

# DEPARTMENT OF SURGERY ANNUAL REPORT 2011/2012

April 1, 2011 to March 31, 2012



FACULTY OF MEDICINE | UNIVERSITY OF CALGARY



**Report Designed, Compiled and Edited**

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**All Content and Photography** (Unless Otherwise Stated)

Provided by Nicolle Amyotte



*Nicolle Amyotte*

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

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# A Message from The Department Head

Dear Colleagues,

It is a pleasure and a privilege to present the Annual Report for 2011/2012. Some of the remarkable achievements of our Faculty are profiled on these pages. This past year we held a celebration at the Lougheed House for the Residency Program Directors who have completed their terms. Our Surgical Residency Programs form the bedrock of our academic initiatives. The leadership, commitment, time and effort required of our Program Directors is enormous. We hope the small token of appreciation at the celebration demonstrates the tremendous appreciation we have for your efforts.

We have also profiled our current Residency Program Directors who continue the good work. Their stories, challenges and successes are described in this year's report and give some idea of the incredible work involved.

We are also privileged to honour Dr. Howard Gimbel in this year's report. Dr. Gimbel has been practicing in Calgary for the past half century. His curriculum vitae is an amazing record of achievement. Remarkably his pace has not slackened as he continues to provide outstanding clinical service and contribute to the scientific literature. Dr. Gimbel's innovations revolutionized cataract surgery both in Calgary and around the world. We appreciate his willingness to share a bit of the story with us.

We would like to extend thanks to all of the members of the Surgical Executive team including our Section leaders, Surgical Site Chiefs and leaders of the Offices of Research, Education and Health Technology.

2011 and 2012 was a busy year with accelerated preparation for the opening of the South Hospital and working with the building initiatives through the strategic and operational clinical networks of Alberta Health Services. The Surgical Network identified several priorities including the introduction of the Safe Surgery Checklist. We are proud that Calgary leads with virtually universal compliance with the three main elements. This has enhanced safety for our patients. We will be working hard in the coming year to implement the adult categorized access targets in Surgery (aCATS). This tool should help us advocate for our patients and prioritize surgery appropriately.

The Department of Surgery would also like to extend a warm welcome to our new Dean, Dr. Jon Meddings.



Dr. John Kortbeek  
Head, Department of Surgery

Dr. Meddings is well known to many of us through his work as an academic gastroenterologist in Calgary. He subsequently led the Department of Medicine at the University of Alberta prior to returning to Calgary to serve as the Vice Dean. We look forward to his leadership in the coming years. Both Dr. Meddings and Dr. Feasby, who has completed his term of leadership, were instrumental in working with the Department of Surgery in Alberta Health Services in finally bringing the dream of the Surgical Simulation Centre to fruition, with construction scheduled to begin in the coming year. It is fitting that as we celebrate our post-graduate residency training Directors a world class, state-of-the-art simulation centre will be built to support the residency as well as undergraduate, post-graduate and allied health medical simulation programs in Calgary.

We would like to thank all members of the Department for their incredible work in serving our missions of safe patient care, research and education as we continue to deliver and build a program of excellence.

Yours 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

## Surgical Executive Team Members as of March 31, 2012

**Dr. John Kortbeek**, Department Head, Surgery  
**Dr. Imtiaz Ali**, Representative, Cardiac Services  
**Dr. JN Armstrong**, Department Head, Anesthesia  
**Ms. Michele Austad**, Manager, Department of Anesthesia  
**Dr. Lea Austen**, Physician Leader, Health Technology and Innovation  
**Dr. Jacques Bouchard**, Director, Office of Surgical Education  
**Ms. Christine Bourgeois**, Administrative Assistant to Dr. Kortbeek  
**Ms. Denise Brind**, Executive Director, Surgery, FMC  
**Dr. Kevin Carlson**, Section Chief, Urology  
**Dr. Kelley deSouza**, Facility Chief, RGH  
**Dr. John Donaghy**, Facility Chief, PLC  
**Dr. Stephan du Plessis**, Representative, Neurosurgery  
**Mr. James Finstad**, Communications  
**Ms. Margaret Fullerton**, Director, ACH  
  
**Ms. Debra Harris**, OR Manager, ACH  
**Dr. A. Robertson Harrop**, Director, Office of Surgical Research  
**Dr. Brent Haverstock**, Section Chief, Podiatry  
**Dr. Kevin Hildebrand**, Section Chief, Orthopaedics  
**Dr. Richard Hu**, Facility Chief, FMC  
**Dr. William Hyndman**, Section Chief, Paediatrics and Site Chief, ACH  
**Dr. Eduardo Kalaydjian**, Section Chief, Dentistry and Oral Health  
**Dr. Andrew Kirkpatrick**, Medical Director, Trauma Services  
**Dr. Beth Lange**, Medical Lead, SHC  
**Dr. Robert Lindsay**, Section Chief, Plastic Surgery  
**Ms. Andria Marin-Stephens**, Manager, Department of Surgery  
**Dr. Wayne Matthews**, Section Chief, Otolaryngology  
**Dr. Sean McFadden**, Section Chief, Thoracic Surgery  
**Dr. Raj Midha**, Representative, Clinical Neurosciences  
  
**Dr. Linda MrKonjic**, Physician Lead, Quality and Safety  
**Ms. Sara Pereira**, Executive Director, Surgery & Women's Health, SHC  
**Dr. Paul Petrasek**, Section Chief, Vascular Surgery  
**Ms. Susan Reader**, OR Manager, RGH  
**Dr. Ken Romanchuk**, Section Chief, Ophthalmology  
**Dr. Anastasio Salazar**, Section Chief, Transplant  
**Ms. Marg Semel**, Director, Surgery, PLC  
**Dr. David Sigalet**, Deputy Head, Department of Surgery  
**Ms. Janice Stewart**, Director, Surgery, RGH  
**Dr. Francis Sutherland**, Section Chief, General Surgery  
**Ms. Shawna Syverson**, Vice President, FMC  
**Dr. Walley Temple**, Section Chief, Surgical Oncology  
**Dr. Brian Whitestone**, Section Chief, Oral Maxillofacial Surgery  
**Dr. Doug Wilson**, Department Head, Obstetrics and Gynecology  
**Ms. Jill Woodward**, Executive Director, Inpatient Care, Child and Women's Health, ACH

**Alberta Health Services, Department of Surgery is among the largest surgical departments in North America.**

**We are a total of 350 members**

**232 Surgeons**

**45 Members in Dentistry & Oral Health**

**15 Members in Oral & Maxillofacial Surgery**

**14 Members in Podiatric Surgery**

**31 Cross Appointments**

**13 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. Simon Touchan** joined the Section of Oral and Maxillofacial Surgery in February 2012.

**Dr. Artan Reso** joined the Section of General Surgery in May 2012.

**Dr. Francois Harton** joined the Section of Podiatry in June 2012.

**Dr. Neil White** joined the Section of Orthopaedic Surgery in June 2012.

**Dr. Jeffrey Dawes** joined the Sections of Plastic Surgery and Surgical Oncology in July 2012.

**Dr. Aaron Bois** joined the Section of Orthopaedic Surgery in August 2012.

**Dr. Raul Kuchinad** joined the Section of Orthopaedic Surgery in August 2012.

**Dr. Marcia Clark** joined the Section of Orthopaedic Surgery in September 2012.

**Dr. Nicholas Makhoul** joined the Section of Oral and Maxillofacial Surgery in September 2012.

**Dr. Farrah Yau** joined the Section of Plastic Surgery in October 2012.

## Appointments

**Dr. Adrian Harvey** accepted the position of Undergraduate Medical Education Clerkship Director for the Faculty of Medicine. We wish to acknowledge and thank **Dr. John Graham** who has completed his term as Undergraduate Medical Education Clerkship Director.

**Dr. Beth Lange** has accepted the role of Site Chief - South Health Campus.

**Dr. Sean McFadden** was appointed Section Chief of Thoracic Surgery. We wish to acknowledge and thank **Dr. Gary Gelfand** who has completed his term as Section Chief of Thoracic Surgery.

**Dr. Lea Austen** was appointed Site Chief – General Surgery at the Rockyview General Hospital. We wish to acknowledge and thank **Dr. Steve Martin** who has completed his term as Site Chief of General Surgery.

**Dr. Jeanie Kanashiro** has accepted the role of Evaluation Coordinator, Surgery Clerkship for Undergraduate Medical Education.

**Dr. May Lynn Quan** was appointed Calgary Breast Health Program Surgical Lead.

**Dr. Anastasio Salazar** has taken the role of Section Chief of Transplant Surgery. We wish to acknowledge and thank **Dr. Serdar Yilmaz** who has completed his term as Section Chief of Transplant Surgery.

**Dr. Linda Mrkonjic** has accepted the role of Physician Lead, Quality and Patient Safety, Surgical Services. We wish to acknowledge **Dr. Beth Lange** who has completed her term as Physician Lead.

**Dr. Neal Church** has taken over as Chair of the Alumni Lecture for the Department of Surgery. We wish to acknowledge and thank **Dr. John Heine** who has completed his term as Alumni Lecture Chair.

**Dr. Jacques Bouchard** has been appointed Director of the Office of Surgical Education. We wish to acknowledge and thank **Dr. Norman Schachar** who has completed his term as Director of the Office of Surgical Education.

**Dr. Stephen Miller** was appointed Site Chief for Orthopaedics and Lead for Arthroplasty at the South Health Campus.

## Promotions

**Dr. Howard Gimbel**, Section of Ophthalmology, has been promoted to the rank of Clinical Professor.

**Dr. Richard Hu**, Section of Orthopaedic Surgery, has been promoted to the rank of Clinical Professor.

**Dr. Anna Ells**, Section of Ophthalmology, has been promoted to the rank of Clinical Professor.

**Dr. Amin Kherani**, Section of Ophthalmology, has been promoted to the rank of Clinical Associate Professor.

**Dr. Geoff Williams**, Section of Ophthalmology, has been promoted to the rank of Clinical Associate Professor.

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

**Dr. Vivian Hill**, Section of Ophthalmology, has been promoted to the rank of Clinical Assistant Professor.

**Dr. Ryan Yau**, Section of Ophthalmology, has been promoted to the rank of Clinical Assistant Professor.

**Dr. Kelley deSouza**, Section of Orthopaedic Surgery, has been promoted to the rank of Clinical Assistant Professor.

# From the Office of Surgical Education

## Purpose of the Office of Surgical Education

The Office of Surgical Education (OSE) is structured to assist with undergraduate medical education, postgraduate education, fellowships and traineeships, and to oversee continuing medical education and professional development. The OSE 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.

### Undergraduate Medical Education

•The Chair of the OSE 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 one and two curriculum through the standing course committees. As a member-at-large, **Dr. Jacques Bouchard** is able to contribute to the policymaking with regard to the undergraduate curriculum and to carry information back to the Department to be disseminated throughout the various sections.

### Surgery Clerkship

•**Dr. Adrian Harvey** is the Course Chair of the Surgery Clerkship for the Department of Surgery and chairs the Surgical Undergraduate Education Committee (SUGEC). Ms. Anita Jenkins is the Education Coordinator for the surgery clerkship

program and the Department of Surgery. The educational representatives, from each of the participating sections, sit on the SUGEC. The mandate of this committee is to revise and improve clerkship experiences in core General Surgery, and in all specialties, as well as to guide the experiences that each of our clerks has within the surgical rotations. These rotations consist of compulsory surgical experiences in General Surgery and selectives in the other surgical specialties.

•The clerkship class of 2012 has increased to a total of 180 clerks. The 6 week rotation included 3 weeks in General Surgery, 2 week assignments in Orthopaedic Surgery, Plastic Surgery or Urology, as well as a one week selective assignment in one of Thoracic Surgery, Vascular Surgery, Neurosurgery or Urology. The number of visiting elective clerks has increased with the addition of new surgical residency programs.



Dr. Jacques Bouchard, Office of Surgical Education Physician Lead

### Post Graduate Medical Education

•The Post Graduate Surgical Residency programs meet together to plan 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 (PGME) at the University level 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.

•The 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 Royal College of Physicians and Surgeons (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 Teaching Methods in Surgery course was also offered to senior residents and fellows.

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

### Fellowships

The OSE manages the ongoing accreditation

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

- Orthopedics 12
- General Surgery 2
- Ophthalmology 3

The Fellows are raising the awareness of the program of excellence in surgery in Calgary, in addition to building academic clinical units at home.

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

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

•Dr. 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.

•Ms. Jessica Joaquin is the Administrative Assistant for the Office of Surgical Education.

### Accomplishments and Highlights

•The OSE is indebted to **Dr. Norm Schachar** who stepped down as Director after 10 years of service. Dr. Schachar is one of the founders of the office and has guided it since its creation. His fingerprints will

remain forever on the structure, documents, and activities related to surgical education at the University of Calgary.

•Dr. Bouchard started as Director of the OSE on July 1<sup>st</sup>, 2011. As such, he sits on the UMEC and the PGME at the University of Calgary.

## **Challenges**

### **Clerkship**

The compressed six-week clerkship structure presents challenges with decreased clinical exposure as the complexity of the surgery clerkship continues to increase. 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.

### **Post-Graduate**

The absence of dedicated space for simulation training is a challenge that is expected to be corrected with the building of the Advanced Technical Skills and Simulation Laboratory (ATSSL). 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. We are in the midst of doing midterm internal reviews of all the postgraduate programs at the University so that we can enhance them by the Royal College Survey in 2015.

### **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.

## **Quality Assurance, Quality Improvement, and Innovation**

Surgeons in the department have the dual responsibility of providing 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 trainees' strengths 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.

## **Future Directions and Initiatives**

### **Simulation**

•eSIM: This is the provincial network that links all of the medical simulation activities in the province and is divided into eSIM North and South. It is a partnership with U of C, U of A, U of L, MRU, GMU, SAIT, NAIT, HSERC, STARS, Department of National Defence and other. The simulation facilities remain relatively unknown to the medical faculty and students but there are increased resources and funding for simulation-based teaching. Each hospital site in Calgary has or will have facilities for simulation. Such facilities exist at the ACH, PLC and FMC (McCaig Tower) and are planned for RGH and SHC.

•Major progress has occurred in the creation of the ATSSL 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 of the HRIC building is scheduled to start in August/September 2012 for completion by September 2013. An ATSSL operations committee has drafted a schedule of all existing and some of the future activities to integrate UME, PGME and CME activities. 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.

•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 four 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. 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.

## From the Office of Surgical Research

### Section Structure and Organization

•The Office of Surgical Research (OSR) is on its 17th year of "life" and although it has experienced a variety of internal and external changes and challenges over the years, our key mission has remained steady and consistent. In advocating for sound,

high-quality research, we are committed to encouraging, developing, supporting, and promoting research excellence within our Surgical Community. We are confident that serving our members in this way will foster a vibrant research culture, as well as lead to effective patient care and best possible patient health outcomes. Basic and surgical research is the cornerstone of responsible surgical care, and the OSR is proud to serve a membership who has demonstrated its willingness and desire to push the research boundaries to the next level. We hope reading through this report will illustrate our progress as an Office, as well as the ways we support the critical work of our surgeon scientists.

•Members of the OSR include all members of the Department of Surgery. Specifically, the OSR receives guidance from the Department of Surgery Research Committee, which is chaired by the Director of the OSR. OSR personnel include: **Dr. Rob Harrop** (Director), **Dr. Elizabeth Oddone Paolucci** (Associate Director), **Ms. Jessica Joaquin** (former Administrative Assistant), and



Dr. Rob Harrop, Director OSR

**Ms. Vaska Saydina** (present Administrative Assistant).

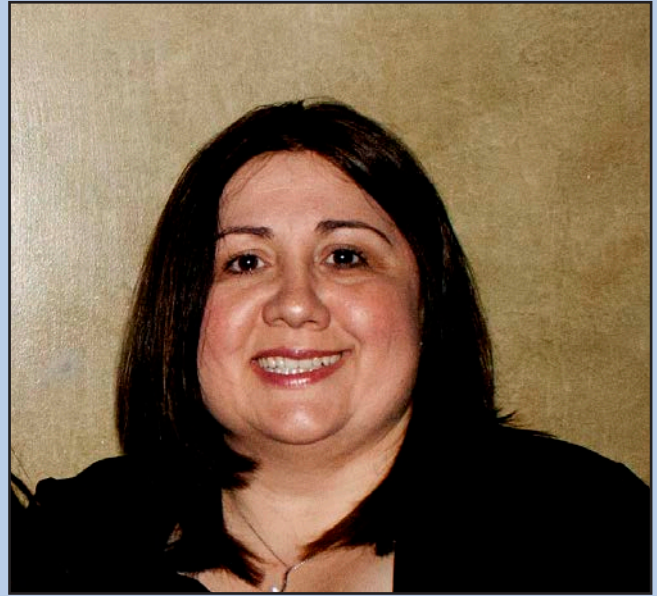
#### Current Committees

- The OSR directly reports to the Department Head (**Dr. John Kortbeek**) and to the City-Wide Surgical Executive Committee, as well as participates in several departmental committees.

- The Department of Surgery Research Committee (RC) serves under the mandate of promoting, facilitating, and overseeing the research activities, internal grants programs, and the Department's Surgeon-Scientist Program. The Research Committee meets every second Wednesday of every second month. The Committee is chaired by Dr. Harrop and co-chaired by Dr. Paolucci.

- All other Committees required for the review of programs administered by the OSR are assembled through the recommendation of the Research Committee and Chair, Dr. Harrop. These committees include The Surgical Research Development Fund Review Committee, Surgery Research Prize Review Committee, Surgery Education Prize Review Committee, and Surgeon-Scientist Program Review Committee.

- The Department of Surgery Research Coordinator Interest Group (SRCIG) has been active since 2008. The group is composed of researchers and coordinators working in different Sections within Surgery, but it has grown to include other Departments within the Faculty of Medicine, as well as Kinesiology. SRCIG members meet every 2 months to share information, experiences, and challenges related to conducting successful research within our Alberta context. "Expert liaisons" (such as **Dr. Glenys Godlovitch** -Chair, Conjoint Health Research Ethics Board, and **Dr. Michael Hill** - Associate Professor for the Departments of Clinical Neurosciences, Community Health Sciences, and Medicine, University of Calgary) are regularly invited



Dr. Elizabeth Oddone Paolucci, PhD, Associate Director OSR

to meetings as guest speakers on relevant topics of interest selected by the group. Including these experts has not only enabled knowledge-sharing regarding the research process and resources available, but has also served to "advertise" our presence. SRCIG's research interests and activities demonstrate our members' willingness and commitment to engaging in meaningful and ethical scientific research. Informing others of the Department of Surgery's active research culture can only strengthen and diversify the quality of our research collaborations and outcomes.

- Guided by the mission of "enabling research excellence among members of the Department of Surgery for the benefit of patients", the OSR provides research consultation and advice through its Research and Statistical Support Services program, directed by Dr. 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.

#### **Internal Department of Surgery Research Grants**

•In the face of declining financial resources, the Department of Surgery continues to show strong support to its investigator workforce through its continued investment of funds in local/internal funding opportunities. To do so requires not only adaptability to the constantly changing environment but also creativity to always anticipate emerging needs and formulate workable solutions.

•The main purpose of the Calgary Surgical Research Development Fund (CSRDF) is 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 2011-2012 funding year, six research projects across all Sections were supported. Congratulations to all awardees and best wishes for the successful completion of your research. Prospective applicants are encouraged to submit their proposals by January 30, 2013.

•The annual Department of Medicine and Surgery Research Development Fund Competition established jointly by the Departments of Medicine and Surgery, provides two awards of up to \$12,500 annually based on adjudication

and 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 5 years of their appointment. All types of clinical, translational or epidemiologic research are considered. This year two research teams were awarded \$6,250 each and one research team was awarded \$12,500. We extend congratulations to our winners, as well as to all those who competed. The next competition deadline is expected for January 15, 2013.

•The Department of Surgery at the University of Calgary in conjunction with the Faculty of Medicine and the Faculty of Graduate Studies offers a Surgeon Scientist Program (SSP). This program is administered by the OSR and is degree-based, leading toward an MSc or PhD degree in the chosen area of study. The objectives of the SSP are to provide excellent research training for surgical residents who wish to pursue an academic medical research career. While there weren't any applicants for the 2012 competition, the deadline for Letters of Intent for the 2013 competition is *November 30, 2012*. Final module submission to the SSP is due *April 30, 2013*.

•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 Surgeons and Physicians of Canada (RCSPEC). The CIP program is increasing its profile and infrastructure with the goal of supporting more residents going forward, than it has in the past. There are two separate intakes

for the program at six-month intervals. 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 those interested in learning more about the CIP, please feel welcome to contact **Dr. Zelma Kiss**.

•Research and Education have always been essential to advancing patient care through knowledge. 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. This year, **Dr. Warren Yunker** was awarded the 2012 Surgery Prize for Research for his research proposal entitled: "The role of the microbiome in pediatric upper airway disease." There were no applicants for the 2012 Surgery Prize for Education. Please note that the next competition deadline for the Surgery Prizes for Research and Education is April 30, 2013.

### **Accomplishments and Highlights**

This year marked the 30<sup>th</sup> Annual Surgeons' Day Research Symposium. The event united more than 270 participants from all the Sections of the Department of Surgery with the goal of celebrating another year of excellence in surgical research and education. Although the event was organized by the OSR (special appreciation to Ms. Jessica Joaquin and Ms. Vaska Saydina) it would not have been a success without the support of Dr. Kortbeek and the entire Department of Surgery. We also would like to take this opportunity to acknowledge and thank our judges: the McPhedran and McMurthy Lecturers **Dr. Sam Daniel** and **Dr. Oliver**

**Bathe**. Special thanks to our sessional chairs: **Dr. Chad Ball** (General Surgery), **Dr. Carmen Brauer** (Orthopaedics), **Dr. Fiona Costello** (Ophthalmology), and **Dr. Derek Drummond** (Otolaryngology), who ensured all presentations and the question and answer period flowed in a timely manner. Finally, thank you to our sponsors: **RCPSC, KLS Martin Group, Smith & Nephew, Covidien, and AMT ElectroSurgery.**

### **Challenges, Future Directions and Initiatives**

•The OSR continues to face the challenge of managing demands for service in the face of constrained financial resources. Still, we work towards building the infrastructure needed to facilitate surgical research and remain vigilant in communicating our members' needs and activity both within the Department and to the larger external research community.

•The success of the OSR is dependent on the engagement of all Department of Surgery members. It is critical that we provide a rich and respectful learning environment so researchers have the support they need to succeed. It is clear that our Department is comprised of many pioneers and leaders in their respective fields. In addition to responding to the various pressing health and medical challenges, our members' innovative and important research serves to educate us all. Mentoring the next generation of surgeon-scientists is the responsibility of the entire Department. In order to attract the best in the next generation of surgeon-researchers, we must showcase our seasoned researcher- role models who convey enthusiasm, compassion, and excellent teaching and communication skills. Junior investigators need to feel they are entering a research world where people care

about them and are able to offer research mentoring, support and advice.

•The success of our researchers depends on a concerted effort and partnership with the OSR in identifying the needs and gaps

in local knowledge. If you would like to comment on the services offered by the OSR and/or wish to contribute ideas about how we can improve as an office, please contact Dr. Elizabeth Oddone Paolucci (eoddone@ucalgary.ca).

## From the Office of Health Technology & Innovation



Dr. Lea Austen, HTI Physician Lead  
Photo Provided by Dr. Lea Austen

### Purpose of the Office of Health Technology & Innovation

New surgical technologies, including devices and procedures, are emerging at an ever-increasing rate. Surgeons are eager to provide the best and most up-to-date care for their patients, hence they often drive the demand for new technologies that purport to deliver better outcomes and shorter hospital stays. Consequently, there is pressure for surgical departments to evaluate and introduce new and innovative health technologies in a timely manner while also ensuring that these technologies have adequate scientific evidence for their safety and effectiveness and can be managed in a climate of scarce resources. To support

the adoption of new health technologies in a safe and effective manner that optimizes patient care as well as health care resource management, the Health Technology & Innovation (HT&I) office developed a Local Health Technology Assessment (HTA) Decision Support Program.

#### Surgery Clinical Network –

#### Health Technology Assessment and Innovation

•This year again, the Department of Surgery's Office of HT&I has served its purpose well by increasing the use of research and evidence to inform decisions by identifying potential risks to the patient, clinician or organization when introducing new health technologies. A particular focus this year has been the work done within the Surgery Clinical



Dr. Paule Poulin, PhD, HTI Administrator  
Photo Provided by Dr. Paule Poulin

Network (SCN) at Alberta Health Services. The network-based management is one of the strategies leveraged for reviewing new surgical technologies at the provincial level. Best practices based on convincing data are reviewed from a broad perspective to support quality improvement while addressing resources allocation. In the past year, the HT&I office focused its activities on the province-wide Surgery Clinical Network Health Technology Assessment and Innovation (SCN-HTAI) Committee, set up to manage requests for new health technologies for the SCN.

•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 Gordon Kleiwer.**

## **Accomplishments and Highlights**

### **Clinical Service**

In 2011-2012, nine surgical technologies were reviewed affecting services in Cardiac Sciences, General Surgery, Orthopaedic surgery as well as overall patient care. To further support effective methodologies for rigorous effective technology reviews, we established linkages, exchanges and collaborative initiatives with the Canadian Agency for Drugs and Health Technologies to put HTA into practice at the micro (network) level.

### **Education**

We have developed mechanisms to engage AHS physicians, administrative leaders and managers in knowledge transfer initiatives and evidence-informed decision making process by means of interactive workshops. In addition to providing workshops within Alberta Health Services, we also provided workshops at the University of Calgary Health Research Methods initiative. In addition, we

presented our work at local, provincial and national conferences.

### **Research**

This year, the team collaborated with other researchers to submit grant proposals to Alberta Innovate Health Solutions. We are also in the process of developing a province-wide clinical trial proposal to address a major priority of the SCN in reducing surgical site infections across the province. Lastly, we also published several manuscripts to ensure rigorous knowledge dissemination, use and adaptation of our initiative.

### **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.

## **Quality Assurance, Quality Improvement, and Innovation**

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 generating new evidence when necessary. We support knowledge, research, quality, innovation, continuous improvement, and excellence in health services.

### **Future Directions and Initiatives**

Our office supports and encourages the use of research evidence to inform decisions for the adoption of new surgical and supports research and innovation when insufficient evidence about the technology's efficacy or safety exists. To further facilitate the acquisition of evidence when necessary, our office plans to work closely with the Office of Surgical Research to develop clinical trials when needed.

## From the Office of The Safety Officer

▪ This year's safety report can be summarized in one significant sentence: finally a 12 month period during which there was no wrong side/site surgery. This is a milestone within our Surgical Department. This outcome is the cumulative result of much effort across many levels and many sites within our Department. In April 2011, the Safe Surgery Checklist became mandatory within Alberta Health Services (AHS). The official policy is now available to all on the AHS website. The adoption of this policy has been the strongest within the Calgary surgical sites. All four hospital sites within Calgary (Foothills, Rockyview, Peter Lougheed and Alberta Children's) consistently report high compliance with the checklist requirement. The use of the checklist has become a staple within the surgical rooms and is championed by nurses, surgeons and anesthesia. Calgary is currently leading the provincial adoption of this policy by creating a culture in which this checklist is becoming an expectation in the initiation of a procedure.

▪ Locally, the Quality Assurance and Safety Committee for Surgery co-chaired by Shawna Syverson and myself has grown this past year. The committee's motto of inclusion has seen increased representation and membership. With the expansion of surgical services in the new South Health Campus we expect further growth in the upcoming year. This committee is responsible for reviewing critical surgical events within the Department and making recommendations to ensure that such future events do not re-occur. The overarching theme across the identified events within this last year was that lack of compliance with the principles of the checklist does not guarantee success. The utilization and compliance of the checklist would have



Dr. Linda MrKonjic, Safety Officer

avoided the undesired outcome in the majority of the events reviewed.

▪ Although compliance is reported as being very high, validation is required. The current provincial pilot project being promoted by the Surgery Quality Improvement and Safety Committee (QISC) seeks to determine if compliance is as stated. This Safe Surgery Checklist Observation Audit project seeks to determine if all three parts of the checklist are being done, who is doing it and are they thorough? This committee is also working towards a standardized quality and performance measurement across surgeries and sites. The National Surgical Quality Improvement Program (NSQIP) is currently being considered as an option for which a business case has been submitted for funding.

# Innovative Ophthalmology Leads to Clinical Research Award

Dr. Howard Gimbel accredits part of his constant need to innovate to his upbringing on a farm near Beiseker, Alberta.

"I often joke with colleagues that when you grow up on a farm, you fix everything with baling wire," Dr. Gimbel said. "You're in the middle of harvest, something breaks down, you've got to try to fix it and keep going. I think the situation demands innovation a lot of times."

That demand for innovation is something that Dr. Gimbel realized in the world of ophthalmology as well, and from innovation and experience follows the responsibility to use research methods to analyze outcomes of new techniques compared to existing ones, and to share that information with colleagues. Dr. Gimbel's extensive research has led to him receiving the Clinical Research Award.

His research has been prospective and retrospective clinical research, largely carried out in his Calgary clinic, the Gimbel Eye Centre.

"Dr. George Kambara, my Chief when I took my residency in the early 1960s kept drilling an idea into our minds," Dr. Gimbel recalled. "He would tell us that we could be clinical faculty at a university but that we didn't have to be in a university setting to do research."

"That was way back before computers, and he showed us how he kept surgical records on five by eight inch cards that had holes punched in the edges at different positions for different procedures so that he could put a skewer through his stack of cards and pull out all cases of the same type to make it easier to find and analyze his data. So basic, so primitive, but he drilled into us that you can make a contribution when you're in a private practice."

At the time that Dr. Gimbel introduced electronic medical records to his practice in 1986 he created fields for every possible technique variation and happening in surgery as well as office clinical data. Having the source code for the system, he has been able to modify it for every new technology.

This has made data retrieval much easier than it was for his chief during residency.

When most eye surgery was still done in hospitals, Dr. Gimbel was an innovator in that aspect as well, taking cataract surgery to a non-hospital surgical centre in 1980. Now, he estimates that less than one per cent of cataract surgery in Calgary is done in hospitals.

Perhaps most notable of his achievements, Dr. Gimbel has played a role in revolutionizing techniques in cataract surgery.



Dr. Howard Gimbel

"I've had many surgeons come up to me at meetings and say 'you're the only person I think of when I'm doing cataract surgery because I am using the techniques that you developed,'" Dr. Gimbel said.

Dr. Gimbel's revolution was the 1983 development of Continuous Curvilinear Capsulorhexis (CCC), in which, after the pupil is dilated, a circular tearing incision is made in the anterior capsule of the

Introducing laser corneal refractive surgery to Canada in 1990 gave Dr. Gimbel the obligation to analyse and report outcomes of refractive surgery as well as cataract surgery.

Dr. Gimbel has lectured extensively around the world on his research and techniques. He said he is also passionate about teaching through visual media. Dr. Gimbel recalls watching 16-mm films of other pioneers using the new instrument to pulverize the cataract to be able to suck it out through a large needle. He realized the important potential of a visual aid in education as he shared his own innovations.

*"The most rewarding thing to me is the good outcome of the surgery and the visual results."*

*-Dr. Howard Gimbel*

cataractous lens. With this, there is no "end of cut" point for a tear to begin going out to the equator of the lens, and a bag "like a bowl" is formed to place the lens implant in after the clouded lens has been removed.

Before this innovation, with jagged edges to the opening, no strategy was effective in preventing frequent radializing tears leaving no "bag" to hold the intra-ocular lens implants.

From this, Dr. Gimbel developed a technique that he called "Divide and Conquer." With this technique, two instruments are used to break up the cataract, making it easier to remove by ultrasonic fragmentation. "Think of it as: you don't eat off the edge of a cake. You divide it up into pieces and serve each piece separately," Dr. Gimbel explained. Both of these techniques are now international standards in cataract surgery.

Other techniques developed have included techniques to facilitate the application of intraocular implants in paediatric cataract surgery and the prevention and managing intra-operative and late complications of adult and paediatric cataract surgery.

As technology evolved, Dr. Gimbel's means of presenting surgeries did as well. Starting with 16-mm film and progressing through all of the video tape formats, he now uses hard drives, DVDs, and the Internet. He has a Gimbel Library of surgical videos on YouTube.

Dr. Gimbel has also shared his expertise through teleconferencing and satellite broadcasts of live surgery. "You know how watching a game is so much more exciting than watching the replay?" he said of his broadcasts. They have been streamed across the world to conference rooms of up to one thousand doctors, with moderators relaying audience questions to him during operations.

Dr. Gimbel said that he has no desire to retire from an extensive career in Ophthalmology. "The most rewarding thing to me is the good outcome of the surgery and the visual results," he said.

"Making a significant difference in peoples' lives every day is to me much more rewarding than winning a golf game or something like that. And equally rewarding is the opportunity to share with colleagues."

# PGSTC Provides Balance in Resident Education

Before 2006, there was little in the way of department-wide educational services for residents within the Department of Surgery, leaving divisions in charge of their own education. Dr. Richard Buckley was instrumental in advocating for changes in that regard in conjunction with Dr. Norman Schachar, a surgeon whom Dr. Buckley has looked to as a mentor for some time.

Dr. Buckley said that since its early stages, the role of the Postgraduate Surgical Training Committee (PGSTC) has been to provide residents with education in things that are "less easily-taught" that are critical to surgical training. Examples that he cited were certain areas of CanMeds: communication, collaboration, health advocacy and professionalism.

Dr. Buckley, who is now Director of the PGSTC, said that when CanMeds and critical thinking began to play a bigger role in resident education, a shift to commonality and department-wide meetings seemed an obvious necessity to Dr. Schachar and himself.

In its early stages, however, there was definitely less enthusiasm overall about the committee. "When there was no good system or structure, getting people to a meeting was impossible," Dr. Buckley said. "Now, it's not uncommon to have 20 or 25 people at a meeting. But before, it was Dr. Schachar and myself. We'd come to the meeting and look at each other. That was it.

"We didn't have any structure; there was no purpose for the meetings. Now, they're very purposeful, they're organized. We have activities that we have to meet to manage, to organize, to make things happen, because we're really busy with our educational structure."

Dr. Buckley said that the organizational structure of this committee varies from that of other educational facilities in that many others have an overarching program looking after residents in each year.



Dr. Richard Buckley

"Our programs are set up so that the committee looks after the first couple years, the surgical foundations, and it's a positive feature of what we do," he said.

"It's a little bit unique here in Calgary compared to some other systems, but it's working and we're darn proud of what we're able to provide for resident education on these key issues that are outside of the medical expert area of CanMeds."

Dr. Buckley said that the costs of implementing more administration and funding for educational endeavours and maintaining high quality work including simulation were great. He said that the PGSTC has always been fortunate to have the support of the Department for their efforts to improve surgical education, and that the committee works to be accountable for that support.

"We've really taken steps forward in this last decade to make sure we're more responsible for the quality of what we do," he said.

For Dr. Buckley, working with residents and being able to improve the quality of their education is rewarding. He said that having a great staff in Program Directors and responsive committee members is crucial.

"They help us to functionalize an important part of resident education."

# Thoracic Surgery

One of eight programs of its kind in Canada, the Thoracic Surgery extended residency program is graduating its fourth resident this year. The program accepts one new resident every two years with applicants typically applying for a training position in their fourth year of general surgery training. According to Dr. Sean Grondin, Program Director for Thoracic Surgery, there are a few benefits to having a program of smaller size.

"Our residents have first pick of whatever they do," Dr. Grondin said. "They're it; they get to choose the cases they wish to do in the OR with no fellows, and they get to be in the clinic as well. They run the show on our ward, so they get to see the good and bad of life as a staff surgeon including dealing with complications. They really get immersed into our specialty with the support of staff surgeons to mentor them, which is very beneficial to their education and preparation for independent practice."

"There's a real social component to the training as well. The residents come to our houses frequently for events such as journal club, so they get to see our homes and meet our families, which adds a personal touch to their training."



Dr. Sean Grondin

"We also have many resources to help the resident," he continued. "There is a nurse-practitioner on the ward, and a full-time data coordinator to help the resident with research projects. These resources provide invaluable support, allowing the resident to be more productive and efficient."

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*"(The residents) really get immersed into our specialty with the support of staff surgeons to mentor them"*

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*-Dr. Sean Grondin*

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Five years ago, the first National Thoracic Surgery Manpower Survey was done out of Calgary for this program in an attempt to assess manpower needs, so that every graduate of this program in Canada can find a job. Dr. Grondin said that the number of positions available is part of the reason that Calgary's program trains a small number of residents.

"If you train too many, they saturate the market and you don't have jobs. One every two years seems to be about the right amount," he explained. "In Calgary, we have been fortunate that every resident who has graduated has passed their exams and has been able to find a position in a desirable location after their two years of training."

Dr. Grondin said that his favourite part of his position is watching the evolution of a new resident into a competent, independent surgeon.

"We were doing a tough case last week and our resident managed it just fine," he said. "He would've never been able to do that operation as the lead surgeon two years ago. It's cool to watch someone become very confident and ready to make that transition into taking care of patients by himself. I think that's what I like the most."

# General Surgical Oncology

For Dr. Greg McKinnon, a big reward of his position as Program Director of the Surgical Oncology program is the potential to "train future colleagues."

"We're taking bright young people and training them to be academic surgeons," he said. "We've been doing this for enough years that we see our graduates go on to successful careers, and we see them at international meetings presenting their new research. So that's pretty gratifying."



Dr. Greg McKinnon

Dr. McKinnon said that the majority of graduates from the program go on to take on university positions. "That fits in with our philosophy that we are training colleagues in terms of joining a relatively small international community." The extended residency program, which is a rigorous two-year training with special attention to research, sees applicants every year from Canada as well as other regions, in the past including the Caribbean, Australia, Europe, and the United States.

*"We're taking bright young people and training them to be academic surgeons."*

*-Dr. Greg McKinnon*

The flexibility of the program to allow extended residents to take on a Masters degree while completing surgical oncology training is something that Dr. McKinnon said appeals to residents.

The subspecialty has been "becoming higher profile" in recent years, in part

because of the advent of a Royal College certification process and examination. The Calgary program has seen an increase in applications from Canadian residents.

There are a few obstacles that Dr. McKinnon said that the program is going to face in the next five to ten years. First, he said that because of an oncoming bulge in the number of cancer patients, a projected 20% increase as the baby boomers age to a point where the incidence of cancer rises, the

program needs to continue to expand to prepare. Secondly, he said that fragmentation is something that needs to be monitored because as subspecialties are further divided into subspecialties,

"you can begin to know more and more about less and less."

"That's something that we're not going to solve on our own," Dr. McKinnon said. "It's something that the subspecialty has to address at a national and international level."

# Orthopaedic Surgery

Finding a proper balance of clinical work, research opportunities, and educational resources for the residents of the Orthopaedic Surgery Program can be challenging, but Program Director Dr. Simon Goldstein says that nearly 50 teaching faculty make it possible.

"It's a very humane program compared to some," he said. "There is a lot of collegiality and cooperation. The teaching staff is interested and enthusiastic. We all love to teach. In fact, at times, we fight over who gets to teach."

"The goal," he said, "is that each resident as they come through is able to achieve their educational objectives in those five years. There is a push toward a simulation style of learning, which is helpful, but ultimately we're dealing with patients, so you need to improve some of your skills by dealing with patients on a constant basis."

Dr. Goldstein pointed out that in medicine, it is not uncommon to see hospitals "run on the back of residents." He said that this creates a manpower challenge.

"The residents see this on a day to day basis as they're being pulled to too many things," he said. "We shouldn't be reliant upon the residency program to fill in gaps when something needs to be done."

"The educational things need to be at the forefront and the service issues need to be secondary. This challenge is going to rely on some infrastructure that's not residency-based to get some of the work done."

Because of the volume and variety of educational resources that are available, the Orthopaedics program can take



Dr. Simon Goldstein

on more residents than many other programs, and it is currently 30 residents strong. Dr. Goldstein said that hiring surgeons with some focus in teaching is important for this.

"If there are more patients coming through, things that need to be dealt with by orthopaedic surgeons, then we should be training more surgeons to fill those spaces. But the secondary part of that is that there is more available learning space."

A surgeon should be able to teach someone what he's doing, so we can take advantage of his expertise. That's part of how he gives back to the community."

For Dr. Goldstein, it is rewarding to regard a surgeon, after having completed his or her residency, who he would be willing to go to with an orthopaedic problem of his own.

"I have a fair bit of personal pride when someone has passed their exam, gotten a job and gone on their way. If I'm happy that they can treat my nearest and dearest, then hopefully they're doing a good job out in the community."

# Otolaryngology

Since 2005, the Otolaryngology residency program has been providing a balanced education encompassing research and clinical work to residents. Dr. Doug Bosch, Program Director, said that the size of the program provides a lot more opportunity to residents.

"The biggest advantage of our program is that it's small and the residents get a tremendous amount of surgical experience early in the program," he said. "Residents get to do a lot of hands-on work given the multiple hospital sites and limited number of residents."

"As a small program, it's quite collegial as well; it's not an extremely formal program per se, there is a lot of first-name basis with some of the younger staff."

While there are advantages to having a smaller-sized program, which alternates between taking one and two residents per year, there are certainly challenges to face as well. Soon, Calgary will have five hospitals that will be serviced by "key teaching faculty" as well as residents.

"The South Health Campus is going to bring in a whole new complexity," Dr. Bosch said. "It will be a challenge for this program in trying to incorporate residents into each of

the sites. ENT is broken into domains: Head and Neck Surgery, Otology, Neurotology, Rhinology, Laryngology, Paediatrics, Facial Plastic Surgery.

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*"We see (the residents) transform into surgeons in the five years they spend with us."*

-Dr. Doug Bosch

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"We have key faculty all over, and the residents have to be involved in all of those specialties. For example, all of our Otolologists will be at the South Health Campus. In order for the residents to master Otology, they will have to make the trip to SHC, which is a fair distance away."

Dr. Bosch also said that the balance between research and clinical is important to the program.

"The bottom line is that every surgeon or physician has to understand the basics of how research works because that helps them make decisions in their practices for the rest of their careers. Some of our residents will become clinicians and others will become academics in university centres. We still have to produce good clinicians to take care of patients; that is what the population wants."

For Dr. Bosch, gratification comes from observing the success and growth of young surgeons and the program.

"We know them all when they're medical students," he said. "They're either from Calgary or they've done electives with us from other universities. We see them transform into surgeons in the five years they spend with us."

"There are a few who have finished and are back here working, and they are colleagues and friends. To see how much they learn and how much they've progressed by the time they're almost done; it's outstanding."



Dr. Doug Bosch

# General Surgery

For Dr. Lloyd Mack, the memory of his own residency was motivation enough to take on the position of Program Director for the General Surgery residency program.

"I certainly remember being a resident," Dr. Mack said. "I had mentors and people influencing my career and making things better for me. There is a feeling that I should pay it forward or give back."

This attitude of mentoring and assuring the success of residents is something that Dr. Mack said that the General Surgery faculty, all of whom play some role in training residents, tries to foster.

"The thing that we appreciate the most is the collegiality between residents and faculty. It's a very organized, respectful atmosphere."

One of the largest residency programs in the city, there are currently 33 General Surgery residents, five of whom are graduating this year. In recent years, the program has expanded to meet higher demand of a growing city.

"All sites are exposed to residents and have residents on teams," Dr. Mack said of the diversity of the training available to the residents.

The General Surgery program also has an extensive history in research, which Dr. Mack said is encouraged by the presence of extensive resources for the residents.

"There is an annual General Surgical research day for residents, which is well-attended by faculty. We have a Research Director, Dr. Chad Ball, who helps coordinate, mentor and influence resident projects as well. Also, the Office of Surgical Research and Office of Surgical Education are very good resources.

"I think having a very well-known, dynamic faculty is a huge resource for



Dr. Lloyd Mack

them in terms of getting key projects and grants. We just had one of our residents successful in getting a very competitive grant through the University."

Dr. Mack said that the balance of research and clinical work, combined with national and international electives, has led to successful careers for graduates.

"In past years, we've had people go to all of the major fellowships in Canada and the United States," he said.

"We've also had those people recruited by academic centers to be future educators in those areas. Many residents go on to become the backbone of the General Surgery workforce as well, in all areas of Canada."

For Dr. Mack, the most rewarding aspect of his position comes with working with residents.

"They're the future. Being a small part of their education, knowing that they're going to be taking over and looking after us when we're no longer in these positions, that is the best part of the job."

# Colorectal Surgery

Since opening as the second program of its kind in Canada in 2004, the Colorectal Surgery extended residency program has graduated nine residents.

biggest challenge will be incorporating itself into the new South Health Campus, and collaborating with the General Surgery program.

Dr. Donald Buie, Program Director, said that because there are a small number of residents combined with a fair-sized academic faculty, there is more than enough room to develop surgical skills.

*"(The residents are) giving you the opportunity to transfer your knowledge and skills to the next generation of surgeons."*

-Dr. Donald Buie

"There's a lot of hands on and interaction," Dr. Buie said. "The rotations are set up such that there is a lot of clinical material that the residents are exposed to. The numbers are comparable to any of the larger programs in the United States, and they get a lot of experience."

"We have a staff that is very committed to teaching, many of whom have won numerous teaching awards with the university."

"We have to figure out how Colorectal in general will be servicing that hospital, and then how the secondary residency fits into that. It's a challenge to keep a balance between exposure and training for the general surgery residents and for our colorectal residents. We try to make sure that both are getting adequate training."

Incorporating research is something that Dr. Buie said that the program works hard to do for residents, offering one full year of research, as well as a year of clinical work.

Regardless of obstacles, Dr. Buie said that there are definite advantages to running a residency program in Calgary of all places. "It's a young city, and there's a lot happening, a lot of opportunity from the standpoint of openness to trying new things," he said.



Dr. Donald Buie

"The residents have all been successful in presenting papers at national and international meetings. Every year we go through publications for each fellow, so the clinical and research portions are balanced."

Dr. Buie said that in the near future, the program's

"People are very supportive of advances, because it's young faculty, and the city is young and vibrant. There's a lot going on. There aren't many cities in Canada where that's going on right now; it's a happening place."

Above all, Dr. Buie said that the opportunity to work with "bright young minds" is the biggest reward of his position.

"The residents are questioning you, making you think about what you're doing, and giving you the opportunity to transfer your knowledge and skills to the next generation of surgeons."

# Vascular Surgery

For Program Director Dr. Joyce Wong, an important part of Vascular Surgery resident education is assuring that trainees address the full spectrum of disease, rather than acting "as technicians."

This attention to the nonsurgical management of Vascular disease is particularly important in a surgical specialty that does not have a common non-surgical equivalent.

"A large chunk of our outpatient clinical practice does not require surgery," Dr. Wong said. "We do assessments and provide management and advice on the nonsurgical aspects of Vascular care, and then we share that with the family physicians."

The six Vascular surgeons in Calgary all participate in training the residents (an intake of one per year). This includes issues of physician wellness and dealing with work-life balance.

"That's the dilemma. We need to physically be there for the operations and if somebody gets sick, they don't get sick at a time that's convenient to you. And that's where we work as a team, we will hand things over. You do feel responsible for the person you've done surgery on."

With an aging population that is at increased risk for developing Vascular problems, the program is determined to find "the best and the brightest" residents. Because the two-year Vascular Surgery program had traditionally followed full General Surgery training, candidates were occasionally deterred by the duration of time required to become a Vascular Surgeon.

This concern has been addressed at the level of the Royal College through the efforts of the Specialty Committee in Vascular Surgery. By the end of this year, Calgary, along with the other nine Vascular Surgery training programs in Canada,



Dr. Joyce Wong

will have gone from a subspecialty to a specialty all its own; a direct-entry five-year training program, which will draw from medical students or those hoping to move laterally from other specified surgical specialties. Calgary hopes to be participating in the CaRMS match for intake of first year residents by 2014.

Dr. Wong said that this change will come with its own set of challenges. "It's not closing the door, it's widening the training. It's going to be a challenge, as we're going to be responsible for training them in the skills necessary for Core Surgery as well as Vascular Surgery, whereas previously we had people fully trained in the core skills."

For Dr. Wong, resident education in the surgical world of Vascular Surgery is about learning to cooperate as a team and "seeing the light bulb go on" in learning minds.

"I do like interacting with learners as well. It's really neat seeing someone come out the other end, even after just a rotation block, and seeing the growth and maturation that comes along with that."

# Ophthalmology

For Dr. Linda Cooper, Program Director for the Ophthalmology program, watching residents “go from knowing nothing to becoming confident Ophthalmologists” is gratifying. In particular this year, as the program is graduating its first resident who has been in the program for the duration of his residency (previously, transfer students have graduated from the Ophthalmology program).

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*“(The residents) go from knowing nothing to becoming confident Ophthalmologists”*

*-Dr. Linda Cooper*

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Dr. Cooper said that the program is a well-rounded mixture of both surgical training and medicine. In the first year, residents work in internal medicine with a bit of surgery. For the second year, residents train in emergency Ophthalmology and learning to properly perform an eye exam.

Following that, three years are spent in the seven subspecialties that make up the Ophthalmology program: Glaucoma, Retina and Vitreous, Cornea and External Disease, Neuro-Ophthalmology, Oculoplastics and Reconstructive Surgery, Cataract and Anterior Segment Surgery, and Paediatric Ophthalmology and Strabismus.

One aspect of the program that Dr. Cooper said is appealing to the residents is the ratio of staff to residents. “They get a lot of good teaching,” she said.

“Unlike the majority of the other programs in surgery, the majority of the residents’ teaching is done outside of the four major hospitals in Alberta Health Services,” Dr. Cooper said.

“The only time that they get a significant amount of teaching in the four hospitals is during the first six months when they are rotating through the Urgent Eye Clinic and during Paediatric Ophthalmology. All of the other teaching is done in private offices.”

Dr. Cooper said that an issue being faced by the section right now is the fact that they are trying to purchase a surgical simulator

for cataract and retinal surgery, which will cost the Department \$300,000. She said this will be a powerful learning tool for the residents when it is an expense they are afforded.

The Ophthalmology residents also get the opportunity to aid in the education of medical students, sometimes participating in workshops put on for the students. The Ophthalmology program also arranges for the Calgary and Edmonton residents to meet, hosting educational events about optics and glaucoma. This collaboration is something that is unique to this particular program.

The administrative duties taken by a Program Director are a lot of responsibility and paperwork, although Dr. Cooper said that it is worth the effort to see the end result, “seeing residents come through after five years.”

# Cardiac Surgery

Established in 2006, the Cardiac Surgery Residency Program is graduating its first resident this year. Program Director since 2010, Dr. Bill Kidd said that in the past six years, it has been rewarding to watch its evolution into a successful program.

"Imparting knowledge to someone, medical student or resident, is very rewarding for me as a Program Director. We're really pleased that we've matched a resident three of the last three years to come to our residency program," he said. "We pride ourselves on having a flexible six-year training program with high-volume and hands-on surgical experience.



Dr. Bill Kidd

"We just have residents; therefore they get first assistant and primary interaction with Cardiac Surgeons without the fellows in between. There is a lot of exposure to surgery itself and getting to do surgery, so that's a big factor. We structure things more around their education rather than other service coverage."

Dr. Kidd said that in a program of seven surgeons and two device surgeons, collaboration with other specialties such as Thoracic Surgery and Vascular Surgery is a benefit to the residents. He also pointed out that having access to resources is an asset to the program.

"There are two operating theatres every day and three operating theatres two days a week. It's a 14 bed ICU, 32 bed ward, we each have one clinic day per week that they attend, and the link with the Department of Cardiac Sciences gives them the access to rotations through the Echo Lab, the Heart Failure Service and Device Implantation."

While not all Cardiac Surgery residents have completed their training in Cardiac Surgery, Dr. Kidd said that residents who have gone on to other specialties

serve a purpose to the development of the program.

"We got them started in surgery, now they've found a specialty that they like better than Cardiac Surgery, so that's a positive for them," he said. "It's been a positive to us because we've been able to iron out some of the kinks of our program."

Resident-driven research is also a component for some students in the Cardiac Surgery residency program, with resources readily available to those interested. "That adds not only to the Section but also to our residency program so they have more and better exposure to research," Dr. Kidd said.

Dr. Kidd said that certain aspects of his time spent as Program Director have been rewarding.

"To work with other people, meet other people, and get different experiences is really rewarding because it is another thing I can do outside of Cardiac Surgery. You have varied experiences, meet different people, and learn about different things. Some of it helps you grow as a surgeon, some of it helps you grow as a person."

# General Paediatric Surgery

According to Dr. Andrew Wong, Program Director of Paediatric General Surgery, which is a program that consists of a two-year residency after General Surgery, the process of creating a "complete surgeon" is what is important in the education of Paediatric surgeons.

"You're not only teaching them how to diagnose and operate," Dr. Wong said, "but also certain tenets of the CanMeds competencies. These are collaboration, communication, management; and especially how to treat patients and their families as if they're part of your own. It's all encased in that formula."

As the city continues to grow, today's Pediatric General Surgery Program has to grow along with it. They now take one resident per year rather than one every two years. "It is too much work for one person," he said of the current residency situation.

Dr. Wong said that a Paediatric Surgery faculty can only function in a larger urban center, where a large number of doctors in other Paediatric specialties are also present. Calgary, with a rapidly-growing population, is an ideal place for this program.

Dr. Wong, who has been training residents in some capacity for 27 years, said that the amount of work available in Calgary for the residents helps them greatly surpass the

number of surgeries that American standards dictate that they complete.

"I was taught by the old technique of intimidation and now we teach by encouragement. In this way the residents now feel confident, unafraid, and

they learn better. We in Calgary are definitely trying to pass that on."

"Teaching by encouragement" and other methods instilled by the TSIMP program have resulted in a 100% pass rate by graduates, compared to a 20% rate of failure in the Royal College examinations.

"Feedback on students who have trained here has been excellent. I've gotten calls about how good their hands are. We train really good surgeons who look after patients very well."

Research is also part of the Paediatric General Surgery program, with a publishable piece of research being a requirement to successful completion.

"Research isn't done for the sake of research," Dr. Wong said. "Research is looking at something and asking 'Can I do it better?' and proving that you can."

"I tell my residents that when they're done, they will be better surgeons than I am. And that's mainly because there are new ways of approaching a procedure. After I was trained in Toronto, I learned Minimally Invasive Surgery. The doctors coming up will learn something else, and my way of doing things will be passé in the next 15 to 20 years."

While research is very important to Dr. Wong, he said that the most rewarding part of his career is the opportunity to train residents.

"I can do as many surgeries as I wish, but if I train approximately twelve General Surgery residents per year, by the end of the year I'll have 12 times the amount of work that I can do."

"They will do 12 times the amount of good that I can do. That's rewarding. We train them to be excellent surgeons, and they all have been."



Dr. Andrew Wong

# Plastic Surgery

Ever since Dr. Dale Birdsell was instrumental in the formation of the Plastic Surgery residency program in 1976, it has been training surgeons in an environment that is both open and comprehensive. Dr. David McKenzie, current Plastic Surgery Program Director, said that although the program has quadrupled in size in the past decade, it has managed the challenge of maintaining a close, comfortable environment.

"It's not a threatening or competitive environment; it's a friendly kind of family. I think that one of the struggles with getting bigger is making sure that it stays a family, albeit a bigger family, rather than becoming an impersonal group. The environment is very conducive to learning.

*"The residents get exposure to the full spectrum of what Plastic Surgery involves."*

-Dr. David McKenzie

"All surgical residencies are a lot of work: very long hours, stressful. But I think if the residents are treated with respect and as equals, it's manageable."

With rapid growth of the program has come improved research done within the Section by residents.

"Since I was a resident ten years ago, the quality and scope of research projects has massively increased," Dr. McKenzie said. "People are doing large, multi-year meaningful studies. I think traditionally the focus of the program had been on training good surgeons to do good surgery, and research was an offshoot of that. But the emphasis on research has certainly grown."

A positive to the program is the "wide scope" of knowledge that is incorporated into the residents' training.



Dr. David McKenzie assists with a PGY-1 Surgical Skills Course

"In Plastic Surgery, there are a lot of subspecialties, for example aesthetic surgery, craniofacial surgery, microsurgery, hand surgery, paediatric surgery, and burn surgery," Dr. McKenzie said. "I think one thing we do very well as a program in Calgary is expose residents to all of those things, whereas many other programs have

differed away from doing certain things.

"For example, facial fractures. We do pretty much all of the facial fractures in town but in many other centers it's done by dentists or ENT surgeons. The residents get exposure to the full spectrum of what Plastic Surgery involves."

Dr. McKenzie said that the most rewarding part of his position is being exposed to the enthusiasm that the residents bring into the specialty.

"The residents that come into our program are amazing. I think the thing I like most is getting to work closely with them. I thought when I took the job that I would be helping to mould and teach them, and I think it's almost been the other way around. I easily learn as much from them as I teach them, and it's nice to continually be reminded what a cool job it is. I think if I didn't teach residents, I might tend to get set in a pattern. If you see the job through their eyes as something phenomenal, that's the biggest thing, seeing the world through fresh eyes."

## International Work Comes with set of Struggles

In her medical trips abroad, Dr. Elaine Joughin has learned several lessons about what is needed for a successful mission overseas.

Dr. Joughin's first trips were to Thailand, to a region without doctors where she and a team arrived to realize that they were not properly prepared for the conditions they faced.

"They didn't really have an operating room, there were no sterile conditions, no sterilizer, and no anaesthetic machine. If you don't know that ahead of time, you can't bring the right equipment and there's only a limited amount you can accomplish."

Dr. Joughin said that it was important to form a relationship with a community rather than offering support a single time. Going to the same community of Cuenca, Ecuador every year is a prime example of this in action.

That mission was put together by Dr. James Harder and supported by The Rotary Club.

Dr. Joughin said that it is also important to have someone on board who is very familiar with local need and customs. For instance, the team she was involved in consulted with a family physician working with indigenous people in

the area, and would bring in local people who needed surgery.

"If I went by myself to Ecuador, I wouldn't have a clue what to do, because I don't know what the local problems are. You need someone to direct you to resources, people, language, what their own base of knowledge is, and what their health care system is like so that you're not trying to duplicate services, you're trying to help fill in holes."

One of the major problems that Dr. Joughin, a Paediatric Orthopaedic Surgeon, realized was prominent in Cuenca was dislocation of babies' hips. In Canada, treatment is available immediately with early detection in place. There, it is more common and often missed. Because the hips are not detected early enough for simple measures to be taken, surgery is necessary to put the hip back into the joint.



Dr. Joughin examines a child's foot in Cuenca  
Photo Courtesy of Dr. Elaine Joughin

"They often don't carry their babies in a way that is healthy for baby's hips. If a baby has a disposition for a hip coming out, and you bind the baby's legs together or push them together, then that will encourage the hip to come out of the joint. There's a very high incidence there of this problem, part of which is because they carry their babies off to the side instead of with their legs apart."

*"Education of local people is the most important part of this type of work."*

*-Dr. Elaine Joughin*

For this issue, Dr. Joughin and the team attempt to take preventative measures in the Ecuadorian community. They designed a poster demonstrating the correct and incorrect ways to carry babies intended to prevent the hip issues.

"Education of local people is the most important part of this type of work. Itinerant surgery talks about going to one place, doing your surgery, and then leaving. You benefit few people and you aren't there to follow up. Nowadays, we have Internet, Skype, resources like that, so it's a lot easier to communicate."

Educating of doctors and even medical students is another aspect of the mission that Dr. Joughin said is useful in the long term.

"It's really important to have people there who will follow up with patients because the treatment isn't finished when we're there; all we do is the procedure. All of the aftercare is just as important as the procedure itself. So ultimately what you

want to do is to be able to share your knowledge that you bring with you."

"We go there and give medical students a couple of talks every year and try to go to the different universities. We teach on things like foot abnormalities, concentrate on hips so they can learn to examine hips for early detection. We educate the local Orthopaedic Surgeons on up-to-date techniques and ways of doing this.

"Teaching advances in treatment of club feet is really important too, because it's more of a non-operative type treatment, and if they learn the new way of doing things, the results will be much better.

"I concentrate on teaching. It's not just the surgeries we've taught them. When we first started, they didn't have tile on the walls, they didn't wash the walls between cases, infection rate was really quite high. The anaesthesia equipment was very rudimentary, and the Anaesthesiologists have taught them quite a lot in terms of ventilation, increasing patient safety for people working there, sharps, universal precautions, preventing exposure to pathogens, we got them x-ray gowns. Those are all little things that we take for granted, which are more important than the big picture of the surgery."

Dr. Joughin said that the mission in Ecuador is at a point where the medical system is improving, but although surgeons have been trained to help patients, leaving the picture altogether is not an option.

"We still have to provide ongoing support. So now we can go down and just do teaching. I want to continue that relationship, and we can develop a relationship elsewhere on the same principles."

## SHC Bone & Joint Clinic Will Improve Patient Care

With the opening of the new South Health Campus (SHC) in the near future, many dyadic teams of physician and managerial leads are making decisions about how patients will be cared for, and the most efficient ways to get things done. One such team is the Section of Orthopaedics, spearheaded at SHC by Site Chief Dr. Stephen Miller.



Calgary's South Health Campus

The new Bone and Joint Clinic will eventually be a fleet of 10 Orthopaedic Surgeons at SHC. It will be implementing a few ideas not commonly seen in Orthopaedics. There will be central intake for all Orthopaedics patients and procedures, which Dr. Miller said will speed up the process of booking patients.

"Our goal is to see urgent patients within two weeks and elective patients within six weeks in all areas of Orthopaedics," he said.

Orthopaedics will also have four operating rooms at SHC: one for trauma, two for Arthroplasty, and one for hand and sports medicine.

Another change that Dr. Miller wanted to see was the localization of physicians' entire practices into SHC. "This is the

ultimate of one doctor practicing on one site. They never have to leave and go between different offices and different hospitals. The hospital is so far away that it wouldn't be a satisfactory way to practice."



The Bone and Joint Clinic is being prepared at SHC

"When you're on call at the South Hospital, you're not in the operating room," Dr. Miller added.

"You're available to see patients, see people in emergency, talk to doctors, et cetera. The day following your call day is when you go into the trauma fracture room. I can see a patient with a problem and tell him he can get in tomorrow."

Sara Pereira, Executive Director of Surgical Services and Women's Health at SHC, said that the relationship between Dr. Miller and his group and management is especially helpful in making changes to the way things are done.

"They will work really closely in order to make sure that the choices we're making make a difference to patients, and also make sense from a physician and operations standpoint," Pereira said.

From a managerial standpoint, efficiency is also key. "We want to get the right patient, to the right provider, at the right time. We are ensuring that our staff are cross-trained so that we are able to utilize all of our staff to the best of our ability.

"Our teams are working out how patients will flow through the different clinics, who needs to be there, who's the right provider at the right point in time, and ensuring that we are ready for that for the first go."

# aCATS Aims to Shorten Wait Times, Improve Patient Care

As discussed at this year's Department of Surgery retreat March 15-16, Adult Coding Access Targets for Surgery (aCATS) is a pilot project intended to decrease wait times by the implementation of codes to standardize wait times.

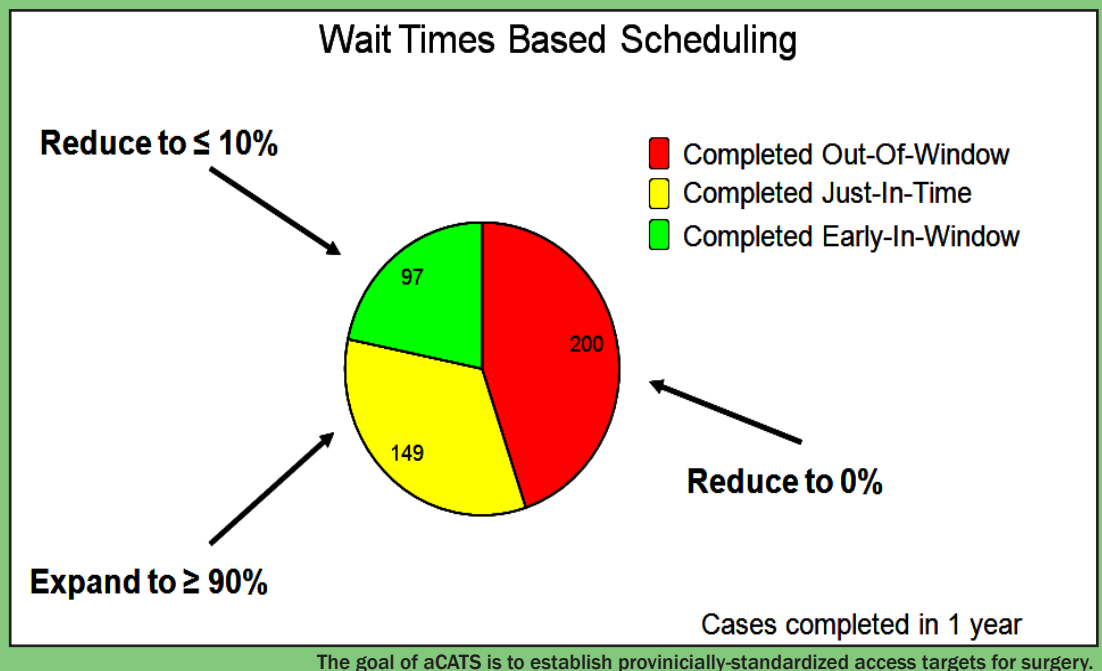
The idea grew from the positive experiences of pCATS (Paediatric Coding Access Targets for Surgery) by Dr. William Cole at Stollery Children's Hospital in Edmonton and Dr. William Hyndman at Alberta Children's Hospital. The pCATS system, according to Dr. Cole, was intended to ensure that patients have timely access to surgery within their diagnosis-based and acuity-based maximum target times. A key element of aCATS and pCATS is the maintenance of complete, comprehensive surgical waitlists. Keeping careful record of surgical patients is expected to enhance OR scheduling procedures by surgical booking office staff.

A diagnosis list for each surgical specialty was created by an expert clinical group assembled by Dr. Cole. There are over 3800 diagnoses in total presently, each with a specific aCATS code and target wait time attached to it. The placement of this code on a form as well as a ready-to-treat

(RTT) date ensures the organization of surgical patients.

The RTT date is defined as "the date on which any planned delay is over and the patient is ready to begin treatment from both a social, personal and medical perspective." Typically, it is the same as a decision to treat date, with exceptions including the patient requiring and recovering from neoadjuvant therapy, the patient being socially unavailable for a length of time, or having sequential surgeries for the same diagnosis. The addition of this new time stamp, ready to treat, assists in accurately capturing when a patient is truly ready for surgery and then the true wait time for that individual patient.

Doug Brenner is the Project Manager for the aCATS project. He said that having standardization within AHS rather than each specific zone having its own system



to track wait times would improve performance and wait time reporting. From pCATS, it was discovered that by tracking, monitoring, and analyzing data provides management with metrics they can use to reduce wait times.

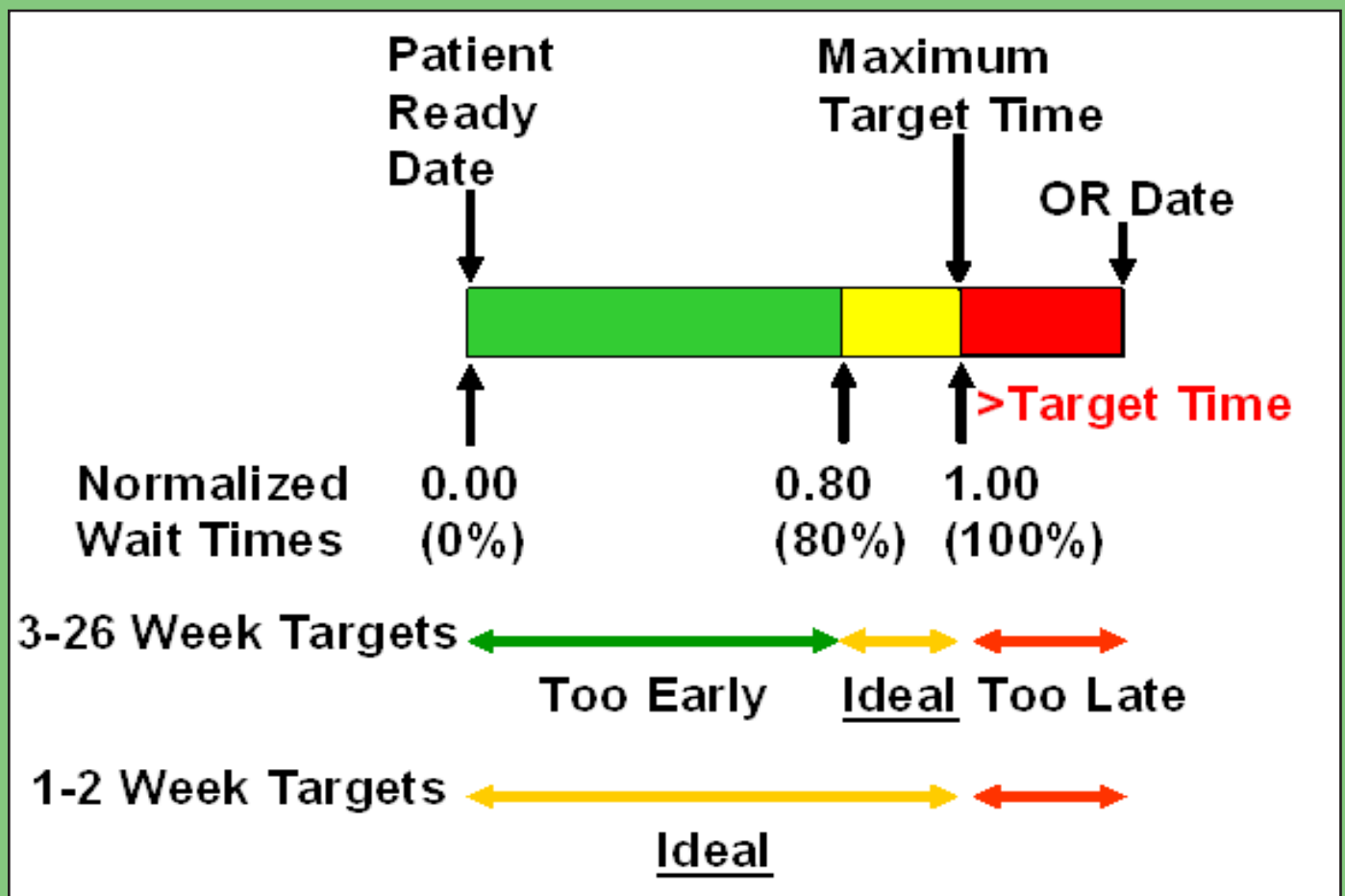
"When you standardize a process, you can optimize a process," Brenner said. "It doesn't sound groundbreaking but we've never been able to do this before. There was no consistent agreement on wait times, how long things should take. So we're going to be able to get reports pulled off in the near future that will give us a clear indication of how many patients are waiting for different procedures."

The ability to track individual surgeons' wait times is an advantage as well. In doing so,

it may become possible to give patients more options in terms of which doctor they would prefer to see. At present, most specialties do not have central intake.

"Anecdotally, it's gone quite smoothly. We're still waiting on initial reports from the aCATS pilot project," Brenner said. "The surgeons are quite engaged, the number of errors being made on forms is very small. The challenging thing has been getting the correct resources in place. Getting experienced Site Leads was vital to the project. They train the surgeons, booking offices, help with waitlist cleanup."

Errin St. Thomas is the Site Lead for FMC, and said that the initial push was getting the surgeons onboard by presenting information about the benefits of aCATS.



Waiting time zones for patients with short and long maximum target times

This presentation touched on the purpose and intent of aCATS, including four project plan points:

1. Develop a system that has the same uniform presentation of diagnoses and targets as in pCATS and apply access targets to patients at 10 sites (pilot) then provincial roll-out (aCATS would be merged into the existing OR information systems).
2. Determine number of patients waiting (in/out of window) – develop comparable provincial waitlist data.
3. Investigate and address root causes for patients who are exceeding their target time.
4. Share knowledge across all AHS Surgical Services.

*“When you standardize a process, you can optimize a process.”*

*-Doug Brenner, aCATS Project Manager*

“We’ve learned that doctors want to improve access for their patients,” St. Thomas said. “They’re willing to participate, but they’re fearful that they’re going to be punished if they’re not meeting their targets. That’s not the case, but will hopefully serve to prove the point that we need more resources.”

St. Thomas said that the placement of the codes and RTT date on patient forms is neither time-consuming nor difficult, it just adds an

extra step for physicians to adjust to.

If an aCATS code or RTT date isn’t on the surgical booking request form, they are returned to the office by admitting or the booking office for completion. St. Thomas said that an email directly to the doctor or a phone call have also proven to be good solutions and that overall, there has been cooperation from the physicians. The only hurdle that she mentioned was organizing a large group of busy surgeons into one place, particularly for larger specialties.

Darcee Clayton, Site Lead for PLC, said that drafts of codes were brought in after the implementation of aCATS. PLC’s pilot of aCATS is at present just the Section of Orthopaedics, which uses a simple formula to build codes. The switch to real time results rather than the retrospective data that has previously been available will likely yield positive change for patients. The current codes will be reviewed and revised at set times to encompass new surgical procedures and to evolve current codes with surgeons’ user feedback.

Brenner said he agrees with this notion. “It’s still in its early stages so we haven’t seen the benefits just yet, but I’m confident that we will see reduced waitlists and improved health care.”



The 2011-2012 Surgical Executive Team at the March Retreat in Banff  
Photo: Dr. Alan Lin

## Surgeons' Day 2012: Recognizing Excellence



Photo by Amanda Hu



Photo by Amanda Hu



The Department of Surgery hosts a Research Symposium and Surgeons' Day annually to honour accomplishments, and the best and brightest research that the department has to offer. The 30th Annual Symposium was held at the Libin Theatre on the Foothills Campus on June 15, 2012.

In four separate sessions, residents, fellows and one medical student presented a broad range of research to an engaged crowd, accepting queries from judges. Dr. Chad Ball, Dr. Carmen Brauer, Dr. Fiona Costello, and Dr. Derek Drummond served as Sessional Moderators for the podium presentations, taking on the responsibility of introducing presenters and moderating question periods.

Topics explored in research varied hugely and included "The treatment of footdrop

following knee dislocation," "Prevention of delirium in trauma patients: Are we giving thiamine prophylaxis a fair chance?" "Beta-blockers for the treatment of problematic hemangiomas," "Visual prognosis of epiretinal membrane peeling based on pre-operative optical coherence tomography findings," and "The impact of reinterpretation of imaging studies on the staging and management of patients with head and neck cancer."

A poster discussion was also lead by Dr. Derek Drummond.

Dr. Oliver Bathe and Dr. Sam Daniel served as judges for the morning's research presentations.

Dr. Bathe is a Professor in Surgery and Oncology with the University of Calgary,

a Surgical Oncologist with a special interest in hepatobiliary, pancreatic, and gastrointestinal tumours. Introduced by Dr. Francis Sutherland, Dr. Bathe delivered this year's McMurtry Lecture, entitled "Of Mice and Men: Making Research Relevant."

Dr. Sam Daniel, visiting judge, is the Director of Otolaryngology Head and Neck Surgery at the Montreal Children's Hospital and Director of Paediatric Otolaryngology at McGill University. After an introduction by Dr. Joseph Dort, Dr. Daniel delivered the 2012 McPhedran Lecture, "Challenges in Surgical Research." Both Dr. Daniel and Dr. Bathe were both presented with judge's awards.

The Peter Cruse Memorial Award was presented by Dr. John Kortbeek to Medical Student Devon Livingstone, with an honourable mention for that award going to Medical Student David Cinats.

The evening's Surgeons' Day was a black tie event held at the Sheraton Suites Calgary Eau Claire Hotel. During dessert, presentation of awards began.

Distinguished Service Awards are presented annually to one surgeon from each facility in the city. This year's recipients were Dr. Donald McPhalen from Alberta Children's Hospital (presenter: Dr. Rob Harrop), Dr. Rene Lafreniere from Foothills Medical Centre (presenter: Dr. Don Buie), Dr. Jim Nixon from Peter Lougheed Centre (presenter: Dr. John Heine) and Dr. Thomas Gillis from Rockyview General Hospital (presenter: Dr. Wayne Matthews).

As for resident-nominated awards, Dr. Jim Nixon was the recipient of the Educator of the year award, which was presented by General Surgery Resident Dr. Trevor Hamilton. Dr. Christaan Schrag was presented with the Ectopic Educator award

by Otolaryngology Resident Dr. Monica Hoy. Dr. Harrop presented the Surgical Innovation Award to Dr. Richard Baverstock and Dr. Kevin Carlson for the Vesia: Alberta Bladder Centre at the Rockyview General Hospital.

Resident awards were presented in four different categories.

There was a tie for Best Overall Resident Research, which was presented to Orthopaedic Surgery Resident Dr. Herman Johal for "Cost-effectiveness of minimally invasive spine surgery in the treatment of adult degenerative scoliosis - a comparison of transpoas and open approaches" and Otolaryngology Resident Dr. Derrick Randall for "Diagnostic utility of central node necrosis in predicting extracapsular spread among oral cavity squamous cell carcinoma."

General Surgery Resident Dr. Janet Edwards, who unfortunately could not attend the evening's events, received honourable mention for Overall Resident Research for her research, "Wound protectors reduce surgical site infection: A meta-analysis of randomized controlled trials."

Best research by a surgical fellow went to Cardiac Surgery Fellow Dr. Billie-Jean Martin for her research titled "Preoperative endothelial dysfunction in coronary bypass trial (PREDICT)." Dr. Martin's efforts earned her a Surgeons' Day award for the third year in a row.

Best poster went to Orthopaedic Fellow Dr. Simon Grange for his research titled "Identification of favourable prognostic factors for non-operative management of full thickness rotator cuff tears."

The evening finished off with words from Dr. Kortbeek and entertainment provided by a jazz quartet.

# Section Update

## Dentistry and Oral Health

### Section Structure and Organization

#### *Current Committees*

#### **Division of Adult Dentistry**

- Corrections Health - **Dr. A. Paladino**
- ZMAC (Zone Medical Advisory Committee) – **Dr. E. Kalaydjian**
- SAIT Dental Assisting Program – **Dr. Kalaydjian**
- Surgical Foundations PGSTC – **Dr. Kalaydjian**
- Calgary Zone Surgical Executive Committee – **Dr. Kalaydjian**
- Combined FMC OR Committee – **Dr. Kalaydjian**
- Dental NHSF Committee – **Dr. A. Tung, Dr. Paladino, Dr. Kalaydjian**
- Dental CE Committee – **Dr. Kalaydjian, Dr. Paladino**

#### **Division of Paediatric Dentistry**

- ACH Operating room Committee and of the ACH Pediatric Surgery Executive Committee – **Dr. M.C. Cholette**
- Royal College of Dentists of Canada – **Dr. R. Barsky, Dr. Cholette, Dr. W. Loeppky**
- ADA&C Hospital Committee – **Dr. Barsky**
- Alberta Academy of Pediatric Dentistry – **Dr. S. Hulland**
- Dental NHSF Committee – **Dr. Loeppky**
- Dental CE Committee – **Dr. Loeppky, Dr. C. Bell**
- Healthy Mouth Healthy Body – **Dr. L. Smith**

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

- SAIT Sterile Processing Technician Program Advisory Committee
- SAIT Dental Assisting Program Advisory Committee

#### **Division of Adult Dentistry**

- Regional After Hours On-Call Program – collaboration between Oral and Maxillofacial Surgery and FMC GPR Program
- FMC Dental Clinic
- Adult Special Needs Dentistry Clinic
- Dental Oncology Clinic
- Sedation Dentistry Clinic
- Dental Hygiene Clinic
- Specialty Clinics including Oral Medicine, Endodontics, Periodontics, Oral and Maxillofacial Surgery (new addition 2011-2012)
- FMC Dental General Practice Residency (GPR) Program
- hosted at FMC Dental Clinic
- current enrolment = 2 residents
- Corrections Dentistry
- dental care for inmates and remanded



Dr. Eduardo Kalaydjian,  
Dentistry and Oral Health Section Chief

population in Calgary Correctional Institutions

#### **Division of Paediatric Dentistry**

•The Paediatric dental clinic at ACH offers care to infants, children, and adolescents who present unique challenges and have special care needs. The team is well trained and experienced in providing dental care for children who have difficulty cooperating due to age, medical status, development delays, or other special needs. Treatment modalities include communicative behavior guidance and minimal/moderate sedation, or in the ACH operating room under general anesthesia. Community pediatric dentists with privileges also provide dental care for children and participate in on-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 who have no dental plan. The program operates from two sites in Calgary: Sheldon M. Chumir Health Centre, Sunridge Mall, and a satellite clinic: Airdrie Community Health Centre.

## Membership

### Division of Adult Dentistry

•37 privileged members (Most members hold privileges based entirely on their affiliation with the provision of surgical dental services at the NHSF)

FMC Dental GPR Program

•Two residents 2011-2012

•Preceptors for FMC Dental Residency Program

•General Dentists

•recent addition of Oral and Maxillofacial Surgeon (OMFS) and an additional Periodontist

Corrections Dentistry

•One casual dentist

FMC Dental Clinic

•Three full time dentists

•Several casual general dentists

### Division of Paediatric Dentistry

•There are currently 18 pediatric dentists in Calgary 15 have AHS privileges

•There was a change in leadership during the fall of 2011. **Dr. Cholette** was named Interim Division Head and Clinical Director of the ACH Dental Clinic in November. **Dr. Cholette** had previously been the Division Head from 1996-2008.

•**Dr. Steven Baylin** retired in 2011.

## Accomplishments and Highlights

### Clinical Service

#### Division of Adult Dentistry

FMC Dental GPR Program

•Continues to maintain its accreditation from the Commission on Dental Accreditation of Canada (CDAC)

•Addition of Oral and Maxillofacial Surgery Clinics

•Expansion of Periodontics Clinics (further days added)

•Surgical Implant Program (development continues)

•Addition of Healthy Patients to the client mix at FMC Dental Clinic (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 with the Commission on Dental Accreditation of Canada (CDAC)

•Surgical Implant Program (development continues)

•Addition of Healthy patients to client mix (development continues)

•Improved fiscal profile of dental clinic

•In collaboration with the Department of Anaesthesia (based at FMC), and the OR Surgical Managers (based at FMC), a "Special

Care Pathway" was developed for patients with extreme behavior issues being brought to the OR for dental treatment

•Increased collaboration with multiple Sections and TBCC NHSF

•Continues to stay within allocated budget

Corrections Dentistry

•Completed successful transition of dental services from Solicitor General to AHS for Calgary Zone

**Division of Pediatric Dentistry**

•Expansion of dental specialty multi-disciplinary with recruitment of **Dr. M. 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 the ACH Dental Clinic. This service is a joint initiative and will continue to involve close collaboration with the VPI Clinic and Speech therapy services.

•The ACH Dental Clinic continues to offer NAM therapy, orthodontics consultation for special need patients. Since February 2012 the clinic offers oral & maxillofacial surgery consultations for special needs patients and will start in September 2012 to offer speech appliance for patient with VPI.

•ACH Dental maintains accreditation by the Commission on Dental Accreditation of Canada (CDAC)

•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:** The program cooperated with this centre to provide urgent dental care for refugee population. If the Interim Federal Health insurance program cuts payment for care by private providers, Community Public Health Clinics may become sole provider of compassionate dental care for an impoverished refugee population.

**Education**

**Division of Adult Dentistry**

Residents

•(July 2011- June 2012) Fourth year for FMC Dental GPR program

•Present enrollment = 2 residents

•This year we noted large increase in number of qualified candidates applying

plans is to add third FMC Dental GPR Program Resident (year 2013)

- Maintain accreditation status (accreditation obtained Sept 2009) by the *Commission on Dental Accreditation of Canada*

Dental Students

- Academic year 2011-2012, FMC Dental hosted a total of five third year dental students from University of Alberta doing elective rotation in "Hospital Dentistry".

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

Residents

- The FMC Dental General Practice Resident and the ACH Dental Practice Resident each worked for 10 days in Dental Public Health Clinics receiving orientation and experience under the preceptorship of Clinic dentists.

Staff

- Staff has received Calgary District Dental Society team-building course. Staff has also received several infection prevention and control updates and in-services, as per current IP+C standards.

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.

### **Challenges**

#### *Response to Issues*

### **Division of Adult Dentistry**

Quality Assurance

- Planning lead by Section Chief around developing and implementing strategies to introduce peer-lead QA strategies for Dental Cases (ie M&M Rounds)

- Engagement and participation of Division members

- Regularly-scheduled Division meetings (4x yearly)

- Planning lead by Section Chief continues around starting zone-wide Clinical Dentistry Rounds

Recruitment and Retention

- Attracting qualified casual dentists remains a challenge

- Hard to recruit & retain

- Those already recruited have limited availability

Staffing Shortages

- Graduating residents hired as casuals/preceptors to help with shortage

- Plan to backfill position by introducing third resident (year 2013) if shortage continues

Recruitment and Retention

- Attracting qualified preceptors for dental

residency program remains a challenge

- Hard to recruit & retain

- Those already recruited have limited availability

### **Division of Pediatric Dentistry**

- The greatest challenge has been the Division's inability to post a fulltime Paediatric Dentist position for ACH Dental Clinic due to significant delays 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.

- Clinic revenues to support dental care in the dental clinic are a challenge. The hospital-based dental services are "fee for service" however; the dental clinic must 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 delivery of optimal care within our target times is a challenge without adequate funding. There have been rising costs of dental treatment due to the increase in staff compensation, Infection Prevention and Control procedure changes and the increasing number of medically compromised and Special Needs Paediatric patients requiring dentistry. We will continue to work with management and the ADA&C Hospital Committee to address this issue.

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

- Detailed AHS Infection Prevention and Control (IP+C) reviews were conducted at all three Community clinics. In response to the reports the clinics made appropriate changes and reported back. One major initiative has been to hire 1.8 FTE permanent sterilization aides for the clinics (instead of using casual positions). Other changes such as increased usage of single-use items and drapes have driven up costs

#### *Ongoing Matters and Plan of Action*

### **Division of Adult Dentistry**

Space Shortage at FMC Dental Clinic

- Patient and staff safety incidents reported due to space issues, e.g., code team could not access patients; patient treated partially in public hall as could not get stretcher in room; staff members report bumps, bruises and musculoskeletal injuries (with lost time) due to awkward positions worsened due to space.

- Management and executive management team made aware of issue.

- Investigating opportunities to move forward plans at SHC

**Dental Staff Shortages**

- Casual/Replacement Dentists
- Continue recruitment efforts from pool of graduating dental residents
- Preceptors for GPR
- 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

**Lack of Dedicated OR Time at Foothills Hospital**

- Performing procedures under sedation that would better be managed under GA; staff lost-time musculoskeletal injuries related to holding combative patients during sedation
- Management and executive management team have been made aware of this issue.
- Audit of cases on OR waitlist being completed
- Plan to challenge present OR allocation (Dentistry receiving zero OR blocks)
- Proposal to OMFS (for usage of their unused OR time)
- Regional 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 reorganization into Alberta Health Services changed the organizational structure of dental clinic programs in the Calgary area. The Dental Public Health Clinic Program (Airdrie Dental Clinic, Chumir Dental Clinic, Northeast Dental Clinic) have become part of the Population and Public Health portfolio, and the dentists report up through the Clinical Department of Public Health as well as the Clinical Department of Surgery. 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**

- Change in dentist compensation model
- Inability to attract healthy patients to clinic
- Partnerships cease

**Division of Paediatric Dentistry**

- Change in dentist compensation model

- Decrease in funding budget of OR time at the NHSF will affect our ability to treat our patients within our target times.

**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.
- The change in organization from a Zone Program to a Provincial Program has redefined eligibility for reduced-fee dental services to include all Albertans who have a low income. The Program does not expect additional funding in the near future, so increases in capacity may be challenging.

**Workforce Planning****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 ORs.

**Division of Paediatric Dentistry**

- Community workforce: 2 replacement positions by 2013 due to retirement of two community-based Paediatric dentists.

**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 as the pay rate is not competitive, yet the new pay scale is still in negotiation.

**Goals and Strategies****Division of Community Dentistry/Dental Public Health Clinic Program**

- The Dental Public Health Clinics were working towards an agreement with Health Canada for First Nations' people to receive care at Chumir Dental Clinic by funding additional staffing. This project is now stalled but may be revived with interest from Aboriginal Health Program.
- 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 for and from other AHS Clinical Departments & Divisions (i.e. Department of Surgery, Section of OMFS, etc.)

**Division of Paediatric Dentistry**

- Continued collaboration and support from other AHS Clinical Departments & Divisions (i.e. Department of Surgery, Section of OMFS)
- Continued collaboration and support for other AHS Clinical Departments & Divisions (i.e. cleft lip and Palate Clinic, VPI Clinic and Speech therapy services, etc)

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

- The Dental Public Health Clinics link with other public health programs to serve disadvantaged people.

**Quality Assurance, Quality Improvement, and Innovation****Division of Adult Dentistry**

- Planning lead by Section Head around developing and implementing strategies to introduce peer-lead QA strategies for Dental Cases (ie M&M Rounds)
- Telehealth Dental Information updated
- Dental Presentations provided to LTC Facilities in Calgary Zone
- 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.

**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
- Some family physicians fax or call the program for urgent cases where the patient has dental infection and no coverage. The

dental hygienist with Mosaic Primary Care Network is also aware of Dental Public Health Clinic Program and refers patients who have low income.

- Sheldon Chumir's Urgent Care Clinic screens patients with dental problems and refers them to the Chumir Dental Clinic (upstairs) if they earn a low income. This cooperative agreement resulted from joint planning by the Chiefs of both departments, and has improved patient flow through emergency department. Other Calgary Zone Urgent Care and Emergency Departments also refer 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)

**Division of Paediatric Dentistry**

- Careful utilization of existing resources for best practices model of pediatric dentistry
- Focused collaboration and interaction with each of the other Divisions and Departments, to provide comprehensive care within ACH
- Completion of the Dentist Compensation Review
- Recruitment of Division Head and ACH Clinical Director
- Increased emphasis on research and evidence-based practice
- Restart of Dental GPR Program and pediatric dentist preceptor support for the program
- Accreditation Review by the Commission on Dental Accreditation of Canada (CDAC) 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 Clinic, Collaboration in Q22 Clinic (Chromosomal anomaly q22 multi-disciplinary 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.

## Section Update General Surgery

•The Section of General Surgery has had another strong year in 2011/2012. Our Section completed a retreat last fall at the Kananaskis Lodge to map out future directions. We focused on a policy for recruitment that is both clear and transparent. Recruits to our Section will require "two skill sets in addition to their Royal College Fellowship". Further we established a Program Recruitment Committee" to oversee this policy. We have also restructured our executive committee to separate clinical from academic interests. In the past, clinical concerns have overwhelmed some of our academic missions.

•Additions to our faculty this year is **Dr. A. Reso**. After graduating from our residency program Dr. Reso completed a fellowship in minimally invasive surgery and his masters in medical education. He has begun his practice at RGH and will be instrumental in our future in directing our educational programs. At the same time **Dr. P. Armstrong** has announced his retirement from active practice. Dr. Armstrong has been stalwart in our clinical surgery program at the Rockyview where he pioneered Laparoscopic General Surgery and showcased excellence in surgical care in Calgary for 30 years.

•Plans for SHC have dominated our discussions over the last year. Four members of our section have agreed to move their elective clinical practices to this site in 2013. **Dr. J. Way** has provided interim leadership for this site. Our plans are to ramp up activity as the hospital grows, starting with an emergency surgery program. The recruitment of one or two new faculty with the help of section members from other sites will allow us to staff this program. Possibilities for a special program here include Anorectal Surgery. The section is moving forward with plans to train IMG clinical assistants to provide support at SHC and other sites.

•The High River Hospital continues to provide a relief valve for less urgent surgery in our zone. The throughput at this hospital is impressive and patient satisfaction with the services provided is sky high. General Surgical endoscopic procedures are also now being provided.

•The Section of General Surgery has been monitoring diagnosis-related wait list times for the past several years including both time from



Dr. Francis Sutherland, General Surgery Section Chief  
Photo Courtesy of Matthew Hayhurst

referral to visit and time from consent to surgery. These audits have been done by research nurse Lynn Nicholson. Wait time data is collected directly from office and hospital charts. This highly reliable data allows our surgeons to compare their patient wait times directly with those of their colleagues. It also allows our Section to look at manpower issues logically. Starting in October we will be participating in the aCATS program, which will provide similar data.

•Patient safety is an ongoing concern with our Section. Each hospital site is providing robust review of morbidity and mortality cases on a regular basis. Local peer review is the cornerstone of quality assurance. As we move to more service-related care delivery models (ACCESS and trauma) communication has emerged as a key issue. The section has developed a highly successful electronic hand over model in Sunrise Clinical Manager. Information on each patient (diagnosis, location, LOS, surgical procedure, etc.) is automatically downloaded and a box for comments added. The list can then be printed as a report. This provides real time information to faculty, residents and nurses on the current

status of each patient. Retention of this information is superior to verbal or written handover.

•**Dr. J. Graham** has completed his term as the surgical clerkship director. He provided calm steady leadership of this program for many years and is to be commended. **Dr. A. Harvey** has taken over in this position.

•Our residency program continues success in producing young surgeons. All candidates were successful in their Royal College examinations and are moving on to fellowships including MIS, pediatric surgery and ICU.

•**Dr. L. Mack** continues to provide skilled leadership of our residency program and is moving forward with plans for simulation training.

•Our fellowship/extended residency programs remain strong. The Hepatobiliary Pancreas Fellowship has received accreditation from the AHPBA. Particular note should be made of **Dr. JF Ouellet** who completed both Trauma and HPB training and has now returned to start his practice in Quebec City.

•Research remains a strength in our Section. **Dr. O. Bathe** was singled out this year for his contributions. He delivered the McMurtry lecture at Surgeons' Day. Dr. Bathe chronicled a decade of effort highlighting translational

research from bench to bedside.

•Population health expertise in our Section runs across all programs. Randomized clinical trials in HPB and trauma are ongoing. Noted studies include a meta-analysis of trials investigating with use of wound-protectors to prevent surgical site infection published in Annals of Surgery by **Dr. J. Edwards** (honorable mention Surgeons' Day). The results of ongoing studies on eye tracking in surgery by Dr. Harvey are fascinating. Dr. Derek Roberts has received a prestigious award from Alberta Innovates investigating damage control trauma surgery.

•Several Section members have received awards this year. Both Drs. Armstrong and Selman received distinguished service awards from the Rockyview Hospital. **Dr. Mack** received the Luminary Award from the University of Calgary for teaching.

•Our continuing medical education program has been active over the last year headed up by **Dr. I. Anderson**. We have had two CME dinner meetings and several visiting lecturers including **Dr. D. Feliciano, Dr. Z. Cohen, Dr. T. Howard** and **Dr. K. Lillemoe**.

•The future looks promising for our Section as the process of renewal with talented young faculty progresses.

## Section Update Ophthalmology

### Section Structure and Organization

#### *Current Committees:*

- Monthly business meetings (all ophthalmologists with privileges in the Calgary Health Zone + 2 Neuro-Ophthalmologists + 1 affiliated vision research scientist + 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. N. Goel**)
- Residency Program Committee (chaired by Residency Program Director **Dr. L. Cooper**)
- Fellowship Program subcommittee (chaired by **Dr. A. Crichton**)
- Undergraduate Medical Education subcommittee (chaired by **Dr. J. Huang**)
- Sectional Research subcommittee (chaired by **Dr. F. Adatia & Dr. F. Costello**)
- Grand Rounds subcommittee (chaired by



Dr. Ken Romanchuk  
Ophthalmology Section Chief

**Dr. Crichton)**

•Research Day subcommittee (chaired by **Dr. B. Ford**)

*Programs:*

- Lions Eye Bank of Southern Alberta at RGH
- Sight Enhancement Clinic at RGH
- University Eye Foundation (President **Dr. A. Kherani** & Secretary-Treasurer **Dr. S. Smith**)
- Calgary Ophthalmic Medical Technology Training Program at RGH

*Organizations*

•**Dr. Adatia** is a reviewer for the *Canadian Journal of Ophthalmology* and *Journal of Medical Case Reports*. He co-chairs our sectional Research subcommittee.

•**Dr. M. Ashenhurst** is a member of the Uninsured Services Committee of the Alberta Medical Association and both the Bylaws Committee and the IRNV Review Committee of the Eye Physicians & Surgeons of Alberta.

•**Dr. B. Astle** is the immediate Past-President of the International Joint Commission on Allied Health Personnel in Ophthalmology (USA), and now is its Secretary of Internal Operations, and is Chair of the Allied Health Committee of the International Council of Ophthalmology and is a member its Refractive Error Committee. He continues ongoing research in trachoma in the Gwember valley region of Zambia.

•**Dr. J. Bhamra** participates on the Corneal Tissue Committee and Working Group of the Canadian Blood Services, is a medical team advisor for A Better World Canada: Eye Camps in Rural Kenya, and has lectured at the Banff Rural Medicine courses and Calgary Urban Medicine courses.

•**Dr. B. Chow** has become the Past-President of the Eye Physicians and Surgeons of Alberta, but continues of the Scientific Committee for its annual meeting. He continues to be an examiner for the Part 2 (LMCCQEII) process of the Medical Council of Canada, and has performed a supervised practice assessment in Ophthalmology for the College of Physicians & Surgeons of Alberta. He continues as a Comprehensive Ophthalmologist Member of the Alcon Glaucoma Advisory Committee.

•**Dr. 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. Costello** and colleagues were the

recipients of the Annual Surgical Innovation Award on June 24, 2011 at Surgeons' Day in Calgary for PITNET: The Pituitary program; an interdepartmental, multi-disciplinary team-based approach to optimizing Neurosurgical, Visual and Endocrinological treatment outcomes for patients with pituitary lesions at the University of Calgary. Dr. Costello continues as an oral examiner for the Royal College of Physicians and Surgeons of Canada.

•**Dr. Crichton** is an examiner in Ophthalmology for the Royal College of Physicians & Surgeons of Canada, a referee for the *Canadian Journal of Ophthalmology*, the *Journal of Glaucoma*, and *Ophthalmology*. He has been a member of the Department of Surgery Research Committee since 2009.

•**Dr. T. Demong** is a member of the Editorial Board of the Canadian Journal of Ophthalmology, is the Medical Director of the Lions Eye Bank of Southern Alberta, and is a founding member of the Canadian Cataract Institute.

•**Dr. G. Douglas** continues to plan our section's Interesting Cases sessions and Journal Clubs.

•**Dr. A. Ells** continues to be a member of the scientific review committee for the annual meeting of the American Association for Pediatric Ophthalmology and Strabismus (2007- present), 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 participates on the clinical practice guideline expert committee of the Canadian Ophthalmological Society. She has been a reviewer for the *Journal of the American Association for Pediatric Ophthalmology and Strabismus* and the *Canadian Journal of Ophthalmology*. She was the "Editor's Choice" for a 2011 article in the *British Journal of Ophthalmology*.

•**Dr. B. Fletcher** is Chair of the Royal College Specialty Committee in Neurology and was a member of the Future of Medical Education in Canada subgroup on competency-based medical education, and was Chair of the Neuro-Ophthalmology Course at the Canadian Neurological Sciences Federation Congress (2009-2011) and a co-moderator

and invited speaker at the 2012 North American Neuro-Ophthalmology Society meeting. In 2011-12, he was a reviewer for *Archives of Ophthalmology*, *American Journal of Ophthalmology*, *Neurology*, *Journal of Neuro-Ophthalmology*, and *Case Reports in Ophthalmology*. He is Associate Head of the Division of Neurology and is a member of the Search Committee for the Head of the Department of Clinical Neurosciences.

•**Dr. Ford** is the chair of the University of Calgary Visual Sciences Research Day, was the co-chair of the Banff Translational Glaucoma Meeting in September 2011, is a reviewer for the *Canadian Journal of Ophthalmology*, the *American Journal of Ophthalmology* and the *Journal of Glaucoma*, is a member of the Committee on Shared Responsibilities of the Canadian Glaucoma Society, and is the glaucoma representative on the INRV fees review committee of the Alberta Association of Eye Physicians & Surgeons.

•**Dr. H. Gimbel** is on the Department Editor of Cataract Surgery for *Clinical & Surgical Ophthalmology*, is on the editorial board of *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 is also Head of Ophthalmology at Loma Linda University.

•**Dr. Goel** has spent countless hours in 2011 & 2012 facilitating a consensus position regarding cataract surgery and surgery in the contracted non-hospital surgical facilities in Calgary, implementing a priority ranking of cataract surgery among the Ophthalmologists in the Calgary zone, and updating the on-call inpatient consultation system.

•**Dr. J. Gohill** is a member of the Executive Committee of the Canadian Society for Cataract & Refractive Surgery, a member of the executive of the Ophthalmological Society of Alberta, a member of the CME committee for cataract surgery of the Canadian Ophthalmological Society, a reviewer for the

Canadian Journal of Ophthalmology, and a member of the advisory committee for the Calgary Ophthalmic Medical Technology Training Program at RGH.

•**Dr. V. Hill** is co-chair of the Ophthalmology teaching for undergraduate education at the University of Calgary (UME Course 5 Teaching Program), a member of the course V undergraduate education planning committee of the Faculty of Medicine of the University of Calgary, an examiner in Ophthalmology for the Royal College of Physicians & Surgeons of Canada, a physician examiner for the Medical Council of Canada, and a member of the IRNV review committee of the Eye Physicians & Surgeons of Alberta.

•**Dr. J. 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, and Vice-President of the University Eye Foundation.

•**Dr. P. Huang** is Chair of the Program Curriculum Committee of Joint Commission of Allied Health Personnel for Ophthalmology, and 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.

•**Dr. A. 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 performs international Ophthalmology work in Kenya.

•**Dr. F. Kherani** continues as a member of the American Society of Oculofacial, Plastic & Reconstructive Surgery Education Committee, and served as an oral examiner

for the American Society of Oculofacial, Plastic & Reconstructive Surgery.

•**Dr. J. McWhae** continues working in international Ophthalmology with Operation Eyesight International, and is referee for the *Canadian Journal of Ophthalmology*.

•**Dr. P. Mitchell** is a referee for the *Canadian Journal of Ophthalmology*.

•**Dr. R. Mitchell** continues his work in international Ophthalmology.

•**Dr. K. Punja** is a member of the Fees Advisory Committee of the Alberta Medical Association and a member of the advisory committee for the Calgary Ophthalmic Medical Technology Training Program at RGH.

•**Dr. 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 is now a member of the RCPSC Professional Development Committee. He continues as chair of the Maintenance of Certification of the Canadian Ophthalmological Society, and is a member of the executive of the Alberta Ophthalmological Society.

•**Dr. P. Savage** is very actively involved in the teaching of students enrolled in the Calgary Ophthalmic Medical Technology Training Program at RGH, as well as medical students at the University of Calgary, residents in Ophthalmology and retinal fellows.

•**Dr. B. Skov** continues to participate in the sectional CaRMS selection process for residents in Ophthalmology.

•**Dr. Smith** continues as the Secretary-Treasurer of the University Eye Foundation.

•**Dr. K. Verstraten** is co-chair (with **Dr. Hill**) of Ophthalmology teaching for undergraduate education at the University of Calgary (UME Course 5 Teaching Program), and is a member of the Canadian Glaucoma Clinical Research Council of the Canadian National Institute for the Blind.

•**Dr. E.I. Weis** comes from Edmonton to share the Ocular Oncology clinic with **Dr. McWhae**. He has started an Ocular Brachytherapy program in Alberta.

•**Dr. G. Williams** is the Site Lead for Ophthalmology at RGH, a member of its Laser Safety Committee, co-director of the retinal fellowship program at the University

of Calgary, and immediate past-president of the Executive of the Eye Physicians & Surgeons of Alberta. He is also a reviewer for the *Canadian Journal of Ophthalmology*.

•**Dr. P. Wyse** remains a member of the Non-hospital Surgical Facility Committee of the College of Physicians and Surgeons of Alberta. He also has specialized eye clinics for Marfan's/connective tissue disorders and solid organ transplants at RGH. He is an active member of the Research Subcommittee of the University Eye Foundation. This year he spearheaded an initiative in our Section to raise over \$10,000 for the Interfaith Food Bank.

## Accomplishments and Highlights

### Clinical Service:

•**Dr. Costello** and her colleagues **Dr. Y. Starreveld**, **Dr. L. Rudmik**, **Dr. S. Wood**, **Dr. A. Mitha**, **Dr. B. Mechor**, **Dr. S. Bhayana**, **Dr. D. Rabi**, **Dr. B. Corenblum** and **Dr. A. Edwards**, were the recipients of the Annual Surgical Innovation Award on June 24, 2011 at Surgeons' Day in Calgary for PITNET: The Pituitary program; an Interdepartmental, multi-disciplinary Team-based approach to optimizing Neurosurgical, Visual and Endocrinological Treatment outcomes for patients with pituitary lesions at the University of Calgary.

•**Subspecialty clinics at RGH:** cornea, glaucoma, Marfan syndrome-connective Tissue Disorders Eye Clinic, Neuro-Ophthalmology, Ocular Oncology, Retina, Solid Organ Transplant Eye Clinic, Urgent eye & Uveitis

•**Retinopathy of prematurity** screening service to the Neonatal Intensive Care Units at ACH, FMC, PLC and RGH

•**Dr. Astle** participates in the Childrens Travelling Sight Enhancement Clinic for Southern Alberta

•**Annually, 32,267 patients visits & 111,372 procedures tests at RGH eye clinic**

•**Annually, 14,503 patient visits at ACH vision clinic**

•**Annual eye surgeries:** 12,947 cataract surgeries total in the contracted non-hospital surgical facilities, 3,681 non-cataract eye surgeries in the contracted non-hospital surgical facilities, 1,760 eye surgeries at RGH, and 582 pediatric eye surgeries at ACH

### Education:

•**Dr. Bhamra** received the 2012 Award for Master Teacher of the Year for our residents in Ophthalmology.

•Our fellowship program in Paediatric Ophthalmology is certified by the American Association for Paediatric Ophthalmology & Strabismus. Both the fellowship programs in Paediatric Ophthalmology & Strabismus and Retina participate in the San Francisco Annual Fellowship Match Program.

•Teaching of undergraduates continues in small group settings, surgical clinical clerkship rotations, and electives. **Dr. Hill** and **Dr. Verstraten** have taken leadership roles in teaching Ophthalmology in the newest undergraduate medical curriculum.

**Dr. J. Huang** has been active in coordinating ophthalmology electives and evaluations for medical students from University of Calgary and other Canadian universities, 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.

### Challenges

#### *Response to Issues*

•The section has had a retreat to discuss issues and future planning for city-wide call

•**Dr. Goel** is championing enacting changes to SCM requests for inpatient consultations from Ophthalmology

#### *Ongoing Matters and Plan of Action*

•A new contract for the non-hospital surgical facilities commenced on April 1, 2012 and is 5 years in duration

•The Section has commenced a needs-based listing of priority for cataract surgery, based on the cataract surgery tool of the Western Canada Waiting List Project, with audit and outcome analysis planned

#### *Future Risks*

•New recruits may themselves be discouraged to come to Calgary if no additional resources become available to support clinical service

•Insufficient funding of academic positions to be able to recruit qualified geographic full-time faculty in order to grow the residency program and clinical service, as well as expand the program in eye research

•The Alberta College of Optometry has again approached Alberta Health & Wellness for

expansion of optometric scope of practice. The exact scope requested has not yet been shared by the Minister of Health with ophthalmologists or the College of Physicians & Surgeons of Alberta. But at the least, this raises issues of the responsibility for being on call 24/7 for their patients (which does not now occur)

### Workforce Planning

#### *Goals and Strategies*

•Regular survey of the Section of Ophthalmology for recruitment needs

•Recruitment is advertised, with an open & transparent process by recruitment subcommittee of our Section of Ophthalmology  
*Impact on other departments and zonal resources*

•Recruitment is designed to provide more timely access for patients requiring Ophthalmological care

•Additional resources are required for new recruits, as the retiring Ophthalmologists tend to use fewer resources than those incoming.

### Quality Assurance, Quality Improvement, and Innovation

#### *General*

•Continued morbidity & mortality rounds

•Ongoing investigations of patient concerns brought to the attention of Section Chief

•There are ongoing submissions by members of the section to the Health Technology Assessment Committee of the Department of Surgery

•Recent initiative to clarify 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 SHC and the expansion opens for the neonatal intensive care unit at ACH; raising funds for purchase of an Indirect Diode Laser for treatment of retinopathy of prematurity in FMC NICU

•**Dr. Costello** is spearheading efforts to establish a Visual Research Unit based at RGH and with links to the Hotchkiss Brain Institute to develop translational models of brain injury using ocular models of disease (multiple sclerosis, brain tumours, Parkinson's disease, and neurodegenerative diseases of the aging brain)

•Access of Family Physicians to specialists has been improved through recruitment to positions in comprehensive Ophthalmology.

•There is 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

### Accomplishments and Highlights

- Dr. B. Whitestone** will be resigning as Section Chief after a five-year stint in this position. **Dr. R. Edwards** will take over on an interim basis.
- Dr. HW Williams** officially retired from active Oral and Maxillofacial surgical practice and is to be congratulated on a productive and successful career.
- Dr. S. Touchan**, a recent graduate from the University of Michigan Oral and Maxillofacial Surgical Program is a new addition to the Section.
- Additionally, **Dr. N. Makhoul** joins our Section in late summer. He has extensive training in Head and Neck Reconstructive Surgery and recently completed a fellowship at the University of Michigan, Department of Oral and Maxillofacial Surgery.

### Education

Our commitment to education has increased significantly. As part of an evolving relationship with the Section of Plastic Surgery, we teach residents on rotation each year. Our Section members are actively engaged in the surgical skills teaching sessions. Likewise, our involvement with the Foothills Hospital GPR Program and Dental Clinic is evolving into a very consistent and fruitful relationship. Members of the Section are now actively rotating through the Dental Clinic to provide teaching support and clinical care.

### Research

**Dr. M. Smith** and **Dr. Makhoul** are involved with the Office of Surgical Research and are engaged in developing research projects.

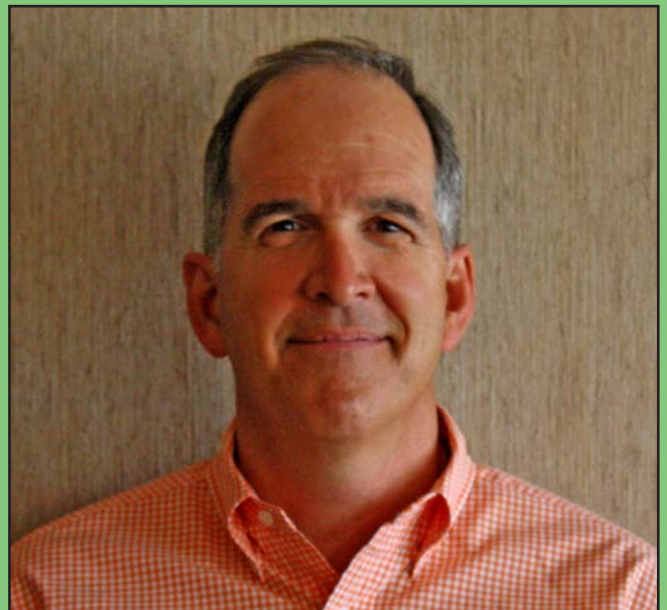
### Challenges

The primary challenges facing our Section include balancing NHSF utilization with OR time allocated at PLC. New contracts are signed and effectively place a one year extension on the current

term. There will be the need for renegotiation with Alberta Health Services so that a more appropriate contractual and fiscal arrangement can be developed. We continue to have utilization issues with block time at PLC. Several strategies are being developed to enhance this utilization, including collaboration with the Dental Department at FMC to allocate some time to their Section.

### Future Directions and Initiatives

Future directions and initiatives include development and participation in various specialty clinics at both ACH and FMC Dental Clinics. There will be a continued emphasis on increased teaching to both the dental and medical communities. Several research initiatives are being developed by Dr. Smith and Dr. Makhoul and will likely be further crystallized over the coming year.



Dr. Brian Whitestone  
Oral & Maxillofacial Section Chief

# Section Update Orthopaedic Surgery

## Section Structure and Organization

### *Current Committees*

- Executive
- Clinical Operations
- Education
- Research
- Orthopaedic Surgery Residency Training Committee
- Fellowship Committee
- On-Call Committee
- Full Section
- Regional Bone and Joint Health Program

### *Divisions*

- Core Orthopaedics
- Orthopaedic Trauma
- Joint Reconstruction/Arthroplasty
- Upper Extremity
- Orthopaedic Oncology
- Foot and Ankle
- Spine
- Sport Medicine
- Pediatric Orthopaedics
- Education, Research and Administration portfolios

### *Membership*

The Section of Orthopaedics has 49 members:

- Seven GFTs
- Six retired/semi-retired Orthopaedic Surgeons (who provide service in our education and clinical service delivery portfolios)
- Seven basic scientists
- Three Neurosurgeons

## Accomplishments and Highlights

### *Clinical Service*

- Dr. D. Bell** retired in 2011.
- The Section of Orthopaedic Surgery was designated a major tenant in the South Health Campus. **Dr. S. Miller** has been named the Site Chief for Orthopaedic Surgery at South Health Campus.
- Orthopaedic Units and Surgery at the Foothills Medical Centre completed their moves into McCaig Tower in 2011, with the exception of the Orthopaedic Trauma operating theatre. **Dr. P. Salo** took over from **Dr. R. Cho** as the Orthopaedic Site Chief at FMC/McCaig.



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

### *Education*

#### **Undergraduate Medical Education**

- MSK Course 2 had a very successful year in 2011 with the overall course evaluation being higher than in the last 4 years. There was a 100% pass rate. There were successful improvements to Team Based Learning, with additional ones planned for the upcoming years.
- Clerkship Course 8: Clerks gained all the experience necessary to get medical school accredited.

#### **Medical Students**

- There were 53 electives and 79 selectives scheduled in Orthopaedic surgery during the last fiscal year.

#### **Postgraduate Medical Education**

- This is the tenth consecutive year that all Orthopaedic residents have passed the Royal College Exams.
- The Orthopaedic Surgery Residency Training Program enjoyed Visiting Professor **Dr. Emil Schemitsch** from the University of Toronto in the 2011 academic year enhancing the resident and fellow learning experience in conjunction with the Fellows Research Symposium.

**Graduate Medical Education (Fellowship)**

•**Dr. J. Powell**, Orthopaedic Fellowship Program Director, has 8 active fellowship programs.

*Research*

•In 2012, the Research Portfolio Committee approved a second \$20,000 in COREF research grant available to members of Orthopaedic Surgery.

•The Research Portfolio is enhancing collaboration with the McCaig Institute. "Research in Motion" was organized on February 22, 2012 at Pinebrook Golf & Country Club. Principal investigators from the McCaig Institute, Orthopaedic Surgeons, and other stake holders attended to discuss ways to partner and collaborate in research projects.

•In the summer of 2012, residents and fellows will be given tours of the McCaig Institute as well as a list of projects they can contribute to if interested. Equipment from the McCaig Institute was showcased to orthopaedic surgeons as a means to attract users and increase collaboration.

•The Section of Orthopaedic Surgery was a major contributor to a multicentre trial that evaluated transfusion thresholds in elderly hip fracture patients. The Calgary Zone was the third leading contributor of 44 sites across North America, with the Rockyview General Hospital the leader in the city. The findings of the randomized clinical trial were published in the New England Journal of Medicine in December 2011.

•The Trauma Division received an endowment fund of \$1,000,000 which was matched by the province of Alberta.

•The Research Portfolio partnered with the Spine Program and the Eagles' Paediatric Spine Fund in creating a \$20,000 and \$25,000 spine research grants through COREF. These grants will be awarded in the fall of 2012.

**Challenges***Response to Issues*

•The Section of Orthopaedics has processes in place to deal with any issues in all domains. We endeavor to respond to these issues in a timely fashion.

*Ongoing Matters and Plan of Action*

•Our primary challenge is with regards to resources and recruitment of staff.

*Future Risks*

•Short term would be lack of resources and the difficulty it creates in recruiting new staff. While the McCaig Tower and South Health campus offer new resources, waits to see Orthopaedic surgeons remain well over 1 year for most subspecialties in the Calgary Zone. The promises of resources at these two sites for centralized Orthopaedic units remain a risk.

•We have an aging Section with retirements beginning to occur within the next three to five years. This demands proactive planning around recruitment.

•We have begun losing academic FTEs due to changing funding paradigms at Alberta Innovates Health Services and CIHR. An ARP would help.

**Workforce Planning***Summary of Recruitment and Future Needs*

•Orthopaedic patient volumes will continue to grow at about 5-10% per year and this will force ongoing 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 two to three Orthopaedic Surgeons per year for the foreseeable future. Many, if not all, of our graduates have an interest in returning. In the fall of 2012 and beginning of 2013 we will be interviewing for positions in Academic Joint Replacement (2), Shoulder/Knee Sport Medicine, Shoulder Reconstruction, and Hand/Wrist.

*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).

*Impact on other departments and regional resources*

•We will work with other departments as required to meet the needs of our patients

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

•The Section of Orthopaedics works with the Department of Surgery using their policies

regarding this area.

*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 one year to see most Orthopaedic surgeons.

*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.

## Section Update Otolaryngology

### **Section Structure and Organization**

*Current Committees*

#### **Division Executive Committee**

•Chair **Dr. TW Matthews**

•Membership: **Dr. P. Park, Dr. J. Dort, Dr. D. Bosch, Dr. J. Warshawski** and **Dr. D. Drummond**

#### **Resident Training Committee**

•Chair **Dr. Doug Bosch**

•Membership: **Dr. S. Chandarana, Dr. Warshawski, Dr. J. Brookes, Dr. P. Marck, Dr. Matthews (ex officio)**

Undergraduate Director: **Dr. Marck** (R. Burke)

CME Director: **Dr. Warshawski**

Research Director: **Dr. Drummond**

#### **Simulation Committee**

•Chair **Dr. Brookes**

•Membership: **Dr. J. Chau, Dr. 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



Dr. Wayne Matthews, Otolaryngology Section Chief  
Photo Courtesy of Matthew Hayhurst

### **Accomplishments and Highlights**

#### *Clinical Service*

•The Richmond Road Diagnostic and Treatment Centre - Otolaryngology Clinic opened Aug 2011 and is the primary ambulatory facility for the Section's UCMG contracted surgeons.

### *Professional Service*

•**Dr. R. Burke** served as President of the Canadian Society of Otolaryngology – Head and Neck Surgery May 2011 – May 2012

•**Dr. T. Gillis** was the guest of honor at the 2012 CSO-HNS AGM and recognized as RGH distinguished Surgeon 2012.

•**Dr. B. Lange** was appointed SHC Department of Surgery Site Lead

•**Dr. Dort** became a Royal College of Physicians and Surgeons - Otolaryngology - Head and Neck Surgery Examination Board member.

•**Dr. Matthews** served as Royal College of Physicians and Surgeons Specialty Committee Otolaryngology - Head and Neck Surgery, Vice Chair

### *Research*

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

•The ORI, in less than four 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. L. Rudmik** in particular is involved in a number of multi-centered clinical trials regarding the management of sino-nasal disorders and is establishing this as a second major research focus for the Section at the University of Calgary.

### **Challenges**

#### *Response to Issues*

•Waitlist concerns for Paediatric Otolaryngology consultations and surgery have been addressed the recruitment of

**Dr. W. Yunker** to ACH in July 2011.

•Waitlist and resident teaching in Rhinology have been addressed with the recruitment of **Dr. Rudmik** to RGH in August 2011.

•Ambulatory clinic and resident teaching deficiencies have been addressed with the opening of the RRDTC ENT Clinic Aug 2011. This large, state of the art clinic serves as the ambulatory clinical teaching unit for the residency program and will allow for future consolidation of multidisciplinary clinics and faculty recruitment. Regular supervised resident clinics have been established and will be expanded in the second half of 2012.

#### *Ongoing Matters and Plan of Action*

•As with most surgical divisions, inadequate operating room access remains a significant barrier to clinical service, education, research and recruitment. The opening of SHC operating rooms in early 2013 will help to address this issue. SHC will be staffed by the relocation of four current Otolaryngology - Head and Neck Surgeons with a practice focus in the area of Otolaryngology- Neurotology: **Dr. Lange, Dr. Park, Dr. Chau and Dr. Marck**. This will increase operating room access at all adult sites and facilitate the provision of subspecialty-based resident rotations and clinical research. The opening of the SHC Otolaryngology ambulatory clinic in October 2012 will improve our ability to provide consultation services and provide a second ambulatory clinical teaching unit for residents and medical students.

•There remains an unmet need for community Otolaryngology services for children. Future adult Otolaryngology recruits with a commitment to providing routine pediatric services will be sought.

•An aging workforce coupled with limited recruitment opportunities may stress the members of the division. The opening of the SHC operating rooms will allow the recruitment of two additional Otolaryngologist-Head and Neck Surgeons to PLC and SHC (one at each site) in July 2013.

### *Future Risks*

•The opening of SHC and inter-hospital transfer of four 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 SHC and PLC in July 2013 and the utilization of a Clinical Assistant at SHC. The Section is considering additional means of addressing this including a city-wide Otolaryngology access service for the Calgary Zone adult sites.

### **Workforce Planning**

#### *Future Needs*

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

- Recruiting to the PLC and SHC July 2013; the potential areas of practice for this recruitment have been identified as General Otolaryngology with a secondary focus in Otology, Sleep Medicine and Surgery or coetaneous malignancies.
- Recruitment of an additional surgeon to each of the PLC, FMC and RGH in 2014-2015 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 and 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 – Paediatric 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.
- Adopting a city-wide access service for urgent consultations will result in an increase of inter-facility transfers of stable patients. This model has been adopted by several other surgical sections.

### **Quality Assurance, Quality Improvement, and Innovation**

#### *General*

- 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 a 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 FMC and has resulted in improved patient care and earlier discharge to the community.

#### *Access of Family Physicians to specialists*

- Central triage of newly-diagnosed or suspected head and neck malignancies has been discussed and will hopefully be implemented in the second half of 2012.

### **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 four 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 as well.

# Section Update

## Paediatric Surgery

### Division Heads

- Dentistry: **Dr. M.C. Cholette**
- General Surgery: **Dr. A. Wong**
- 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. R. Harrop**
- Urology: **Dr. A. Cook**
- There were 10,427 surgeries done in 2011-2012. This is up from 10,183 cases the year before.

### Education and Research

#### General Surgery

•**Dr. D. Sigalet** continues his role as the Assistant Head of the Department of Surgery to Dr. John Kortbeek. Dr. Sigalet received approval from Health Canada in December 2011 to trial the Glucagon-Like Peptide 2 in infants and children with intestinal failure. Congratulations to Dr. Sigalet and his team who worked very hard to receive this approval. Dr. Sigalet was awarded the role of Professorship in Paediatric General Surgery, with a research grant of \$125,000 per year in 2006. This was renewed in 2011 to 2013. He is also the Vice President of the World Federation of Association of Paediatric Surgeons which is the world representative body of National Paediatric Surgical Associations. Their mission is to "Improve the surgical care of the world's children."

•**Dr. M. Brindle** will be assuming the role of Division Head for Paediatric General Surgery as of August 2012. We would like to thank **Dr. Wong** for leading the Division and welcome Dr. Brindle to her new role as Division Head. Dr. Brindle continued her training in Clinical Epidemiology through the Master of Public Health Program at Harvard University, expected completion 2012.

•**Dr. S. Lopushinsky** has been accepted into the Master Teacher's Program at the University of Calgary and is now in charge of organizing Paediatric Surgery Grand Rounds.

•**Dr. Wong** is involved as a teaching Scholar in Medicine at the University of Calgary. He has received several teaching awards for his contributions to undergraduate medical



**Dr. William Hyndman**  
Paediatric Surgery Section Chief

education. He is also the Program Director for the Department of General Surgery.

•**Dr. R. Eccles** is the local organizer for the Pacific Association of Paediatric Surgeons Annual meeting for 2014.

•**Dr. P. Beaudry** continues to serve as the Children's Oncology Group surgical representative for the Alberta Children's Hospital. He also serves on the Neuroblastoma Biology Committee with the Children's Oncology Group and is a reviewer for several Paediatric Oncology journals.

•General Surgery has 2 Resident Doctors:

**Dr. R. Lee** and **Dr. S. Lai**

#### Neurosurgery

•**Dr. C. Gallagher** and **Dr. R. Frank** are working together on a new procedure; Endoscopic Facial Cranial Vault Remodeling, in children three to four months old who have scaphocephaly.

•Paediatric Neurosurgery has a new Fellow starting in July of 2012, **Dr. O. Ajani**.

#### Orthopaedic Surgery

•Over the past year, the division has been involved in the education of residents in Orthopaedics, Paediatrics, Paediatric Emergency fellows, Physiatry residents,

clerkship and medical students in addition to General Paediatric Orthopaedic and Spine fellows. Under the supervision of **Dr. F. Ferri-de-Barros** and **Dr. Parsons**, our spine fellow, **Dr. S. Alsayegh** was awarded best paper for evaluation of skeletal traction in spine surgery that was initiated in the last few years and was able to show that this technique may decrease blood loss during surgery. **Dr. S. Goldstein** has continued to serve as the Director of the Orthopaedic Surgery Residency Training Program at the University of Calgary.

•**Dr. C. Brauer** was appointed as the Research Director in the Department of Orthopaedics. She was awarded the Department of Medicine and Surgery Research Development Fund Award.

•**Dr. Parsons** continues to be co-chair for the Royal College Examination in Orthopaedics.

•**Dr. J. Harder** is a member of Council in the College of Physicians and Surgeons of Alberta.

•**Dr. G. Kiefer** continues to be involved in the Alberta Medical and Canadian Medical Associations.

•**Drs. Joughin, Harder, and Brauer** participated in outreach Paediatric Orthopaedics in Ecuador. We received a large donation from Nancy Southern specifically for Paediatric Orthopaedics which has been used in part to fund a summer student, develop a room for spine research, and purchase a mini C-arm for the Orthopaedic clinic.

### Otolaryngology

•After more than 25 years of service, **Dr. R. Burke** has closed the paediatric aspect of his Otolaryngology practice. Dr. Burke has dedicated a tremendous amount of time and energy to both Paediatric Otolaryngology and the ACH. In addition to serving on or heading numerous ACH committees, he is also a former president of the ACH Medical Staff Association. His involvement, however, extends beyond paediatrics. Dr. Burke has just completed his term as president of the Canadian Society of Otolaryngology – Head & Neck Surgery. Congratulations and thank you Dr. Burke.

•**Dr. W. Yunker** was awarded the 2012 University of Calgary – Department of Surgery Research Prize. His research will focus on identifying and characterizing the bacterial species found in the paediatric upper respiratory tract in a variety of different disease states.

### Paediatric Gynecology

•**Dr. Brain** and **Dr. J. Mannerfeldt** have a busy outpatient practice, primarily dealing with adolescent problems.

### Urology

•Paediatric Urology Clinics continue to be very busy, seeing 5023 patients in 2011. Joint Nephrology/Urology clinics occur monthly to deal with Complicated Renal Failure and Obstructive Uropathy.

•**Dr. Hyndman** continues his administrative duties as Zone Clinical Section Chief, for the Department of Paediatric Surgery and Zone Clinical Facility Chief, Alberta Children's Hospital.

•**Dr. B. Weber** has established an adult transition clinic for patient's graduating from Alberta Children's Hospital with Urological conditions requiring long-term follow up, with a particular focus in patients with dysfunction of the urinary bladder secondary to a neurogenic cause. Dr Weber has also taken over the role as post-graduate director for the Division of Urology in order to facilitate all medical students and residents involved in Paediatric and Adult Urology in Calgary.

### Division of Paediatric Plastic Surgery Division Members

•**Dr. R. Harrop** (Clinical Associate Professor, Surgery) - ACH Site Chief for Plastic Surgery

•**Dr. D. McPhalen** (Clinical Assistant Professor, Surgery)

•**Dr. F. Fraulin** (Clinical Assistant Professor, Surgery)

•**Dr. J. Dilay** (half-time at ACH)

•**Dr. R. Frank** (Clinical Lecturer, Surgery)

### Outpatient Clinics

#### General Paediatric Plastic Surgery Clinic

•One day per week per surgeon

#### Multidisciplinary Programs

•Cleft Palate Clinic (Director Dr. McPhalen)

•Vascular Birthmark Clinic (Director Dr. Fraulin)

•ACH Burn Clinic (Director Dr. Fraulin)

•Brachial Plexus Clinic (Director Dr. Harrop)

•Complex Upper Extremity Clinic

•Paediatric Gynecology Clinic

•Craniofacial Clinic

•Microtia Clinic (Director Dr. McPhalen)

### Surgical Activity

#### Minor Surgery Clinic

•0.5 day per surgeon per week available for minor procedures under local anaesthesia (elective and emergency)

**Administrative Activities****Dr. Harrop**

- Director, Office of Surgical Research and Chairman, Department of Surgery Research Committee
- Member, Division of Plastic Surgery City-wide Executive Committee
- Member, Division of Plastic Surgery Resident Training Committee
- Member, Calgary Medicine-Surgery Research Development Fund Committee
- Director, Calgary Surgical Education and Research Trust
- Site Chief, ACH Plastic Surgery
- Member, ACH OR Committee
- Member, Canadian Society of Plastic Surgeons Education Foundation
- Member, Canadian Society of Plastic Surgeons Board of Directors
- Member, Clinical Investigator Program Resident Training Committee, Faculty of Medicine, University of Calgary
- Co-organizer, 29<sup>th</sup> Annual Surgeons' Day, June 15, 2011
- Member, Department of Surgery Postgraduate Surgical Training Committee

**Dr. McPhalen**

- Member, ACH Quality Control Committee
- Member, Division of Plastic Surgery Resident Training Committee
- Examiner, Royal College of Physicians and Surgeons Examination in Plastic Surgery
- Referral Triage Officer for Paediatric Plastic Surgery

**Dr. Fraulin**

- Coordinator, Division of Paediatric Surgery Grand Rounds
- Member, Plastic Surgery Executive Committee
- Member, Division of Plastic Surgery Resident Training Committee
- Member and Plastic Surgery Representative, Surgical Undergraduate Education Committee (SUGEC)
- Member, Faculty Council, Faculty of Medicine
- Clinical Clerk and Resident Coordinator, ACH Paediatric Plastic Surgery
- Interviewer, CARMS day Feb 4, 2012
- Secretary-Treasurer, Alberta Society of Plastic Surgeons Board Member, Project Outreach Charity
- Reviewer, Canadian Journal of Plastic Surgery

- Lead - Safety review of Death following spinal surgery May-Aug 2011

**Educational Activities****Dr. Harrop****Teaching at CME**

- Spine and Peripheral Nerve Anatomy and Surgery Course, Faculty of Medicine, University of Calgary, January 11, 2012
- Invited Speaker, Department of Surgery Professional Development Workshop III, University of Calgary, May 25, 2012: How to Give a (Great) Presentation

**Small Group Sessions - Medical Students**

- Med 440 Student Supervision - Imran Ratanshi
- Systematic Review of Propranolol for the Treatment of Infantile Hemangiomas
- MSK Course Instructor - Burns, December 7, 2011

**Small Group Sessions - Residents/Fellows**

- Department of Surgery Critical Thinking Course for Surgical Residents
- Lecture – Evidence-based Surgery as Applied to Diagnostic Testing, October 27, 2011
- Examination - Evidence-based Surgery - preparation and marking, December 2011

**Dr. McPhalen**

- Instructor, U of C Faculty of Medicine Undergraduate Physical Exam Course
- Master Teacher, Faculty of Medicine University of Calgary; **418 teaching hours** (2011-2012)
- Examiner, Royal College of Physicians and Surgeons

**Dr. Fraulin****Undergraduate Teaching**

- Medical Student Coordinator – Paediatric Plastic Surgery rotation at ACH (including first year Shadowers, second year elective observers, and third year clinical clerks)

**440 Projects**

- Catherine Bereznicki
- Chrisjan DeWaal
- Teaching Large Group Lectures
- MSK Course 2 (First year medical students): 1 hour Burns Dec 7, 2011
- Teaching Small Group Sessions
- MSK Course 2 (First year medical students): 1 hour Burns Dec 7, 2011 (Separate from above large group lecture)
- Clinical clerks on Surgery Rotation – Plastic Surgery for Medical Students
- Suturing Workshop: Second years Feb 3, 2012. Evaluator
- OSCE April 5, 2011

- OSCE Jan 27, 2012 Airway intubation (Second years)
- OSCE Mar 21, 2012 Communication Skills (First years)

### Postgraduate Training

- Resident Coordinator: Paediatric Plastic surgery rotation at ACH.  
Teaching Large Group Lectures
- Plastic Surgery Review Course Ottawa Mar 4, 2012: Vascular anomalies; Panel: •Paediatric Plastic Surgery Cases  
Teaching Small Group Sessions
- Microsurgery Course Mar 11, 2011
- Tissue Biopsy – PGY1s Aug 21, 2011
- City Wide Rounds - Peru Trip, Burn Reconstruction Oct 20, 2011
- Resident Teaching. Academic half day. Secondary Deformities cleft lip: 2 hrs: Mar 1, 2012.
- Resident Teaching. Academic half day. Wound Healing: 2 hrs: May 20, 2012.
- Evaluator
- OSPRe PGY 1 residents Excision of Lipoma Nov 17, 2011
- Resident Review Course Ottawa
- Practice oral exams Plastic Surgery Residents throughout the year

### Research

#### Presentations at National and International Meetings

- The Epidemiology and Treatment of Orofacial Clefts in Canada 1998-2007. Matthews J, **Harrop AR**, Oddone Paolucci E. Canadian Society of Plastic Surgeons 6<sup>th</sup> Annual Meeting, Vancouver, British Columbia, May 22, 2011.
- Beta-blockers for the treatment of problematic hemangiomas. Sharma V, Dumestre D, **Fraulín F, McPhalen D, Harrop AR**. Canadian Society of Plastic Surgeons 66<sup>th</sup> Annual Meeting, Toronto, Ontario, June 8, 2012.
- Nerve transfer for obstetrical brachial plexus injuries: outcomes of spinal accessory nerve to suprascapular nerve transfer using a posterior approach versus an anterior approach. Guilfoyle R, Ladak A, Morhart M, Chan M, **Harrop AR**, Olson J. Canadian Society of Plastic Surgeons 66<sup>th</sup> Annual Meeting, Toronto, Ontario, June 8, 2012.
- Harrop AR**, 2012 American Alpine Workshop in Plastic Surgery, Telluride, Colorado Feb 2012, four presentations:
- Breathing a Little Easier Now

- Fat ... and Dead Too
- Keeping a Stiff Lower Lip
- Vascularized Fibula/Allograft Reconstruction for Extremity Sarcoma

### Awards and Distinctions

#### Dr. McPhalen

- Department of Surgery 2012 Distinguished Service Award for ACH
- Teaching Scholars in Medicine Certificate, Faculty of Medicine, University of Calgary, 2011-2012

### Challenges

- Current challenges include relative understaffing of nursing and clerical staff in our outpatient clinics. We are working with administration to find solutions to these issues.
- Access to emergency time in the operating room remains a problem for plastic surgery as well as for orthopedic surgery and general surgery at the ACH, especially during the summer when trauma volumes increase yet operating room time decreases by approximately 40%. We are currently beginning a trial of 2 "urgent" OR rooms per week (Tuesday and Friday) as a possible solution for this problem. This trial will be reassessed after one and two months.

### Workforce Planning

Presently we have a full complement of plastic surgeons at ACH. No retirements are anticipated in the next five years. No recruitment is under way currently.

### Quality Assurance, Quality Improvement, And Innovation

#### Vascular Birthmark Clinical Database

With the assistance of a database expert provided by the Department of Surgery, we have over the past year developed and implemented a clinical database for the ACH Vascular Birthmark Clinic. The Vascular Birthmark Clinic treats children from southern Alberta, British Columbia and Saskatchewan with a variety of vascular birthmarks and follows these children into adulthood. We have now begun to use this data to study the effect of propranolol in the treatment of complicated hemangiomas.

### ACH Paediatric Plastic Surgery Education Initiative

With the assistance from private donors and the ACH Foundation the ACH Paediatric Plastic Surgery Education Initiative was established in 2011. This initiative provides funding for medical and/or ancillary staff to attend centres of excellence in Paediatric Plastic Surgery in

order to expand the available Paediatric Plastic Surgery expertise at the ACH.

### **Plastic Surgery Emergency Consultation and Referral System**

In collaboration with our colleagues in the ACH Emergency Department, we have developed a process for referrals from the ACH Emergency Room to the Plastic Surgical Services. A hard-copy referral form was developed and made available in the Emergency Room which sets out four categories of referral based on urgency. Guidance for the referring ER physician is provided on the referral form: more urgent categories trigger an immediate call to the on-call Plastic Surgeon whereas less urgent categories trigger a fax referral to the Plastic Surgeon. Each referral category has a suggested follow-up interval. In all cases the referral form and a copy of the ER physician's medical record go to the Plastic Surgery office. During the first year following institution of this referral process we performed a quality assurance project whereby the receiving plastic surgeon filled out a similar form after seeing the patient to determine the degree of agreement by the receiving plastic

surgeon on the referral category selected by the referring ER physician. Agreement was excellent, and as such the referral form and process has been adopted as a standard process for the plastic surgery service at ACH.

### **Operation Outreach**

Drs. **Fraulín** and **McPhalen** were key members of this Project Outreach mission to Peru in September, 2011. The goals of the mission were to provide clinical expertise and education in Paediatric Burn Scar Reconstruction. They operated on 33 children over six surgical days. They plan to return in October 2012 to Chancay, a small town 100km outside of Lima and they hope to take two Plastic Surgery residents with them to help even more kids with burn scar contractures.

### **Future Initiatives**

**Dr. Frank**, our newest member, will complete his MBA over the next year. Upon completion, it is expected that he will assume a greater clinical role at the ACH and also make use of his business skills to assist with challenges faced by both the Section of Paediatric Surgery and the Division of Paediatric Plastic Surgery.

## Section Update Plastic Surgery

### **Section Structure and Organization**

The Section of Plastic Surgery Executive Committee is responsible for monitoring and steering the activities of the section in clinical service, research and education.

### **Accomplishments and Highlights**

- Plastic Surgeons continue to be involved in reconstruction after resection of malignant disease in collaboration with Surgical Oncologists of various disciplines in the management of breast cancer, head and neck cancer, skin cancer, extremity sarcomas and chest wall malignancies.
- In association with Otolaryngologists, the development of a clinical pathway for the management of patients after major head and neck surgery has led to improved outcomes. In addition, the introduction of a standardized operative team for such procedures has been shown to shorten



Dr. Robert Lindsay, Plastic Surgery Section Chief  
Photo Courtesy of Matthew Hayhurst

operating time and improve outcomes. **Dr. C. Schrag** has been the Plastic Surgery lead in these initiatives. Resident **Dr. C. Doherty** has an article accepted for publication on this subject. A database for free flap breast reconstruction is now in place thanks to the effort of Resident **Dr. J. Matthews** under the supervision of **Dr. W. de Haas**. Plans are underway to develop a more organized approach to breast reconstruction, working with the Surgical Oncologists involved.

- Hand surgery continues to be a fundamental element of Plastic Surgery and a joint program with Orthopaedic Surgeons is planned for SHC under the guidance of **Dr. E. Magi** and **Dr. V. Bowen**.

- Dr. A. Lin** and **Dr. J. Lee** are developing research initiatives in hand surgery at PLC.

- The interdisciplinary burn treatment and research program, a collaborative team led by **Dr. V. Gabriel**, **Dr. Duncan Nickerson**, and **J. Biernaskie Ph.D** continued to expand this year.

- In the AHS 2011 fiscal year, 242 new adult patients were referred for physician and surgeon consultations to the outpatient clinic and 475 patients were seen for follow-up visits. The in-patient program developed and instituted a new burn-specific database project supported by a data analyst. The burn program also hosted a three-day course for therapists from Southern Alberta, Saskatchewan and British Columbia that was presented and facilitated by international experts in burn rehabilitation.

- Dr. A.R. Harrop** and Dr. Schrag continue to participate in the multidisciplinary Peripheral Nerve Clinic at RGH.

- Dr. D. McKenzie** remains Residency training Program Director. Currently there are ten residents. **Dr. B Byers** and **Dr. D. Graham** were selected from a large group of applicants for entry into the training program.

- Dr. Kennedy** successfully completed the Royal College Specialty examinations and is currently engaged in a Hand/Microsurgery fellowship in Los Angeles. Dr. Nickerson remains chair of the Plastic Surgery

Examination Development Committee of the Royal College of Physicians and Surgeons of Canada. Both he and **Dr. D. McPhalen** are on the Royal College Board of Examiners. Dr. McPhalen attained the Master Teacher qualification from the Faculty of Medicine. **Dr. F. Fraulin** participates in the national plastic surgery review course for residents in Ottawa annually. **Dr. J. Dawes** completed a fellowship in Moh's Micrographic Surgery under the Supervision of Dr. J. Arlette. Dr. Doherty completed a Masters degree in Epidemiology at Harvard University. Dr. Fraulin is the sectional representative as the Surgical Undergraduate Education Committee and is heavily engaged in organizing our contributions to medical student education.

- The Microsurgery Training Course was again organized by Dr. Schrag with participation of several members of faculty. The course is open to residents from any discipline. The physical space remains somewhat inadequate, but development of new quarters is anticipated as the components of the Simulation Centre unfold.

- Dr. Harrop** and Dr. Schrag participate in the multidisciplinary Spine and Peripheral Nerve Anatomy and Surgery Course.

- In November, a multidisciplinary seminar was held with invited speaker Dr. Christine Novak from the Division of Plastic & Reconstructive Surgery in Toronto describing the importance of post operative rehabilitation in the management of brachial plexus injuries.

- Activity in research continues in many different directions. Drs. Nickerson, Gabriel and Biernaskie were awarded a clinical impact research grant from the Federal Networks of Centres of Excellence stem Cell Network to study dermal stem cell-based treatments for wounds and improve outcomes of skin grafting. This work is also supported by the Calgary Fire Fighters' Burn Treatment Society. Preliminary findings were presented at the American Burn Association's annual meeting in Seattle. Dr. Gabriel has been approved by the Health Canada Investigational Devices

Bureau to initiate a study of a high frequency ultrasound device's effect on burn scars.

Resident Research Day presentations demonstrated the improving quality of our resident's research endeavours.

•**Dr. R. Warren** and **Dr. E. Dixon** were the judges. Dr. Warren is a Vancouver plastic surgeon, specializes in aesthetic surgery and is former Chief Examiner and current chair of the Specialty Committee. Dr. Dixon is with the Hepato-biliary program and inspired the residents with his talk on developing a successful research initiative as a young surgeon. Dr. Warren also gave the third annual Dale Birdsell Lecture in honour of our former chairman.

•**Sternotomy wound infections** are the subject of a study by a group led by Dr. Doherty. Head and neck cancer management continues to be a field of study in concert with Otolaryngology.

### Challenges

•**Access to operating rooms for urgent/emergency care** continues to be an issue at all sites.

•**To an extent at each hospital, we continue to receive and treat emergency cases at our minor surgery clinics, as has been demonstrated.** It is essential that we continue to expand this service to reap the benefits to the patient and to the system that have been shown to be prompt, effective, and cost effective.

•**Alternative funding plans of a realistic nature** would attract members of our section who are engaged in reconstructive surgery, where individual efficiency can be difficult.

### Workforce Planning

•**Dr. C. Temple-Oberle** was recruited to the Department of Oncology and to the section of Plastic Surgery from the University of Western Ontario. Dr. Temple-Oberle has an outstanding record of academic performance in both research and education, while her clinical focus is Oncology. Since her arrival early this year she has already had considerable impact on our teaching program and is accumulating resources to continue research interests.

•**Dr. Dawes** has been recruited and will

provide the section with expertise in Moh's Micrographic Surgery for treating coetaneous malignancies.

•**Dr. Kennedy** will come to PLC/SHC to focus on hand and microsurgery, the subject of his fellowship, as will Dr. Farrah Yau, graduate of the UBC Training Program who is currently completing a fellowship in San Francisco.

•**Further recruitment is planned for all Calgary sites, both as replacement positions and new positions, particularly at SHC.**

### Quality Assurance, Quality Improvement, and Innovation

•**The Vascular Birthmark Clinic Database** that has been established recently will provide data that can be analyzed to reflect the natural history and outcomes of various interventions, as has recently been demonstrated in a study of the efficacy and safety of propranolol in the treatment of complicated haemangiomas.

•**The breast reconstruction and head and neck databases** are also expected to yield such valuable information.

•**Dr. Temple-Oberle's expertise in outcome studies** will enhance our ability to analyse results.

•**At ACH, a new process for referral from the Emergency Room to the Plastic Surgery service has been developed, with guidelines as to the stratification of the urgency of referrals to improve efficiency.** A quality assurance project analyzing the success of the new system has led to the adoption of the process.

### Future Directions and Initiatives

•**Dr. C. Temple-Oberle** has already has a positive influence on resident education and we anticipate further benefits in both that sphere and in clinical research.

•**Under the leadership of Dr. Schrag, the Section is investigating the development of a composite tissue allotransplantation program.** This initiative involves many different specialists and services. We have entertained three visiting experts in the subject and with their help the appropriate protocols are being devised. We look forward to further developments in this field.

## Section Update Podiatric Surgery

### Section Structure and Organization

▪The section of Podiatric Surgery provides patient care in all three adult hospital sites in Calgary and also provides on-call coverage of all emergency departments and urgent care facilities in the city. There are two components to the section of Podiatric Surgery; a Hospital Section and an Outpatient Section.

#### *Current Committees*

▪A residency committee has been established to develop a three-year podiatric medical and surgical residency program. The program will be structured to meet the requirements of the Council on Podiatric Medical Education of the American Podiatric Medical Association.

#### *Membership*

▪Currently there are 11 members of the Section of Podiatric Surgery. Five are members of the hospital section and provide inpatient and outpatient care. There are six members of the outpatient section who provide surgical care of patients in contracted nonhospital surgical facilities.

### Accomplishments and Highlights

▪The members of the Hospital Section have been involved in the planning of a Vascular Institute to be constructed on the 5<sup>th</sup> floor of the east wing at PLC. A Foot Clinic will provide care of patients with diabetes and ischemic-related foot complications.

### Challenges

▪The main challenge facing the Section is obtaining an adequate volume of operating room time in the hospital to manage chronic diabetes-related foot complications. Currently, the majority of these cases are performed on the emergency schedule. This provides a challenge for these patients and the internists managing their diabetes as they are often NPO for extended periods of time. An Urgent Podiatric Surgical OR day would help to alleviate this problem.



Dr. Brent Haverstock, Podiatric Surgery Section Chief  
Photo Courtesy of Matthew Hayhurst

▪The opening of the South Campus will also provide the Section with the challenge of how to provide on-call and inpatient coverage while already covering three sites in the city.

### Workforce Planning

▪The Section will continue to evaluate its growth needs based on population growth and the demographics within the Calgary area. With obesity rates continuing to climb, the impact of diabetes will result in us seeing an increased need for Podiatric care in the areas of preventative foot care and the management of established diabetes-related foot complications.

▪The aging population will also increase the demand for reconstructive foot surgery to maintain active lifestyles.

### Future Directions and Initiatives

The Section of Podiatric Surgery will continue to work and collaborate with members of other sections to enhance the delivery of care in Calgary.

## Section Update Surgical Oncology



Dr. Wally Temple, Surgical Oncology Section Chief  
Photo Courtesy of Dr. Temple

The Section of Surgical Oncology continues its development in academic service, administration and research components. Our continuing success developing our division and being on the forefront of new treatments is also a credit to extraordinary cooperation between the Departments of Surgery and Oncology as well as the extraordinary dedication of our administrative assistants.

### Service

•Surgical oncologists are active participants in all outpatient clinics and are team leaders in the Cutaneous, Sarcoma, Hepatobiliary, and Advanced GI clinics. They continue to lead provincial programs in Sarcoma and Melanoma. The Hepatobiliary and Melanoma clinics are well established and are working closely with the surgeons in Edmonton to continue to standardize care across the province. As well its members continue to organize the Annual Canadian Melanoma Conference, which was very successful in promoting a standardized approach to this disease. The synoptic reporting project will standardize care in the entire area of Cancer Surgery, Endocrine Surgery, Gyne Oncology, Cutaneous, and Sarcoma. Over 20,000 reports have been entered into the system which is an amazing advance in changing the culture where surgeons enter health care information at point of care as part of their routine activity. The

Canadian Health Infoway information project on synoptic reporting implementation across Alberta has been successfully completed and has formed the basis for the national CPAC project in this area.

•The Surgical Oncologists in the division are performing well over 2,000 cancer operations with a minimum of 4,000 consultations. Cytoreduction and Intraperitoneal Chemotherapy for appendix and recurrent colon cancer has now been performed on over 300 patients and has resulted in a number of international presentations and publications. The long term survivals are showing that the success in Alberta is equal or better than that in the literature. We continue to be the centre managing these tumors for Western Canada. We have set up a database that is being considered for national adoption to study their treatment. We have assisted in developing a unit in Edmonton and training surgeons in Manitoba to begin this effort. Staff from the Cleveland clinic has also spent time with the team in their quest to develop their own centre. We are one of two centers in Canada providing limb perfusion for metastatic and otherwise untreatable melanoma confined to a limb. Our hepatobiliary surgeons are leaders in Phase III trials both in surgery and in novel chemotherapy approaches for colon and liver metastasis. Our endocrine oncologists are world leaders in their field.

### Research

•The Section of Surgical Oncology is leading the effort to develop a comprehensive database for all cancer surgeries using the Web SMR. This will allow us to develop care pathways as an integral part of surgical care on a provincial level. Our program in outcomes research will dramatically increase as we include more cancer sites with evidence informed templates. We have over 50 functioning templates in 6 tumor disciplines. The next phase will be to integrate pathology synoptic reporting with surgery and initial plans are in development. Finally, as the acceptance of the synoptic report becomes widely used the acceptance of this form will be promoted as the provincial standard for cancer and provide us with the opportunity to promote

the technology across Canada. Our programs are continuing to develop in new and exciting areas of cytoreduction surgery in gastric cancer combined with neoadjuvant systemic chemotherapy and regional treatment of metastatic melanoma.

- The national CPAC initiative on synoptic reporting has been led by our division and successfully completed an 8 million dollar project in March 2011. We are continuing to work on our next phase of creating a national infrastructure, developing and maintaining evidence informed templates as well as creating a national database for cancer surgery. The literature now supports our vision that structured synoptic medical records will be the future of information management in surgery. Our members have been very successful in obtaining research dollars and Dr. Elijah Dixon continues as a Heritage Scholar with the CIHR Investigative Award. Our grants total well over \$3,000,000 per year in research funding. Our members have authored over 25 peer reviewed publications.

- The national CPAC initiative on synoptic reporting has been led by our division and successfully completed a 7 million dollar project in March 2011. We are continuing to work on our next phase of creating a national infrastructure, developing and maintaining evidence informed templates as well as a national database for cancer surgery.

### Education

The Surgical Oncology program continues to train Surgical Oncology residents. In the last year 1 has graduated and 2 are completing their second year with 1 beginning in July, 2012. We continue as an accredited program with the North American Surgical Oncology Training Program with the Society of Surgical Oncology as well as one of three Canadian programs. Our own graduate Dr. Lloyd Mack is one of the first Surgical Oncologists to complete the Royal College exams and become an accredited Surgical Oncologist, a credit to our faculty and institution. A Moh's Fellowship has been created under the auspices of the Section of Surgical Oncology led by Dr. John Arlette. Dr. Lloyd Mack is also the Program Director for General Surgery and Dr. Greg McKinnon for Surgical Oncology.

### Administration

**Dr. G. McKinnon** is a past president of the Canadian Society of Surgical Oncology. **Dr. W. Temple** continues as Clinical Director

of Cancer Surgery Alberta (CSA). Dr. Temple continues as Editor of the *Journal of Surgical Oncology* and *Seminars in Surgical Oncology*. **Dr. F. Sutherland** is a Section Chief of General Surgery. **Dr. A. Harvey**, **Dr. M. L. Quan**, **Dr. S. Chandarana**, **Dr. C. Ball** and **Dr. D. Jenken** have joined our staff and are valuable contributors to growth of expertise in Surgical Oncology. **Dr. L. Mack** has taken over the Residency Training Program for General Surgery with the University of Calgary, a very challenging job. We welcome **Dr. G. Gotto** to our Section who is a trained urologic oncologist. **Dr. C. Temple-Oberle** has joined the department of plastic surgery and in addition appointed full-time to the Department of Oncology and Section of Surgical Oncology. She is involved in national randomized clinical trials, has extensive research experience as well as clinical expertise in cancer reconstruction.

### Future Directions

The Section of surgical oncology will be creating a comprehensive database for all cancer surgeries using the Web SMR. This will allow us to develop care pathways as an integral part of surgical care on a provincial level. This project will support the application for all surgery. Prototypes are already developed in other non cancer areas. Our programs will continue to develop in new and exciting areas of Cytoreduction surgery in gastric cancer combined with neoadjuvant systemic chemotherapy. Our program in outcomes research will dramatically increase as we include more cancer sites with evidence informed templates. The next phase will be to integrate pathology synoptic reporting with surgery and initial plans are in development. Finally, as the acceptance of the synoptic report becomes widely used the acceptance of this form will be promoted as the provincial standard and provide us with the opportunity to promote the technology across Canada.

### Grant Support

#### Dr. O. Bathe

- 2010-2011: NCIC Grant. "Tissue Procurement for the Cancer Genome Atlas Project" \$72,240 on the Immunosuppressive Tumor Microenvironment" \$120,000

- 2009-2011: Alberta Cancer Research Institute Operating Grant- Alberta Cancer Board. "Development of a Test for Pancreatic and Periapillary Malignancies Based on Metabolomics" \$378, 434

•2009-2011: Alberta Cancer Board. "Identification of Colorectal Adenocarcinoma Using Multiplexed Serum Proteomic Analysis" \$30,000

**Dr. S. Chandaran**

•2011: Office of Surgical Research. "The Impact of CAIX in Cervical Lymph Node Metastases in Oral Cavity Squamous Cell Carcinoma" \$75,000

**Dr. E. Dixon**

•2010: Calgary Surgical Research Development Fund. "The Effects of Call and Call Scheduling on General Surgeons' and General Surgery Residents' Perceived Quality of Life" \$1,230

•2010: (Dr. S. Cassie, Dr. A. MacLean) Calgary Surgical Research Development Fund. "Laparoscopic Cholecystectomy for Acute Calculous Cholecystitis: How Urgent is 'Urgent'?" \$2,300

**Dr. JC Dort**

•2009-2011: Ohlson Family Fund in Support of Head, Neck & Pancreatic Cancer. "Molecular Markers in Head & Neck Squamous Cell Cancer" \$20,000

•2008-2010: (Dr. L. Rudmik) Calgary Surgical Education and Research Trust. "Resident Research Project – The Clinical Utility of PET-CT in the Management of Squamous Cell Carcinoma of Neck Nodes with an Unknown Primary Malignancy" \$3,500

•2008-2010: (Dr. N. Brockton) ACRI Bridge/Pilot/Limited Term Project. "HPV, Hypoxia and Head & Neck Cancer" \$35,000

•2009-2011: (Dr. S. Walen, Dr. L. Rudmik) Calgary Surgical Research Development Fund. "Resident Research Project - Harmonic Scalpel vs. Electrocautery in Modified Radical Neck Dissection" \$3,000

•2010-2012: (Dr. R. Mitchell) Alberta Ingenuity Centre for Machine Learning. "Machine Learning and MR Texture Analysis to Assess Human Papilloma Virus (HPV) Status in Head and Neck Tumors" \$100,000

•2011-2015: Terry Fox Research Institute. "A Randomized Phase III Study of the Efficacy of FV-Guided Surgery in the Management of Early-Stage Oral Cancer: A Pan-Canadian Initiative for Oral Cancer Control" \$180,000

•2011-2013: (Dr. J. Yeung, Dr. C. Schrag) Calgary Surgical Research Development Fund. "Resident Research Project Post-operative Pulmonary Complications in Patients Undergoing Head & Neck Reconstructive Surgery at FMC" \$4,000

**Dr. B. Donnelly**

•2011-2012: (Dr. T. Bismar) Prostate Cancer Canada. "Genetic mutations in CA prostate tissue" \$500,000

**Dr. L. Lafreniere**

•2009-2011: CIHR. "Ethics, economics and the regulation and adoption of new medical devices: case studies in pelvic floor surgery" \$93,887.00 for 2 years

**Dr. L. Mack**

•2007-2011: AHFMR. "Colorectal cancer screening among first-degree relatives of colorectal cancer patients: benefits and barriers" \$15,000

**Dr. G. McKinnon**

•2005-2011: NCI. "Multicenter Selective Lymphadenectomy Trial II" per patient funding

•2008-2010: Vical Inc. "A Phase 3 Clinical Trial to Evaluate the Safety and Efficacy of Treatment with 2 mg Intravesical Allovectin-t<sup>®</sup> Compared to Dacarbazine (DTIC) or Temozolomide (TMZ) in Subjects with Recurrent Metastatic Melanoma" per patient funding

•2009: Alberta Cancer Board. "A comparison of the needs of new and follow-up patients in the melanoma and sarcoma surgical oncology clinics" \$10,000

•2009-2010: Order of AHEPA. "Impact of guidelines on the treatment and outcomes of patients with melanoma in Southern Alberta" \$15,000

**Dr. D. Mew**

•2011-2013: (Dr. E. Fear) Alberta Cancer Foundation. "Clinical evaluation of a new approach to breast imaging with microwaves" \$245,650

•2010-2011: University of Calgary. "Application of Microwave Breast Imaging to Lymph Node Assessment" \$18,000

**Dr. ML Quan**

•2011: University of Calgary. "SLNB patterns of care in Alberta" \$5,000

•2011: Breast Cancer Society of Canada. "Clarifying the role of axillary node dissection after SLNB in early stage breast cancer" \$15,000

•2011: MSI Foundation. "Improving safety in Alberta operating rooms: Evaluating the implementation of the Safe Surgery Checklist" \$100,000

**Dr. W. Temple**

•2007-2011: CPAC. "Synoptic Reporting Tools Project" \$6,000,000

•2011-2013: Canada Health Infoway. "Interactive Patient Portal Project" \$1,200,000

•2012-2014: Canada Health Infoway. "CPAC National Project" \$300,000

## Section Update Thoracic Surgery

•The Section has undergone major changes in the roles of the four members. After 12 years of service, **Dr. G. Gelfand** has stepped down as Section Chief. The section wishes to express our heartfelt thanks to **Dr. Gelfand** for his tireless enthusiasm, work, dedication and foresight in the many years of leadership since the inception of the Section of Thoracic Surgery at the University of Calgary.

•The members of the Section would also like to express a warm thank you to **Dr. A. Graham** for his role in developing, implementing and directing the Residency Training Program for Thoracic Surgery at the University of Calgary.

•**Dr. Graham** steps down after successfully graduating three fellows. The job as Program Director has been handed over to **Dr. S. Grondin**.

•The Section continues to provide complete coverage for Thoracic Surgery services in the Calgary Zone and beyond. The recent spotlight shining on lung cancer care has increased the resources available for care and has brought challenges to meet the wait times listed for reasonable access to care. The provision of timely care for patients will be the biggest clinical challenge for the section in the coming years. Preliminary discussions are underway to add more manpower in the next three to eight years.



Dr. Sean McFadden  
Thoracic Surgery Section Chief

•The Section continues to support development of our specialized nursing ward with educational activities, quality assurance rounds and collaborative care initiatives. Unit 61 has undergone many changes in the last 12 months and we look forward to developing a caring, vibrant, expert team.

## Section Update Transplant Surgery

### Section Structure and Organization

#### *Current Committees*

- Live Donation
- Cadaver Donation
- Vascular Access
- Peritoneal Dialysis

#### *Current Programs*

- Live Donor Program

### Accomplishments and Highlights

•**Dr. Monroy** was promoted to Associate

Professor

•**Dr. Yilmaz** was granted sabbatical leave for 6 months

#### *Clinical Service*

•Established in collaboration with the Departments of Diagnostic Imaging and Nephrology, the "One Day Live Donor Evaluation" program focused on attracting more live donors to compensate for the lack of cadaver donation. This was created to respond to the steady decline in kidney transplants due

to the decline in cadaver donation and lack of growth in live donation. Making the process efficient, expeditious and more inclusive, the goal is to perform all medical tests in one day, making the evaluation more donor-friendly, decreasing loss of work days and removing hurdles to donate a kidney. Results of this program will be seen in 6 months to a year; however it has already started showing signs of improvement in the transplant activity with a substantial increase in transplant surgeries booked for this year.

- Help in the re-establishment of the Saskatchewan Kidney Transplant Program by mentoring/teaching laparoscopic live donor nephrectomies

#### *Education*

- We continue our educational mandate with General Surgery and Nephrology residents
- This year we do not have a surgical fellow but we contribute with the education of a Nephrology fellow in surgical aspects of transplantation and surgical access for dialysis both peritoneal and haemodialysis.
- Medical and nursing students are common participants in our daily activities both in the OR room as well as in the clinic.

#### *Research*

- Members of the Section continue to collaborate in different research projects that include a whole spectrum from Theoretical Biology to clinical trials. They have produced three peer-reviewed publications this past year. They have participated as invited speakers in international and national meetings as well.

### **Challenges**

#### *Response to Issues*

- Decrease in cadaver donation: In addition to the improvement of live donor evaluations, the Section is participating in implementing services currently not available as the case of ABO Incompatible kidney transplants which will be added to the "chain" or "domino" kidney transplants all in coordination with Nephrology within the ALTRA program. Also, a communication channel has been open with the direction of ICU in Calgary to see the advances on the possibility for a "Non-heart

beating" donor program in Southern Alberta; such communications have already started and will continue every three months.

#### *Ongoing Matters and Plan of Action*

- Our most important challenge is the lack of donations. We have taken a multi-factor approach knowing that this phenomenon is complex and accordingly needs to be solved in several fronts with several measures and initiatives.

### **Workforce Planning**

#### *Future Needs*

- A fourth surgeon will be desirable once the workload reaches an acceptable level to attract a transplant surgeon into our group.

#### *Goals and Strategies*

- Increase surgery activity in both transplant and access surgery

#### *Impact on other departments and zone resources*

- Once live donor kidney donation increases, the Section may require more OR time.

### **Quality Assurance, Quality Improvement, and Innovation**

- Access of Family Physicians to specialists
- Patient flow through the Emergency Department

### **Future Directions and Initiatives**

- Centralize surgery booking process to maximize resources



Dr. Anastasio Salazar  
Transplant Surgery Section Chief

# Section Update

## Urology

### Section Structure and Organization

#### *Current Committees*

##### **Dr. R. Barr**

- Education Committee U of C PGY1
- Prostate Cancer Centre Medical Advisory Board

##### **Dr. R. Baverstock**

- Director of Quality Assurance Department of Surgery, Division of Urology
- Search and Selection Committee (3 new Urologists and Chief of Urology) Department of Surgery, Section 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 Jan 2011-Present RGH Urology
- Surgical Undergraduate Education Committee Dept of Surgery, Faculty of Medicine
- 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 Urological Association Annual Meeting National Steering 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

##### **Dr. A. Cook**

- OR Committee ACH Urology
- Regional Department Surgery Executive Committee ACH Urology



Dr. Kevin Carlson, Urology Section Chief  
Photo Courtesy of Matthew Hayhurst

##### **Dr. B. Donnelly**

- Prostate Cancer Centre Medical Advisory Board
- 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-Centered 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
- Society of International Urology - Local Organizing Committee
- Prostate Cancer Centre Medical Advisory Board

**Dr. G. Kozak**

- AMA Urology section President
- AMA rep forum representative
- New Technologies Committee regional, South Hospital Urology Committee
- 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

**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

**Dr. R. P. Wilkin**

- Prostate Cancer Centre Medical Advisory Board+A1

*Programs*

- Rapid Access Clinics (RAC) for Prostate Cancer screening, diagnosis, follow-up, and after care support
- Alberta Bladder Centre (vesia) – diagnostic testing, medical management and treatment of Urinary Incontinence

*Membership*

- The section of urology has a total of 17 Urologists, 14 Adult and 3 Pediatric.

**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
- 5751 surgical procedures
- 10000+ patients visits to the Prostate Cancer Centre (includes Rapid Access Clinics)

*Education*

- Dr. Weber** has taken over as the program director for both PGY1 residents and medical students

- Dr. Kozak, Dr. Donnelly** and **Dr. Baverstock** have all been recognized with the Star Teacher Award for the PGY1 residents

**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 RGH, the section has revisited its clinical pathways to ensure efficiency and patient flow is maintained. The group has actively pursued a model of inpatient care that would include a Nurse Practitioner and hope that within the next year this will occur.

- Population growth has demanded a separation of adult and pediatric on call services. This change to the on call schedule was introduced in July 2011 and is ongoing.

*Plan of Action*

- 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 second annual retreat held in February 2012.

- 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.

#### *Future Risks*

- Inadequate infrastructure by way of OR access, and ambulatory clinic resources (Cystoscopy and Lithotripsy) present the biggest challenge for Urology. 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 now 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

- The section of urology, while benefiting from centralization at RGH is also challenged to provide citywide coverage. This challenge increases each year with the population growth and is enhanced by the lack of extenders such as Nurse Practitioners. The addition of the SHC will further strain the section in the provision of citywide coverage

### **Workforce Planning**

#### *Future Needs*

- With several retirements occurring over the next three to five years, the focus of next year's retreat will be on developing a formal workforce plan within the context of current resources and program service

#### *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

### **Quality Assurance, Quality Improvement, and Innovation**

#### *General*

- Dr Richard Baverstock continues to lead the section in Quality Assurance and will continue on for another 3 year term

#### *Access of Family Physicians to Specialists*

- Dr. Carlson** and **Dr. Baverstock** were recently recognized 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 alongside the specialist to provide timely access to care, diagnosis and treatment. The Bladder Centre model will be the foundation that the four urology programs will be built and expanded upon.

#### *Patient Flow through the Emergency Department*

- Having the urology program based at RGH allows for a strong partnership with our colleagues in the emergency department. The section has one of the fastest response times from "consult request to decision" at RGH

- 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 is currently working toward developing a multidisciplinary Stone Clinic to reduce patient visits to the Emergency Departments

### **Future Directions and Initiatives**

The section has had another challenging and successful year with the addition of 3 new urologists, and also the addition of an Executive Director for the Southern Alberta Institute of Urology. With manpower in place, work has begun in all four key programs to deliver exceptional care using opportunities to improve access, apply innovative models, and generate outcomes research. Building on the success of the Alberta Bladder Centre (vesia) and the Prostate Cancer Centre, the Southern Alberta Institute of Urology will focus on becoming a Canadian and world leader in delivering comprehensive urologic care.

## Section Update Vascular Surgery

▪The Section of Vascular Surgery continues its role as the only provider of vascular care for all of southern Alberta, western Saskatchewan and eastern British Columbia. As the population of this vast referral area steadily increases and as Canadians age, our volumes continue to show steady growth. The key news for the Section in the past year has been the infrastructure redevelopment project at Peter Lougheed Centre. We have completed functional planning and are proceeding with final design of two "hybrid" endovascular/open operating theatres, a new inpatient unit, step-down unit and ambulatory care centre. The hybrid ORs will be equipped with high-powered, robotic-controlled c-arms that will permit complex endovascular aneurysm repairs, involving branches of the thoracic and abdominal aorta. These procedures will save patients from open thoracoabdominal surgery, with much lower morbidity and mortality. The hybrid ORs will be located on the second floor of the (new) East Wing of PLC, in dedicated space separate from the main OR. Our ambulatory care facility, inpatient unit and step-down unit will be co-located on the 5<sup>th</sup> floor of the same East Wing. This grouping of inpatient/outpatient services will create a world-class facility that will provide a "medical home" for vascular patients. The integrated facility will contribute to better continuity of care, and increase staffing efficiencies. We will provide more complete care to patients, as the ambulatory centre will include a Vascular Risk Reduction Clinic (run by Internal Medicine) and a foot clinic (run by Podiatric Surgery).



Dr. Paul Petrusek, Vascular Surgery Section Chief  
*Photo Courtesy of Matthew Hayhurst*

▪Construction for both the vascular ORs and the clinic/inpatient unit is scheduled to begin in early 2013, with occupancy expected in 2014. We are looking forward to this new facility and the improved care that it will deliver. We are grateful for the generosity of the Calgary Health Trust and the CHT PLC Development Council, who have prioritized Vascular Surgery in fundraising, this year and next. The Health Trust is working tirelessly to raise millions of dollars to equip our new facility with state of the art components that will be key to our future success.

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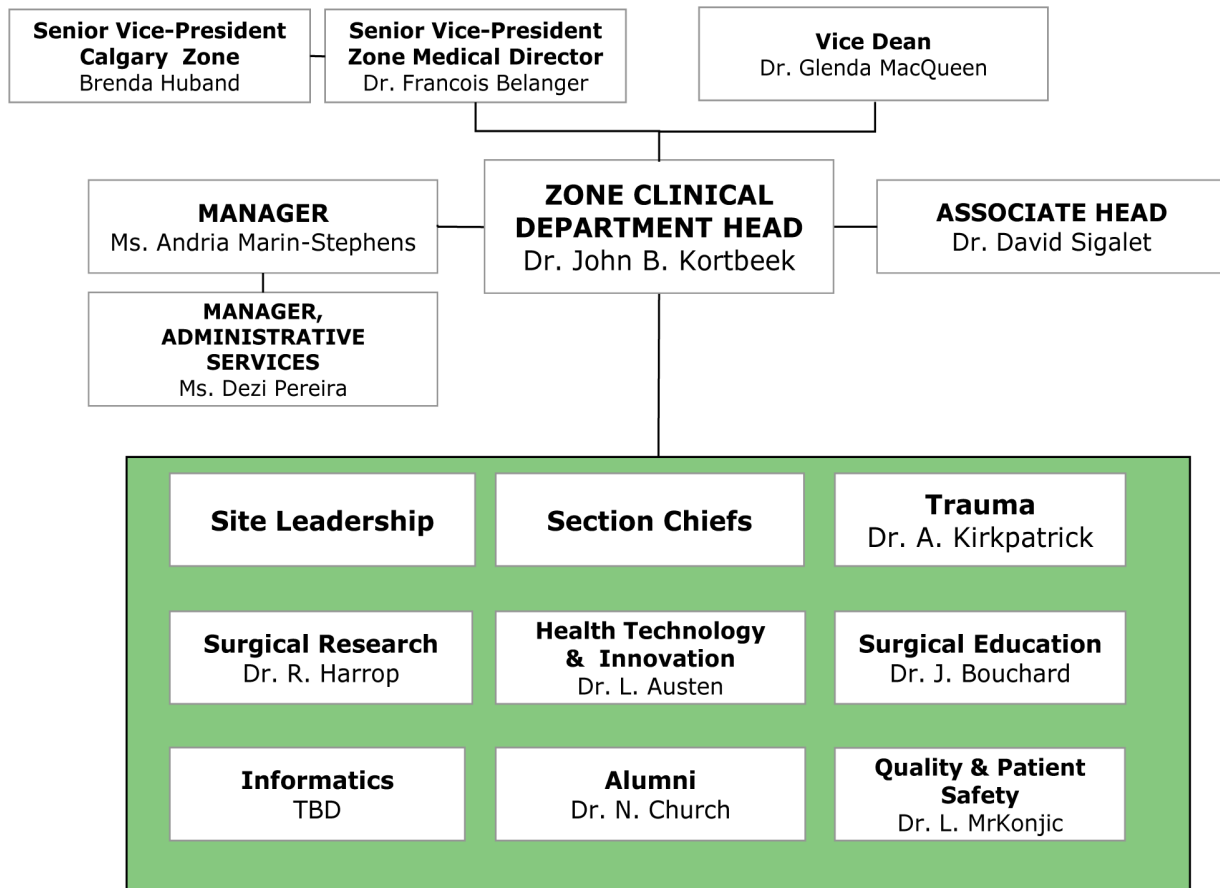
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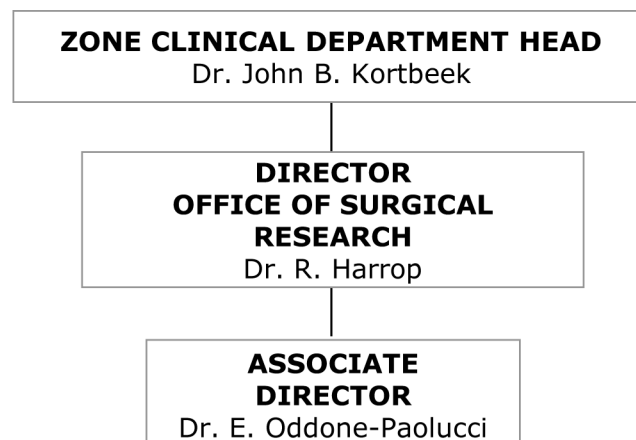
## 1.0 Department Structure

### 1.1 Governance

#### Leadership – Department of Surgery

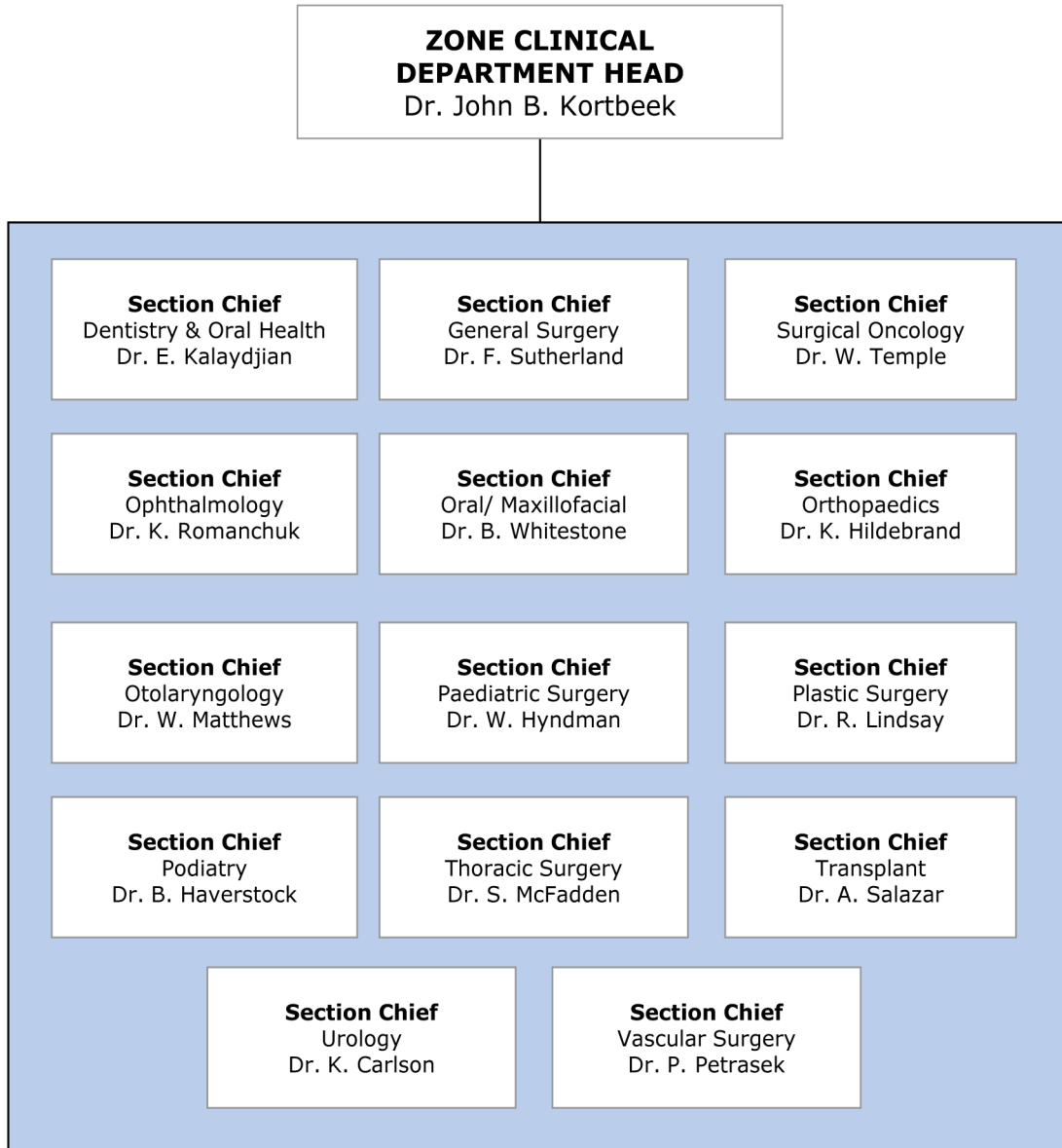


#### Surgical Research – Department of Surgery



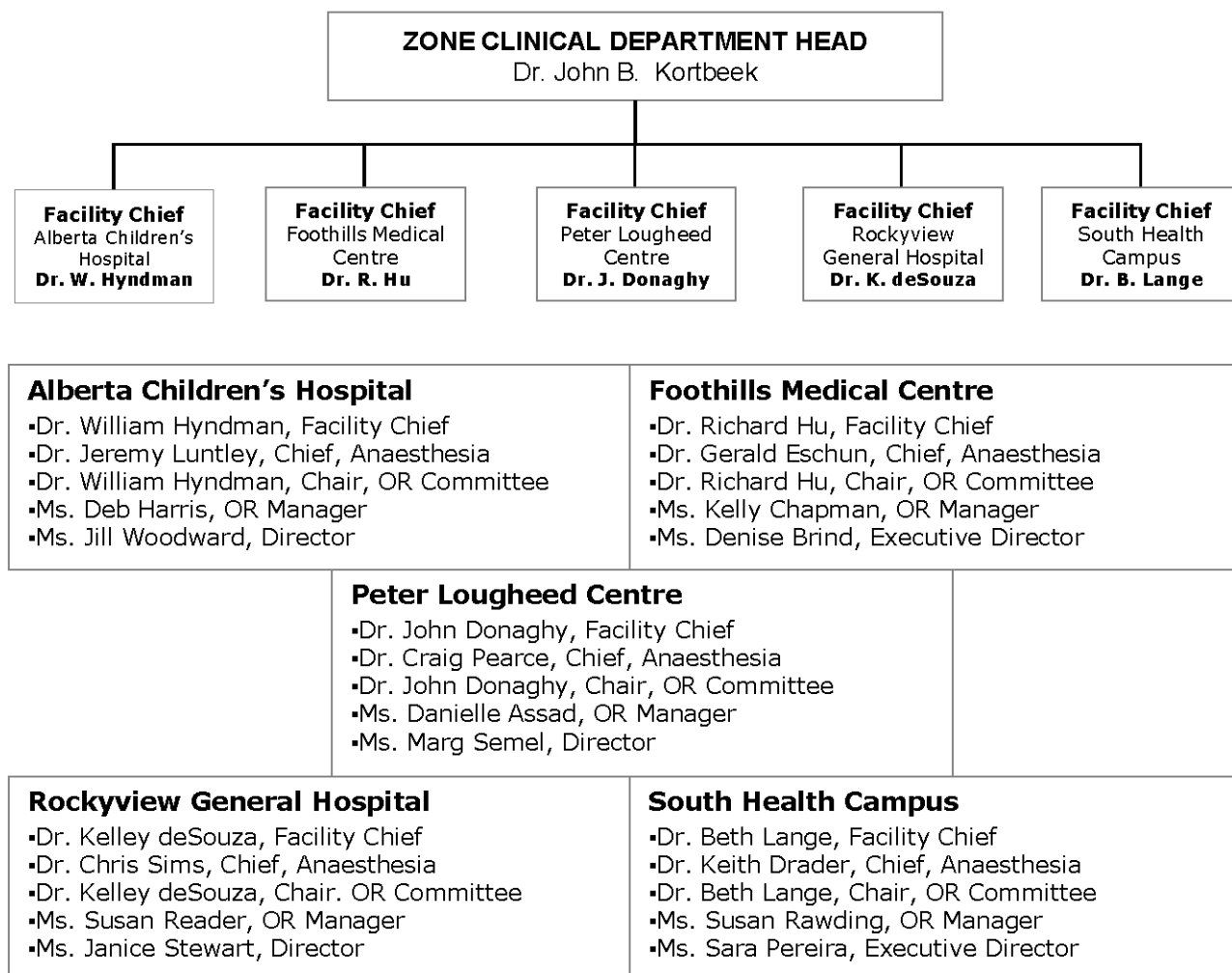
## 1.1 Governance Continued

### Section Chiefs – Department of Surgery

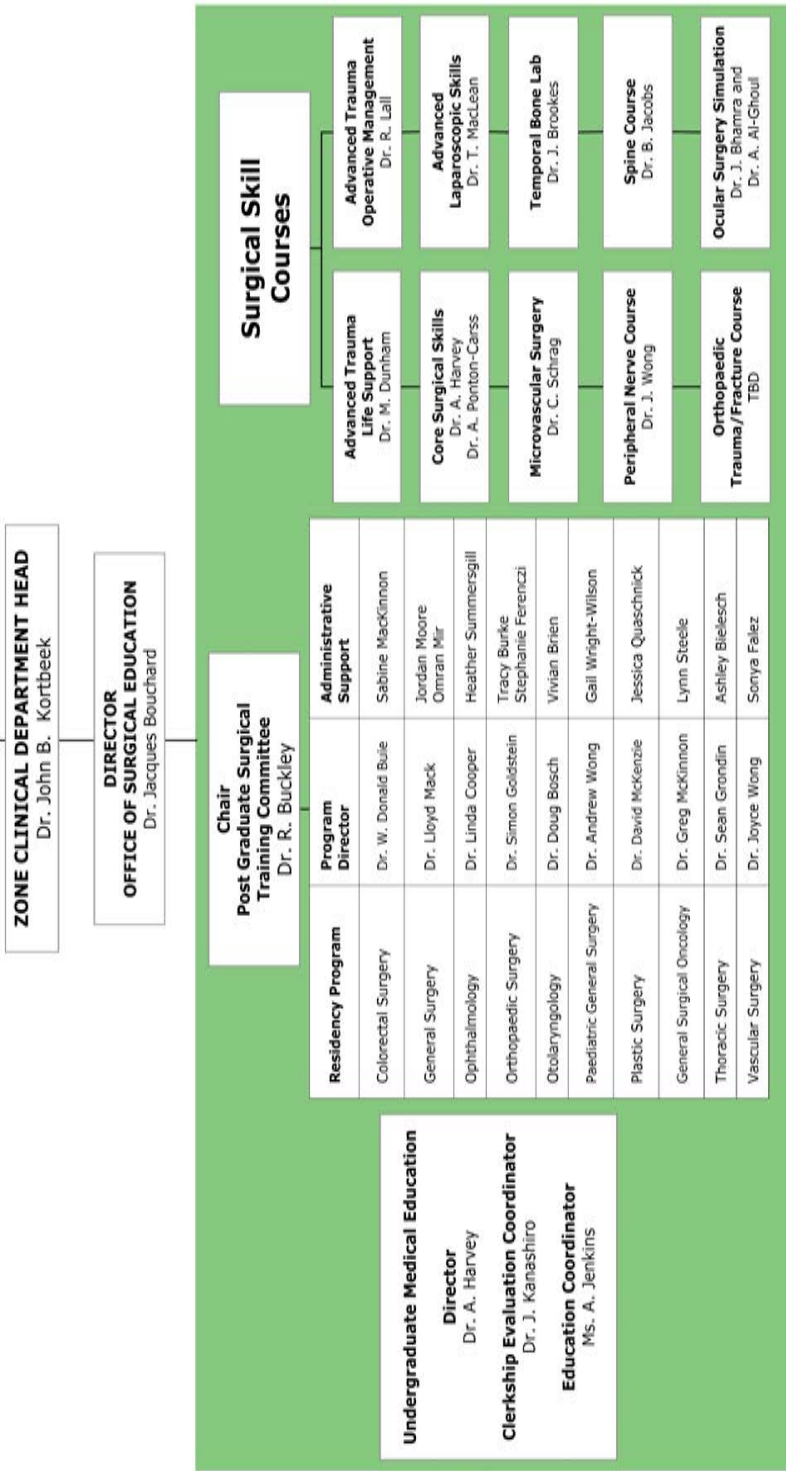


## 1.1 Governance Continued

### Site Leadership – Department of Surgery



## Surgical Education – Department of Surgery



## 1.2 Department Committees

Department Committees <b>Department of Surgery Executive Committee</b> Chair: Dr. John Kortbeek	<b>Block Booking Committee</b> Chair: Dr. Jeff Way	<b>Surgical Education</b> Chair: Dr. Jacques Bouchard
<b>Site OR Committees (ACH, FMC, PLC, RGH, SHC)</b> Chair: Facility Chiefs	<b>Health, Technology and Innovation</b> Chair: Dr. Lea Austen	<b>Educational Executive</b> Chair: Dr. John Kortbeek
<b>Site Leadership Committee</b> Dr. John Kortbeek	<b>Safety</b> Chair: Dr. Linda MrKonjic	<b>Postgraduate Surgical Training Committee</b> Chair: Dr. Richard Buckley
	<b>Surgical Research</b> Chair: Dr. Robertson Harrop	<b>Undergraduate Medical Education</b> Chair: Dr. John Graham

## 1.3 Department Members

### 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  
 Lekhi, Veenu, Clinical Lecturer  
 Loepky, Warren (primary in pediatric surgery)  
 Lovick, David  
 Mehra, Tarun (primary in pediatric surgery)  
 Narvey, Allan (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  
 Rehak, Robert  
 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  
 Lafreniere, Rene; Professor  
 Lall, Rohan N.; Clinical Assistant Professor  
 Lewkonja, Peter, Clinical Assistant Professor (primary in pediatric surgery)  
 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  
 Pasieka, Janice; Clinical Professor  
 Quan, May Lynn; Assistant Professor  
 Reso, Artan; Clinical Lecturer  
 Rosen, Wayne S.; Clinical Assistant Professor  
 Rothwell, Bruce C.; Clinical Assistant Professor  
 Sigalet, David L.; Professor (primary in Pediatric Surgery)  
 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  
 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  
 Williams, R. Geoff; Clinical Associate Professor  
 Wyse, J. Patrick; Clinical Associate Professor  
 Yau, Ryan, Clinical Assistant Professor

**Section of Oral Maxillofacial Surgery****Whitestone, Brian; Section Chief, Clinical Lecturer**

Bureau, Stephen  
 Edwards, Richard  
 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  
 Williams, Hedd-Wyn

Young, Carl Wayne

**Section of Orthopaedic Surgery****Hildebrand, Kevin A.; Section Chief, Professor**

Abelseth, Gregory A.; Clinical Assistant Professor  
 Bauman, John; Clinical Assistant Professor  
 Bazant, Francis J.; Clinical Assistant Professor  
 Bell, Douglas; Clinical Associate Professor  
 Bering, Michael P.; Clinical Lecturer (Medicine Hat)  
 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  
 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*  
 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)*  
*Kiefer, Gerhard N.; Clinical Associate Professor (primary in Pediatric Surgery)*  
 Korley, Robert; Clinical Lecturer  
 Le, Ian; Clinical Lecturer  
 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 Assistant Professor  
 Timmermann, Scott; Clinical Assistant Professor  
 Van Zuiden, Lowell J.; Clinical Assistant Professor  
 Werle, Jason R.; Clinical Associate Professor

**Section of Otolaryngology – Head and Neck Surgery**  
**Matthews, T. Wayne; Section Chief, Associate Professor**

Bosch, J. Douglas; Clinical Assistant Professor  
*Brookes, James; Clinical Lecturer (primary in Pediatric Surgery)*  
 Burke, Robert; Clinical Associate Professor  
 Chau, Justin K.; Clinical Assistant Professor  
 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 Lecturer  
*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.; Assistant Professor  
 Brookes, James; Clinical Lecturer  
*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)*

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)*  
*Leong, James (primary in Urology)*  
 Loeppky, 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  
*Metcalf, Donald G.; Clinical Assistant Professor (primary in Urology)*  
 Narvey, Allan  
*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)*  
 Sigalet, David L.; Professor

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

#### **Lindsay, Robert L.; Section Chief, Clinical Associate Professor**

Beveridge, John A.; Clinical Lecturer  
 Birdsell, Dale C.; Clinical Professor  
 Campbell, Earl A.D.; Clinical Assistant Professor  
 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  
*Harrop, A. Robertson; Clinical Associate Professor (primary in Pediatric Surgery)*  
 Haugrud, Mark J.  
 Humphreys, Douglas  
 Lee, Jonathan; Clinical Lecturer  
 Lin, Alan; Clinical Assistant 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  
 Whidden, Peter G.

### Section of Podiatric Surgery

#### **Haverstock, Brent D.; Section Chief, Clinical Assistant Professor**

Bulanda, Catherine S.; Clinical Lecturer  
 Feldman, Ziv S.; Clinical Lecturer  
 Gurevitch, Darryl; Clinical Lecturer  
 Gurevitch, Jason; Clinical Lecturer  
 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

#### **Temple, Walley J.; Section Chief, Professor**

Arlette, John; Clinical Associate Professor  
*Bathe, Oliver F.; Professor (primary in General Surgery)*  
*Buie, W. Donald; Associate Professor (primary in General 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)*  
*McKinnon, J. Gregory; Professor (primary in General Surgery)*  
*Mew, Daphne J.Y.; Clinical Assistant Professor (primary in General Surgery)*  
*Pasieka, Janice; Clinical Professor (primary in General Surgery)*  
*Schachar, Norman S.; Professor (primary in Orthopedic Surgery)*  
*Sutherland, Francis R.; Professor (primary in General Surgery)*

### Section of Thoracic Surgery

#### **Gelfand, Gary A.J.; Section Chief, Clinical Assistant Professor**

Graham, Andrew J.; Clinical Associate Professor  
 Grondin, Sean C.; Clinical Associate Professor  
 McFadden, Sean; Clinical Assistant 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

### 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

Oddone Paolucci, Elizabeth; Assistant Professor

### 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  
 Russell, Margaret L.; Associate Professor, Community Health Sciences  
 Rothschild, John; Clinical Associate Professor, Cardiac Sciences  
 Stell, William K.; Professor, Cell Biology & Anatomy  
 Thornton, Gail M.; Associate Professor, Engineering

### 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  
 Wishart, Paul M.; Adjunct Assistant Professor  
 Zernicke, Ronald F.; Adjunct Professor

## 2.0 Activity Reports

### 2.1 Surgical Activity Reports

#### Total Activity Cases Surgical Statistical Activity by Service All Hospitals (FMC, RGH, PLC, ACH)

Service	Total Cases 08/09	Total Cases 09/10	Total Cases 10/11	Current Year 2011/2012												Current YTD	% Change	Variance
	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar						
*	76	15	9	0	0	1	0	1	1	2	1	1	2	4	0	13	0.44	4
ANA	73	70	70	0	6	3	4	7	6	2	5	3	3	5	1	45	-0.36	-25
CAR	1281	1296	1232	114	112	126	95	105	123	111	126	102	112	112	118	1356	0.10	124
COH	1033	1101	1005	78	92	95	73	84	83	83	94	84	78	86	98	1029	0.02	24
DEN	812	812	963	95	70	70	45	45	84	77	84	55	81	81	83	870	-0.10	-93
ENT_ORL	6107	5985	5986	513	542	453	381	438	613	505	544	517	549	511	594	6160	0.03	174
GEN	13152	13038	13611	1212	1268	1268	1001	1101	1239	1211	1230	1130	1185	1203	1228	14276	0.05	665
GI	500	528	642	57	62	62	38	51	62	51	61	47	63	46	58	658	0.02	16
GYN	7317	7276	6969	543	621	658	450	450	603	553	586	508	557	563	596	6688	-0.04	-281
MED	88	55	64	4	6	3	3	12	3	8	6	4	2	4	3	58	-0.09	-6
NEU	1616	1742	1866	164	174	173	161	156	152	156	173	163	151	162	178	1963	0.05	97
OBS	1677	1932	2098	184	198	171	157	150	196	162	198	195	159	185	194	2149	0.02	51
OPH	2161	2322	2364	179	185	225	150	153	186	192	225	201	215	224	209	2344	-0.01	-20
ORA	400	396	369	27	36	31	27	35	37	30	42	30	38	32	20	385	0.04	16
ORT	12339	12208	12791	1142	1245	1239	976	1000	1249	1158	1177	1126	1221	1129	1284	13946	0.09	1155
PLS	3465	3349	3230	267	302	321	230	252	309	286	305	266	281	273	319	3411	0.06	181
POD	404	504	473	35	44	39	26	39	41	32	36	29	24	31	34	410	-0.13	-63
PSY	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	-1
RAD	166	282	431	41	32	50	37	31	46	40	27	43	48	42	44	481	0.12	50
RES	96	104	84	7	5	12	8	6	8	4	7	6	6	6	13	88	0.05	4
SATP	22	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	-3
THO	560	614	628	49	53	53	33	39	54	51	56	50	52	49	47	586	-0.07	-42
TRN	522	481	511	47	37	46	48	32	38	33	33	32	33	49	42	470	-0.08	-41
URO	6101	6293	6340	539	539	625	465	528	601	619	634	580	648	604	668	7050	0.11	710
VAS	814	768	761	57	61	66	55	70	65	64	71	72	66	87	81	815	0.07	54
Total	60781	61171	62501	5355	5690	5790	4463	4785	5799	5430	5721	5244	5574	5488	5912	65251		

# Total Activity Cases

## Surgical Statistical Activity by Admit Type

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

Service	Admit Type	Total Cases	Total Cases	Total Cases	Current Year 2011/2012												YTD	% Change
		08/09	09/10	10/11	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar		
*	Elective	24	3	3	0	0	0	0	1	0	0	1	0	0	1	0	3	0.00
	Emergency	36	9	4	0	0	1	0	0	1	0	0	1	0	1	0	4	0.00
	Urgent	16	3	2	0	0	1	0	1	1	2	0	0	2	2	0	6	200.00
	Total	76	15	9	0	0	2	0	2	2	2	1	1	2	4	0	13	
ANA	Elective	2	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	-500.00
	Emergency	65	64	58	0	6	2	3	6	6	2	5	3	2	5	1	41	-29.31
	Urgent	6	6	7	0	0	1	1	1	0	0	0	0	1	0	0	4	-42.86
	Total	73	70	70	0	6	3	4	7	6	2	5	3	3	5	1	45	
CAR	**	0	0	1				1	0	0	0	0	0	0	0	0	1	-100.00
	Elective	533	681	647	57	57	73	47	45	70	59	75	52	61	56	66	718	10.97
	Emergency	93	130	122	14	15	16	16	11	13	10	15	10	7	13	6	146	19.67
	Urgent	655	485	462	43	40	37	31	49	40	42	36	40	44	43	46	491	6.28
	Total	1281	1296	1232	114	112	126	95	105	123	111	126	102	112	112	118	1356	
COH	Elective	53	26	38	4	3	1	0	2	1	0	5	0	3	0	3	22	-42.11
	Emergency	221	267	222	14	17	19	14	21	11	20	26	25	16	15	16	214	-3.60
	Urgent	759	808	745	61	72	75	59	61	71	63	63	59	59	71	79	793	6.44
	Total	1033	1101	1006	79	92	95	73	84	83	83	94	84	78	86	98	1029	
DEN	Elective	786	765	903	87	68	67	41	43	82	70	80	51	79	79	80	827	-8.42
	Emergency	10	24	27	2	1	0	1	1	1	2	2	2	0	1	3	16	-40.74
	Urgent	16	23	33	6	1	3	3	1	1	5	2	2	2	1	0	27	-18.18
	Total	812	812	962	95	70	70	45	45	84	77	84	55	81	81	83	870	
ENT_ORL	Elective	5125	5139	5226	468	478	401	313	355	538	434	492	448	478	445	529	5379	2.93
	Emergency	311	307	324	27	28	17	32	38	30	35	22	33	20	25	23	330	1.85
	Urgent	671	539	436	18	36	35	36	45	45	36	30	36	51	41	42	451	3.44
	Total	6107	5985	5986	512	542	453	381	438	613	505	544	517	549	511	594	6160	
GEN	**	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	100.00
	Elective	5736	5594	5756	532	581	539	367	385	539	519	522	443	495	480	519	5921	2.87
	Emergency	4576	4570	4822	422	409	410	409	465	456	417	404	386	406	430	415	5029	4.29
	Urgent	2839	2874	3033	258	278	319	225	251	244	275	304	301	284	293	294	3326	9.66
	Total	13151	13038	13611	1212	1268	1268	1001	1101	1239	1211	1230	1130	1185	1203	1228	14276	
GI	Elective	402	418	542	46	51	55	26	39	49	44	54	41	52	42	140	545	0.55
	Emergency	54	72	62	10	6	4	6	9	7	4	4	4	9	2	6	71	14.52
	Urgent	44	38	38	1	5	3	6	3	6	3	3	2	2	2	6	42	10.53
	Total	500	528	641	57	62	62	38	51	62	51	61	47	63	46	58	658	
GYN	**	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
	Elective	5001	5078	4863	408	453	463	279	284	434	407	422	352	401	405	418	4726	-2.82
	Emergency	1341	1263	1200	71	87	102	99	80	103	71	94	98	91	84	108	1088	-9.33
	Urgent	975	934	906	64	81	93	72	86	66	75	70	57	65	74	70	873	-3.64
	Total	7317	7276	6969	543	621	658	450	450	603	553	586	508	557	563	596	6688	
MED	**	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	-100.00
	Elective	39	34	37	3	4	1	2	8	1	6	3	3	2	3	2	38	2.70
	Emergency	42	10	17	0	2	1	1	3	2	0	3	0	0	1	1	14	-17.65
	Urgent	7	11	9	1	0	1	0	1	0	2	0	1	0	0	0	6	-33.33
Total	88	55	64	4	6	3	3	12	3	8	6	4	2	4	3	58		
NEU	**	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
	Elective	704	775	820	81	79	82	49	71	72	80	90	58	76	68	71	877	6.95
	Emergency	297	339	424	35	37	34	41	41	26	32	31	49	33	27	37	423	-0.24
	Urgent	615	627	622	48	58	57	71	44	54	44	52	56	42	67	70	663	6.59
	Total	1616	1742	1866	164	174	173	161	156	152	156	173	163	151	162	178	672	
OBS	Elective	1104	1356	1479	135	130	122	104	113	146	106	145	148	111	134	137	1531	3.52
	Emergency	493	487	513	42	55	38	46	35	34	54	44	35	40	40	51	514	0.19
	Urgent	80	89	106	7	13	11	7	2	16	2	9	12	8	11	6	104	-1.89
	Total	1677	1932	2098	184	198	171	157	150	196	162	198	195	159	185	194	2149	

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

Service	Admit Type	Total Cases 08/09	Total Cases 09/10	Total Cases 10/11	Current Year 2011/2012												YTD	% Change
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar					
OPH	Elective	1449	1438	1484	100	113	154	74	88	132	119	138	120	125	112	97	1372	-7.55
	Emergency	387	498	515	44	39	42	48	39	35	40	40	42	38	56	51	514	-0.19
	Urgent	325	386	365	35	33	29	28	26	19	33	47	39	52	56	61	458	25.48
	Total	2161	2322	2364	179	185	225	150	153	186	192	225	201	215	224	209	2344	
ORA	Elective	322	331	324	23	27	25	17	30	33	22	36	19	29	27	17	305	-5.86
	Emergency	76	63	42	4	8	6	10	4	4	8	6	11	9	4	2	76	80.95
	Urgent	2	2	3	0	1	0	0	1	0	0	0	0	0	1	1	4	33.33
	Total	400	396	369	27	35	31	27	35	37	30	42	30	38	32	20	385	
ORT	Elective	6735	6870	7534	733	811	792	495	547	767	746	765	636	750	713	804	8559	13.60
	Emergency	3300	3173	3154	228	258	249	295	269	275	231	230	300	250	237	281	3103	-1.62
	Urgent	2304	2165	2103	181	176	198	186	184	207	181	182	189	221	179	199	2283	8.56
	Total	12339	12208	12791	1142	1245	1239	976	1000	1249	1158	1177	1126	1221	1129	1284	13946	
PLS	Elective	2382	2342	2277	196	204	204	122	168	191	179	230	184	212	186	201	2277	0.00
	Emergency	577	509	515	31	56	44	51	38	63	49	41	44	31	32	57	537	4.27
	Urgent	506	498	438	40	42	73	57	46	55	58	34	38	38	55	61	597	36.30
	Total	3465	3349	3230	267	302	321	230	252	309	286	305	266	281	273	319	3411	
POD	Elective	217	324	263	24	28	26	13	16	24	20	28	10	14	23	22	248	-5.70
	Emergency	181	169	193	11	16	12	13	22	13	9	7	19	8	7	11	148	-23.32
	Urgent	6	11	17	0	0	1	0	1	4	3	1	0	2	1	1	14	-17.65
	Total	404	504	473	35	44	39	26	39	41	32	36	29	24	31	34	410	
PSY	Elective	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RAD	Elective	65	111	107	12	2	14	12	2	10	14	9	8	10	11	9	113	5.61
	Emergency	80	151	291	27	29	35	24	29	35	26	15	34	37	30	33	354	21.65
	Urgent	21	20	33	2	1	1	1	0	1	0	3	1	1	1	2	14	-57.58
	Total	166	282	431	40	32	50	37	31	46	40	27	43	48	42	44	481	
RES	Elective	23	24	12	2	1	1	1	0	3	0	1	3	1	1	3	17	41.67
	Emergency	46	39	34	2	1	3	3	3	1	1	0	2	3	1	5	25	-26.47
	Urgent	27	41	38	3	3	8	4	3	4	3	6	1	2	4	5	46	21.05
	Total	96	104	84	7	5	12	8	6	8	4	7	6	6	6	13	88	
SATP	**	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	-100.00
	Emergency	22	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	-200.00
	Total	22	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	
THO	Elective	32	41	49	4	3	1	0	1	2	1	10	1	2	3	4	32	-34.69
	Emergency	48	76	58	0	2	2	3	4	5	6	2	4	5	2	4	39	-32.76
	Urgent	480	497	521	45	48	50	30	34	47	44	44	45	45	44	39	515	-1.15
	Total	560	614	628	49	53	53	33	39	54	51	56	50	52	49	47	586	
TRN	Elective	53	68	94	2	2	8	14	3	1	1	11	3	13	12	26	96	2.13
	Emergency	72	62	92	16	7	5	12	2	5	3	2	7	2	6	2	69	-25.00
	Urgent	397	351	325	29	28	33	22	27	32	29	20	22	18	31	14	305	-6.15
	Total	522	481	511	47	37	46	48	32	38	33	33	32	33	49	42	470	
URO	**	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	2	100.00
	Elective	3569	3646	3635	312	324	334	190	228	329	319	347	246	308	289	323	3549	-2.37
	Emergency	1839	1926	1927	157	135	188	200	217	188	224	219	219	207	184	212	2350	21.95
	Urgent	693	721	778	70	79	103	75	83	84	76	68	115	132	131	133	1149	47.69
	Total	6101	6293	6340	539	539	625	465	528	601	619	634	580	648	604	668	7050	
VAS	Elective	445	399	377	25	24	28	19	29	27	31	35	23	27	32	26	326	-13.53
	Emergency	192	174	207	18	16	21	17	22	18	14	16	32	16	31	20	241	16.43
	Urgent	177	195	177	14	21	17	19	19	20	19	20	17	23	24	35	248	40.11
	Total	814	768	761	57	61	66	55	70	65	64	71	72	66	87	81	815	
Summary	**	0	2	3	0	1	0	1	0	0	0	0	2	1	0	0	5	
	Elective	34801	35463	36473	3254	3443	3391	2185	2458	3451	3177	3499	2849	3249	3122	3403	37481	
	Emergency	14359	14382	14825	1175	1230	1251	1344	1359	1332	1258	1228	1360	1230	1234	1345	15346	
	Urgent	11621	11324	11197	926	1016	1148	933	968	1016	995	994	1033	1094	1132	1164	12419	
	Total	60781	61171	62501	5355	5690	5790	4463	4785	5799	5430	5721	5244	5573	5488	5912	65251	

# Inpatient/Outpatient Cases

## Surgical Statistical Activity by Patient Type

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

Service	Patient Type	Total Cases 08/09	Total Cases 09/10	Total Cases 10/11	Current Year 2011/2012												YTD
					Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	
*	InPatient	60	12	6	0	0	1	0	0	1	2	0	1	2	2	0	9
	OutPatient	16	3	3	0	0	0	0	1	0	0	1	0	0	2	0	4
	<b>Total</b>	<b>76</b>	<b>15</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>4</b>	<b>0</b>	<b>13</b>
ANA	InPatient	72	70	65	0	6	3	4	7	6	2	5	3	3	5	1	45
	OutPatient	1	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0
	<b>Total</b>	<b>73</b>	<b>70</b>	<b>70</b>	<b>0</b>	<b>6</b>	<b>3</b>	<b>4</b>	<b>7</b>	<b>6</b>	<b>2</b>	<b>5</b>	<b>3</b>	<b>3</b>	<b>5</b>	<b>1</b>	<b>45</b>
CAR	InPatient	848	864	827	83	75	84	76	78	75	60	83	64	83	77	77	915
	OutPatient	433	432	405	31	37	42	19	27	48	51	43	38	29	35	41	441
	<b>Total</b>	<b>1281</b>	<b>1296</b>	<b>1232</b>	<b>114</b>	<b>112</b>	<b>126</b>	<b>95</b>	<b>105</b>	<b>123</b>	<b>111</b>	<b>126</b>	<b>102</b>	<b>112</b>	<b>112</b>	<b>118</b>	<b>1356</b>
COH	InPatient	1023	1100	1004	79	91	95	73	84	83	83	94	84	78	86	98	1028
	OutPatient	10	1	1	0	1	0	0	0	0	0	0	0	0	0	0	1
	<b>Total</b>	<b>1033</b>	<b>1101</b>	<b>1005</b>	<b>79</b>	<b>92</b>	<b>95</b>	<b>73</b>	<b>84</b>	<b>83</b>	<b>83</b>	<b>94</b>	<b>84</b>	<b>78</b>	<b>86</b>	<b>98</b>	<b>1029</b>
DEN	InPatient	69	62	81	4	5	2	4	2	2	2	6	4	6	8	8	53
	OutPatient	743	750	882	91	65	68	41	43	82	75	78	51	75	73	75	817
	<b>Total</b>	<b>812</b>	<b>812</b>	<b>963</b>	<b>95</b>	<b>70</b>	<b>70</b>	<b>45</b>	<b>45</b>	<b>84</b>	<b>77</b>	<b>84</b>	<b>55</b>	<b>81</b>	<b>81</b>	<b>83</b>	<b>870</b>
ENT_ORL	InPatient	1291	1298	1271	87	126	89	92	112	120	115	89	92	123	118	122	1285
	OutPatient	4816	4687	4715	426	416	364	289	326	493	390	455	425	426	393	472	4875
	<b>Total</b>	<b>6107</b>	<b>5985</b>	<b>5986</b>	<b>513</b>	<b>542</b>	<b>453</b>	<b>381</b>	<b>438</b>	<b>613</b>	<b>505</b>	<b>544</b>	<b>517</b>	<b>549</b>	<b>511</b>	<b>594</b>	<b>6160</b>
GEN	InPatient	8142	8220	8639	765	772	811	686	755	782	737	780	717	739	749	765	9058
	OutPatient	5009	4818	4972	447	496	457	315	346	457	474	450	413	446	454	463	5218
	<b>Total</b>	<b>13151</b>	<b>13038</b>	<b>13611</b>	<b>1212</b>	<b>1268</b>	<b>1268</b>	<b>1001</b>	<b>1101</b>	<b>1239</b>	<b>1211</b>	<b>1230</b>	<b>1130</b>	<b>1185</b>	<b>1203</b>	<b>1228</b>	<b>14276</b>
GI	InPatient	117	118	119	15	10	9	8	13	19	7	5	6	11	2	11	116
	OutPatient	383	410	523	42	52	53	30	38	43	44	56	41	52	44	47	542
	<b>Total</b>	<b>500</b>	<b>528</b>	<b>642</b>	<b>57</b>	<b>62</b>	<b>62</b>	<b>38</b>	<b>51</b>	<b>62</b>	<b>51</b>	<b>61</b>	<b>47</b>	<b>63</b>	<b>46</b>	<b>58</b>	<b>658</b>
GYN	InPatient	3526	3434	3286	233	282	297	243	223	288	235	299	244	294	260	280	3178
	OutPatient	3791	3842	3683	310	339	361	207	227	315	318	287	264	263	303	316	3510
	<b>Total</b>	<b>7317</b>	<b>7277</b>	<b>6969</b>	<b>543</b>	<b>621</b>	<b>658</b>	<b>450</b>	<b>450</b>	<b>603</b>	<b>553</b>	<b>586</b>	<b>508</b>	<b>557</b>	<b>563</b>	<b>596</b>	<b>6688</b>
MED	InPatient	52	21	33	2	4	1	1	4	2	3	3	1	0	1	1	23
	OutPatient	36	34	31	2	2	2	2	8	1	5	3	3	2	3	2	35
	<b>Total</b>	<b>88</b>	<b>55</b>	<b>64</b>	<b>4</b>	<b>6</b>	<b>3</b>	<b>3</b>	<b>12</b>	<b>3</b>	<b>8</b>	<b>6</b>	<b>4</b>	<b>2</b>	<b>4</b>	<b>3</b>	<b>58</b>
NEU	InPatient	1451	1547	1668	143	156	147	154	138	138	139	154	138	136	145	160	1748
	OutPatient	165	195	198	21	18	26	7	18	14	17	19	25	15	17	18	215
	<b>Total</b>	<b>1616</b>	<b>1742</b>	<b>1866</b>	<b>164</b>	<b>174</b>	<b>173</b>	<b>161</b>	<b>156</b>	<b>152</b>	<b>156</b>	<b>173</b>	<b>163</b>	<b>151</b>	<b>162</b>	<b>178</b>	<b>1963</b>
OBS	InPatient	710	784	793	68	75	74	73	69	69	86	80	55	64	69	77	859
	OutPatient	967	1148	1305	116	123	97	84	81	127	76	118	140	95	116	117	1290
	<b>Total</b>	<b>1677</b>	<b>1932</b>	<b>2098</b>	<b>184</b>	<b>198</b>	<b>171</b>	<b>157</b>	<b>150</b>	<b>196</b>	<b>162</b>	<b>198</b>	<b>195</b>	<b>159</b>	<b>185</b>	<b>194</b>	<b>2149</b>
OPH	InPatient	797	589	600	46	42	47	52	40	41	51	51	51	46	62	56	585
	OutPatient	1364	1733	1764	133	143	178	98	113	145	141	174	150	169	162	153	1759
	<b>Total</b>	<b>2161</b>	<b>2322</b>	<b>2364</b>	<b>179</b>	<b>185</b>	<b>225</b>	<b>150</b>	<b>153</b>	<b>186</b>	<b>192</b>	<b>225</b>	<b>201</b>	<b>215</b>	<b>224</b>	<b>209</b>	<b>2344</b>
ORA	InPatient	341	329	302	23	32	24	26	30	31	26	29	26	31	24	14	316
	OutPatient	59	67	67	4	4	7	1	5	6	4	13	4	7	8	6	69
	<b>Total</b>	<b>400</b>	<b>396</b>	<b>369</b>	<b>27</b>	<b>36</b>	<b>31</b>	<b>27</b>	<b>35</b>	<b>37</b>	<b>30</b>	<b>42</b>	<b>30</b>	<b>38</b>	<b>32</b>	<b>20</b>	<b>385</b>
ORT	InPatient	8458	8391	9123	813	903	903	794	739	930	842	871	830	896	833	923	10277
	OutPatient	3881	3817	3668	329	342	336	182	261	319	316	306	296	325	296	361	3669
	<b>Total</b>	<b>12339</b>	<b>12208</b>	<b>12791</b>	<b>1142</b>	<b>1245</b>	<b>1239</b>	<b>976</b>	<b>1000</b>	<b>1249</b>	<b>1158</b>	<b>1177</b>	<b>1126</b>	<b>1221</b>	<b>1129</b>	<b>1284</b>	<b>13946</b>
PLS	InPatient	1712	1675	1594	129	159	186	142	128	164	165	152	133	137	138	180	1813
	OutPatient	1753	1674	1636	138	143	135	88	124	145	121	153	133	144	135	139	1598
	<b>Total</b>	<b>3465</b>	<b>3349</b>	<b>3230</b>	<b>267</b>	<b>302</b>	<b>321</b>	<b>230</b>	<b>252</b>	<b>309</b>	<b>286</b>	<b>305</b>	<b>266</b>	<b>281</b>	<b>273</b>	<b>319</b>	<b>3411</b>
POD	InPatient	320	336	323	22	29	17	20	32	23	20	21	24	17	21	21	267
	OutPatient	84	168	150	13	15	22	6	7	18	12	15	5	7	10	13	143
	<b>Total</b>	<b>404</b>	<b>504</b>	<b>473</b>	<b>35</b>	<b>44</b>	<b>39</b>	<b>26</b>	<b>39</b>	<b>41</b>	<b>32</b>	<b>36</b>	<b>29</b>	<b>24</b>	<b>31</b>	<b>34</b>	<b>410</b>
PSY	InPatient	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	OutPatient	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	<b>Total</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
RAD	InPatient	125	191	333	30	30	39	29	31	40	28	20	39	38	32	39	395
	OutPatient	41	91	98	11	2	11	8	0	6	12	7	4	10	10	5	86
	<b>Total</b>	<b>166</b>	<b>282</b>	<b>431</b>	<b>41</b>	<b>32</b>	<b>50</b>	<b>37</b>	<b>31</b>	<b>46</b>	<b>40</b>	<b>27</b>	<b>43</b>	<b>48</b>	<b>42</b>	<b>44</b>	<b>481</b>

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

Service	Patient Type	Total Cases	Total Cases	Total Cases	Current Year 2011/2012												YTD
		08/09	09/10	10/11	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	
RES	InPatient	75	85	71	6	4	10	7	6	6	2	3	3	5	6	10	68
	OutPatient	21	19	13	1	1	2	1	0	2	2	4	3	1	0	3	20
	<b>Total</b>	<b>96</b>	<b>104</b>	<b>84</b>	<b>7</b>	<b>5</b>	<b>12</b>	<b>8</b>	<b>6</b>	<b>8</b>	<b>4</b>	<b>7</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>13</b>	<b>88</b>
SATP	InPatient	22	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0
	OutPatient	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	<b>Total</b>	<b>22</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
THO	InPatient	521	575	599	44	49	52	29	36	51	48	53	48	43	39	44	536
	OutPatient	39	39	29	5	4	1	4	3	3	3	3	2	9	10	3	50
	<b>Total</b>	<b>560</b>	<b>614</b>	<b>628</b>	<b>49</b>	<b>53</b>	<b>53</b>	<b>33</b>	<b>39</b>	<b>54</b>	<b>51</b>	<b>56</b>	<b>50</b>	<b>52</b>	<b>49</b>	<b>47</b>	<b>586</b>
TRN	InPatient	161	156	189	24	10	19	19	9	12	4	4	9	4	15	11	140
	OutPatient	361	325	322	23	27	27	29	23	26	29	29	23	29	34	31	330
	<b>Total</b>	<b>522</b>	<b>481</b>	<b>511</b>	<b>47</b>	<b>37</b>	<b>46</b>	<b>48</b>	<b>32</b>	<b>38</b>	<b>33</b>	<b>33</b>	<b>32</b>	<b>33</b>	<b>49</b>	<b>42</b>	<b>470</b>
URO	InPatient	3826	3776	3771	321	327	350	333	363	371	404	395	394	402	377	417	4454
	OutPatient	2275	2517	2569	218	212	275	132	165	230	215	239	186	246	227	251	2596
	<b>Total</b>	<b>6101</b>	<b>6293</b>	<b>6340</b>	<b>539</b>	<b>539</b>	<b>625</b>	<b>465</b>	<b>528</b>	<b>601</b>	<b>619</b>	<b>634</b>	<b>580</b>	<b>648</b>	<b>604</b>	<b>668</b>	<b>7050</b>
VAS	InPatient	624	567	625	53	45	54	48	62	60	54	57	59	59	84	67	702
	OutPatient	190	201	136	4	16	12	7	8	5	10	14	13	7	3	14	113
	<b>Total</b>	<b>814</b>	<b>768</b>	<b>761</b>	<b>57</b>	<b>61</b>	<b>66</b>	<b>55</b>	<b>70</b>	<b>65</b>	<b>64</b>	<b>71</b>	<b>72</b>	<b>66</b>	<b>87</b>	<b>81</b>	<b>815</b>
Summary	InPatient	34343	34200	34326	2990	3232	3314	2913	2961	3314	3115	3254	3025	3217	3153	3382	37870
	OutPatient	26438	26971	27175	2365	2458	2476	1550	1824	2485	2315	2467	2219	2357	2335	2530	27381
	<b>Total</b>	<b>60781</b>	<b>61171</b>	<b>62501</b>	<b>5355</b>	<b>5690</b>	<b>5790</b>	<b>4463</b>	<b>4785</b>	<b>5799</b>	<b>5430</b>	<b>5721</b>	<b>5244</b>	<b>5574</b>	<b>5488</b>	<b>5912</b>	<b>65251</b>

## Total Activity Hours Surgical Statistical Activity by Service All Hospitals (FMC, RGH, PLC, ACH)

Service	Total Patient Hours	Total Patient Hours	Total Patient Hours	Current Year 2011/2012												% Change Var		
	08/09	09/10	10/11	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	YTD	Change	Var
*	51.00	13.48	10.13	0.00	0.00	2.15	0.00	0.52	0.00	0.00	3.54	0.00	0.00	3.18	4.19	13.58	34.06	3.45
ANA	82.20	75.41	80.57	0.00	6.55	4.07	5.28	6.61	3.79	0.59	7.54	2.76	2.40	4.49	0.19	44.27	-45.05	-36.30
CAR	2141.38	2101.51	2168.25	202.38	185.42	217.36	155.78	175.91	223.16	193.23	219.42	178.51	190.68	214.11	213.04	2369.00	9.26	200.75
COH	4621.45	4684.40	4475.13	389.19	390.48	392.11	321.04	348.07	406.26	374.17	448.08	376.22	387.24	407.09	478.16	4718.11	5.43	242.98
DEN	1100.18	1101.44	1321.05	137.51	100.71	88.93	62.41	64.27	117.51	107.42	113.25	84.66	108.53	111.55	106.44	1203.19	-8.92	-117.86
ENT_ORL	6304.20	6262.39	6235.33	479.53	586.41	502.51	403.14	436.29	593.21	555.62	549.49	481.35	587.46	545.88	624.54	6345.43	1.77	110.10
GEN	22578.43	22701.41	23582.54	2056.20	2159.44	2206.31	1823.82	1903.10	2116.25	2129.54	2205.01	1983.27	2121.88	2112.52	2109.52	24925.86	5.70	1343.32
GI	418.12	467.24	520.16	58.44	53.54	44.54	36.71	38.19	50.42	38.78	44.04	44.02	49.12	42.20	50.66	550.66	5.86	30.50
GYN	8024.05	7764.34	7727.33	598.93	701.38	717.74	585.70	541.08	706.42	660.02	743.82	555.43	703.12	652.41	684.58	7850.63	1.60	123.30
MED	66.28	51.14	57.28	2.51	3.27	1.43	1.16	11.86	2.11	7.10	3.13	1.59	0.53	2.06	1.56	38.31	-33.12	-18.97
NEU	5870.22	6662.52	6985.07	621.40	654.61	639.79	603.02	562.01	531.68	624.54	619.45	582.94	535.56	614.71	653.48	7243.19	3.70	258.12
OBS	1489.03	1749.30	1844.57	171.47	170.43	177.36	147.37	165.14	201.65	171.54	206.56	177.57	156.12	185.49	184.27	2114.97	14.66	270.40
OPH	2732.45	2924.00	3047.24	216.91	215.97	258.70	211.01	218.91	262.11	258.60	286.93	245.74	284.51	287.61	274.56	3021.56	-0.84	-25.68
ORA	1001.57	952.54	918.13	75.56	88.37	69.54	63.62	93.53	74.87	71.01	91.11	77.59	83.87	69.62	47.01	907.70	-1.14	-10.43
ORT	23118.59	23404.23	24819.37	2206.60	2393.92	2494.66	1952.72	1964.39	2490.44	2332.80	2350.49	2170.69	2358.15	2169.40	2482.72	27366.98	10.26	2547.61
PLS	7202.21	7144.59	6837.32	586.43	570.99	706.54	499.69	542.69	616.67	623.59	646.63	531.62	622.52	539.59	538.88	7025.84	2.76	188.52
POD	497.27	631.45	588.37	59.13	52.04	48.07	35.39	51.50	42.33	42.84	44.48	35.79	38.64	41.34	44.34	535.89	-8.92	-52.48
PSY	0.00	0.00	2.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-100.00	-2.09
RAD	136.40	255.44	372.12	42.71	28.77	41.18	31.69	27.33	42.42	29.47	30.31	40.75	44.20	30.75	32.55	422.13	13.44	50.01
RES	178.22	188.38	168.34	16.44	9.61	22.32	24.50	16.32	11.59	11.43	12.59	8.92	12.26	13.61	18.36	177.95	5.71	9.61
SATP	74.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
THO	1641.54	1811.46	1765.43	151.30	144.31	136.58	126.33	110.47	177.05	149.03	171.18	150.59	157.40	135.21	166.56	1776.01	0.60	10.58
TRN	903.23	889.51	971.40	97.05	57.67	110.08	101.82	52.02	61.42	48.44	50.44	59.65	54.24	96.56	73.15	862.54	-11.21	-108.86
URO	6,258.08	6,268.13	6,362.41	529.46	552.14	591.91	480.95	541.12	651.76	639.71	705.49	653.35	696.51	630.00	729.03	7401.43	16.33	1039.02
VAS	2,738.29	2,286.48	2,475.05	199.35	166.57	181.08	172.36	221.02	192.56	187.19	214.27	222.14	214.13	335.25	235.64	2541.56	2.69	66.51
<b>Total</b>	<b>99233.17</b>	<b>100396.39</b>	<b>103339.08</b>	<b>8898.50</b>	<b>9292.60</b>	<b>9654.96</b>	<b>7845.48</b>	<b>8092.35</b>	<b>9575.68</b>	<b>9256.66</b>	<b>9767.25</b>	<b>8665.15</b>	<b>9409.07</b>	<b>9244.63</b>	<b>9753.42</b>	<b>109455.75</b>		

## 2.2 NHSF Surgical Indicator Report

	Fiscal	Fiscal	Fiscal	Fiscal
<b>NHSF Activity</b>	<b>2008/09</b>	<b>2009/10</b>	<b>2010/11</b>	<b>2011/12</b>
Cataracts	8,498	9,291	12,204	12,947
Non-Cataracts	3,261	3,464	2,331	3,681
Ophthalmology Total	11,759	12,755	14,535	16,628
Oral Maxillofacial Surgery	514	535	761	863
Restorative Dentistry	679	569	409	484
Podiatry	776	764	823	860
Vestibular Testing	155	178	239	229
<b>NHSF Activity</b>	<b>14,799</b>	<b>15,848</b>	<b>17,389</b>	<b>19,064</b>
Kensington Clinic	4,252	4,289	4,667	4,913
<b>Total NHSF Activity</b>	<b>19,051</b>	<b>20,137</b>	<b>22,056</b>	<b>23,977</b>

<b>NHSF Mean Wait Time (Weeks)</b>	<b>2008/09</b>	<b>2009/10</b>	<b>2010/11</b>	<b>2011/12</b>
Cataracts	19	28	31	18
Non-Cataracts	10	11	16	15
Oral Maxillofacial Surgery	6	6	8	8
Restorative Dentistry	10	10	9	9
Podiatry	26	40	38	33
Vestibular Testing	4	8	3	10

<b>NHSF Waiting List</b>	<b>2008/09</b>	<b>2009/10</b>	<b>2010/11</b>	<b>2011/12</b>
Cataracts	6,924	8,500	6,515	5,723
Non-Cataracts	2,208	1,906	2,174	2,077
Ophthalmology Total	9,132	10,406	8,689	7,800
Oral Maxillofacial Surgery	416	180	219	318
Restorative Dentistry	233	416	96	169
Podiatry	1,464	1,099	1,075	1,344
Vestibular Testing	48	34	46	59
<b>Total NHSF Wait List</b>	<b>11,293</b>	<b>12,135</b>	<b>10,125</b>	<b>9,690</b>

## 2.3 Rural Volumes Surgeries Report

\*Information below depicts cumulative statistics from the fiscal year April 2011-March 2012

IP/OP	Surgeon Service	Number of Cases				Percent of Total Cases			
		BMS	CGH	HRH	Total	BMS	CGH	HRH	Total
<b>Inpatient</b>	Gen	0	59	6	65	0.00%	1.10%	0.11%	1.21%
	Gyn	0	85	163	248	0.00%	1.59%	3.04%	4.63%
	Med	44	98	14	156	0.82%	1.83%	0.26%	2.91%
	Obs	0	0	38	38	0.00%	0.00%	0.71%	0.71%
	Ort	794	1	0	795	14.82%	0.02%	0.00%	14.84%
	Pls	342	45	0	387	6.38%	0.84%	0.00%	7.22%
	Uro	0	0	1	1	0.00%	0.00%	0.02%	0.02%
	Vas	0	2	0	2	0.00%	0.04%	0.00%	0.04%
	<b>Total</b>	<b>1180</b>	<b>290</b>	<b>222</b>	<b>1692</b>	<b>22.02%</b>	<b>5.42%</b>	<b>4.14%</b>	<b>31.58%</b>
<b>Outpatient</b>	Gen	0	177	1181	1358	0.00%	3.30%	22.05%	25.35%
	Gyn	0	195	259	454	0.00%	3.64%	4.83%	8.47%
	Med	102	54	46	202	1.90%	1.01%	0.86%	3.77%
	Obs	0	0	46	46	0.00%	0.00%	0.86%	0.86%
	Oph	0	0	89	89	0.00%	0.00%	1.66%	1.66%
	Ort	654	0	0	654	12.21%	0.00%	0.00%	12.21%
	Pls	514	161	0	675	9.59%	3.01%	0.00%	12.60%
	Uro	0	0	41	41	0.00%	0.00%	0.77%	0.77%
	Vas	0	146	0	146	0.00%	2.73%	0.00%	2.73%
	<b>Total</b>	<b>1270</b>	<b>733</b>	<b>1662</b>	<b>3665</b>	<b>23.70%</b>	<b>13.69%</b>	<b>31.03%</b>	<b>68.42%</b>
<b>Total</b>	Gen	0	236	1187	1423	0.00%	4.41%	22.16%	26.56%
	Gyn	0	280	422	702	0.00%	5.23%	7.88%	13.10%
	Med	146	152	60	358	2.73%	2.84%	1.12%	6.69%
	Obs	0	0	84	84	0.00%	0.00%	1.57%	1.57%
	Oph	0	0	89	89	0.00%	0.00%	1.66%	1.66%
	Ort	1448	1	0	1449	27.03%	0.02%	0.00%	27.05%
	Pls	856	206	0	1062	15.98%	3.85%	0.00%	19.83%
	Uro	0	0	42	42	0.00%	0.00%	0.78%	0.78%
	Vas	0	148	0	148	0.00%	2.76%	0.00%	2.76%
<b>Grand Total</b>		<b>2450</b>	<b>1023</b>	<b>1884</b>	<b>5357</b>	<b>45.72%</b>	<b>19.11%</b>	<b>35.17%</b>	<b>100.00%</b>

\*Note

CGH- Canmore General Hospital

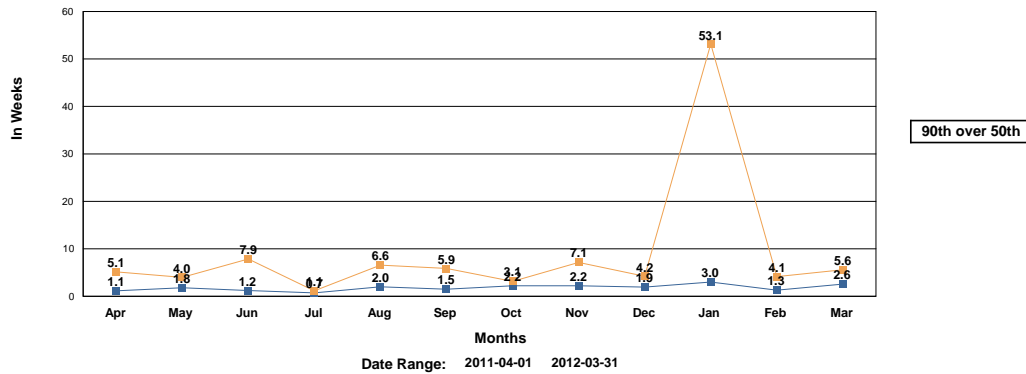
HRH- High River General Hospital

BMS- Banff Mineral Springs Hospital

## 2.4 Wait Time Reports by Procedure Group

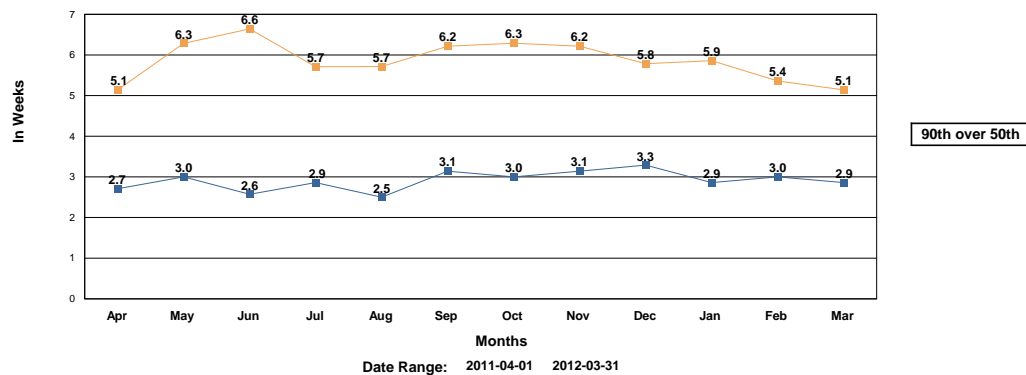
### Ear, Nose, Throat - Otolaryngology Urgent Throat Endoscopy Wait Time

Total Cases: 86  
50th: 1.86 90th: 5.22



### General Surgery Urgent Breast Mastectomy Wait Time

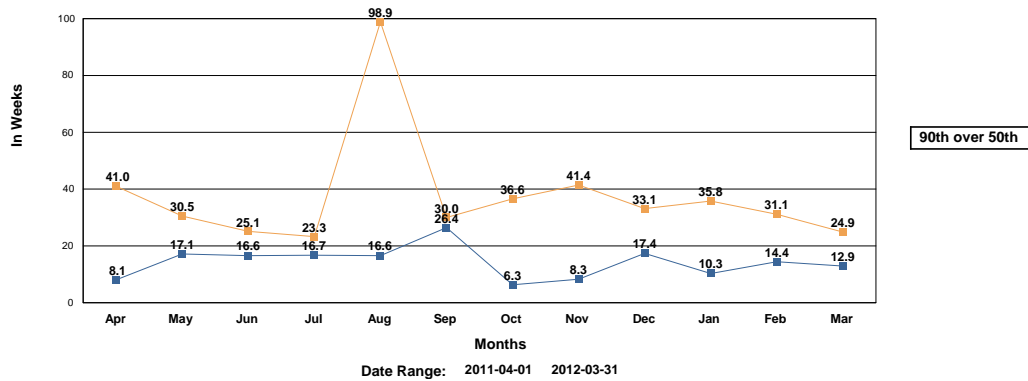
Total Cases: 1011  
50th: 2.86 90th: 5.71



## Neurosurgery/ Orthopaedic Surgery

### Elective Spine Wait Time

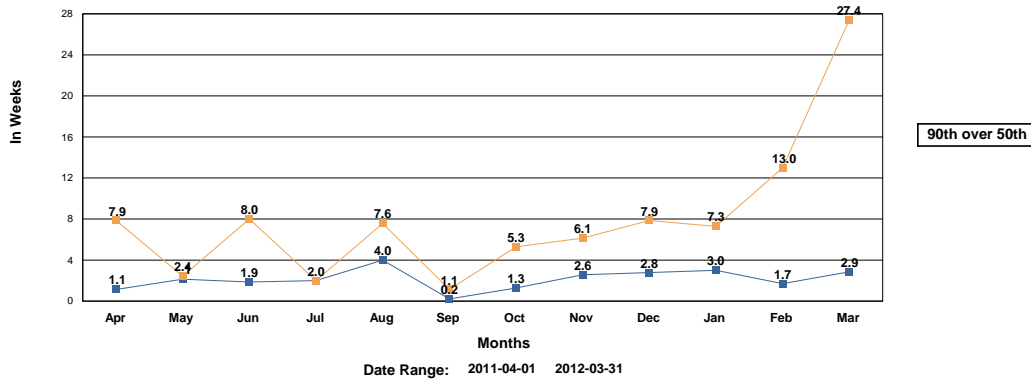
Total Cases: 107  
50th: 14.00 90th: 32.86



## Gynecology/ Obstetrics Surgery

### Urgent Hysterectomy Other Wait Time

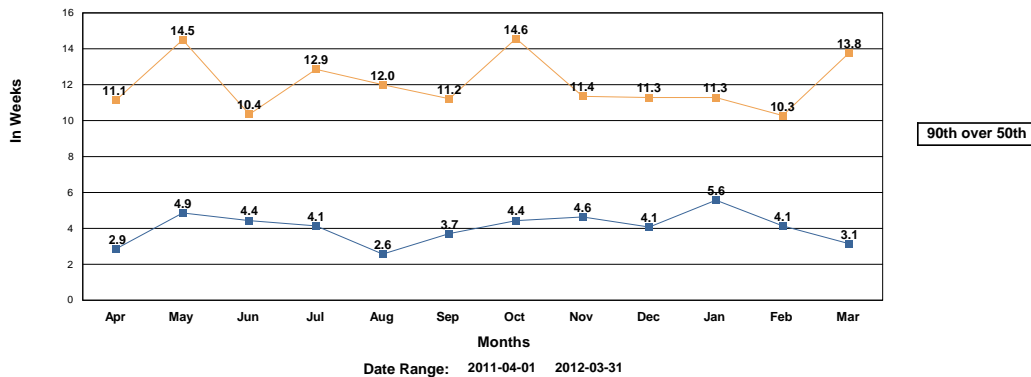
Total Cases: 55  
50th: 2.00 90th: 7.93



## Ophthalmology

### Elective Eye Retinal/ Choroid/ Vitreous Wait Time

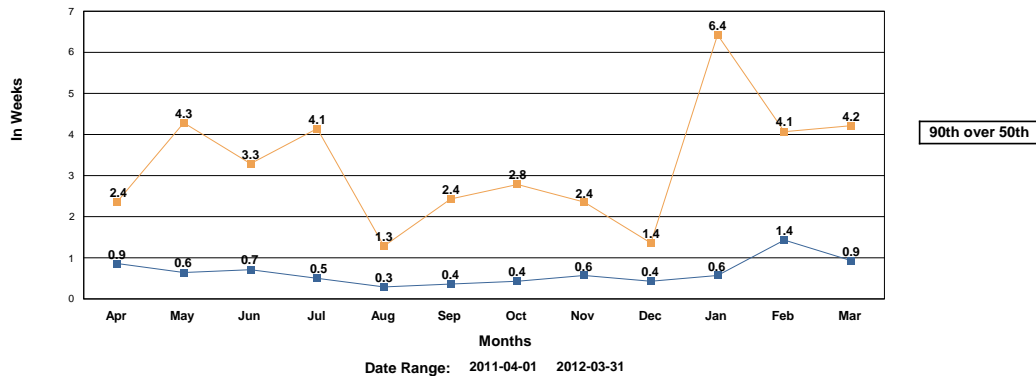
Total Cases: 633  
50th: 4.14 90th: 11.57



## Ophthalmology

## Urgent Eye Retinal/ Choroid/ Vitreous Wait Time

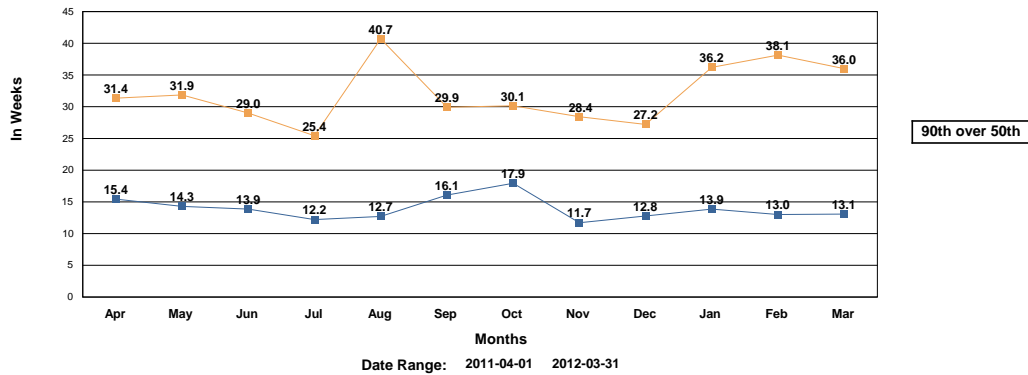
Total Cases: 388  
 50th: 0.71 90th: 3.36



## Orthopaedic Surgery

### Elective Hip Arthroplasty Wait Time

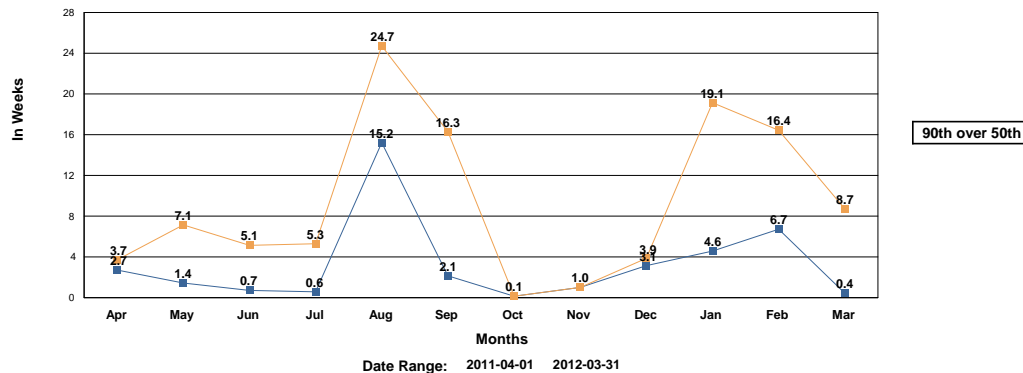
Total Cases: 1301  
 50th: 14.00 90th: 30.64  
 Elective Target Wait Time: 27 weeks



## Orthopaedic Surgery

### Urgent Hip Arthroplasty Wait Time

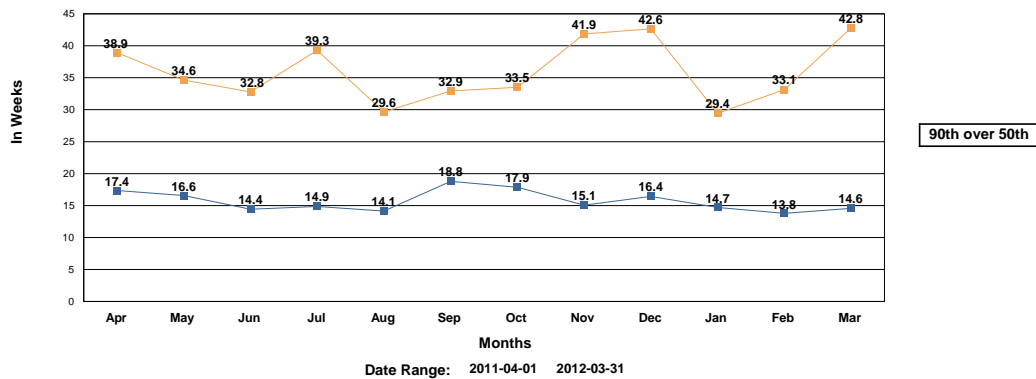
Total Cases: 52  
 50th: 1.72 90th: 13.15  
 Elective Target Wait Time: 27 weeks



## Orthopaedic Surgery

### Elective Knee Arthroplasty Wait Time

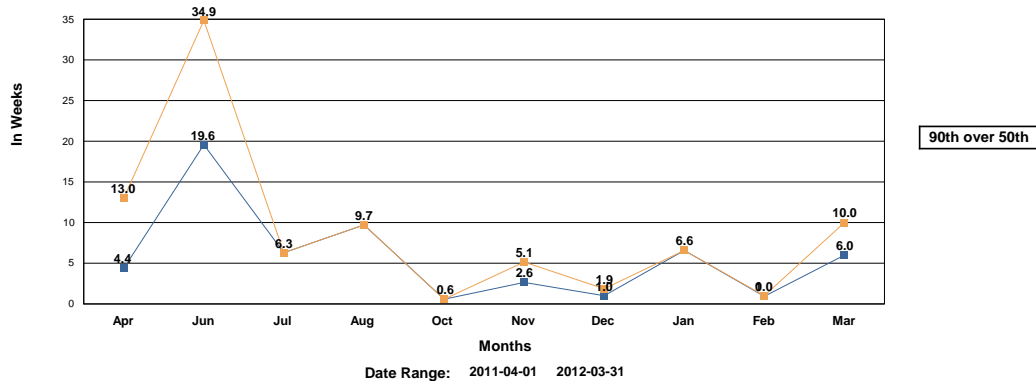
Total Cases: 1789  
 50th: 15.71 90th: 34.86  
 Elective Target Wait Time: 35 weeks



## Orthopaedic Surgery

### Urgent Knee Arthroplasty Wait Time

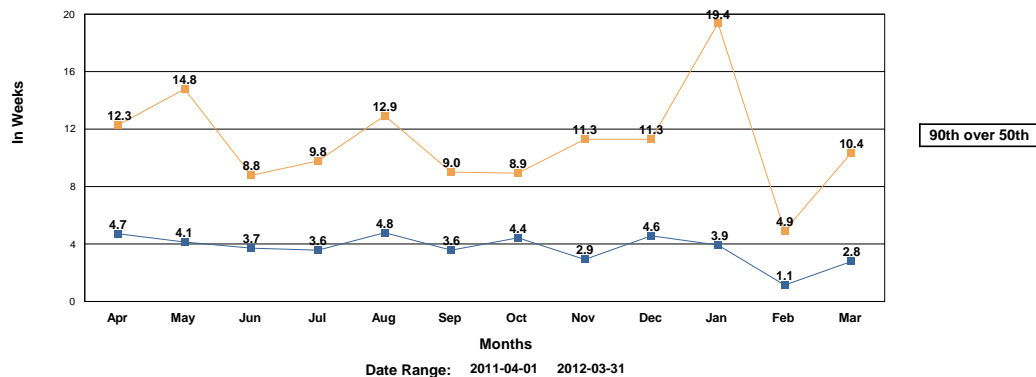
Total Cases: 19  
 50th: 4.29 90th: 13.00  
 Elective Target Wait Time: 35 weeks



## Thoracic Surgery

### Urgent Lung Wait Time

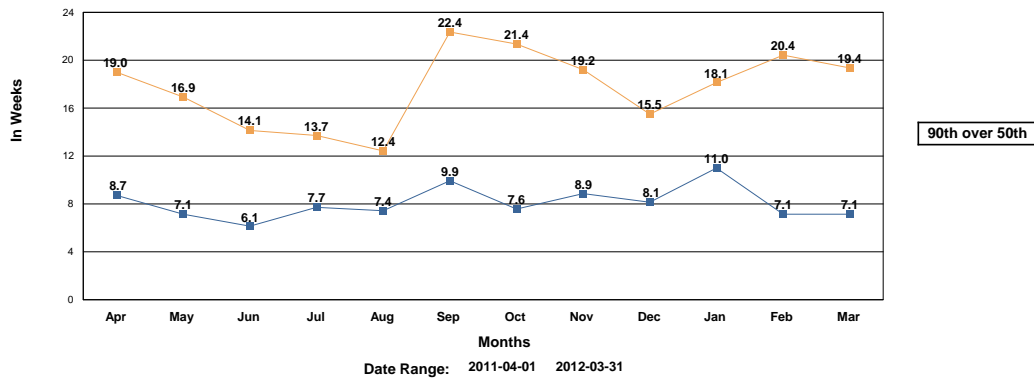
Total Cases: 239  
 50th: 3.14 90th: 9.57



## Urology

### Elective Prostate Other Wait Time

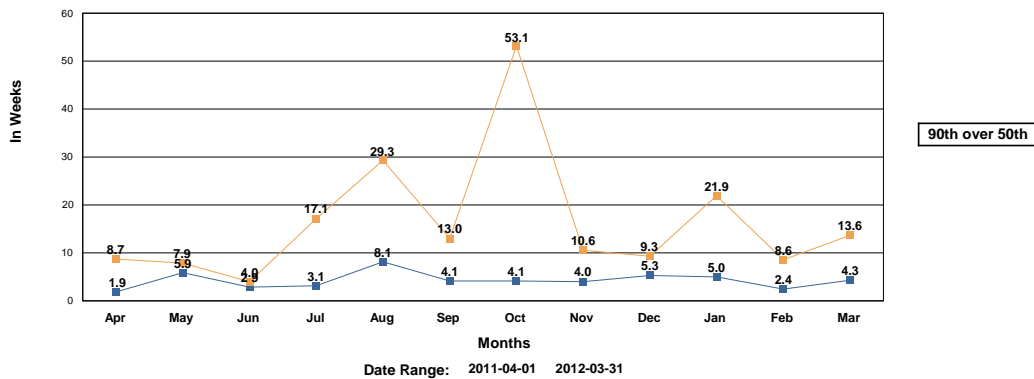
Total Cases: 502  
50th: 8.00 90th: 18.00



## Urology

### Urgent Prostate Other Wait Time

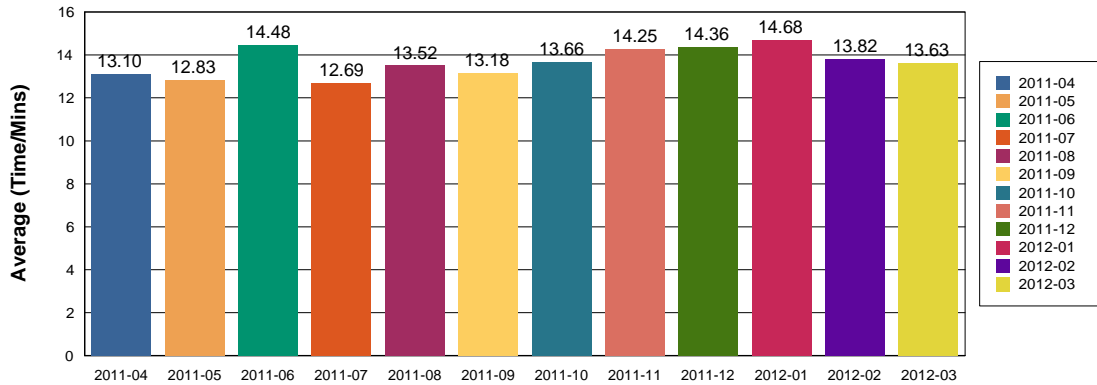
Total Cases: 105  
50th: 4.14 90th: 10.72



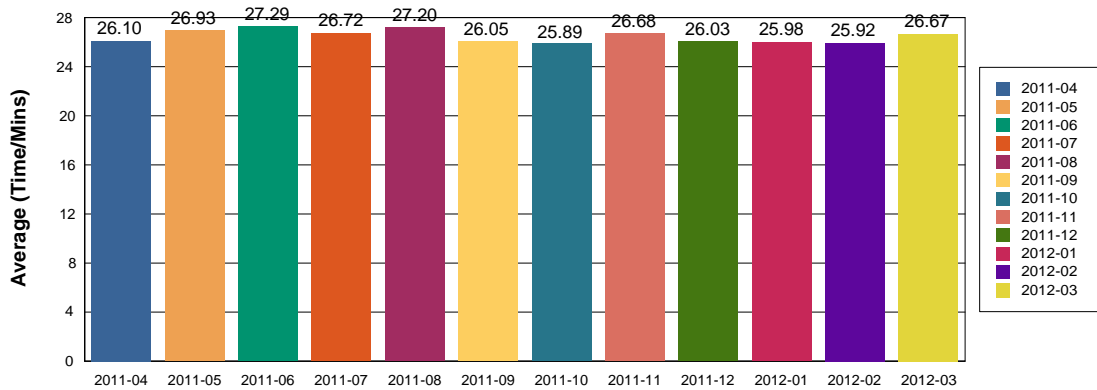
## 2.4 Average Patient Turnover

### Surgical Statistical Activity by Facility

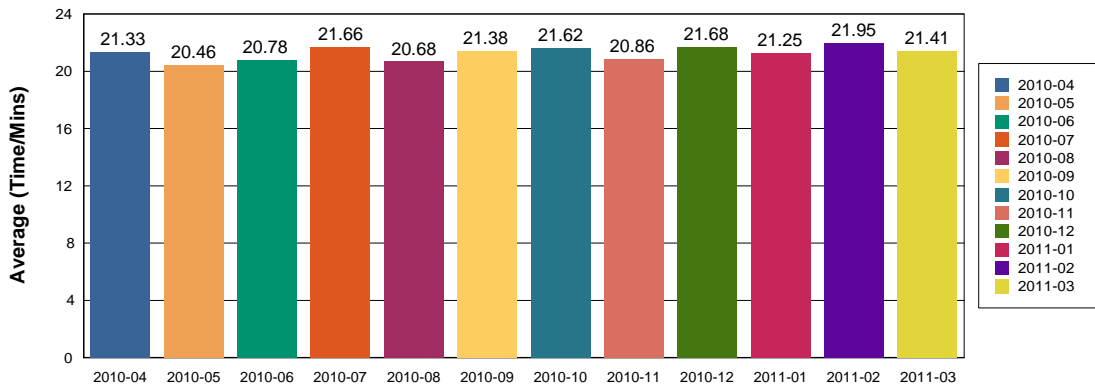
ACH



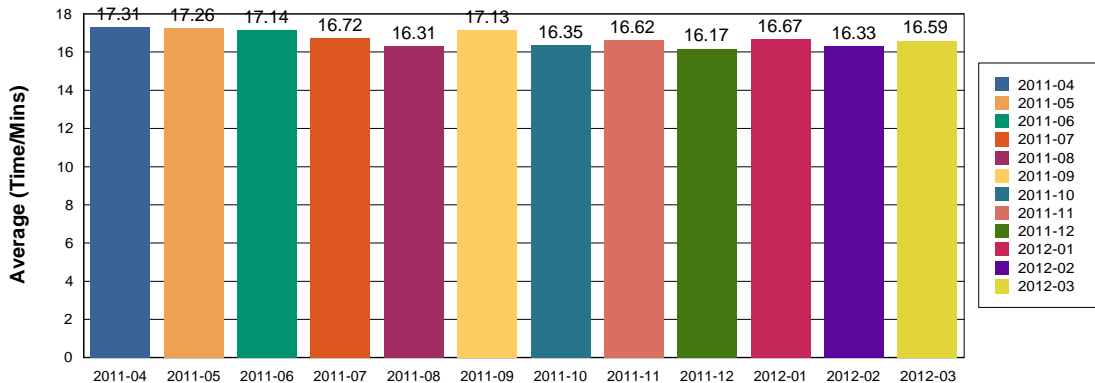
FMC



PLC



RGH



## 3.0 Research from Within the Department

### 3.1 Peer-reviewed Journal Articles

#### SECTION OF GENERAL SURGERY

1. **Poulin P., Austen L.,** Scott C.M., Poulin M., Gall N., Seidel J., **Lafrenière R.** Introduction of New Technologies and Decision-Making Processes: A Framework to Review and Adapt a "Local Health Technology Decision-Support Program" for Other Local Settings. *Surgical Innovation*. 2012 (in Press)
2. **Poulin P., Austen L., Kortbeek J., and Lafrenière R.** New Technologies and Surgical Innovation: Five Years of a Local Health Technology Assessment Program in a Surgical Department. *Surgical Innovation*. Published online 26 September 2011. Published in print in Volume 19 Issue 2 June 2012 pp. 183 – 195
3. **Ball CG; Maclean AR; Dixon E; Quan ML; Nicholson L; Kirkpatrick AW; Sutherland FR** (2012) Acute care surgery: the impact of an acute care surgery service on assessment, flow, and disposition in the emergency department. *Am J Surg* 203(5):578-83
4. Ouellet JF; **Ball CG; Kortbeek JB; Mack LA; Kirkpatrick AW** (2012) Bioprosthetic mesh use for the problematic thoracoabdominal wall: outcomes in relation to contamination and infection. *Am J Surg* 203(5):594-7
5. **Ball CG; Kirkpatrick AW;** Williams DR; Jones JA; Polk JD; Vanderploeg JM; Talamini MA; Campbell MR; Broderick TJ (2012) Prophylactic surgery prior to extended-duration space flight: Is the benefit worth the risk? *Can J Surg* 55(2):125-31
6. **Ball CG; Roberts DJ; Kirkpatrick AW; Feliciano DV; Kortbeek JB; Datta I; Laupland KB; Brar M**(2012). Can cervical spine computed tomography assist in detecting occult pneumothoraces? *Injury* 43(1):51-4
7. Grendar J; Shaheen AA; Myers RP; Parker R; Vollmer CM; **Ball CG; Quan ML; Kaplan GG; Al-Manasra T; Dixon E** (2012). Predicting in-hospital mortality in patients undergoing complex gastrointestinal surgery: determining the optimal risk adjustment method. *Arch Surg* 147(2):126-35
8. Clancy AA; Tiruta C; Ashman D; **Ball CG; Kirkpatrick AW** (2012) The song remains the same although the instruments are changing: complications following selective non-operative management of blunt spleen trauma: a retrospective review of patients at a level I trauma centre from 1996 to 2007 *J Trauma Manag Outcomes* 6(1):4
9. Chauhan A; House MG; Pitt HA; Nakeeb A; Howard TJ; Zyromski NJ; Schmidt CM; **Ball CG; Lillemoe KD** (2011) Post-operative morbidity results in decreased long-term survival after resection for hilar cholangiocarcinoma. *HPB (Oxford)* 13(2):139-47
10. Ouellet JF; **Ball CG** (2011) Recurrent abdominal compartment syndrome induced by high negative pressure abdominal closure dressing. *J Trauma* 71(3):785-6
11. **Datta I; Ball CG;** Cox H; **Pasieka JL** (2011) Computed tomography target sign: a case of mistaken intussusception. *Indian J Surg* 73(1):76-7
12. McBeth PB; Keaney M; **Ball CG;** Saary J; Broderick TJ; Kock MV; **Kirkpatrick AW** (2011) Aeromobile modular critical care, resuscitation, and surgical suites for operational medicine. *J Trauma* 71(5 Suppl 1):S494-500
13. Roberts DJ; **Ball CG;** Tiruta C; **Kirkpatrick AW**(2011) Image of the month. Tension occult pneumothorax. *Arch Surg* 146(10):1211-2
14. **Ball CG; Kirkpatrick AW;** D'Amours SK(2011) The RAPTOR: Resuscitation with angiography, percutaneous techniques and operative repair. Transforming the discipline of trauma surgery. *Can J Surg* 54(5):E3-4
15. **Ball CG;** House MG; Lillemoe KD (2011) Image of the month--quiz case. Isolated common hepatic duct injury with anomalous right hepatic duct anatomy. *Arch Surg* 146(8):989-90
16. **Ball CG**(2011) The R.A.P.T.O.R. suite: resuscitation with angiography, percutaneous techniques, and operative repair. *J Trauma* 70(6):1579-80
17. **Ball CG;** Salomone JP; Shaz B; Dente CJ; Tallah C; Anderson K; Rozycki GS; Feliciano DV (2011) Uncrossmatched blood transfusions for trauma patients in the emergency department: incidence, outcomes and recommendations. *Can J Surg* 54(2):111-5
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19. Chauhan A; House MG; Pitt HA; Nakeeb A; Howard TJ; Zyromski NJ; Schmidt CM; **Ball CG;** Lillemoe KD (2011) Post-operative morbidity results in decreased long-term survival after resection for hilar cholangiocarcinoma. *HPB (Oxford)* 13(2):139-47
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22. Ouellet JF, **Ball C.G.,** Panebianco NL & **Kirkpatrick AW** (2011). The sonographic diagnosis of pneumothorax. *Journal of Emergencies, Trauma*

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23. Andrews CN; Mintchev P; Neshev E; Fraser HF; Storr M; **Bathe OF**; Urbanski SJ(2011) Percutaneous endoscopically assisted transenteric full-thickness gastric biopsy: initial experience in humans. *Gastrointest Endosc* 73(5):949-54
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  25. Kharchenko SV, **Ball C.G.**, **Dixon E** & **Sutherland FR**. A giant non-parasitic liver cyst: a case report and technique of laparoscopic fenestration. *Ukrainian Journal of Surgery*, In-Press, 2011.
  26. Biegler N, McBeth PM, Tiruta C, **Ball C.G.** & **Kirkpatrick AW**. Management of incidental findings in the trauma patient: trauma services provided primary care. *Journal of Trauma Nursing*, In-Press, 2011
  27. McBeth PB, Hamilton T, Musselwhite K, Panebianco P, Melnick L, Dulchavsky SD, **Ball C.G.**, Gargani L & **Kirkpatrick AW**. Simple, almost anywhere, with almost anyone: Remote low-cost telementored resuscitative lung sonography conducted wherever there is internet access. *Journal of Trauma*, In-Press, 2011
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  31. **Bathe OF**; Shaykhtudinov R; Kopciuk K; Weljie AM; McKay A; **Sutherland FR**; **Dixon E**; Dunse N; Sotiropoulos D; Vogel HJ(2011)Feasibility of identifying pancreatic cancer based on serum metabolomics. *Cancer Epidemiol Biomarkers Prev* 20(1):140-7
  32. Andrews CN, Mintchev P, Neshev E, Fraser HF, Storr M, **Bathe OF**, Urbanski SJ (2011). Percutaneous endoscopically assisted transenteric full-thickness gastric biopsy: initial experience in humans.Citation: *J Surg Oncol*. 103(5): (451-9)
  33. Garland SN, Pelletier G, Lawe A, Biagioni BJ, Easaw J, Eliasziw M, Cella D, **Bathe OF** (2011) Prospective evaluation of the reliability, validity, and minimally important difference of the functional assessment of cancer therapy-gastric (FACT-Ga) quality-of-life instrument. *Cancer* 117(6) : ( 1302-12)
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50. Dupre MP; **Dixon E**; Heitman SJ (2011) Primary pancreatic lymphoma: a rare cause of massive upper gastrointestinal hemorrhage. *Can J Gastroenterol* 25(10):532-3
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55. **Dixon E**; Cheadle WG; Khadaroo RG (2011) Preventing postoperative surgical site infection. *J Am Coll Surg* 212(3):418-20
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58. **Harvey A**; Hu M; Gupta M; Butler R; Mitchell J; Berber E; Siperstein A; Milas M (2012) A new, vitamin d-based, multidimensional nomogram for the diagnosis of primary hyperparathyroidism. *Endocr Pract* 18(2):124-31
59. **Harvey A**; Bandiera G; Nathens AB; Le Blanc VR (2012) Impact of stress on resident performance in simulated trauma scenarios. *J Trauma Acute Care Surg* 72(2):497-503
60. **Harvey A**; Rosenbaum P; Hanna S; Yousefi-Nooraie R; Graham KH (2012) Longitudinal changes in mobility following single-event multilevel surgery in ambulatory children with cerebral palsy. *J Rehabil Med* 44(2):137-43
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64. Varughese AM; **Hagerman N**; Patino M; Wittkugel E; Schnell B; Salisbury S; Kurth D (2012) A comparison of inhalational inductions for children in the operating room vs the induction room. *Paediatr Anaesth* 22(4):327-34
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67. Stelfox HT; Khandwala F; **Kirkpatrick AW**; Santana MJ (2012) Trauma center volume and quality improvement programs. *J Trauma Acute Care Surg* 72(4):962-8
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81. Ouellet JF; **Ball CG**; **Kortbeek JB**; **Mack LA**; **Kirkpatrick AW** (2012)Bioprosthetic mesh use for the problematic horacoabdominal wall: outcomes in relation to contamination and infection *Am J Surg* 203(5):594-7
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86. **Barabas AZ**; Cole CD; Sensen M; **Lafreniere R** (2012) Production of heterologous IgG antibody against Heymann nephritis antigen by injections of immune complexes. *Int J Exp Pathol* 93(1): 11-7
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90. **Lewkonja P**; Medlicott SA; **Hildebrand KA** (2012) Intramuscular myxoid lipoma in the proximal forearm presenting as an olecranon mass with superficial radial nerve palsy: a case report. *J Med Case Rep* 5:321
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