	66	234	18	24	42
NHSF Activity	14,799	15,848	17,389	19,063	1,613	1,689	1,616	4,918	1,358	1,347	1,462	4,167	1,911	1,910	1,323	5,144	1,679	1,616	1,741	5,036	19,265	1,773	1,801	3,574
Kensington Clinic	4,252	4,289	4,667	4,913	383	476	404	1,263	400	502	391	1,293	431	435	378	1,244	471	369	375	1,215	5,015	428	453	881
Total NHSF Activity	19,051	20,137	22,056	23,976	1,996	2,165	2,020	6,181	1,758	1,849	1,853	5,460	2,342	2,345	1,701	6,388	2,150	1,985	2,116	6,251	24,280	2,201	2,254	4,455

NHSF Mean Wait Time (Weeks)	2008/09	2009/10	2010/11	2011/12	Apr	May	June	1 QT	July	Aug	Sept	2 QT	Oct	Nov	Dec	3 QT	Jan	Feb	Mar	4 QT	2012/13	Apr	May
Cataracts	19	28	31	18	16	18	18	17	17	16	18	17	19	17	17	18	17	16	18	17	17	19	18
Non-Cataracts	10	11	16	15	15	15	14	15	11	14	12	12	13	11	10	11	12	14	11	12	13	12	11
Oral Maxillofacial Surgery	6	6	8	8	8	6	6	7	8	9	6	8	8	6	4	6	8	8	5	7	7	6	8
Podiatry	26	40	38	33	30	33	29	31	31	22	25	26	20	24	35	26	22	22	18	21	26	22	22
Restorative Dentistry	10	10	9	9	9	14	11	11	14	13	14	14	12	10	11	11	9	11	12	11	12	10	9
Vestibular Testing	4	8	3	10	4	4	4	4	6	3	5	5	4	7	4	5	4	5	3	4	4	5	6

NHSF Waiting List	2008/09	2009/10	2010/11	2011/12	Apr	May	June	1 QT	July	Aug	Sept	2 QT	Oct	Nov	Dec	3 QT	Jan	Feb	Mar	4 QT	2012/13	Apr	May
Cataracts	6,924	8,500	6,515	5,723	5,536	5,529	5,608	5,608	5,559	5,583	5,654	5,654	5,773	5,743	5,644	5,644	5,767	5,345	5,409	5,409	5,409	5,580	5,434
Non-Cataracts	2,208	1,906	2,174	2,077	2,085	2,090	2,146	2,146	2,144	2,129	2,227	2,227	2,347	2,359	2,340	2,340	2,217	1,384	1,454	1,454	1,454	1,566	1,547
Ophthalmology Total	9,132	10,406	8,689	7,800	7,621	7,619	7,754	7,754	7,703	7,712	7,881	7,881	8,120	8,102	7,984	7,984	7,984	6,729	6,863	6,863	6,863	7,146	6,981
Oral Maxillofacial Surgery	416	180	219	318	315	337	389	389	381	376	396	396	402	441	441	441	486	507	536	536	536	576	578
Podiatry	1,464	1,099	1,075	1,344	754	825	876	876	948	1,026	1,022	1,022	1,073	1,170	1,229	1,229	1,159	913	976	976	976	977	1,039
Restorative Dentistry	233	416	96	169	179	226	216	216	217	219	218	218	232	247	233	233	187	160	174	174	174	179	204
Vestibular Testing	48	34	46	59	69	73	93	93	99	86	96	96	103	87	99	99	118	61	53	53	53	52	40
Total NHSF Wait List	11,293	12,135	10,125	9,690	8,938	9,080	9,328	9,328	9,348	9,419	9,613	9,613	9,930	10,047	9,986	9,986	9,934	8,370	8,602	8,602	8,602	8,930	8,842

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

2.3 Rural Volumes Surgeries Report

Information below depicts cumulative statistics from the fiscal year April 2012-March 2013

IP/OP	Surgeon Service	Number of Cases				Percent of Total Cases			
		BMS	CGH	HRH	Total	BMS	CGH	HRH	Total
Inpatient	Gen	0	60	4	64	0.00%	1.01%	0.07%	1.08%
	Gyn	0	74	114	188	0.00%	1.25%	1.93%	3.18%
	Med	38	121	0	159	0.64%	2.05%	0.00%	2.69%
	Obs	0	0	43	43	0.00%	0.00%	0.73%	0.73%
	Oph	0	0	0	0	0.00%	0.00%	0.00%	0.00%
	Ort	846	1	0	847	14.30%	0.02%	0.00%	14.32%
	Pls	329	45	0	374	5.56%	0.76%	0.00%	6.32%
	Uro	0	0	1	1	0.00%	0.00%	0.02%	0.02%
	Vas	0	2	0	2	0.00%	0.03%	0.00%	0.03%
Total		1213	303	162	1678	20.50%	5.12%	2.74%	28.36%
Outpatient	Gen	0	177	1777	1954	0.00%	2.99%	30.04%	33.03%
	Gyn	0	195	159	354	0.00%	3.30%	5.98%	9.28%
	Med	102	54	82	238	1.72%	0.91%	1.39%	4.02%
	Obs	0	0	57	57	0.00%	0.00%	0.96%	0.96%
	Oph	0	0	119	119	0.00%	0.00%	2.01%	2.01%
	Ort	654	0	0	654	11.05%	0.00%	0.00%	11.05%
	Pls	514	161	0	675	8.69%	2.72%	0.00%	11.41%
	Uro	0	0	37	37	0.00%	0.00%	0.63%	0.63%
	Vas	0	150	0	150	0.00%	2.54%	0.00%	2.54%
Total		1370	737	3291	4238	21.47%	12.46%	37.71%	71.64%
Total	Gen	0	237	1781	2018	0.00%	4.01%	30.10%	34.11%
	Gyn	0	269	273	542	0.00%	4.55%	4.61%	9.16%
	Med	140	175	82	397	2.37%	2.96%	1.39%	6.71%
	Obs	0	0	100	100	0.00%	0.00%	1.69%	1.69%
	Oph	0	0	0	0	0.00%	0.00%	0.00%	0.00%
	Ort	1500	1	119	1620	25.35%	0.02%	2.01%	27.38%
	Pls	843	206	0	1049	14.25%	3.48%	0.00%	17.73%
	Uro	0	0	38	38	0.00%	0.00%	0.64%	0.64%
	Vas	0	152	0	152	0.00%	14.62%	0.00%	14.62%
Grand Total		2483	1040	3333	5916	41.97%	17.68%	40.35%	100.00%

*Note

CGH- Canmore General Hospital

HRH- High River General Hospital

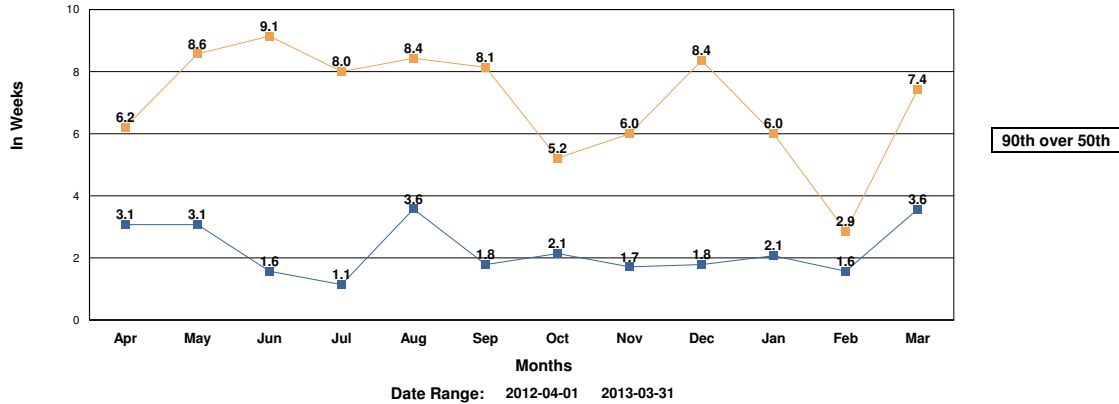
BMS- Banff Mineral Springs Hospital

2.4 Wait Time Reports by Procedure Group

Ear, Nose, Throat - Otolaryngology

Urgent Throat Endoscopy Wait Time

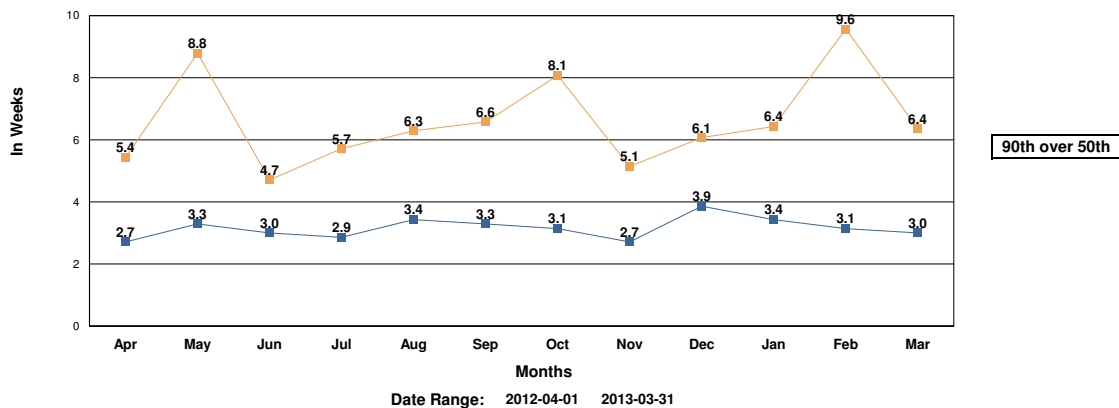
Total Cases: 102
50th: 2.29 90th: 6.15



General Surgery

Urgent Breast Mastectomy Wait Time

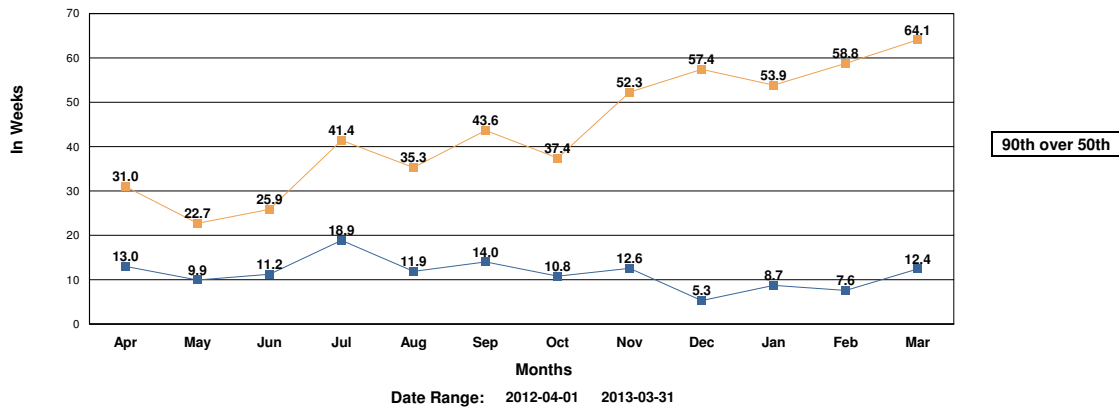
Total Cases: 1002
50th: 3.14 90th: 6.29



Neurosurgery/ Orthopaedic Surgery

Elective Spine Lumbar Wait Time

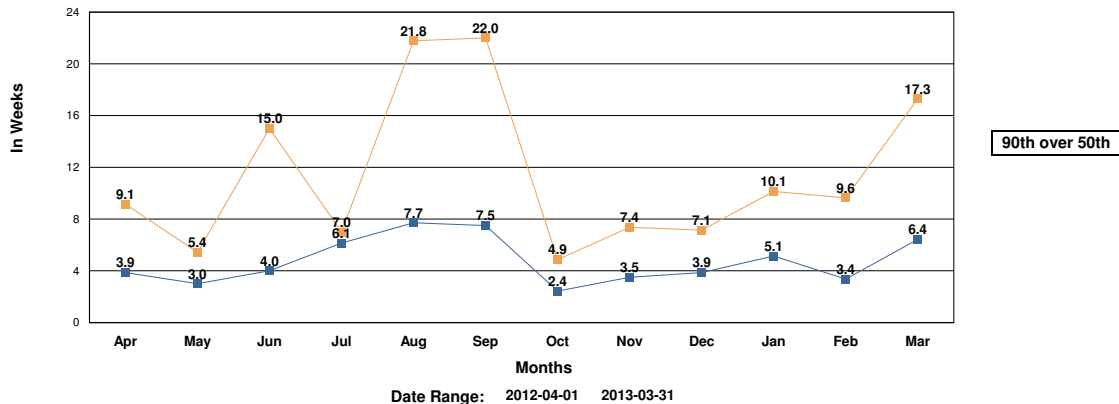
Total Cases: 264
50th: 11.43 90th: 41.00



Gynecology/ Obstetrics Surgery

Urgent Hysterectomy Other Wait Time

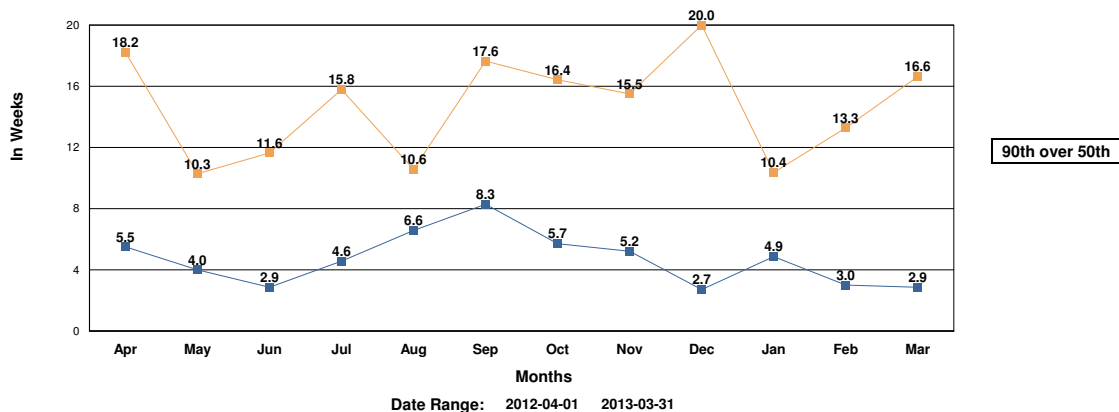
Total Cases: 129
50th: 4.29 90th: 9.14



Ophthalmology

Elective Eye Retinal/ Choroid/ Vitreous Wait Time

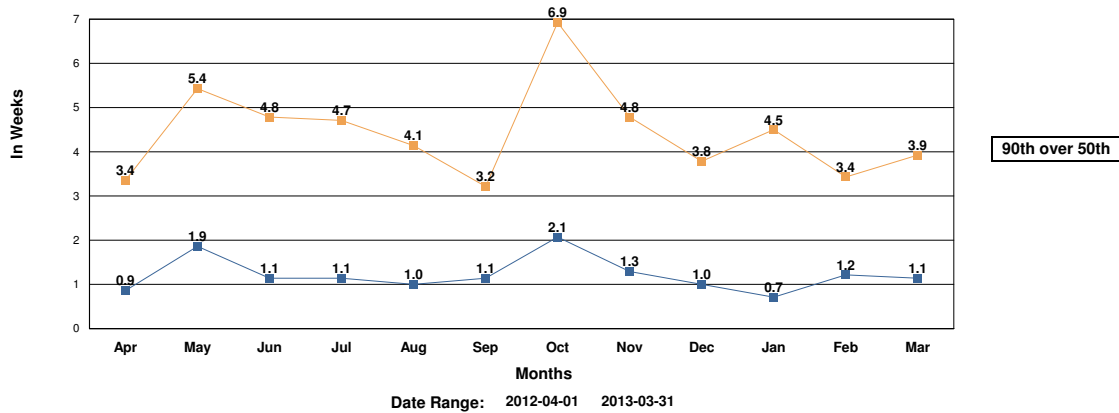
Total Cases: 570
50th: 4.71 90th: 14.07



Ophthalmology

Urgent Eye Retinal/ Choroid/ Vitreous Wait Time

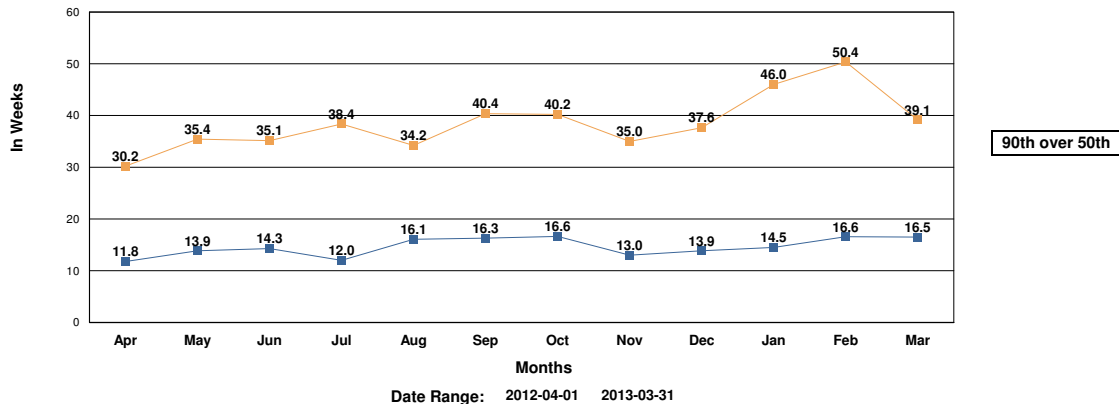
Total Cases: 526
50th: 1.14 90th: 4.29



Orthopaedic Surgery

Elective Hip Arthroplasty Wait Time

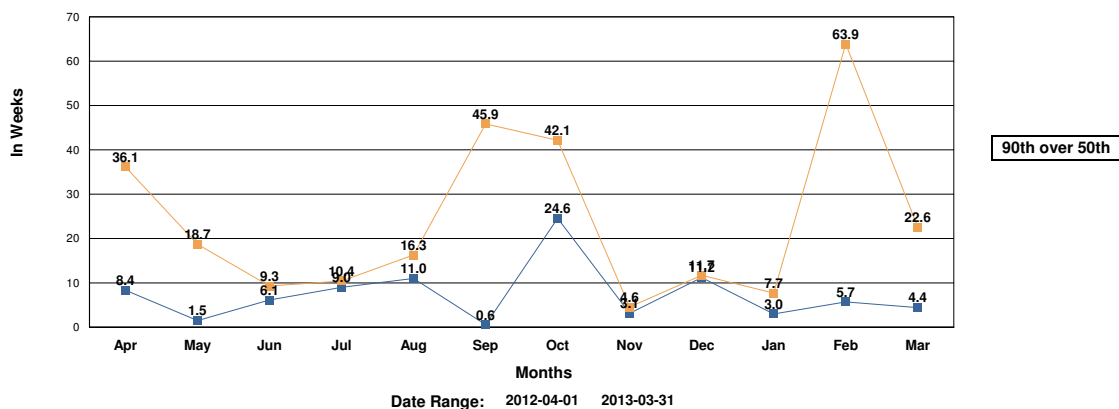
Total Cases: 1307
50th: 14.71 90th: 38.43
Elective Target Wait Time: 27 weeks



Orthopaedic Surgery

Urgent Hip Arthroplasty Wait Time

Total Cases: 50
50th: 5.14 90th: 20.64
Elective Target Wait Time: 27 weeks



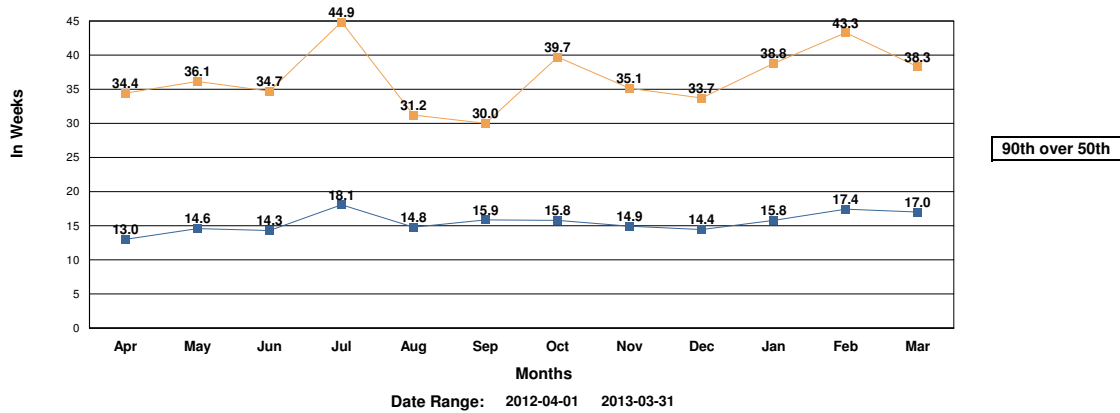
Orthopaedic Surgery

Elective Knee Arthroplasty Wait Time

Total Cases: 1872

50th: 15.29 90th: 36.50

Elective Target Wait Time: 35 weeks



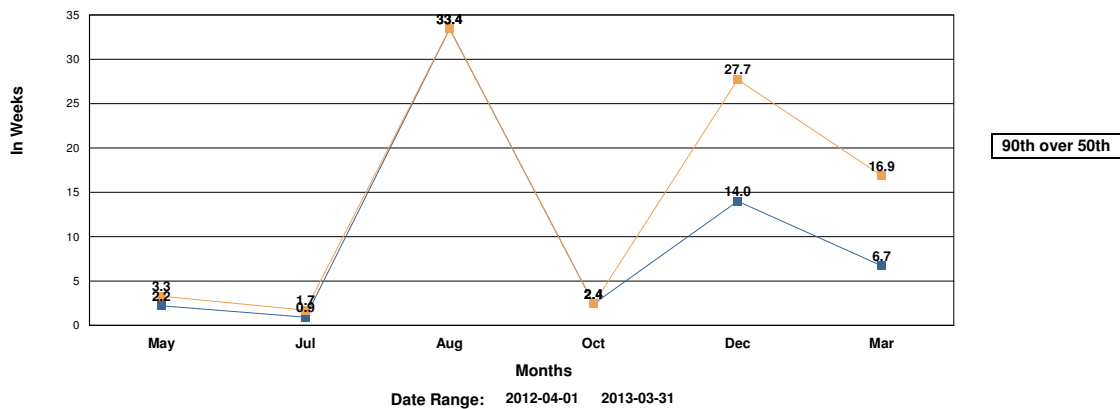
Orthopaedic Surgery

Urgent Knee Arthroplasty Wait Time

Total Cases: 13

50th: 3.29 90th: 30.57

Elective Target Wait Time: 35 weeks

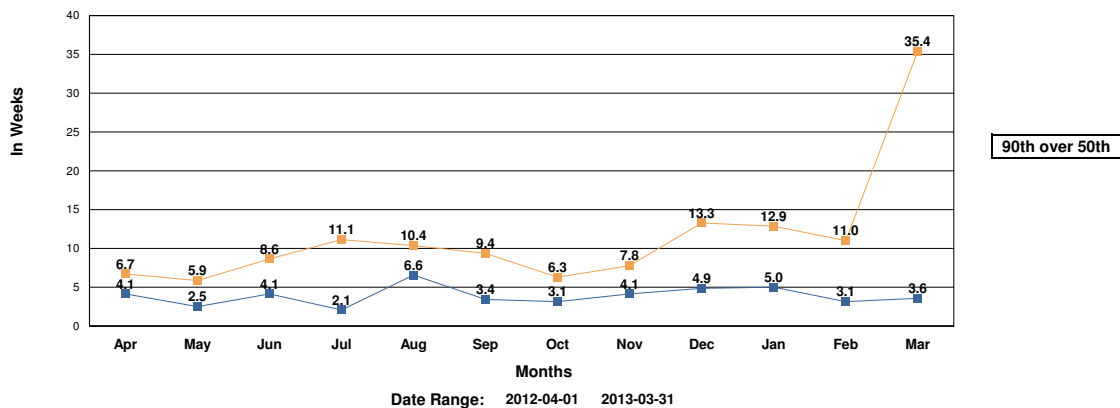


Thoracic Surgery

Urgent Lung Wait Time

Total Cases: 231

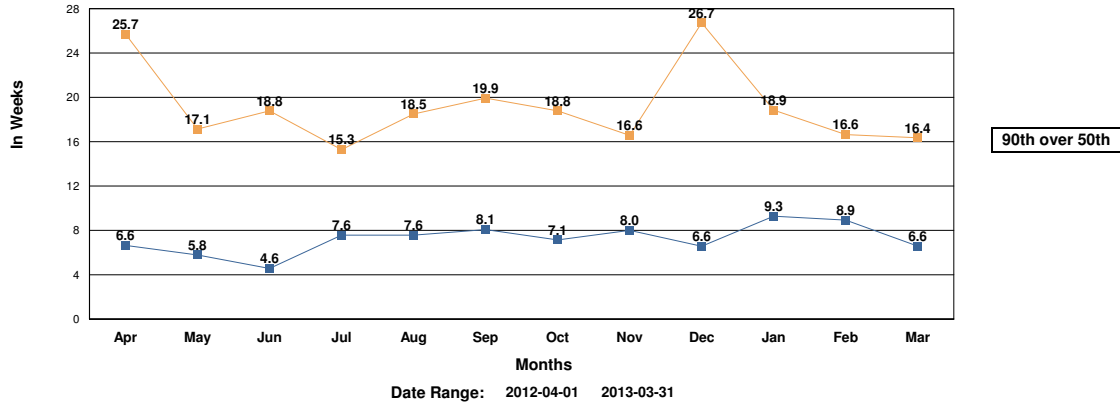
50th: 3.71 90th: 8.29



Urology

Elective Prostate Other Wait Time

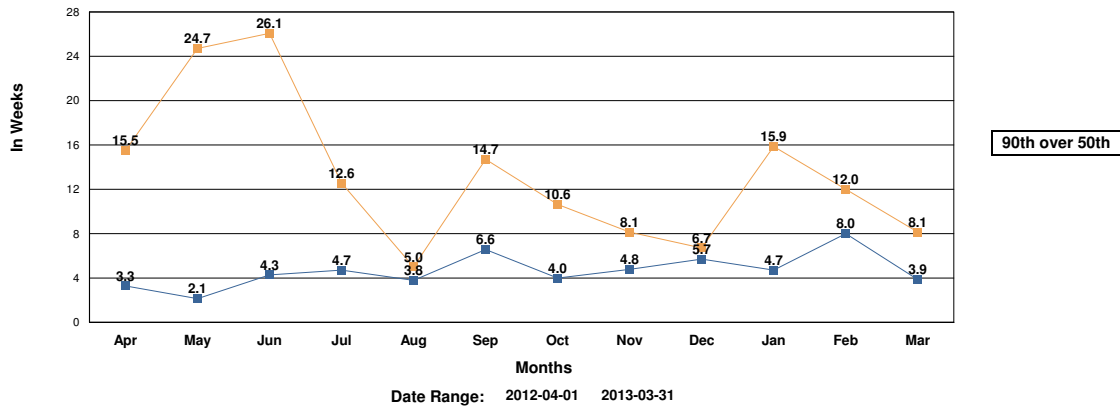
Total Cases: 480
50th: 7.14 90th: 17.79



Urology

Urgent Prostate Other Wait Time

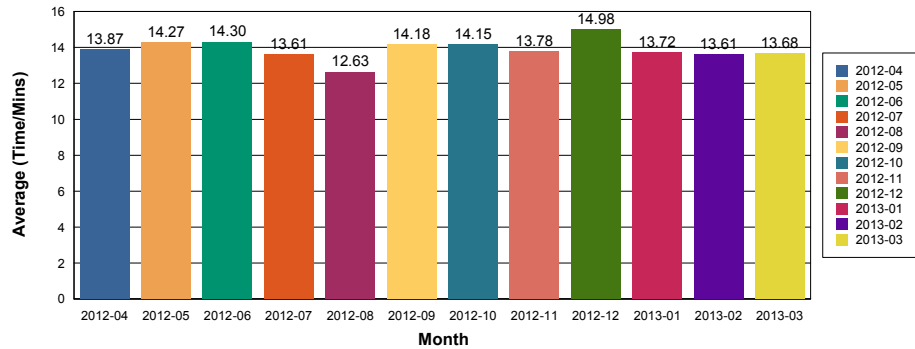
Total Cases: 125
50th: 4.14 90th: 10.14



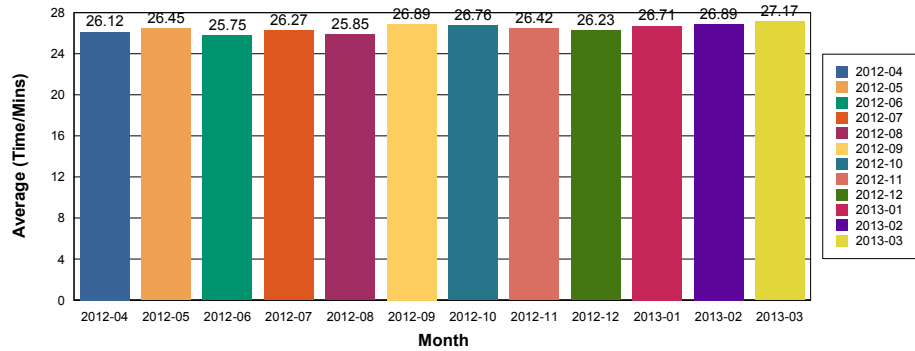
2.5 Average Patient Turnover

Surgical Statistical Activity by Facility

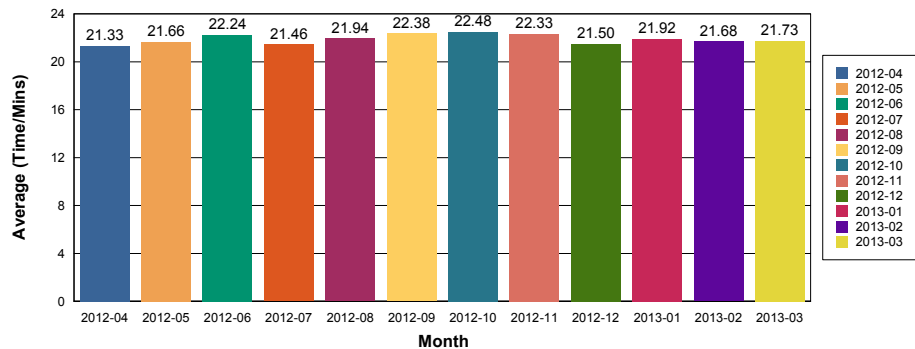
ACH



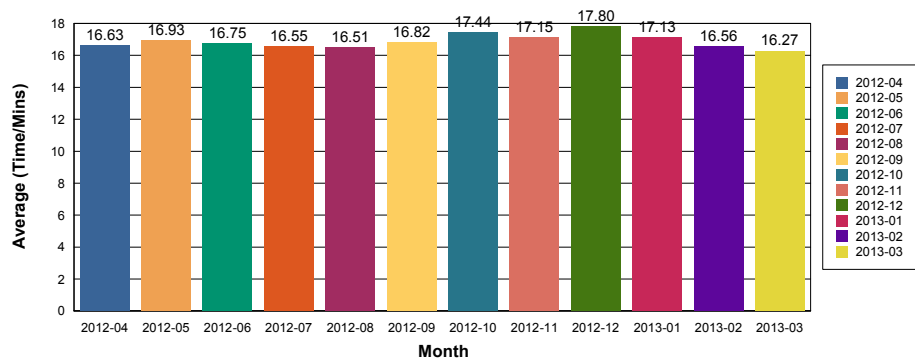
FMC



PLC



RGH



3.0 Research from Within the Department

3.1 Peer-reviewed Journal Articles

Section of General Surgery

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6. **Ball CG; Kirkpatrick AW** (2013) Utility of c-spine and abdominal CT in diagnosing occult pneumothoraces. *J Trauma Acute Care Surg* 2013 Mar; 74(3):948.
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12. Niven DJ, **Kirkpatrick AW, Ball CG**, Laupland KB (2012). Effect of comorbid illness on the long-term outcome of adults suffering major traumatic injury: a population-based cohort study. *Am J Surg* Aug, 204(2):151-6.
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Joint Appointments

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3.2 Research Grants

Person	Title	Role	Theme	Status	Funding Source	Award
Astle, William	Research with alternate or no funding support					
	Refractive Surgery in Children. Huang PT, Farran P, Paszuk A	principal investigator	clinical			
	Research with alternate or no funding support					
	Trachoma. Wiafe B, Ingram AD, Mwanga M, Glassco BC	principal investigator	social, cultural, environmental and population			
	Research with alternate or no funding support					
	The Clinical-Demographic, Epidemiology, Pathology, Neuroimaging Features and Outcome of Acute Demyelination in Canadian Children. Romanchuk K, Costello F, Slick D, AbouReslan W, Wei XC, Burton J, Tellier R, Metz L	co-investigator	clinical			
	Research funded with peer-reviewed grant support					
	ATS 1, & 10-16	co-investigator	clinical	Ongoing / Renewed	NIH	\$4,000.00
4 grants						\$4,000.00

Bathe, Oliver	Research funded with peer-reviewed grant support					
	Development of a Metabolomic Response Biomarker	principal investigator	multi-themed	New	Breast Cancer Society of Canada	\$36,330.00
	Research funded with peer-reviewed grant support					
	Tissue Procurement for The Cancer Genome Atlas Project - renewal	principal investigator	multi-themed	Ongoing / Renewed	National Cancer Institute (US)	\$243,681.00
	Research funded with peer-reviewed grant support					
	Prospective, Randomized Controlled Trial of Early Enteral Feeding Via a New Gastrojejunostomy Tube in Patients Undergoing Laprotomy for Periapillary and Pancreatic Neoplasms	principal investigator	multi-themed	Ongoing / Renewed	Novartis	\$15,000.00
	Research funded with peer-reviewed grant support					
	The Biological Role of TEM8 in Human Breast Cancer	principal investigator	multi-themed	Ongoing / Renewed	Breast Cancer Society of Canada	\$21,364.00
	Research funded with peer-reviewed grant support					
	Metabolomic Biomarker Development for Metastatic Colorectal Cancer	principal investigator	multi-themed	New	NSERC	
	Research funded with peer-reviewed grant support					
	Genetic and Molecular Basis of Severe Muscle Wasting (Sarcopenia)	co-investigator	multi-themed	Ongoing / Renewed	Canadian Institutes of Health Research	\$105,000.00
	Research funded with peer-reviewed grant support					
	Vascular heterogeneity in colorectal cancer: regulation of VEGFR2 by TGF-beta	co-investigator	multi-themed	Ongoing / Renewed	National Cancer Institute of Canada (NCIC)	\$417,846.00
	Research funded with peer-reviewed grant support					
	Randomized controlled trial of early enteral feeding via a new gastrojejunostomy tube in patients undergoing laprotomy for peripillary and pancreatic neoplasms	principal investigator	multi-themed	Ongoing / Renewed	Novartis Nutrition Corporation	\$15,000.00

Research funded with peer-reviewed grant support					
Canadian-International Network for the Advancement of the Treatment of Cancer-Associated Cachexia	co-investigator	multi-themed	Ongoing / Renewed	Canadian Institutes of Health Research	\$381,000.00
Research funded with peer-reviewed grant support					
The role of vitamin D and inflammation in colorectal cancer metastases, Alberta Cancer Research Institute	co-investigator	basic/biomedical	Ongoing / Renewed	Alberta Cancer Research Institute	\$543,247.00
Research funded with peer-reviewed grant support					
Next generation anti-mitotics for treatment-refractory cancer	co-investigator	multi-themed	Ongoing / Renewed	NSERC	\$467,000.00
Research funded with peer-reviewed grant support					
Identifying the serum metabolomic changes associated with obstructive jaundice in patients with benign and malignant pancreaticobiliary disease	principal investigator	multi-themed	Ongoing / Renewed	The University of Calgary, Medical-Surgical Research Award	\$12,500.00
Research funded with peer-reviewed grant support					
CIHR Team in Population-based Colorectal Cancer Screening	co-investigator	multi-themed	Ongoing / Renewed	Canadian Institutes of Health Research	\$2,180,379.00
Research funded with peer-reviewed grant support					
Tissue Procurement for The Cancer Genome Atlas Project	principal investigator	multi-themed	Ongoing / Renewed	National Cancer Institute (US)	\$72,240.00
Research funded with peer-reviewed grant support					
Protein Characterization using Advanced Mass Spectrometry: a Core Facility to Advance Medical Research	co-investigator	multi-themed	Ongoing / Renewed	Canadian Institutes of Health Research	\$325,000.00
Research funded with peer-reviewed grant support					
The Influence of Macrophages on the Immunosuppressive Tumor Microenvironment	principal investigator	multi-themed	Ongoing / Renewed	Cancer Research Society	\$120,000.00
Research funded with peer-reviewed grant support					
An Open Label, Phase II Study of Anti-CTLA4 (CP-675, 206) in Patients with Advanced or Metastatic Uveal Melanoma	co-investigator	multi-themed	Ongoing / Renewed	Pfizer Global	\$481,562.00
17 grants					\$5,437,149.00

Beaudry, Paul	Research funded with peer-reviewed grant support					
	Characterization and Targeting of Neuroblastoma Cancer Stem Cells (KCCFA Grant)	principal investigator	basic/biomedical	Ongoing / Renewed	Kids Cancer Care Foundation of Alberta	\$300,000.00
	Research funded with peer-reviewed grant support					
	Immunotherapy for Cancer - Repurposing Targeted Therapeutics with Oncolytic Viruses (CRIO Grant)	co-principal investigator	basic/biomedical	New	Alberta Innovates - Health Solutions (AIHS)	\$750,000.00
	2 grants					\$1,050,000.00

Brauer, Carmen A.	Research funded with peer-reviewed grant support					
	Treatment of medial epicondyle fractures in children: A systematic review	co-principal investigator	clinical	Ongoing / Renewed	Calgary Surgical Research Development Fund	\$1,750.00
	Research funded with peer-reviewed grant support					
	An interdisciplinary collaboration to explore quality indicators in pediatric orthopaedics	co-principal investigator	social, cultural, environmental and population	Ongoing / Renewed	Canadian Institute for Health Research	\$14,360.00

	Research funded with peer-reviewed grant support					
	Treatment of medial epicondyle fractures in children: A systematic review	co-principal investigator	clinical	Ongoing / Renewed	Canadian Orthopaedic Foundation	\$2,500.00
	Research funded with peer-reviewed grant support					
	Quality Indicators in Cerebral Palsy: A Scoping Review	principal investigator	clinical	New	Alberta Innovates Health Solutions Knowledge Transfer/Innovation Research Grant	\$24,663.00
	Research funded with peer-reviewed grant support					
	Premature Growth Arrest Following Growth Plate Fractures in Children Across Alberta: A Retrospective Review and Identification of Quality Indicators	co-principal investigator	basic/biomedical	New	Department of Medicine and Department of Surgery Research Development Fund Award	\$6,250.00
	Research funded with peer-reviewed grant support					
	Quality indicators in pediatric orthopaedics: A literature review	co-principal investigator	health services (education)	Ongoing / Renewed	University of Calgary, COREF Research Grant	\$5,000.00
	Research funded with peer-reviewed grant support					
	Quality indicators in pediatric orthopaedic surgery	principal investigator	clinical	Ongoing / Renewed	University of Calgary, Department of Surgery Research Prize	\$75,000.00
7 grants						\$129,523.00

Bray, Robert C.	Research funded with peer-reviewed grant support					
	Biological Augmentation of Ligament and Tendon Healing	principal investigator	basic/biomedical	Ongoing / Renewed	American Orthopaedic Society for Sport Medicine	\$246,019.00
	Research funded with peer-reviewed grant support					
	Role of Mechanosensitive Pathways in Ligament Remodelling	co-investigator	basic/biomedical	Ongoing / Renewed	Canadian Institutes of Health Research	
2 grants						\$246,019.00
Brindle, Mary E.	Research with alternate or no funding support					
	Non-operative management of high-grade pancreatic trauma: is it worth the wait?	co-principal investigator	clinical			
	Research with alternate or no funding support					
	Developing a Clinical Prediction Rule for Tracheoesophageal Fistula	principal investigator	clinical			\$0.00
	Research funded with peer-reviewed grant support					
	Effects of Educational Strategies on Cognitive Load for Teaching Medical and Surgical Procedures: An Exploratory Study	co-principal investigator	health services (education)	Ongoing / Renewed	UCMG	\$10,000.00
	Research funded with peer-reviewed grant support					
	The Canadian Pediatric Surgery Network (CAPSNet): Establishing Best Practices for Gastroschisis and Congenital Diaphragmatic Hernia	co-investigator	clinical	Ongoing / Renewed	Canadian Institutes of Health Research	\$100,000.00
	Research funded with peer-reviewed grant support					
	The impact of maternal Serotonin Specific Re-uptake Inhibitors on neonatal pulmonary	principal investigator	basic/biomedical	Ongoing / Renewed	ACH- Foundation	\$49,200.00

hypertension: An animal model					
Research funded with peer-reviewed grant support					
Overcoming surfactant inhibition in neonates and infants: a clinical prospective cohort study with an animal model correlate	co-principal investigator	basic/biomedical	Ongoing / Renewed	Alberta Children's Hospital Foundation	\$49,200.00
Research funded with peer-reviewed grant support					
Improving outcomes for infants with Myelomeningocele: From fetus to child	principal investigator	health services	Ongoing / Renewed	Spinal Bifida Association	\$25,000.00
Research funded with peer-reviewed grant support					
CIHR Secondary Analysis of Databases: Canadian Pediatric Surgery Network (CAPSNet)	co-principal investigator	multi-themed	Ongoing / Renewed	Canadian Institutes of Health Research	\$100,000.00
8 grants					\$333,400.00

Buie, W. Donald	Research with alternate or no funding support				
	Diverticular disease a population based study	principal investigator	clinical		
	Research with alternate or no funding support				
	Long term outcome of infliximab in the treatment for Complex Perianal Crohn's disease	principal investigator	clinical		
	Research with alternate or no funding support				
	Outcome following surgical salvage or anal cancer	principal investigator	clinical		
	Research with alternate or no funding support				
	5 yr provincial outcomes following resection for rectal cancer	principal investigator	clinical		\$12,000.00
	Research with alternate or no funding support				
	Follow up colonoscopy following resection for colorectal cancer	principal investigator	clinical		\$0.00
	Research with alternate or no funding support				
	Long term outcomes for the treatment for rectal cancer in the Province of Alberta	principal investigator	clinical		\$12,000.00
	Research funded with peer-reviewed grant support				
	Timing of Rectal Cancer - Response to chemoradiation	local principal investigator	clinical	Ongoing / Renewed	US Public Health Services
	Research funded with peer-reviewed grant support				
	Timing of Rectal Cancer- response to chemoradiation	local principal investigator	clinical	Ongoing / Renewed	National Institutes of Health Research (NIH US)
8 grants					\$62,000.00

Cooper, Linda	Research funded with peer-reviewed grant support				
	ATS 1, 10-16	co-investigator	clinical	Ongoing / Renewed	NIH
	Research funded with peer-reviewed grant support				
	Corneal Confocal Microscopy: A Rapid Noninvasive Approach to Detect Diabetic Neuropathy in Children with type 1 Diabetes	co-investigator	clinical	Ongoing / Renewed	Juvenile Diabetes Research Foundation
2 grants					\$4,365.00
Dixon, Elijah	Research funded with peer-reviewed grant support				

"Effect of Physician Alternative Payment Plans on the Completeness and Validity of Administrative Data."	co-investigator	health services	Ongoing / Renewed	Canadian Institutes of Health Research	\$230,492.00
Research funded with peer-reviewed grant support					
"Improving safety in the operating room: Evaluating implementation of the Safe Surgery Checklist"	co-investigator	clinical	New	M.S.I. Foundation	\$98,000.00
Research funded with peer-reviewed grant support					
"Rates and waits for cancer surgery in Canada: Mixed method assessment."	principal investigator	health services	Ongoing / Renewed	Canadian Institutes of Health Research	\$430,000.00
Research funded with peer-reviewed grant support					
"The Effects of Call and Call Scheduling on General Surgeons" and General Surgery Residents" Perceived Quality of Life."	principal investigator	health services	New	Calgary Surgical Research Development Fund	\$1,230.00
Research funded with peer-reviewed grant support					
"Laparoscopic Cholecystectomy for Acute Calculous Cholecystitis: How Urgent is "Urgent"?"	co-investigator	clinical	New	Calgary Surgical Research Development Fund	\$2,300.00
Research funded with peer-reviewed grant support					
Establishment of the Hepatopancreaticobiliary Community of Surgical Oncologists: Clinical, Evaluative and Prospective.	co-investigator	health services	New	Canadian Institutes of Health Research	\$24,900.00
Research funded with peer-reviewed grant support					
"Postoperative Outcomes Following Colectomy in Elderly Ulcerative Colitis Patients."	principal investigator	clinical	Ongoing / Renewed	M.S.I. Foundation	\$47,858.00
Research funded with peer-reviewed grant support					
Predictors of Acute Kidney Injury after Major Surgical Procedures.	co-investigator	clinical	New	University of Calgary Department of Medicine and Department of Surgery Research Development Fund Award	\$12,500.00
8 grants					\$847,280.00

Dort, Joseph C.	Research funded with peer-reviewed grant support				
	Machine learning and MR texture analysis to assess human papilloma virus (HPV) status in head and neck tumors	co-principal investigator	multi-themed	New	Alberta Ingenuity Centre for Machine Learning
	Research funded with peer-reviewed grant support				
	Efficacy of optically-guided surgery in the management of early-stage oral cancer	co-investigator	multi-themed	New	Terry Fox Research Institute
	Research funded with peer-reviewed grant support				
	Post-operative pulmonary complications in patients undergoing head and neck reconstructive surgery at FMC	co-investigator	clinical	New	Calgary Surgical Research Development Fund
3 grants					\$184,000.00

Frank, Cyril B.	Research funded with peer-reviewed grant support				
	Ligament Transplantation	co-principal investigator	basic/biomedical	Ongoing / Renewed	Canadian Institutes of Health Research
	Research funded with peer-reviewed grant support				
	The Mechanical Causes of Osteoarthritis	co-investigator	basic/biomedical	New	Canadian Institutes of Health Research

Research funded with peer-reviewed grant support					
Ligament Transplantation	co-principal investigator	basic/biomedical	Ongoing / Renewed	Canadian Institutes of Health Research	\$135,751.00
Research funded with peer-reviewed grant support					
Resurfacing as an alternative to total hip arthroplasty -- Knowledge synthesis of the causes and rates of early failure	co-investigator	social, cultural, environmental and population	Ongoing / Renewed	Canadian Institutes of Health Research	\$95,814.00
Research funded with peer-reviewed grant support					
Training program for Biomedical Engineers for the 21st century	co-investigator	basic/biomedical	Ongoing / Renewed	NSERC	\$1,650,000.00
Research funded with peer-reviewed grant support					
Total joint replacement: Strategic management for timely treatment	co-investigator	social, cultural, environmental and population	Ongoing / Renewed	Canadian Institutes of Health Research	\$1,478,500.00
Research funded with peer-reviewed grant support					
CIHR Team in models of care in arthritis (MOCA)	co-investigator	health services	Ongoing / Renewed	Canadian Institutes of Health Research	\$1,486,095.00
Research funded with peer-reviewed grant support					
Team Lead of: Osteoarthritis Team Grant -- OA Alberta -- creating bone and joint health from the bedside to the bench and back again	principal investigator	basic/biomedical	Ongoing / Renewed	Alberta Innovates - Health Solutions (AIHS)	\$5,000,000.00
Research funded with peer-reviewed grant support					
Osteoarthritis Team Grant - OA Alberta - Creating Bone and Joint Health From the Bedside to the Bench and Back Again	principal investigator	basic/biomedical	Ongoing / Renewed	Alberta Innovates - Health Solutions (AIHS)	\$1,000,000.00
9 grants					\$11,680,015.00

Hart, David A.	Research funded with peer-reviewed grant support					
	OA Team grant	co-investigator	basic/biomedical	Ongoing / Renewed	Alberta Innovates - Health Solutions (AIHS)	\$5,000,000.00
	Research funded with peer-reviewed grant support					
	Stem Cells as Diagnostic Markers	co-principal investigator	basic/biomedical	Ongoing / Renewed	Alberta Innovates - Health Solutions (AIHS)	\$250,000.00
	Research funded with peer-reviewed grant support					
	Stem Cells and Cartilage Repair	principal investigator	basic/biomedical	Ongoing / Renewed	Canadian Arthritis Network	\$50,000.00
	3 grants					\$5,300,000.00

Hildebrand, Kevin A.	Research funded with peer-reviewed grant support					
	The Dose-response Effect of the Mast Cell Stabilizer, Ketotifen Fumarate, on Post-traumatic Joint Contractures	co-investigator	basic/biomedical	New	Orthopaedic Trauma Association	\$20,000.00
	Research funded with peer-reviewed grant support					
	"Evaluation of an Evidence-informed Care Pathway for Patients with Hip Fractures"	local principal investigator	basic/biomedical	New	Departments of Surgery and Medicine Research Development Fund	\$12,500.00
	Research funded with peer-reviewed grant support					
	Randomized Controlled Trial of Ketotifen to Prevent Post-traumatic Elbow Contractures	principal investigator	basic/biomedical	New	American Foundation for Surgery of the Hand	\$100,000.00

Research funded with peer-reviewed grant support						
Post-Traumatic Joint Contractures: Correlation between the Human Condition and an Animal Model, and Identification of Potential Preventative Intervention.	principal investigator	basic/biomedical	New	Canadian Orthopaedic Foundation		\$10,000.00
Research funded with peer-reviewed grant support						
Post-Traumatic Elbow Joint Contractures: Defining Pathologic Capsular Mechanisms and Potential Future Treatment Paradigms.	principal investigator	basic/biomedical	New	American Society for Surgery of the Hand		\$20,000.00
Research funded with peer-reviewed grant support						
Investigations of Mechanisms and Treatment in Post-traumatic Joint Contractures	principal investigator	basic/biomedical	New	Canadian Institutes of Health Research		\$100,000.00
Research funded with peer-reviewed grant support						
The Early Definitive Diagnosis of Occult Scaphoid Fracture: A randomized controlled trial comparing early definitive diagnosis to the current standard of care	co-investigator	basic/biomedical	Ongoing / Renewed	Canadian Orthopaedic Foundation		\$1,200.00
Research funded with peer-reviewed grant support						
Neuroinflammatory Mechanisms in Joint Contracture Development	principal investigator	basic/biomedical	Ongoing / Renewed	Canadian Institutes of Health Research		\$148,234.00
Research funded with peer-reviewed grant support						
Feasibility of randomized controlled trial of ketotifen for lateral epicondylalgia	local sub-investigator	basic/biomedical	New	Canadian Institutes of Health Research		\$15,000.00
Research funded with peer-reviewed grant support						
The Role of Mast Cells and Nerves in Overuse Tendinopathy: Clinical and Laboratory Studies	co-investigator	basic/biomedical	New	Worksafe BC		\$30,000.00
Research funded with peer-reviewed grant support						
Tryptase as a Biomarker for Post-Traumatic Elbow Contracture	principal investigator	basic/biomedical	New	Calgary Surgical Research Development Fund		\$3,725.00
11 grants						\$460,659.00

Hollaar, Gwendolyn	Research with alternate or no funding support					
	Commercial mesh versus low cost mesh for Inguinal Hernia Repairs in Rwanda	co-principal investigator	health services			\$0.00
	Research with alternate or no funding support					
	Asian Academic Consortium Collaborative Activities	team grant investigator	health services (education)			\$15,280.00
	Research with alternate or no funding support					
	Professional Development Conference for Family Doctors in Lao PDR	team grant investigator	health services (education)			\$15,000.00
3 grants						\$30,280.00

Hutchison, Carolyn R.	Research with alternate or no funding support					
	Joint-Sparing Transplant with fresh osteochondral allografts. Schachar N, Timmerman S, Hutchison CR, Heard M, Miller S.	co-investigator	basic/biomedical			
	Research with alternate or no funding support					
	Assessment of Communication, Professional and Surgical Skills in an OSPRE: A Psychometric Study. Ponton-Carss, Donnone T, Hutchison CR.	co-investigator	health services (education)			\$40,000.00

Research funded with peer-reviewed grant support					
Medical Imaging of Knee Kinematics after Joint Replacement. Anglin C, Frayne R, Hutchison CR, Ronsky J, Wilson D: NSERC-CIHR Collaborative Health Research Projects (\$380,800; 2008-extended beyond 2011).	co-investigator	basic/biomedical	Ongoing / Renewed	NSERC	\$380,800.00
Research funded with peer-reviewed grant support					
Development of an Orthopaedic Surgery Trauma Patient Handover Checklist. Leblanc J, Donnon T, Hutchison CR, Duffy P.	co-principal investigator	clinical	New	COREF Bone & Joint Health Research Grant	\$875.00
4 grants					\$421,675.00

Kirkpatrick, Andrew W.	Research funded with peer-reviewed grant support					
	Tele-mentored Ultrasonography (TMUS) to Support Remote Canadian Communities. (\$10,000.00) Collaborative Program – Letter of Intent. Alberta Innovates Health Solutions. PI – Douglas Hamilton; Co-investigators Kirkpatrick AW, Wilson S,	co-investigator	health services	New	Alberta Innovates - Health Solutions (AIHS)	\$10,000.00
	Research funded with peer-reviewed grant support					
	Effect of an established blunt cerebrovascular injury screening protocol on detection rates and clinical outcomes. Wong J (Principle Investigator) Tso M (resident Investigator). Tso M, Wong J, Kirkpatrick AW, Moorish W, Tiruta C. Calgary Surgical Research Development Fund (\$2000.00).	co-principal investigator	clinical	Ongoing / Renewed	Calgary Surgical Research Development Fund	\$2,000.00
	Research funded with peer-reviewed grant support					
	Peritoneal Vacuum therapy to reduce the systemic inflammatory insult from intra-peritoneal sepsis/injury/hypertension: A randomized comparison of baseline wall suction versus KCI AbThera abdominal dressing. Kirkpatrick AW (Principle Investigator). Ouellet JF (Resident Investigator). Ouellet JF, Kirkpatrick AW, McBeth PB, Doig C, Ball CG, Kubes P, Leger C, Tiruta C. Calgary Surgical Research Development Fund (\$4000.00).	principal investigator	clinical	Ongoing / Renewed	Calgary Surgical Research Development Fund	\$4,000.00
	Research funded with peer-reviewed grant support					
	Peritoneal Vacuum therapy to reduce the systemic inflammatory insult from intra-peritoneal sepsis/injury/hypertension: A randomized comparison of baseline wall suction versus KCI AbThera abdominal dressing. Kirkpatrick AW (Principle Investigator). Ouellet JF, Kirkpatrick AW, McBeth PB, Doig C, Ball CG, Kubes P, Leger C, Tiruta C. Investigator Initiated Trial Agreement between KCI USA and the Governors of the University of Calgary and Andrew W Kirkpatrick (\$218,550.00). KCI-Contract Number: KCI-Clinical/UniversityCalgaryAlbertaHealth/082611-000/7	principal investigator	clinical	Ongoing / Renewed	KCI USAand University of Calgary	\$218,550.00
	Research funded with peer-reviewed grant support					
	2011 Developing a Patient and Family-Centered Approach for Measuring the Quality of Trauma Care. STELFOX HT (Principle Investigator). STELFOX HT (Principle Investigator). Straus S, Nathens AB, Tallon JM, Gagliardi A, Hudak P, Quan H, Chernoff J, Burns K, Evans D, Loughheed V, Vuksic A, Fortin CM, Kagan C, Zarins H, KIRKPATRICK AW, Straus SE. CIHR's Partnerships for Health System Improvement Competition, \$628692.00 over three years (C)	co-investigator	health services (education)	New	CIHR Partnerships for Health System	\$628,692.00

					5 grants	\$863,242.00
Kortbeek, John B.	Research with alternate or no funding support					
	Impact of Massive Transfusion Protocol and Exclusion of Plasma Products from Female Donors on Outcome of Trauma Patients in Calgary Zone of Alberta Health Services	co-principal investigator	health services			\$0.00
	1 grant					\$0.00
Lafrenière, René	Research funded with peer-reviewed grant support					
	Ethics, economics and the regulation and adoption of new medical devices: case studies in pelvic floor surgery	co-investigator	clinical	Ongoing / Renewed	Canadian Institutes of Health Research	\$93,887.00
	Research funded with peer-reviewed grant support					
	Ethics, economics and the regulation and adoption of new medical devices: case studies in pelvic floor surgery	co-investigator	clinical	Ongoing / Renewed	Canadian Institutes of Health Research	\$93,887.00
	2 grants					\$187,774.00
Matthews, T. Wayne	Research with alternate or no funding support					
	Head and Neck Cancer Dysphagia Outcomes	co-principal investigator	clinical			\$5,000.00
	Research with alternate or no funding support					
	Head and Neck Oncology Outcomes	co-investigator	clinical			\$0.00
	Research funded with peer-reviewed grant support					
	Pan Canadian Optically Guided Approach for Oral Lesions Surgical Trial	local sub-investigator	clinical	New	Terry Fox Research Institute	\$4,734,000.00
	Research funded with peer-reviewed grant support					
	The Impact of CAIX in Cervical Node Metastases in Oral Cavity Squamous Cell Carcinoma	co-investigator	basic/biomedical	New	University Calgary Office of Surgical Research - Research Prize	\$75,000.00
	Research funded with peer-reviewed grant support					
	Does the Harmonic Scalpel reduce Operating Time and Blood Loss in Patients Undergoing Major Surgery for Oral Cavity Squamous Cell Carcinoma? : A Prospective, Randomized Trial.	co-investigator	clinical	New	Ohlson Research Initiative	\$11,243.00
	Research funded with peer-reviewed grant support					
	The Impact of CAIX in Cervical Node Metastases in Oral Cavity Squamous Cell Carcinoma	co-investigator	clinical	New	Dept Surgery University of Calgary	\$75,000.00
	6 grants					\$4,900,243.00
Monroy Cuadros, F. Mauricio	Research funded with peer-reviewed grant support					
	Canadian Living Kidney Donor Safety Study	co-investigator	clinical	Ongoing / Renewed	Canadian Institutes of Health Research	\$11,250.00
	Research funded with peer-reviewed grant support					
	The Long-term Effects of becoming a living Kidney Donor	principal investigator	clinical	Ongoing / Renewed	Canadian Institutes of Health Research	\$200,000.00
	Research funded with peer-reviewed grant support					
	Safety and Outcomes of Accepting	principal	clinical	New	Canadian Institutes	\$0.00

Hypertensive Individuals as Living Kidney Donors. Funding Source: Canadian Institutes of Health Research. Completion Date: September 17, 2012.	investigator			of Health Research	
3 grants					\$211,250.00

Moore, Randy D.	Research with alternate or no funding support					
	ANACONDA Endovascular Device for the Treatment of Aortic Aneurysm: A Multi-center Phase 2 Trial	international principal investigator	clinical			\$40,000.00
	Research with alternate or no funding support					
	Thoraflex: A New Approach to aortic arch disease	local principal investigator	clinical			\$20,000.00
	Research funded with peer-reviewed grant support					
	TX2 trial for the endovascular repair of thoracic aortic aneurysm	principal investigator	basic/biomedical	New	FDA	\$7,500.00
	3 grants					\$67,500.00

Oddone Paolucci, Elizabeth	Research with alternate or no funding support					
	An evaluation of a teaching module to enhance the quality of dictated operative reports by first year surgical residents.	team grant investigator	health services (education)			\$3,200.00
	Research with alternate or no funding support					
	A meta-analysis of the prevalence of surgical medical errors	principal investigator	health services (education)			
	Research with alternate or no funding support					
	"Faculty Development and Evaluation."	co-investigator	health services (education)			\$0.00
	Research with alternate or no funding support					
	"An investigation of the relationship between conformity and communication in medical education."	co-investigator	health services (education)			\$0.00
	Research with alternate or no funding support					
	"Assessment of Conformity."	co-investigator	health services (education)			\$0.00
	Research with alternate or no funding support					
	"Formative Curriculum Evaluation of the University of Calgary O&G Clerkship: A Mixed-Methods Case Study."	co-investigator	health services (education)			\$5,000.00
	Research funded with peer-reviewed grant support					
	"From education to engagement to action: A dynamic, interactive, and integrated knowledge translation approach to bring evidence into practice for introducing new health technologies."	co-principal investigator	health services (education)	New	Alberta Innovates - Health Solutions (AIHS)	\$25,000.00
	Research funded with peer-reviewed grant support					
	Identification of factors related to experiences of conformity in medical education.	co-investigator	health services (education)	New	Calgary Surgical Research Development Fund	\$1,900.00
	Research funded with peer-reviewed grant support					
	"Boot camp training for pediatric general surgery fellows: Is there a need for it to ease the transition to fellowship?"	principal investigator	health services (education)	New	Calgary Surgical Research Development Fund, Department	\$601.50

					of Surgery	
					9 grants	\$35,701.50

Quan, May Lynn	Research funded with peer-reviewed grant support					
	"Should all young women (<35) with breast cancer be treated with mastectomy?"	principal investigator	health services	Ongoing / Renewed	Canadian Breast Cancer Foundation - Ontario Chapter	
	Research funded with peer-reviewed grant support					
	"Management of the axilla in early breast cancer: Clarifying the role of sentinel node biopsy"	principal investigator	health services	New	Canadian Breast Cancer Society	\$10,000.00
	Research funded with peer-reviewed grant support					
	"Sentinel lymph node biopsy in breast cancer: Population based evaluation in Alberta"	principal investigator	health services	New	U of C Starter grant	\$5,000.00
	Research funded with peer-reviewed grant support					
	Improving safety in the operating room: Evaluating implementation of the safe surgery checklist	principal investigator	health services	Ongoing / Renewed	MSI Foundation	\$100,000.00
					4 grants	\$115,000.00

Romanchuk, Kenneth G.	Research funded with peer-reviewed grant support					
	Is Peripheral Neuropathy Occurring in Association with Idiopathic Parkinson's Disease, or an Iatrogenic Complication?"	co-investigator	clinical	New	HBI CRU award & Parkinson Society of Canada award	\$53,212.00
	Research funded with peer-reviewed grant support					
	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	co-investigator	clinical	Ongoing / Renewed	Pediatric Eye Disease Investigator's Group	\$2,000.00
	Research funded with peer-reviewed grant support					
	Intermittent Exotropia Study (IXT1); a Randomized Clinical Trial of Observation versus Occlusion Therapy for Intermittent Exotropia	principal investigator	clinical	Ongoing / Renewed	National Institutes of Health Research (NIH US)	\$0.00
	Research funded with peer-reviewed grant support					
	Intermittent Exotropia Study (IXT2): a randomized clinical trial of observation versus occlusion therapy for intermittent exotropia	co-investigator	clinical	Ongoing / Renewed	Pediatric Eye Disease Investigator's Group	\$2,000.00
	Research funded with peer-reviewed grant support					
	Canadian Pediatric Acute Demyelinating Disease Study:	co-investigator	clinical	Ongoing / Renewed	Multiple Sclerosis Research Foundation	\$454,709.00
	Research funded with peer-reviewed grant support					
	Corneal Confocal Microscopy: A Rapid Noninvasive Approach to Detect Diabetic Neuropathy In Children With Type I Diabetes.	co-investigator	clinical	Ongoing / Renewed	Juvenile Diabetes Research Foundation	\$365,000.00
					6 grants	\$876,921.00

Salazar Banuelos, Anastasio	Research funded with peer-reviewed grant support					
	Prevention of Chronic Allograft Rejection and Recipient Vascular Disease	co-investigator	clinical	Ongoing / Renewed	Fujisawa Canada Inc	\$0.00

Research funded with peer-reviewed grant support					
Effect of Vaccination into the Bone Marrow in the Development of Experimental Allergic Encephalomyelitis in Rodents (Protocol #M07014)	co-principal investigator	basic/biomedical	Ongoing / Renewed	AHS - Department of Neurology	\$10,000.00
Research funded with peer-reviewed grant support					
Cellular Transplantation in Swine: Effect of Bone Marrow Seeding on Graft Rejection, Tolerance, and Survival (Protocol #M03018)	principal investigator	basic/biomedical	Ongoing / Renewed	Department of Surgery	\$50,000.00
3 grants					\$60,000.00

Salo, Paul T.	Research funded with peer-reviewed grant support					
	Neuroinflammatory Mechanisms in Joint Contracture Development	co-investigator	basic/biomedical	Ongoing / Renewed	Canadian Institutes of Health Research	\$422,196.00
	Research funded with peer-reviewed grant support					
	Regenerative Therapy for the Intervertebral Disc	co-investigator	basic/biomedical	Ongoing / Renewed	Canadian Institutes of Health Research	\$413,228.00
	Research funded with peer-reviewed grant support					
	Biological Augmentation of Ligament and Tendon Healing	co-investigator	basic/biomedical	Ongoing / Renewed	American Orthopaedic Society for Sport	\$246,019.00
	3 grants					\$1,081,443.00

Schachar, Norman	Research with alternate or no funding support					
	Biological Aspects of Tissue Repair	principal investigator	health services			\$500,000.00
	Research with alternate or no funding support					
	Meniscus Interest Group	team grant investigator	health services (education)			\$0.00
	Research with alternate or no funding support					
	Meniscus Transplantation Research Group	co-investigator	basic/biomedical			\$0.00
	Research funded with peer-reviewed grant support					
	Primary Lead in Research Development	principal investigator	basic/biomedical	Ongoing / Renewed	Private Donor	\$1,000,000.00
	4 grants					\$1,500,000.00

Sutherland, Francis R.	Research with alternate or no funding support				
	Complex distal duodenal resections	principal investigator	clinical		
	Research with alternate or no funding support				
	Posterior Sectoral Duct Injury	principal investigator	clinical		
	Research with alternate or no funding support				
	Serum metabolomic profile in patients with pancreatic cancer	co-investigator	basic/biomedical		\$0.00
	Research with alternate or no funding support				
	Wound protectors in HPB surgery	co-investigator	clinical		\$10,000.00
Research funded with peer-reviewed grant support					

Is N-Acetylcysteine protective after major hepatic resections: A randomized controlled trial	co-investigator	clinical	Ongoing / Renewed	Calgary Surgical Development Fund	\$3,000.00
Research funded with peer-reviewed grant support					
Medical Services Incorporated Reconstruction Following Pancreaticoduodenectomy: A Randomized Clinical Trial of Pancreaticojejunostomy vs. Pancreaticogastrostomy	co-investigator	clinical	Ongoing / Renewed	Tom Baker Cancer Centre	\$150,000.00
6 grants					\$163,000.00

Thornton, Gail M.	Research with alternate or no funding support				
	A Biomechanical Evaluation of Suture Locking Mechanisms	co-principal investigator	clinical		\$15,000.00
	Research funded with peer-reviewed grant support				
	Damage Mechanics and Mechanisms in Ligament and Tendon	principal investigator	basic/biomedical	Ongoing / Renewed	Canadian Institutes of Health Research
	Research funded with peer-reviewed grant support				
	Mechanics of Damage in Biological Soft Tissues	principal investigator	basic/biomedical	Ongoing / Renewed	NSERC
	Research funded with peer-reviewed grant support				
	Role of Mast Cells in Achilles Tendinopathy	co-investigator	basic/biomedical	New	Canadian Institutes of Health Research
4 grants					\$313,019.00

Yilmaz, Serdar	Research with alternate or no funding support				
	A Prospective, Randomized, Open-Label, Pilot Study to Compare the Effect on Carotid Atherosclerosis of a Tacrolimus-Based Regimen with Conversion from a Tacrolimus to a Sirolimus-Based Regimen at 3-4 Months Post-Transplant in De Novo Renal Transplant Recipients. Protocol: 0468H1-101995/0468H1-319-NA (Grant ID: 21190)	co-investigator	clinical		\$53,971.00
	Research with alternate or no funding support				
	A Comparison of Effects of Standard Dose vs. Low Dose Advagraf with IL-2 Receptor Antibody Induction, MMF and Steroids, with or without an ACEi/ARB-based Antihypertensive Therapy on Renal Allograft Histology, Function and Immune Response. (Grant ID: 21983)	co-investigator	clinical		\$113,725.00
	Research with alternate or no funding support				
	Master Lab Service Agreement - FK-014 - A blinded, centralized review of post transplant renal histology to assess the degree of acute and chronic histologic changes	principal investigator	clinical		\$113,831.00
	Research with alternate or no funding support				
	Long-term effects of becoming a living kidney donor study. CIHR sponsored study.	co-investigator	basic/biomedical		\$11,250.00
	Research with alternate or no funding support				
	Central Biopsy Review for NOVARTIS Study CRAD001AUS92 A 12 month, multi-center, randomized, open-label non-inferiority study of efficacy and safety comparing concentration-controlled Everolimus with low dose tacrolimus to CellCept® with standard dose tacrolimus in de novo renal transplant recipients Novartis Pharma AG, Basel, Switzerland Anticipated total dollar support: \$ 936,812 (US\$) Primary	principal investigator	clinical		\$81,717.00

	investigator: Serdar Yilmaz, M.D., Ph.D.					
	Research funded with peer-reviewed grant support					
	Astellas Service Agreement RT703938 FKC Advagraf with IL-2 014	co-principal investigator	basic/biomedical	Ongoing / Renewed	Astellas Pharma	\$633,750.00
	Research funded with peer-reviewed grant support					
	Central Biopsy Review for NOVARTIS Study CRAD001AUS92	principal investigator	basic/biomedical	Ongoing / Renewed	Novartis Pharma	\$936,813.00
	7 grants					\$1,945,057.00
Division Total:	167 grants					\$41,802,279.53
				167 grants	\$41,802,279.53	

DEPARTMENT OF SURGERY ANNUAL REPORT 2012/2013

April 1, 2012 to March 31, 2013



**Alberta Health
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