

# DEPARTMENT OF SURGERY ANNUAL REPORT 2009

FOR THE PERIOD: APRIL 1, 2009 TO MARCH 31, 2010



*TOGETHER, LEADING AND CREATING EXCELLENCE IN SURGICAL CARE*



**Report Designed, Compiled and Edited** by Katie Fisher and Marie McEachern.

**Content and Photographs Provided** by Katie Fisher, Marie McEachern and numerous Department Members.

**We Wish to Thank** all the Surgeons, Administrators and other team members, whose tremendous efforts made this report possible.

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# A MESSAGE FROM THE HEAD OF THE DEPARTMENT

The 2009–2010 year was a year of rapid change. It saw the completion of a 3-year cycle of budgetary cuts and renewed optimism with a commitment by the Government to reinvest in health care as well as the pending completion of much needed infrastructure. Alberta Health Services continues to evolve and surgical access has been prioritized as part of the strategic plan.

In order to facilitate standardization and evidence-based strategic planning, the organization has created several important groups. These are the surgical networks, one has been designated for Surgery and one for Bone and Joint. These are tasked with establishing common reporting to support strategic planning and prioritization, program redesign and improvement. The Alberta Clinician's Council provides a venue for practicing clinicians, including surgeons, to review the priorities of the networks and Alberta Health Services. Although these programs are in their infancy, much work has been done and these provide renewed optimism for the future.

The Department's strength remains in its people and once again, we are pleased to highlight some of the many achievements of our faculty in this year's report as well as in the Alumni Newsletter. Achievements in Education include the successful accreditation of our many residency programs, the full implementation of the Core Surgical Skills Program and a commitment by the faculty to develop a simulation centre. The leadership of Dr. Norm Schachar in the Office of Surgical Education along with Dr. Buckley, Chair Post-Graduate Surgical Training, Dr. Graham, UME for Program Directors, and Ms. Anita Jenkins are greatly appreciated.

The Department Retreat focused on Surgical Research and achieved consensus in three important domains:

1. Alignment of research focused recruits with the University of Calgary Institutes
2. Development of a mentorship program which will be introduced in the fall of 2010 and will be led by **Dr. Duncan Nickerson**
3. Development of a business model to expand and improve access for statistical support, methodology reviews, paper writing and grant application activities.

On the international front, the Office of International Surgery led by **Dr. Gwen Hollaar** hosted the prestigious Bethune Round Table which featured visiting surgeons from across the developing world. This was certainly a highlight of the academic year. The academic and social



Dr. John Kortbeek, Regional Head of the Department of Surgery since 2006.

programs were both vigorous and entertaining. A number of collaborates were strengthened or developed through these interactions.

Finally, 2010 will see the opening of the long awaited McCaig Tower which will provide a specialty focus for Bone and Joint surgery and support much needed expansion in surgical activity in the city of Calgary. This will be followed within the next several years by the opening of the South Health Campus. Both will alleviate the rising access pressures and support further recruitment to continue to build our incredible Department.

Sincerely,

John B. Kortbeek  
 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

## Surgical Executive Team Members as of March 31, 2010

**Dr. John Kortbeek**, Department Head

**Dr. JN Armstrong**, Department Head, Anesthesia

**Ms. Michele Austad**, Regional Manager, Department of Anesthesia

**Dr. Lea Austen**, Physician Leader, Health Technology and Innovation

**Ms. Christine Bourgeois**, Administrative Assistant to Dr. Kortbeek

**Ms. Denise Brind**, Acting Director, Surgery, FMC

**Dr. John Dushinski**, Division Chief, Urology and Site Chief, RGH

**Ms. Margaret Fullerton**, Director, ACH

**Dr. Gary Gelfand**, Division Chief, Thoracic Surgery



**Dr. David Halpenny**, Chair, PLC OR Committee

**Dr. A. Robertson Harrop**, Director, Office of Surgical Research

**Dr. Brent Haverstock**, Division Chief, Podiatry

**Dr. Mark Heard**, Representative, Rural Health

**Dr. Kevin Hildebrand**, Division Chief, Orthopedics

**Dr. Richard Hu**, Site Chief, FMC

**Dr. William Hyndman**, Division Chief, Pediatrics and Site Chief, ACH

**Dr. Eduardo Kalaydjian**, Division Chief, Dentistry and Oral Health

**Dr. William Kidd**, Representative, Cardiac Sciences

**Dr. Andrew Kirkpatrick**, Regional Medical Director, Trauma Services

**Dr. Beth Lange**, Physician Leader, Quality and Safety

**Dr. Robert Lindsay**, Division Chief, Plastic Surgery

**Dr. Wayne Matthews**, Division Chief, Otolaryngology

**Ms. Marie McEachern**, Regional Manager, Department of Surgery

**Dr. Raj Midha**, Representative, Clinical Neurosciences

**Dr. James Nixon**, Site Chief, PLC

**Dr. Paul Petrasek**, Division Chief, Vascular Surgery

**Ms. Lynda Phelan**, Communications

**Ms. Susan Reader**, Senior Manager, ACH, Pediatric Surgery

**Dr. Ken Romanchuk**, Division Chief, Ophthalmology



**Dr. Norm Schachar**, Director, Office of Surgical Education

**Ms. Marg Semel**, Director, Surgery, PLC

**Dr. David Sigalet**, Deputy Head

**Ms. Janice Stewart**, Director, Surgery, RGH

**Dr. Francis Sutherland**, Division Chief, General Surgery

**Ms. Shawna Syverson**, Acting Vice President, FMC

**Dr. Walley Temple**, Division Chief, Surgical Oncology

**Dr. Brian Whitestone**, Division Chief, Oral Maxillofacial Surgery

**Dr. Doug Wilson**, Department Head, Obstetrics and Gynecology

**Dr. Serdar Yilmaz**, Division Chief, Transplant

**T**he Department of Surgery, Alberta Health Services, in the Calgary zone, is among the largest Surgical Departments in North America.

We are a total of 285 members

- 199 Surgeons
- 63 Members in Dentistry & Oral Health
- 12 Members in Oral Maxillo-facial Surgery
- 11 Members in Podiatric Surgery
- 14 Divisions in Total

Each of the 14 Divisions has a Division Chief, all of whom meet with other Department and Zone leaders to form the Surgical Executive Committee. This committee serves to make decisions and 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.



*The Department would like to acknowledge the following promotions and new members which all occurred in the 2009-2010 fiscal year.*

### Promotions

§ **Dr. Jacques Bouchard** in the Division of Orthopedics has been promoted to **Clinical Professor** effective April 2010.

§ **Dr. Kevin Hildebrand** in the Division of Orthopedics has been promoted to **Professor** effective April 2010.

§ **Dr. Andrew Kirkpatrick** in the Division of General Surgery has been promoted to **Professor** effective April 2010.

§ **Dr. Beth Lange** in the Division of Otolaryngology has been promoted to **Clinical Associate Professor** effective April 2010.

§ **Dr. Anastasia Salazar** in the Division of Transplant has been promoted to **Associate Professor** effective April 2010.

§ **Dr. Ganesh Swamy** in the Division of Orthopedics has been promoted to **Clinical Assistant Professor** effective April 2010.

§ **Dr. Gail Thornton** in the Division of Orthopaedics and Engineering has been promoted to **Associate Professor** effective April 2010.

§ **Dr. Jason Werle** in the Division of Orthopedics has been promoted to **Clinical Associate Professor** effective April 2010.

## New Faculty

§ **Dr. Shamir Chandarana** joined the Division of Otolaryngology in August 2010.

§ **Dr. Fabio Ferri-de-Barros** joined the Divisions of Pediatric Surgery and Orthopaedics in January 2010.

§ **Dr. Mark Hardy** joined the Divisions of General Surgery and Surgical Oncology in March 2010.

§ **Dr. Jun Kawakami** joined the Division of Urology in August 2009.

§ **Dr. Mark Nutley** joined the Division of Vascular Surgery in November 2009.

## Appointments

§ **Dr. Simon Goldstein** has been appointed Program Director for the Orthopaedic residency program, effective July 2009. We wish to acknowledge and thank Dr. Jacques Bouchard who has completed his term as Program Director.

§ **Dr. C. David McKenzie** has been appointed Program Director for the Plastic Surgery residency program, effective July 2009. We wish to acknowledge and thank Dr. Earl Campbell who has completed his term as Program Director

*Congratulations and Thank you for your hard work and contributions!*



# FROM THE OFFICE OF SURGICAL EDUCATION



Photo: Katie Fisher/2010

Dr. Norm Schachar, Director of OSE

The Office of Surgical Education (OSE) is structured to assist with undergraduate medical education, post graduate education, fellowships and traineeships, and to oversee continuing medical education / professional development. The Office of Surgical Education is central for all of the educational undertakings in the Department of Surgery.

**Dr. Norman Schachar**, Director of the Office of Surgical Education, sits on the University of Calgary (UofC) Undergraduate Medical Education committee (UME) and the Post Graduate Medical Education committee (PGME) at the UofC to represent the Department of Surgery. Dr. Schachar chairs a committee of the Fellowship Directors and conveys the information to PGME.

## Undergraduate Medical Education

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

## Surgery Clerkship

**Dr. John Graham** is the Course Chair of the Surgery Clerkship for the Department of Surgery and chairs the Surgical Undergraduate Education Committee (SUGEC). **Dr. Ian Anderson** served as the Evaluation Coordinator until November 2009 when **Dr. Adrian Harvey** accepted the position.

**Ms. Anita Jenkins** is the Education Coordinator for the surgery clerkship program in the Department of Surgery. The edu-

cational representatives, from each of the participating divisions, sit on the Surgical Undergraduate Education Committee (SUG-EC). The mandate of this committee is to revise and improve clerkship experiences in core general surgery, and in all selective specialties, as well as to guide the experiences that each of our clerks has in their surgical rotations. These rotations consist of compulsory surgical experiences in General Surgery and selectives in the other surgical specialties.

The clerkship Class of 2010 has increased to a total of 152 clerks. The Department received 24-26 UofC clerks for each of the six, eight week Surgery/ Anesthesia blocks. The eight week rotation included three weeks in General Surgery, two week assignments in either Orthopaedic or Plastic Surgery, as well as a one week assignment in Anesthesia, and a one week 'selective' assignment in any one of Thoracic Surgery, Vascular Surgery, Neurosurgery or Urologic Surgery. The number of visiting elective clerks also increased with the addition of new surgical residency programs, now averaging 10 - 30 clerks per month.

The electronic E-log was required to track clerk experiences during the clerkship, and the formative exam was changed to an on line examination. Surgery takes part in the cumulative year three OSCE which was implemented for most clerkships. We have a continuing role in representing the Department in discussions related to the increase in class size, changes to year one and two curriculum and to the clerkship program.

## Post Graduate Medical Education

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

PGSTC guides and hosts the core educational activities such as CanMEDS sessions, Critical Thinking and Principles of Surgery teaching sessions; which take place within the first part of all academic half days. The Teaching Methods in Surgery (TIMS) course is also offered to senior residents and fellows.

The PGSTC assisted the surgical residency programs to prepare for the on-site surveys which were conducted by the Royal College of Physicians and Surgeons to accredit the post graduate residency education programs at the UofC. Programs were successfully reviewed as follows:

- The Dental program completed an external review from the Commission of Dental Accreditation.
- The Otolaryngology program had a successful internal review.

- The Ophthalmology program had a successful internal review.
- The Vascular surgery program was approved for a five year program by the RCPSC.

## Surgery Residency Programs

There are surgery residency programs in Colorectal Surgery, General Surgery, General Surgical Oncology, Ophthalmology, Orthopaedic Surgery, Otolaryngology, Plastic Surgery, Thoracic Surgery, Vascular Surgery and Pediatric General Surgery.

**Fellowships:** The OSE manages the ongoing accreditation and approval of Surgery Fellowships within the teaching divisions. The number of divisions with accredited Fellowships is four, with the number of Fellows (17) as follows:

- Orthopedics 12
- General Surgery 1
- Ophthalmology 3
- Surgical Oncology 1

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

**Dr. Paul Petrasek** is the Department of Surgery representative on the UofC Continuing Medical Education Committee. He coordinates activities and informs the various divisions about opportunities for continuing professional development. The committee meets monthly and consists of CME representatives from every department in the medical school and the health region. There are plans underway to create a Department of Surgery CME committee that will host all of the various CME representatives from each division to improve and enhance CME for surgical specialists.

Dr. Petrasek represents the Department of Surgery on the UofC's CME / CPD committee, 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 divisions and departments in the faculty and external educational offerings.

There is collaboration with **Dr. Paule Poulin**, in the teaching of Health Technology Assessment (HTA) to assist physicians with decision making for introduction of new health technologies into clinical practice.

## Challenges

**Clerkship:** The reduction in clerkship weeks by one over the past year has presented challenges with decreased clinical exposure, in relation to the high number of clinical presentations to be reviewed during the surgery clerkship. The complexity of the surgery clerkship continues to increase, as it is combined with Anesthesia for clinical time, seminar time, as well as the summative exam. The formative assessment for each clerkship block exists as an online exam. The incoming Class of 2011 surgery clerkship format has been reduced to six weeks by UMEC.

**Post-Graduate:** The absence of dedicated lab space for a clinical skills lab continues as a constraint for the ongoing development of the surgical skills curriculum, as adequate and ongoing practice time is recommended for a surgical skills curriculum.

**Fellowships:** The increasing demand for advanced clinical training experiences puts pressure on our clinical faculty and threatens competition for our clinical teaching resources.

## Future Directions

It will be important to increase faculty interest in teaching with adequate development for faculty and residents who wish to enhance teaching skills. We plan to develop more meaningful feedback systems and recognition for faculty teachers. Teacher training workshops are currently available within the Faculty, however, matching these with Faculty needs is a challenge due to time constraints and clinical obligations.

PROGRAM	PHYSICIAN CHAIR	FUNCTION
UGME/SUGEC	Dr. John Graham  Dr. Norman Schachar  Dr. Adrian Harvey	Course Chair of the Surgery Clerkship and chairs SUGEC. The division representatives of the Undergraduate Clerkship sit on the Surgical Undergraduate Education Committee (SUGEC). Sits on the University of Calgary (UofC) UMEC, and the UofC Clerkship Committee. SUGEC Evaluation Coordinator
PGME/PGSTC	Dr. Rick Buckley	Chairs the Post Graduate Committee and sits on PGME, UofC to represent the Department of Surgery.
Fellowships/Traineeships	Dr. Norman Schachar	Conveys information to the Associate Dean, PGME.
CME/CPD	Dr. Paul Petrasek	Represents the Department of Surgery on UofC CME/CPD committee, chaired by Associate Dean CME/CPD.

# FROM THE OFFICE OF SURGICAL RESEARCH

## Function and Purpose

The purpose and function of the Office of Surgical Research (OSR) is to enable research excellence among members of the Department of Surgery for the benefit of patients. Roles of the OSR include: Supporting and fostering surgical research and an evidence-based introduction of new technology for the Department of Surgery; Provision of methodological and statistical research consultation services; Guidance on how to access research resources and assistance in completing research grant submissions.

Coordinate of the Department of Surgery Research Coordinator Interest Group (SRCIG) provides; Assistance in formulating research policy, direction, goals and priorities within the Department of Surgery in consultation with the Research and Surgical Executive Committees; Administration of the Surgeon Scientist Program (SSP); Administration of the Department of Surgery Prizes for Research and Education; Awarding of research grants from the Calgary Surgical Research Development Fund; Planning and execution of the annual Surgeons' Day Research Symposium and Dinner.

## Accomplishments and Highlights

Founded in 2008, the Department of Surgery Research Coordinator Interest Group (SRCIG) has grown from 5 - 20 members, and has hosted numerous informative presentations on topics of research interest (e.g., ethics, legal services, privacy office and biostatistics). The group is presently involved in the preparation of a manual on how to conduct research and foster research networking and collaboration both within and outside the Department of Surgery.

On April 8-9, 2010, 51 members of the Department and guests participated in a research-focused retreat at the Banff Centre. See the story on page 19.

The Annual Surgeons' Day Research Symposium is organized by the OSR and supported by the entire Department of Surgery. Resident and fellow research with both podium and poster presentations were followed in the evening with a gala dinner and awards presentation. See the story on page 24.

There were several people who served in various capacities, who made our 28th Annual Research Day a success. We wish to acknowledge and thank the following:

- Judges: **Dr. James Wright** and **Dr. David Sigalet**
- Sessional Chairs: **Dr. Rick Buckley** (Division of Orthopaedic Surgery), **Dr. Earl Campbell Paul Duffy** (Division of Plastic Surgery), **Dr. Tony MacLean** (Division of General Surgery), and **Dr. Andrew Graham** (Division of Thoracic Surgery)

The Surgeons' Day Gala Awards Dinner was attended by 240 members. Numerous accomplishments within the Department of Surgery were acknowledged. We thank **Dr. Norman Schachar**,



Photos: Katie Fisher/2010

From Left, **Dr. Robertson Harrop**, Director of OSR and **Dr. Elizabeth Oddone Paolucci**, Assistant Director of OSR.

**Dr. Sigalet**, **Dr. Peter Huang** and **Dr. Kevin Hildebrand**, respectively, for introducing and presenting the Distinguished Services Awards. We would also like to thank **Dr. Scott Walen**, **Dr. Michelle Riordon** and **Dr. Lea Austen** for presenting the Educator of the Year, Ectopic Educator of the Year and the Surgical Innovation Awards. The resident research awards from the day symposium were also presented, and award selection criteria were based on abstract, manuscript, and presentation. For award winners, please see page 24.

## Internal Department of Surgery Research Grants

The Calgary Surgical Research Development Fund generates revenues through the Annual Department of Surgery Golf Tournament. The funds are used to support new research projects within the Department of Surgery. In the 2009 - 2010 funding year, six research projects across all divisions were supported:

- **Dr. Scott Cassie**, "Laparoscopic Cholecystectomy for Acute Calculous Cholecystitis: How Urgent is 'Urgent'?"
- **Dr. Chris Doherty**, "Significant Wound Dehiscence Following CABG Open Sternotomy."
- **Kate Elzinga** (medical student), "The Effects of Call and Call Scheduling on General Surgeons' and General Surgery Residents' Perceived Quality of Life."
- **Dr. Kimberly Sass** and **Dr. Paul McBeth**, "Retrospective Analysis of Fluid Resuscitation in Moderate to Severe Adult Burn Patients."
- **Dr. Rachel Schachar** and **Dr. Christina Bakir**, "Sensitivity and Specificity of Clinical Tests for Long Head Biceps Pathology."

- **Dr. Prism Schneider**, “A Randomized Clinical Trial Comparing Open Reduction and Internal Fixation with Non-operative Treatment of Isolated Ulnar Diaphyseal Fractures.”

Congratulations to all awardees and best wishes for the successful completion of your research. The next call for submissions will be in the fall, with the application deadline set for January 30, 2011.

**Medicine:** Surgery Research Development Fund Grants. This new award established jointly by the Departments of Medicine and Surgery awards two grants (up to \$12,500 each) each year. This year two research teams were awarded \$12,500 each; (1) **Dr. Mary Brindle** (Surgery) and **Dr. Irene Mah** (Medicine) for their project entitled: “Effects of educational strategies on cognitive load for teaching medical and surgical procedures,” and (2) **Dr. Don Buie** (Surgery) and **Dr. Kevin Rioux** (Medicine) for their project entitled: “Early microbiological events during post-operative recurrence of Crohn’s disease.” Congratulations to our winners, as well as to those who competed as there were an impressive number of strong applicants.

### Surgeon Scientist Program (SSP).

The SSP is a highly competitive, degree-based program for research training of residents within the Department of Surgery. The program provides the opportunity for residents to develop effective skills to conduct high-quality basic and/or clinical surgical research. Over the years, the SSP has supported a number of highly motivated residents who have successfully completed the program and in turn continued to produce excellent research within the Department of Surgery.

Our 2009 SSP recipients, **Dr. Luke Harmer** (Orthopaedic Surgery) and **Dr. Chris Doherty** (Plastic Surgery), have both enrolled in graduate programs at the Harvard School of Public Health, focused on public health and economics. Congratulations to both of them and we thank them for their hard work and commitment to the development and integration of solid research and clinical practice.

This year **Dr. Janet Edwards** (General Surgery, R3) has been selected for enrolment in the SSP. Dr. Edwards intends to complete a Masters in Public Health with a concentration in Global Health at Harvard University. Her studies are expected to assist her in achieving her long-term goal of developing a sustainable surgical training program in developing countries. Congratulations to Dr. Edwards for receiving this opportunity to further develop her skills as a Surgeon Scientist within the Department of Surgery. Best wishes for your continued success!

### Research and Education Prizes for Faculty

Each year a call for submissions is extended to faculty members of the Department of Surgery for the Department of Surgery Research Prize and the Department of Surgery Education Prize.

The Surgery Prize was designed to help newer faculty members (i.e., within the first five years of their academic careers) establish their research programs and to assist them in developing a track record to in turn enable success in future applications for external funding.

The Education Prize was established for members (regardless of seniority) wishing to pursue further training in a field relevant

to surgical education.

Both Prizes reward excellence, innovation, and the potential for future success and impact on the Department of Surgery.

Although prizes will not necessarily be awarded each year for both areas of endeavour, there is one prize of \$75,000 for Research and one prize of \$25,000 for Education.

In 2009, the Department of Surgery Research Prize was awarded to **Dr. Carmen Brauer** for her proposed research, “Quality Indicators in Pediatric Orthopaedic Surgery.” Dr. Brauer graduated as one of our residents in Orthopaedics in June 2001. Following her residency, she pursued research in the economics of orthopaedic practice in the United Kingdom and then completed a fellowship at Harvard University in the area of cost-utility and cost-effectiveness analysis in Orthopaedic surgery, followed by a second fellowship at the University of British Columbia. Dr. Brauer’s project involves investigating quality indicators in Pediatric Orthopaedics. We wish her continued success in her scientific work.

Dr. Austen was awarded the Surgery Prize for Education, for his proposal on a “Local Health Technology Assessment Decision Support Program.”

### Challenges

The OSR continues to face the challenge of managing demands for services in the face of constrained financial resources. The development and implementation of a new business model for statistical and research support may help overcome this obstacle. It is hoped that this model may help generate some revenue, as well as assist in the identification of individuals able to offer support to the OSR in providing quality and timely services to department members.

### Future Directions and Initiatives

The OSR strives to facilitate the research efforts for those conducting research within the Department of Surgery at the University of Calgary (UofC). The OSR plans to continue to develop and nurture partnerships with key groups at the UofC and within Alberta Health Services to ensure that our research efforts fit into existing targeted research mandates and fit the needs of the population we serve.

We want to ensure that the SSP remains a viable program for our surgical residents. We may need to think of new ways to actively generate revenue for sponsorship necessary to keep this program alive.

# FROM THE OFFICE OF HEALTH TECHNOLOGY & INNOVATION

**H**ealth Technology Assessment (HTA), health technology appraisal, and innovation are important policy tools and effective approaches for addressing Alberta Health Services (AHS) goals of improving the access, quality and sustainability of health care for Albertans. 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 HTA Decision Support Program.

## ADAPTATION OF OUR HTA PROGRAM

This year, the Local HTA Decision Support Program was adapted by the newly formed Province-Wide Health Technology Assessment and Innovation (HTAI) Team, which is part of the Quality and Service Improvement Portfolio at AHS. In addition, HTAI Satellite Committees will be developed to manage requests for new health technologies within each specified clinical area, such as the Surgery Clinical Network (SCN). To this end, the HT&I office is working with the HTAI Province wide Team to develop the Surgery Clinical Network-HTAI Satellite Committee, process and tools for formulating recommendations for (when appropriate) province-wide technologies review and adoption.

The SCN-HTAI Satellite Committee will manage provincial requests for new health technologies, formulate recommendations for technologies adoption and in that way become a broad base for evidence-informed decision making. Members of the Health Technology & Innovation office of the Department of Surgery now also share responsibility on this provincial wide HTAI committee.

## INNOVATION AWARD IN SURGERY

The HT&I office was once again honoured to administer the Department of Surgery "Surgical Innovation Award," to be presented at the annual Surgeons' Day Gala Dinner. This year the award review committee received outstanding nominations by members of the Department and had to make a difficult choice in selecting the award recipient.

It gives us great pleasure to announce that **Dr. Jason Werle** and The Rockyview General Hospital J.O.I.N.T. – Joint Optimization and INcentive Team (RGH –J.O.I.N.T.-Team) including: Dr. Werle, **Sheila Kelly, Linda Makar, Lynn Feasel, Heather Manning, Sarah Quigley, Loretta Dobblesteyn, Brooke Hancock, Art Teppler, Stephen Nicholle, Chris Smith, Arlene Weidner, Tracy Wasylak, Janice Stewart, and Shawna Syverson** from the Division of Orthopaedics Surgery and AHS administrators were the award recipients.

This hard-working, innovative multi-disciplinary team was established at RGH from 2008-2010 to optimize hip and knee arthroplasty care. They have been successful at achieving their goals and deserve appropriate recognition.

The RGH J.O.I.N.T. team tested the concept of using non-monetary incentives (educational opportunities, co-worker recog-



Photos: Katie Fisher/2010  
From Left, Dr. Lea Austen, HT&I Physician Leader and Paule Poulin, PhD, HT&I Scientific Administrator.

...nition, and increased autonomy) for front-line staff to institute an integrated care path and measure progress according to a team-derived "score-card". The scorecard was designed based on the Alberta Health Quality Council's Six measurements of Quality – Efficiency, Safety, Appropriateness, Accessibility, Acceptability, and Effectiveness. Key Performance Indicators (KPI's) were developed by the team and measured at three-month intervals to assess progress. Strategies to improve scores on the KPI scorecard were instituted by front-line staff along the care continuum. This integration resulted in dramatic improvements in patient care.

Results to date include: (1) Average LOS (efficiency measure) declined from 5.5 - 4.4 days (20% improvement) (2) Pre-incision checklist and time out (safety measure) compliance in the OR improved from 60% - 96.1% (3) Patient mobilization on POD#0 (appropriateness measure) improved from 47% - 76% (4) Waiting time for surgery (T0-T2) (accessibility measure) improved from 896 days - 450 days (a 50% improvement). Given the cost of each inpatient bed day in acute care, the reduction in LOS (mean 1.1 days) has already resulted in thousands of dollars of savings available for AHS re-investment or added capacity.

The J.O.I.N.T. project is currently being implemented in the AHS province-wide Bone and Joint Clinical Network. The concept is to establish local J.O.I.N.T. teams, implement the integrated care path, measure KPI's, and improve access, quality and safety in centers across Alberta.

Once again, congratulations to Dr. Werle and the RGH J.O.I.N.T. for their achievements which have led to this recognition by the Department of Surgery members. We encourage everyone to continue to work in creating new ways to improve patient care.

The HTAI Program provides a well defined framework for evaluating health technology requests within our health care service delivery setting and has great potential to optimize patient care as well as health care resource management. To enhance this potential, the HT&I Office recognized that there is a need to further educate members of clinical Departments about the newly adapted

Program.

To this end, the HT&I office applied and received the Department of Surgery Education Prize to develop a peer-reviewed HT&I education program. It will address the critical need for health care providers to become aware and gain a better understanding of processes. Providers will work to integrate a wide variety of evidence

to best support decisions about the adoption of health technologies within a health services delivery setting. The principal objectives of this education program are to engage participants in learning about the HTAI Program and to collect feedback on how the Program can be best utilized to optimize patient care and health resources management when considering new health technologies.

## FROM THE OFFICE OF THE SAFETY OFFICER

**W**ith organizational changes to Quality Assurance and the Safety Committee, both at the provincial and local level, the members of the Department of Surgery continue their commitment to place their patients' safety as their first priority.

The beginning of 2010 found the implementation of the WHO Safe Surgery Checklist, at all Calgary Zone Sites. The intent of the three part checklist is to; Reduce surgical operative misadventure, such as wrong sided surgery; Reduce delays during surgery, such as missing equipment and blood products; Ensure post operative concerns are communicated. The checklist also improves the collaborative, professional working relationship for all members of the surgical team. Although, some services modified the checklist for short, lower risk procedures, the "common sense" aspect of the checklist led to its adoption for Minor Surgical and Non-Hospital Surgical areas, as well as procedures done at the bedside.

Compliance is still not one hundred percent at any of the sites. Modification of the checklist has been done by some divisions to better address their specific needs.

Following the WHO Safe Surgery Checklist's one year of operation, an outcome analysis will be done with the help of Marlene Brandt, the Health Information Analyst of the Department of Data Integration, Measurement and Reporting.

In alignment with the new Alberta Health Services (AHS) structure, a standardized Quality Assurance Committee (QAC) structure that supports safety learning and complies with the legislative requirements of the Alberta Evidence Act (Section 9) was developed and came into effect June 1, 2010.

### Highlights of the Changes at a Local Level

There is a change from a single program based Surgical Services Safety Committee, to four hospital site QA committees. This may create logistic challenges in communicating recommendations from all hospital sites, for review by the Surgical Executive.

The Clinical Safety Leaders can be found in the appendix.

Physicians who feel a safety issue requires a QA review, are encouraged to discuss with either their Department Heads or their site Clinical Safety Leader.

If a QA review is accepted, any recommendations generated by the review will continue to be Specific, Measurable and Assignable.

AHS Complex Review Committees, (Head: Donna MacFarlane) are done for those cases with possible media involvement,



Photo: Provided by Dept. of Surgery  
Dr. Beth Lange, Safety Officer

serious or fatal harm to patient, or if there are multiple Clinical/Program areas, Sites, Zones affected.

The following URL will take the interested reader to the AHS Patient Quality Assurance Committee website which contains all of the QAC resources and templates.

<http://iweb.calgaryhealthregion.ca/programs/qshi/clinical-safety/committees.htm>

### Highlights of the Changes at a Provincial level

Dr. Chris Eagle, Executive Vice President, Quality and Safety Improvement, and his committee have approved a standardized provincial Patient Safety Approach to standardize the way AHS reacts and follows up on adverse events, close calls and hazards.

1. Reporting and Learning System (RLS) for Patient Safety will be a province wide system for physicians/staff to report on adverse events, etc.
2. Notification of Patient Safety Hazards will be an automated process to ensure that quick communication of patient safety alerts occur to appropriate operational and administrative stakeholders.

There will be a phased 'roll-out' into spring of 2011, with a review of all programs in December 2010.

The proposed changes are ambitious, with significant potential for streamlining recognition and improvement in communication for patient safety issues.

**Dr. Beth Lange** welcomes any comments or questions.

## POSTGRADUATE SURGICAL TRAINING COMMITTEE PROMOTES QUALITY TEACHING



Photo: Katie Fisher/2010

Dr. Richard Buckley (left) and Dr. Norm Schachar at the 28th Annual Surgeons' Day.

With 28 members, the Postgraduate Surgical Training Committee (PGSTC) has come a long way since its original days with three members. Built on the vision of a committee that encompasses the different components and specialist groups of the Department of Surgery, the PGSTC was established to assist residents with their education focused on quality education.

As Chair of the committee, **Dr. Richard Buckley** has been involved with the committee since 1997 when he was elected as an orthopaedic training committee member. **Dr. Norm Schachar**, head of the PGSTC at the time, helped Dr. Buckley to better understand the education process and as he learned, the PGSTC is an "integrated, distributive, collaborative and collegial way" to get other members of the department involved in the education process. The PGSTC is symbolic to Dr. Buckley and proves that there is strength in numbers.

"Together we're stronger and apart we're weaker"

- Dr. Richard Buckley  
Chair

"Quality education is not everywhere," Dr. Buckley said. "Quality education is carefully planned and executed and can only be achieved with some forethought because it just doesn't

happen," he said.

If the committee was not in place, students "would not have any organization to their education," Dr. Buckley said. The committee provides students with a comprehensive curriculum that focuses on areas both inside and outside of the realm of medical scholar. This detailed education would not be possible without forethought, planning and contributions provided by the PGSTC, he said.

To better assist the students, though, the committee must focus its time spent on teaching.

"We have to give time. Time is expensive. Time is tough to give for busy people," Dr. Buckley said. "Surgeons are busy people. We have businesses, we have patients, and we have commitments. So we have to be organized to get that time from the teachers," he said.

2009 was a successful year for the PGSTC when all of their programs got through the Royal College external reviews with passing grades.

This success sets the committee apart from other programs in Canada; it's rare to see such a high level of success in a single program, Dr. Buckley said.

The PGSTC also saw the introduction of new courses, including the Core Surgical Skills Curriculum, organized by **Dr. Alicia Ponton-Carss** in 2009.

2010 will be different. The committee will not see change in their structure again but will focus on methods to keep the PGSTC organized in their curriculum. Last year saw an increase in the number and volume of teaching, budgets and residents. This year, sustainability is important to the committee who must get comfortable with the changes that 2009 brought, Dr. Buckley said.

Like others, the committee has its own share of issues. The biggest issue the committee faces today is the question of funding and where it will come from.

"Education is expensive and is always something that has been on the backs of surgeons and simply done for free," Dr. Buckley said. "Our biggest challenge now is providing education and teaching within an environment that's changing with not accepting teaching for free. It's an expensive venture to teach and we need to account for that," he said.

Together, Dr. Schachar and Dr. Buckley have created a strong committee that can be seen as an efficient model in Canada that combines expertise within the Department of Surgery to better assist residents in their education, Dr. Buckley said.

"Together we're stronger and apart we're weaker. When we are together with our teaching we can use all the different parts of the department to help all the other parts of the department. It's a great way to do it," Dr. Buckley said.

# PILOT STUDY ACHIEVES SUCCESS



In July 2009, the PGY-1 Core Surgical Skills Curriculum was introduced to first year residents as a pilot study with the understanding that it is more effective to train new residents outside of the operating room.

The course was developed by **Dr. Alicia Ponton-Carss** and **Dr. Carolyn Hutchison** to provide residents with skills to feel more confident and ready to work in the operating room. The leadership team was joined in 2010 by **Dr. Adrian Harvey**, an endocrine surgeon with specialty training in medical education. Understood by Dr. Ponton-Carss as a first year “boot camp,” residents participate in various activities that combine basic surgical skills from each surgical division and the practice of CanMEDS roles.

Following the pilot study “feedback was very good,” Dr. Ponton-Carss said. “The program directors and the residents, who are the focus of the study, were very happy to participate and they found it helpful to develop their surgical skills and their CanMEDS competencies,” she said.

The course encompassed 24 residents and featured nine modules that were completed July through to the end of August 2009. Residents then participated in a formative exam in September and a final exam in May 2010.

Prior to the pilot study, each surgical division was asked to

provide volunteers to teach and conduct modules “that were more tailored to their specialty,” she said. Dr. Ponton-Carss found that those who wanted to teach had been teaching for a period of time. Teaching was not limited to these instructors; fellows and senior residents were also invited to help in the learning process.

Although feedback was positive, the course still faced challenges in its first year. The biggest challenge was finding an appropriate venue to conduct the course. “We need a wet lab to do many of the modules and the only wet lab that we have accessible for this many people is the anatomy lab and we were always competing for the lab,” Dr. Ponton-Carss said.

Another issue that the course faced involved the instructors. “All the surgeons are extremely busy with their OR time and clinical work and it’s definitely not easy to get them out for three hours to come and teach, especially in the summer,” she said.

Following the pilot study, the course was adopted into the first year residents’ curriculum with full support from the Department head and PGME. In response to the challenges the course gained priority to access the anatomy lab and has also been split into two, with half of the modules to be completed in the summer and the other half in the fall. Class time has been added to as well, to give residents more hands on time.

The next class began in July 2010.



Photos: Provided By Dr. Alicia Ponton-Carss



# Spine and Peripheral Nerve Anatomy and Surgery Course



Photos: Provided by Dr. John Wong

The now annual Spine and Peripheral Nerve Anatomy and Surgery course has run for three years with high reviews by the residents. The course is set to run again in January.

Designed for senior residents in orthopaedics and neurosurgery with an interest in spinal and peripheral nerve surgery, the course is open to surgery residents across Canada. The course focuses on peripheral nerve surgical anatomy and spinal instrumentation techniques and devotes three days to lectures on peripheral nerve surgery, and cervical, thoracic and lumbar spine fusion methods with corresponding cadaver dissection labs. The course provides students with a mock operating room scenario; taking away the stresses that are experienced within the actual OR, such as time and exploratory restraints.

Though the course may only run for three days “there are residents from a lot of different programs with certain time commitments,” said Dr. Bradley Jacobs of neurosurgery. “We wanted something that could be focused and could hit the high points in a short time frame,” he said.

As the course continues into its fourth year, Dr. Jacobs and Dr. John Wong have noticed a considerable increase in resident applications.

“We’ve noticed over the past couple of years that our University of Calgary Spine Program fellowship applications from Canadian trained residents has dramatically increased and we think one of the reasons for that is exposure afforded our program through the spine cadaver course,” Dr. Jacobs said.

Orthopaedic and neurosurgery residents are not the only residents who receive invitations to attend the course. As a multidisciplinary course, residents within the Division of Plastic Surgery may attend the peripheral nerve component, while ENT residents may attend a cranial dissection course that runs concurrently with the spine course.

**Dr. Robertson Harrop** of plastic surgery participates as a lecturer and also as a preceptor for the cadaver dissections. **Dr. Brad Mechor** of ENT is involved with the concurrent cranial dissection course, given his expertise regarding cranial skull base

exposure.

“Repair and reconstruction of peripheral nerve injuries following injury or cancer surgery requires a multidisciplinary approach with shared expertise from the specialties of plastic surgery, neurosurgery, neurology and physiatry/rehabilitation medicine,” Dr. Harrop said.

“I feel that the course provides the attendees with an excellent hands-on review of peripheral nerve anatomy; as well they have an opportunity to learn about important techniques in peripheral nerve surgery such as nerve decompression and nerve transfers,” Dr. Harrop said.

Residents are not only offered a hands-on learning experience, but guidance by multiple staff members and surgeons who volunteer to assist teaching the course.

“It’s a very high teacher to resident’s ratio,” Dr. Wong said. “It works out really well this way.”

The fourth course will run January 5-January 7, 2011.



Photo: Katie Fisher/2010

From left, Dr. Bradley Jacobs, Dr. Raj Midha (peripheral nerve component) and Dr. John Wong.

# OUR FACULTY

Ohlson Research works towards Effective Treatment for Head & Neck Cancer



Photo: Katie Fisher/2010

From left, Stephanie Petrillo, Alex Klimowicz and Dr. Joseph Dort in the Translational Lab at the Tom Baker Cancer Institute.

The Ohlson Research Initiative is a new clinical research program within the Faculty of Medicine and the Southern Alberta Cancer Research Institute at the University of Calgary (UofC). The generosity and commitment of the Ohlson family made this program possible and the Initiative is directed by **Dr. Joseph Dort** who currently serves as the Ohlson Family Professor of Head and Neck Surgery. The overall mission of the Ohlson Research Initiative is to develop tailored therapy for people with head and neck cancer.

The Ohlson family, because of their experience with cancer, wanted to do something that would make a difference for patients with head and neck cancer. As a result of this desire to make a difference, the Ohlson family, along with a team of community members and researchers, built the foundation for this growing clinical research program. The generosity of the Ohlson family sends a clear message about the importance and relevance of improving treatment for head and neck cancer.

With a vision of “effective treatment for head and neck cancer, targeted to underlying tumour biology and tumour behaviour,” the Ohlson Research Initiative works to “develop and deliver tailored therapy for people with head and neck cancer,” the website ([www.ohlsonresearch.ca](http://www.ohlsonresearch.ca)) states.

The Initiative focuses on three pillars to achieve their vision: Molecular Epidemiology, Clinical Outcomes in Head and Neck Cancer and Imaging Innovation.

Formally started in June 2009, the Initiative has already had a taste of success. Not only has the program recruited mem-

bers but in 2009 there were 14 presentations and posters made on behalf of the program. The program was also awarded with a couple of pilot research grants.

“That’s a phenomenal success for a program that really didn’t exist until a year and a half ago,” Dr. Dort said.

“I’ve stopped doing a lot of things that I was doing before because of the tremendous potential for our team to answer some important questions about head and neck cancer.”

- Dr. Joseph Dort  
Ohlson Family Professor

Recently, at the 28th Annual Surgeons’ Day, **Dr. Scott Walen’s** “The Utility of the Harmonic Scalpel in Selective Neck Dissection,” was awarded Honourable Mention for Overall Research; a randomized trial done with the assistance of Dr. Dort. This study also received an award for best paper at the Alberta Otolaryngology Society meeting and has been accepted for presentation at the American Academy meeting in the fall of 2010.

“We’ve attracted national and international attention because of what we’ve done already so I’m very excited about it,” Dr. Dort said.

In terms of development, the head and neck program created a tumour bank in October 2009 and supports it as part of its core infrastructure. The program has also been formally adopted by the **Southern Alberta Cancer Research Institute (SACRI)** and has hired a postdoctoral research fellow (Dr. Pinaki Bose) who will start in September 2010. This is a major step toward strengthening the relationships between basic scientists and the Initiative.

“It’s become my life.”

- Dr. Joseph Dort  
Ohlson Family Professor

On April 21, 2010 the Initiative had its first Ohlson Lecture. Delivered by Dr. Douglas Chepeha, an Associate Professor in the Department of Otolaryngology at the University of Michigan, the lecture distinguished important characteristics of team members and how they are helpful towards translational research. Dr. Chepeha also interacted with members of the Ohlson research team and this interaction will open the doors to collaboration with researchers at the University of Michigan.

With plans to keep moving forward, Dr. Dort realizes that a successful program is not possible without research publications and research grants. The team is already having success in these areas and the future looks bright.

From a personal perspective, the Ohlson Research Initiative has become the major focus of Dr. Dort’s career. “It’s become my life,” he said. “I’ve stopped doing a lot of things that I was doing before because of the tremendous potential for our team to answer some important questions about head and neck cancer. If we can do the right things over the next 3 – 5 years this program will be a legacy for head and neck cancer research here in Calgary as well as nationally and internationally,” Dr. Dort said.

As for the future, Dr. Dort will continue to consolidate the group of people involved in the program and help find meaningful ways for them to collaborate. There are number of manuscripts and research grant applications under review and the program looks forward to sharing new knowledge and developing collaborations within the UofC as well as with other researchers nationally and internationally.



Photo: Provided by Dr. Joseph Dort  
(Above) Dr. Joseph Dort, Ohlson Family Professor of Surgery.

(Below) At work in the Translational lab. Photo: Katie Fisher/2010



## The Utility of the Harmonic Scalpel in Selective Neck Dissection

This research was performed in order to determine the impact of the harmonic scalpel on intraoperative blood loss and operative time in selective neck dissection.

Designed as a prospective and randomized study, the project was carried out by **Dr. Scott Walen**, an R5 within the Division of Otolaryngology. Co-Investigators included **Dr. L. Rudmik**, **Dr. E. Dixon**, **Mr. S. Nakoneshny**, **Dr. T.W. Matthews** and **Dr. J. Dort**.

Thirty-one subjects with head and neck cancer and who required a selective neck dissection participated in this randomized trial.

Patients were randomized to either the traditional dissection group or the harmonic scalpel group. The 2 primary outcomes

were operative time and intraoperative blood loss; secondary outcomes included intraoperative/postoperative complications, drain output and length of hospital stay.

The study found that intraoperative blood loss was significantly lower in the harmonic scalpel group than the traditional group whereas operative time was not different between the 2 treatment groups. There were also no differences in the secondary outcomes between the 2 groups.

The study concludes that harmonic scalpel dissection results in less blood loss compared to standard dissection techniques in patients undergoing selective neck dissection for head and neck cancer.

# ULNA MODEL GIVES ORTHOPAEDICS A ROLE IN VIRTUAL SIMULATION

**D**r. Justin LeBlanc, a fourth year resident, graduated from the Surgeon Scientist Program (SSP) in July 2009.

Dr. LeBlanc was excited to enter the program but worried about losing surgical skills and techniques that he had recently gained, working as a resident at the University of Calgary (UofC). Despite this concern, Dr. LeBlanc joined the SSP because of the funding that would be available to him while he learned proper research techniques and worked on his project.

Just as he selected his project, Dr. LeBlanc advises residents to “do something that you are passionate about. Make sure that you’re actually interested in the project,” Dr. LeBlanc said. “You’ll get a lot more out of it.”

Dr. LeBlanc’s research project focused on surgical education for Orthopaedic residents through virtual simulation as a means to teach surgical skills. Virtual simulation has not played a large role in Orthopaedics and encouraged Dr. LeBlanc to look into a virtual model.

With an interest in both sports and trauma, Dr. LeBlanc looked at open procedures through virtual simulation and found it was a good place to start.

Injury to the Ulna was the basic model that Dr. LeBlanc used to begin research on open procedures through virtual simulation. It was decided that the Ulna was the best model to start with because the Ulna’s position requires very little dissection.

Through collaboration with the University of Calgary; engineering department (**Dr. Hu**), medical education (T. Beran and

Virtual Simulation gives residents the opportunity to “practice on inanimate objects before they actually try and learn [surgical] skills on real patients.”

- Dr. Justin LeBlanc  
Fourth Year Resident

T. Donnon), Orthopaedic surgery (**Dr. Hutchison**), the team at Schulich School of Engineering and all of the Orthopaedic surgery resident volunteers, the Virtual Ulna became a reality for Dr. LeBlanc.

In October 2009, Dr. LeBlanc completed his work on his project and continues to work on two papers, with Dr. Hutchison, for publication, discussing the findings that were made while working with virtual simulation. He hopes that as virtual simulation improves in the Orthopaedic division over the next couple of years that he can conduct a trial simulation to determine if “virtual reality is as efficient for learning basic technical skills as a Sawbones model,” he said.

Currently, a new group of engineering students have been



Photo Provided By: Dr. Justin LeBlanc

The Virtual Ulna continues to undergo improvements in the areas of feel and sound.

working and updating the simulator in accordance with other resident’s comments. The simulator, however, has room for improvement in the areas of sound and feel in order to make it more realistic, Dr. LeBlanc said.

Upon finishing the SSP, Dr. LeBlanc graduated with an understanding of how a project runs as a whole and the writing process behind proposals and grants. Also, Dr. LeBlanc came to discover just how important virtual simulation is for residents. Virtual simulation gives residents the opportunity to “practice on inanimate objects before they actually try and learn [surgical] skills on real patients,” he said.



Photo: Katie Fisher/2010

Dr. Justin LeBlanc continues to assist with the Virtual Ulna after graduation

# ROCKYVIEW OPENS CANCER CENTRE



**Prostate Cancer Centre**



**O**n March 29, 2010, the Prostate Centre opened its doors in the Southern Alberta Institute of Urology (SAIU), located on the Rockyview General Hospital site. A formal opening celebration is planned for Sept. 30, 2010.

The seeds of this idea were sown 12 years ago with the objective of providing “one-stop shopping” for urology patients. The Prostate Cancer Centre is home to all Calgary Urologists, the urology clinical trials unit and a research lab (in collaboration with Dr. Tarek Bismar and Calgary Lab Services). The Prostate Centre houses a resource centre staffed by volunteers, ultrasound guided prostate biopsies, the Rapid access clinic (for patients with a suspicion of prostate cancer), educational sessions for newly diagnosed men and their families, and the Man Van (a mobile PSA service that promotes prostate cancer awareness). These available services are all unique to Canada.

“With the group working in cooperation and different subspecialties available to us, specific cases can be passed around within the building to particular specialists, increasing the quality of care,” said **Dr. Bryan Donnelly**, chair and cofounder of the Prostate Cancer Centre.

Prior to regionalization of urology at the Rockyview and the establishment of the Prostate Cancer Centre (originally located on Glenmore Trail), urologists worked in three groups in the city. They worked separately from each other with little collaboration. When new urology equipment became available, there was intense competition, leaving some hospitals without required equipment. This is no longer an issue.

Urologists agreed that as specialists, it is most helpful to have one’s colleagues close at hand. The easy availability of “corridor consultation” greatly facilitates high quality care, and urgent cases are rapidly triaged among the group.

The centre remained on Glenmore until the Rockyview underwent renovations to open a new parkade. Members of the Prostate Cancer Centre agreed that a bigger building would provide urology patients with an improved focus on quality care.

The building is an example of P3 (Public Private Partnerships). The site was provided by the former Calgary Health Region, and the building was entirely funded by community donated dollars. There is no government money

in the building. All Urologists are rent paying tenants.

The new facility allows the further development of areas of special interest for Urologists. The Alberta Bladder Centre now provides comprehensive, on site services for patients with incontinence problems. A sexual health clinic addresses sexual dysfunction issues, with clinical and psychosocial expertise available. Members of the group can develop expertise in specific areas such as robotic, endoscopic and cryosurgery.

The next step in the centre’s development will bring radiation and chemotherapy specialists into the centre. This will allow patients to receive consultations prior to undergoing radiation therapy and chemotherapy at the Tom Baker, thereby providing comprehensive “one-stop shopping” for urology patients.

It is a win-win outcome for all involved.



**Dr. Bryan Donnelly**

Photos: Katie Fisher/2010

Dr. Donnelly Photo: Provided by the Dept. of Surgery.

# Southern Alberta Institute of Urology

# FOOTHILLS MEDICAL CENTRE TO OPEN NEW ADDITION IN 2010

Foothills Medical Centre will welcome a new addition in Fall 2010.

Named after philanthropist, Bud McCaig, the McCaig Tower stands 10 storeys tall and will hold 93 inpatient beds, surgical processing, a 36-bed Intensive Care Unit, outpatient clinics, Diagnostic Imaging and eight new operating rooms with shelved space for 15 additional operating rooms. The Southern Alberta Organ and Tissue Procurement Program, PACU, Surgical short stay, a rehabilitation treatment unit and future space for lab services will also be located at the McCaig Tower.

The addition of new operating rooms will dramatically improve access to surgical care for our patients, explains **Dr. John Kortbeek**, Department Head of Surgery.

“It will allow us to recruit talented young faculty and it will deliver the long awaited Bone and Joint Centre of Excellence,” he said.

Upon opening, AHS will allocate increased operating room capacities strategically and try to meet the most pressing needs, including cancer care.

The McCaig Tower will support activity that involves bone and joint, orthopaedics and a trauma program through a hybrid operating room.

The hybrid operating room “combines interventional angiography and regular all-purpose surgery to allow interventional angiographic procedures to be done in the same location as regular operations without moving the patient,” said **Dr. Andrew Kirkpatrick**, Regional Medical Doctor of Trauma Services.

Named the RAPTOR, Room for Angiographic Percutaneous Treatments and Operative Resuscitation, the hybrid operating room will focus on issues involving trauma and benefit patients with the possibility to do more complex life saving procedures.

The tower will not only facilitate the hybrid operating room but it will offer the Division of Orthopaedics with an opportunity to consolidate services, said **Dr. Kevin Hildebrand**, Division Chief of Orthopaedics.

“The McCaig will allow us to deliver service in a more unified manner,” he said.

Services will begin to move into the McCaig Tower in the



All Photos: Katie Fisher/2010  
Dr. Cyril Frank, Alberta Bone and Joint, and Dr. Kevin Hildebrand of Orthopaedics.

fall, and will continue in a phased approach as funding becomes available.

The Tower has gone through a lot of planning and construction to get to where it is today. Bud McCaig donated \$10 million to the project; the rest of the project has been funded by the provincial government.

“Current McCaig construction value is approximately \$329 million which includes the \$19 million for site clearing and preparation,” said Dan Clement, senior project manager.

The Tower was constructed based on a physical design that creates flexibility, efficiency, separation of traffic (public from staff), functionality and a master plan implementation for future growth.

**Shawna Syverson**, Interim Vice President of the Foothills Medical Centre, is excited about the near completion of the McCaig Tower.

“It will be orthopaedic-focused and will be an important piece in continuing to deliver quality patient care,” she said.



One of the spacious operating rooms.



Dan Clement (left) and two other workers.



Dr. Andrew Kirkpatrick tours the Tower.

# ANNUAL RETREAT ADDRESSES SURGICAL RESEARCH

With 51 members of the Department of Surgery and guests from other departments, the annual retreat at the Banff Centre was a success. Featuring a diverse selection of topics all focused on research, those in attendance worked towards improvements in a Department Business Model, Mentorship and Alliances with Research Institutes.

There were four topics presented by guest speakers: "Institutes 101 and CIHR pillars," by **Dr. Richard Hawkes**; "Alberta Innovates – Future Priorities and Directions," by **Dr. Jacques Magnan**; "Success as an Academic," by **Dr. Chip Doig** and "Lessons learned; Strategies to be Successful, Pitfalls to Avoid," by **Dr. Elijah Dixon**. These presentations were a strong start to this years retreat and probed many enlightened comments.

The following day, **Dr. Elizabeth Oddone Paolucci**, **Dr. Duncan Nickerson** and four of the seven institutes at the University of Calgary gave presentations that led in to small group discussions.

Dr. Oddone Paolucci spoke on the current business model for providing statistical and research design services, and a proposed new model. Her speech provoked three group discussions: *Should we maintain the current business model, and accept 'waiting in cue'; Are we willing to pay for access to faster service and If yes, should we provide this service as cost recovery or cost recovery plus?*

Dr. Nickerson spoke on mentorship including information on the mentorship program at the University of California. His speech opened the floor for four group discussions: *Who should be the protégés; who should be the mentors; how should we reward mentors and how do we enable an excellent mentorship program? What will it take to be successful?*

**Dr. John Kortbeek** opened the floor for **Dr. Steve Robbins**, **Dr. Brent Scott**, **Dr. Nigel Shrive** and **Dr. Peter Freeman** to speak on alliances with research institutes. Combined, their presentations led to four discussions regarding: *What are the benefits*



Photo: Provided by Marie McEachern/2010

Retreat members gathered at the Banff Centre on April 8 -9 2010.



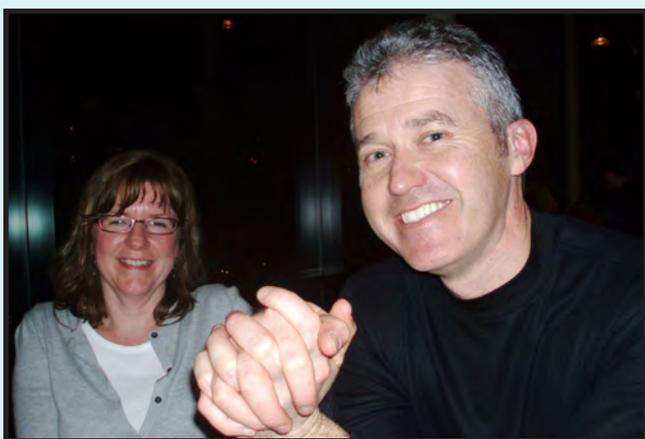
Photo: Provided by Marie McEachern/2010

**Dr. John Kortbeek (left) and Dr. Norm Schachar in the Banff Centre.**

*and downsides of developing strategic alliances with research institutes; what would be the best way to proceed, Focus on one research pillar? Focus on one institute; what changes should the department make to its recruiting process, given its interest in strategic alliances and what could the Department/Divisions do to be more successful with strategic alliances?*

The large group discussions allowed members of the Department of Surgery to work together and approve plausible decisions regarding the presentations. These decisions included:

- 1) Participants supported a blended approach to fees which would see Department members charged on a cost-recovery basis and groups external to the Department charged cost recover plus.
- 2) The OSR will develop a proposal for a changed business model based on input from the retreat and take it to the Surgical Executive for approval by June and implementation in July.
- 3) Dr. Kortbeek will work with the Office of Surgical Research to decide whether/how to proceed with a mentorship program.
- 4) Divisions will collaborate with institutes around recruitment, specifically by engaging institutes early in recruitment planning.
- 5) Divisions will consider cross PhD appointments.
- 6) The Department will set the expectation that any new Department member with a research focus must have a partnership/relationship with an institute.



## OFFICE OF SURGICAL RESEARCH

**D**r. Rob Harrop, Director of the Office of Surgical Research (OSR), was responsible for organizing the retreat and acted as the Chair. Dr. Harrop and **Dr. Elizabeth Oddone Paolucci**, Co-director for the Office of Surgical Research, were chosen for this responsibility based on the theme of the retreat, surgical research.

Following Dr. Oddone Paolucci's presentation regarding a new business model it was determined that the OSR will refine the model and present it to the Surgical Executive body for consent.

The need for a new business model emerged from the observation of "a dramatic increase in the number of requests for statistical and research design consultations over the past two years," Dr. Harrop said.

Statistical and research design consultation is, at the moment, provided to members of the Department of Surgery with no attached fee.

"Many of these requests are urgent, with a deadline of several days. Attention given to these urgent consultations, in turn, results in an increased wait time for other non-urgent consultation," Dr. Harrop said.

"The consensus of those attending the retreat was that a small consulting fee for urgent requests would allow the OSR to refer some of these urgent consults to paid consultants outside the Department of Surgery," Dr. Harrop said.

For now, the new model is in the preparatory stage with plans for presentation to the Surgical Executive in June, 2010.



# CALGARY HOSTS 10TH ANNUAL BETHUNE ROUND TABLE

**W**ith an early start to the day, surgeons from Africa, Asia, Europe, India, North America and South America gathered together for three days in Calgary for the 10th Annual Bethune Round Table on International Surgery, hosted by the Department of Surgery and Chaired by **Dr. Gwen Hollaar**.

Those involved devoted two days to discuss issues and present research and practices on surgical protocol in low and middle income countries. Speakers were divided in to four sessions focused on: Educational/Institutional Partnerships, Partnerships and Technology, Partnerships in Clinical Care and Interdisciplinary Partnerships.

**Dr. Dan Kiage** of the Aga Khan University Hospital in Nairobi, Kenya, said the Bethune Round Table is important for promoting cooperation.

“The needs for surgery and the personnel in developing countries can be solved through cooperation,” Dr. Kiage said. “We don’t want to be helped; we want a situation where we can have cooperation that is good for both sides. We feel people in Canada have something they can gain by coming to Africa.”

Health care may be different in Canada than it is in developing countries but surgeons worldwide share a common motivation.

“You see a problem and it’s within your ability to help,” Dr. Kiage said. “I see a blind person and I want to make this person see,” he said.

One keynote speaker was chosen to lead each session. **Professor Mahesh Misra** kicked off the Bethune Round Table through a sponsorship of the Royal College of Physicians and Surgeons of Canada.

Prof. Misra is the founder of the Indian Society for Trauma and Acute Care and spoke on the centre’s triumphs and challenges.

The most important factor in trauma care, Prof. Misra said, is “getting these patients to the appropriate facility as quickly as possible.”

Rural areas are of a major concern for the trauma centre, especially when ambulances are not as quick to arrive as they are in Delhi.

“We need to focus on training bystanders in basic emergency care,” Prof. Misra said.

In India it has been recommended that a chapter on basic emergency care be introduced into schools ranging from Class 7 –



All Photos: Katie Fisher/2010  
**Dr. Francis Sutherland (left), Dr. Gwen Hollaar and Dr. John Kortbeek.**

Class 12, he said.

The trauma centre would also benefit through the use of a global trauma database that would assess the levels of trauma and the outcomes.

**Dr. Myles Clough** of the University of British Columbia introduced this idea at the conference the next day.

Dr. Clough introduced a universal trauma system that should be used everywhere. It would give trauma and injury a focus that governments, the UN and World Health Organization (WHO) could place emphasis on just as they have with cancer and heart disease.

**Dr. Boateng Wiafe** was the last keynote speaker to address the conference on the second day.

Dr. Wiafe is the regional director for Africa, Operation Eye-sight Universal; an organization that works to eliminate avoidable blindness through the cooperation of the national government.

Dr. Wiafe spoke on the importance of partnerships in order to Improve Global Eye Health Needs.

Partnerships are similar to a pack of lions that work together and share together, he said.

Dr. Wiafe presented interesting and shocking statistics that placed more emphasis on why partnerships are necessary and important. The statistics shared by Dr. Wiafe informed the audience that 90 per cent of blind people live in low income countries, 80 per cent of types of blindness are avoidable and that one-quarter of the world’s blind children live in Africa.



**Multiple Speakers gathered in Calgary for the 10th Annual Bethune Round Table.**



He referred to Dr. Kiage's presentation regarding "The Sandwich Fellowship," acknowledging its impressive structure and possible adoption by Operation Eyesight in order to attain more doctors.

"The Sandwich Fellowship" is "an educational model in which a fellow completes rotations at an academic institution in the developed world as well as in his or her home environment," Dr. Kiage said.

I am speaking of my experiences with the hope that some of the people here may have had similar experiences

- Dr. Pius Okong  
Save The Mothers Initiative

There were many participants this year who were new to the Bethune Round Table, one of these being **Dr. Pius Okong**, president of Association of Obstetrics and Gynecology in Uganda.

"I am speaking of my experiences with the hope that some of the people here may have had similar experiences," Dr. Okong said.

Dr. Okong is a leader of the WHO "Save the Mothers Initiative." The Initiative is an international organization that trains professionals from developing countries to improve the mother's health. They believe that it is a human right to have access to safe maternal care in childbirth.

Dr. Okong started the second day of presentations as the first keynote speaker



to discuss "Improving Maternal Health in Uganda: The Opportunities and Challenges of Partnerships."

"If we don't address these issues it won't lead to favourable outcomes," Dr. Okong said. "Women will suffer from complications, they will develop complications. They will be sick for a long time, if they don't die."

Fistulas, one of the many complications experienced by women in Africa was discussed by **Dr. Hillary Mabeya** who works in Eldoret, Kenya; and is not an unusual sight for Okong.

As described by Dr. Mabeya, a fistula is a hole that develops between a woman's vagina and bladder and sometimes between her vagina and rectum. Fistulas develop during prolonged obstructed labour and causes the woman to become incontinent.

Fistulas are not socially acceptable in Africa both Dr. Mabeya and Dr. Okong noted.

Dr. Okong came to Bethune in hopes that "there are people who are interested in change rather than just academic knowledge."

The information presented at Bethune is important, along with the support and networks that you gain through participating, Dr. Okong said.

Following two days of presentations at the Health Sciences Centre, guests gathered for dinner at Fort Calgary to toast the Bethune's success. Dinner was accompanied with speeches by **Dr. Grant Stewart** and **Dr. Clarence Guenter**.

Next year the Bethune Round Table will be hosted by Montreal, Quebec.



### The Committee

**N**amed after **Dr. Norman Bethune** (1890-1939), Canada's most well-known international surgeon, The Bethune Round Table is held in Canada every year to address surgical care issues and research on surgical care that exists in developing countries.

The conference was made possible by both sponsors and the planning committee. **Dr. Gwen Hollaar** acted as Chair of the committee and worked with 12 other members. Without these members the conference would not have been possible. The Department of Surgery would like to thank: **Dr. Hollaar, Dr. William Astle, Dr. Hallgrimur Benediktsson, Dr. Mantaj Brar, Dr. Janet Edwards, Dr. James Graham, Dr. Mark Hardy, Dr. Kelly Johnston, Dr. Elaine Joughin, Dr. Daniel Kiely, Dr. John Kortbeek, Dr. Jaelene Mannerfeldt** and **Ms. Marie McEachern**.

The committee was brought together by Dr. Hollaar, in search of individuals who have either worked or expressed an interest in international surgery. The committee represented multiple surgical disciplines including general surgery, orthopaedic surgery and ophthalmology, as well as obstetrics/gynecology and pathology, said Hollaar. Three residents also made up the committee.

Hollaar found her work for the committee rewarding in two different manners. "First of all it was great to see the enthusiasm of other physicians here in Calgary, who are also passionate about international work, come together, exchange ideas and wholeheartedly support this endeavour," she said. "The second reward was to see the conference take shape into something that I could be proud of," Hollaar said.

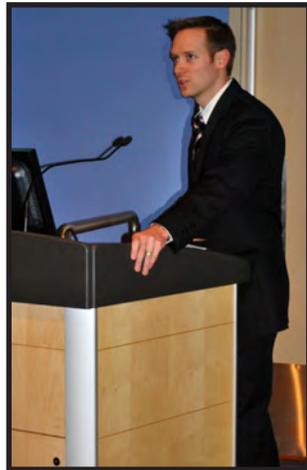
Overall, Hollaar believes that, "Since the Bethune Round Table always tries to have a good representation from the developing world, it becomes a good forum for a balanced exchange of ideas," she said.

"I think the Bethune Round Table is growing and may very well continue to grow beyond its Canadian borders," she said.



# SURGEONS' DAY

A CHANCE TO RECOGNIZE RESIDENT AND FELLOW RESEARCH



The 28th Annual Surgeons' Day was held at the Auditorium in the Alberta Children's Hospital on June 25, 2010, a day that provides residents and fellows from the Department of Surgery with a forum to present and discuss their research.

Both **Dr. David Sigalet** and **Dr. James Wright** were invited to judge the research presentations.

Dr. Sigalet is the Professor and Associate Head at the University of Calgary, Faculty of Medicine; Department of Surgery. He is a member of the Division of Pediatric Surgery, General Surgery. Dr. Wright is the Surgeon-in-Chief and the Chief of Perioperative Services and Professor within the Department of Surgery at the University of Toronto.

The symposium was broken into four sessions moderated by chairs. **Dr. Rick Buckley, Dr. Earl Campbell, Dr. Tony MacLean** and **Dr. Andrew Graham** were this year's sessional chairs with responsibilities that entailed introducing speakers and leading question periods.

There were 21 residents and fellows on hand to present their research at the symposium. The symposium was made up of a wide variety of presentations including, "Abdominal Compartment Syndrome: Burn Patient Resuscitation," "The Environmental Impact of Telehealth" and "Measuring the Microwave Frequency Properties of Lymph Nodes."

The symposium was not limited to research presentations by fellows and residents. **Dr. Rob Harrop** introduced Dr. Sigalet's presentation for the McMurtry Lecture, titled "Lost in Translation: The Challenge of Clinical Innovations." **Dr. Nick Mohtadi** introduced Dr. Wright's presentation for the McPhedran Lecture, titled "Evidence-based Orthopaedics: Beyond the Tipping Point."

**Dr. John Kortbeek** presented the Dr. Peter Cruse Memorial Award to **Dr. Emily Krauss** who placed first with "Ten Years of ATV Injury, Mortality and Healthcare Costs in Alberta." **Christopher Dusik** was awarded Honourable Mention for "Orthopaedic Surgeon Perspectives on Appropriate Referral of Trauma Patients to Physical Therapy," but was not able to attend.

Following a full day of presentations, surgeons, fellows, residents, department members and guests gathered in their gowns and suits at the Eau Claire Sheraton Hotel for the awards dinner.

Awards were presented for distinguished service, educator of the year, surgical innovation and resident research.

Distinguished Service Awards were presented to **Dr. Robert Gordon** of RGH, **Dr. Andrew Wong** of ACH, **Dr. Cyril Frank** of PLC and **Dr. Glen Edwards** of FMC.

Educator of the Year was awarded to **Dr. Doug Bosch** and Ectopic Educator of the Year was awarded to **Dr. Michael Dunham**.

**Dr. Jason Werle** and the RGH J.O.I.N.T. Team were presented with the Surgical Innovation award.

There were four categories in resident research. Best Overall Research was awarded to **Dr. Billie-Jean Martin** for her research on "The Impact of Cardiac Rehabilitation on Outcomes in Patients with Coronary Artery Disease: A Retrospective Cohort Study with a Focus on Women and the Elderly." Honourable Mention for Overall Research was presented to **Dr. Scott Walen** for his research on "The Utility of the Harmonic Scalpel in Selective Neck Dissection." Best research by a Surgical Fellow was awarded to **Dr. Jacob Alant** for his research on "Traumatic Neuroma in Continuity Injury Model in Rodents." Best Poster

was presented to **Dr. Peter Lewkonja** for "Reliability of a new classification system for fractures of the Thoracolumbar Spine (TLICS)."



All Photos: Katie Fisher/2010  
From left, Dr. James Wright, Dr. Rob Harrop and Dr. David Sigalet at the awards ceremony.

### The winners from both the Symposium and Service awards were:

#### Distinguished Service Award, RGH

- Dr. Robert Gordon

#### Distinguished Service Award, ACH

- Dr. Andrew Wong

#### Distinguished Service Award, PLC

- Dr. Cyril Frank

#### Distinguished Service Award, FMC

- Dr. Glen Edwards

#### Educator of the Year

- Dr. Doug Bosch

#### Ectopic Educator of the Year

- Dr. Michael Dunham

#### Surgical Innovation Award

- Dr. Jason Werle & The RGH J.O.I.N.T. Team

#### Best Overall Resident Research

- Dr. Billie-Jean Martin

#### Honorable Mention for Overall Resident Research

- Dr. Scott Walen

#### Best Research By a Surgical Fellow

- Dr. Jacob Alant

#### Best Poster

- Dr. Peter Lewkonja

# DIVISION HIGHLIGHTS

## Division of Dentistry And Oral Health



Photo: Katie Fisher/2010  
**Dr. Eduardo Kalaydjian, Chief, Division of Dentistry and Oral Health.**

### ADULT DENTISTRY

#### Programs

Programs in the division of Adult Dentistry include; the Adult High Risk Clinic, which is a dentistry program for patients with medical, mental and physical disabilities; the Dental Oncology Program which is a dentistry program for cancer patients who are registered patients with the Alberta Cancer Board (Tom Baker Cancer Centre); the Sedation Dentistry Clinic, which is a pilot project that worked with the Department of Anaesthesia from October 2009 – January 2010 to render anaesthesia services on-site at the dental clinic.

#### Accomplishments and Highlights

##### Clinical Service:

The division of Adult Dentistry continues to provide comprehensive care for Special Care Adults, both outpatients and inpatients. The division collaborates with the Department of Anaesthesia. Recently, anaesthesia services for deep sedation for Special Needs Patients were provided onsite at the Foothills Hospital Dental Clinic. The program ran from October 2009 - January 2010. Currently, a Surgical Implant Program is being developed within the periodontal specialty clinic.

#### Education

#### Residents:

The Foothills Dental GPR program ran for its second year from July 2009 - June 2010. The training of one Dental General Practice Resident ran from July 2009 - June 2010.

Plans have been made to increase the number of GPR resident positions from one position to two positions for the July 2010 – June 2011 year.

In June 2009 the Foothills Dental Residency Program was reviewed by the Commission on Dental Accreditation of Canada. As of November 2009 the Foothills Dental Residency Program was accredited by the Commission on Dental Accreditation of Canada.

The Dental Continuing Education Program (note: this is for all the division as a whole and not just the Sub-Division of Adult Dentistry) in conjunction with the Department of Medical Continuing Education continues to provide courses to dentists.

### PEDIATRIC DENTISTRY

#### Programs

The pediatric dental clinic at the Alberta Children's Hospital 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 behaviour guidance and minimal/moderate sedation, or in the Alberta Children's Hospital operating room under general anaesthesia.

Community pediatric dentists with privileges also provide dental care for children and participate in on-call services.

#### Accomplishments and Highlights

##### Clinical Service:

The division of Pediatric Dentistry continues to provide comprehensive care for children with special health care needs, both outpatients and inpatients; provision of service under general anaesthetic, with local anaesthetic, oral sedation and nitrous oxide/oxygen sedation (data available with Pediatric Surgery Annual Report).

The Royal College Fellowship Board Examiners are as follows: **Dr. Marie-Claude Cholette** and **Dr. Robert Barsky**.

#### Education

##### Residents:

There was one full-time pediatric dentistry General Practice Resident at the Alberta Children's Hospital.

*Division highlights continue on the next page*

## *Dentistry and Oral Health continues*

The GPR has been designed as a one-year teaching program with a strong clinical focus at ACH where the resident will receive advanced training in the multidisciplinary clinical care of pediatric patients in the children's hospital environment. The goal is accreditation by the Commission on Dental Accreditation of Canada (CDAC).

Preceptor recruitment remains a challenge.

Rotations have been completed in the dental clinic by dental students, medical students and pediatric residents.

A journal club for the pediatric dentists in Calgary was established and has received full accreditation from the Alberta Dental Association and College and has become a strong evidence-based educational opportunity for local pediatric dentists.

## Challenges

### Response to Issues:

A workforce plan is being developed that will see collaboration with administration to maximize resource utilization.

## COMMUNITY DENTISTRY

## Programs

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: the Sheldon M. Chumir Health Centre located in North-east Calgary (Sunridge Mall); and a satellite clinic: Airdrie Community Health Centre.

## Accomplishments and Highlights

### Clinical Service:

The division of Community Dentistry worked with several organizations this year; Project Homeless Connect: During the year at special events, people who are homeless were screened for oral disease, received information and resources to prevent and control dental disease, and received free dental care for urgent conditions; the Margaret Chisholm Resettlement Centre: Cooperating with this centre to provide urgent dental care for refugee population; School Age Children: Free care for urgent problems in underprivileged school children identified through screening by Dental Hygienists; Best Beginnings Program: Providing dental care for at risk low income pregnant women; Teenage Youth: Providing care for troubled youth referred by government agencies; Alberta Dental Association and College Mobile Dental Clinics: **Dr. Luke Shwart, Ms. Del Pollard, Ms. Vickie McKinnon** and **Dr. Eduardo Kalaydjian** collaborating with Alberta Dental Association and College to facilitate the mobile dental services to the elderly in the Long Term Care facilities in Calgary.

## Education

### Residents:

The FMC Dental General Practice Resident and the ACH Dental Practice Resident each worked for 10 days in Dental Public

Health Clinics under the preceptorship of Clinic dentists, receiving orientation and experience.

## Ongoing Matters and Plan of Action

The Alberta Dental Association and College's Code of Ethics obligates dentists to provide after-hours availability of contact to patients who have received care. Across Canada this is not typical in Dental Public Health Clinic Programs.

The Dentists have adopted a proactive model of contacting patients early to ensure they are healing as expected after dental surgery.

As part of the evolving Alberta Health Services (AHS) re-organization, the Dental Public Health Clinic Program returned to the Population and Public Health Portfolio in late 2009 and is no longer part of the Department of Surgery. However, the Clinic dentists still receive privileges through the Division of Dentistry and Oral Health.

The Subdivision Chief attends the monthly Division of Dentistry and Oral Health meetings and the Division Chief (Dr. Kalaydjian) attends the quarterly Staff Meetings.

The former Subdivision Chief (Dr. Shwart) became the new AHS Dental Public Health Officer reporting through the Medical Officer of Health.

The Dental Public Health Program has an Interim Subdivision chief and Manager (**Dr. Heidi Rabie**) as it develops a new internal organization.

The Alberta Dental Association and College has proposed new Infection Prevention and Control guidelines that align with the new Alberta guidelines. The Dental Public Health Clinic Program is following these developments to stay abreast and ahead of the new regulations.

## Division of General Surgery



Photo: Katie Fisher/2010

**Dr. Francis Sutherland, Chief, Division of General Surgery.**

### Accomplishments and Highlights

The Calgary Zone division of General Surgery has had an eventful year in 2010 with the establishment of a new model for the delivery of emergency service in the three adult care hospitals and the recruitment of three, new, full-time surgeons. Research productivity continues to be high. Our education program continues to excel with graduation of our first all female class.

**Dr. May Lynn Quan** started her practice at the Foothills Hospital in August 2009. Dr. Quan brings special expertise in Breast Cancer Surgery with a research focus on population health.

**Dr. Adrian Harvey** started work this last August at the Peter Lougheed Hospital. Dr. Harvey's expertise is endocrine surgery and medical education. He is already running the skills course for our junior residents and will be very active in the undergraduate medical education program

**Dr. Chad Ball** has accepted a position to start in October. Dr. Ball has completed both a trauma and hepatobiliary fellowships. He will be working at both the Foothills and Rockyview hospitals. His special research interest is acute care surgery.

Several members of our division have received awards in the last year **Dr. Mike Dunham** received the ectopic educator of the year award. **Dr. Jim Nixon** and **Dr. Elijah Dixon** were honoured by our residents for their efforts in education.

General Surgery Residents continue to be active in our Surgeon Scientist Program. **Dr. Steve Johnson** is just completing his master in **Dr. Paul Kubes** laboratory. **Dr. Janet Edwards** has been accepted into the program to complete a Masters in public health at Harvard.

Congratulations go out to our graduating residents. **Dr. Terry Leung**, **Dr. Marilyn Vanderputten**, **Dr. Kathryn Lanuke** and **Dr. Nadra Ginting**. All are headed toward the warmer climate of the west coast for clinical work or fellowship training. Congratulations also go out to our Fellows completing colorectal, surgical oncology, upper GI Surgery and trauma/ICU training programs.

Resident Research Day was a great success this year. It was held at the Banff Centre with guest judges **Dr. Carman Giacomantonio** from Halifax and our local judge **Dr. Carmen Bauer** from the Alberta Children's Hospital. This year our research day was combined with Basic science weekend and some skiing. The best paper was by **Dr. Kourosh Sarkhosh** investigating the treatment of infants with short gut syndrome. His preceptor was **Dr. David Siglet**. Dr. Sarkhosh also received honourable mention at Surgeons' Day.

### Research and Activities

Members of our division continue to be very productive in research. A recent review of our productivity as measured by a quality index indicates that output has almost doubled in the last five years.

Division members are also involved in an eclectic array of activity. **Dr. Gwen Hollaar** organized a very successful Bethune Round Table on international surgery. **Dr. Lea Austin** continues to lead the office of Health Technology and Innovation, while **Dr. John Graham** leads our surgical clerkship program. **Dr. Rohan Lall** has completed the University Master teaching program and is actively participating in undergraduate teaching and **Dr. Doug Johnson** has been accepted into this program recently. **Dr. Wayne Rosen** is actively involved in the medical ethics program at the University of Calgary.

### Future Directions and Initiatives

Perhaps the most significant change has seen the implementation of emergency surgery services at all sites. Several years ago **Dr. Janice Pasiaka** initiated an emergency general surgery program at the Foothills Hospital. This was one of the first services of its kind in Canada and its success has prompted Alberta Health Services to support programs at all adult surgery hospitals. This constitutes a major change in the way we handle our business requiring increased cooperation amongst surgeons and change in the way we manage our practices. Improved and more timely care to emergency patients and a better quality of working life for surgeons is the goal. General Surgeons in Calgary should be congratulated for moving forward with this important initiative.

Challenging times continue for our division with limited resources and an increasingly complex patient population.

We should, however, be encouraged by the new and energetic staff that have joined our ranks. Young faculty bring positive changes to our work environment and encourage us to critically look at new ways of providing care. This allows for renewal and rejuvenation of our program. The surgeons that are going to lead us tomorrow are arriving today.

## Division of Ophthalmology

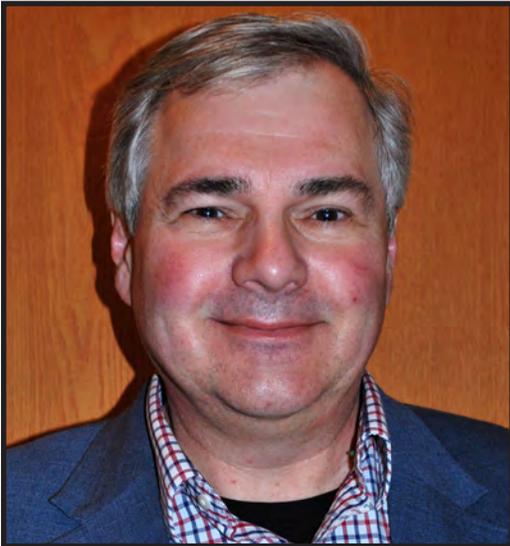


Photo: Katie Fisher/2010

**Dr. Kenneth Romanchuk, Chief, Division of Ophthalmology.**

### Division Structure and Organization

The division holds monthly business meetings, which includes ophthalmologists, two neuro-ophthalmologists and two vision research scientists.

Programs in the division include; Lions Eye Bank of Southern Alberta at RGH, including deep stripping automated endothelial keratoplasty (DSAEK) program by three corneal surgeons; Continued Retinopathy of Prematurity screening service to Neonatal Intensive Care Units at FMC, PLC and RGH (500± per year) and a follow-up neonatal clinic at ACH; Sight Enhancement Clinic (Low Vision Clinic) at RGH; Continued participation in the Craniofacial and Vascular Birthmark Clinics at ACH; Subspecialty clinics at RGH: corneal, glaucoma, neuro-ophthalmology, retinal, urgent eye and uveitis; University Eye Foundation. Also, **Dr. William Astle** participates in the traveling Sight Enhancement Clinic for Southern Alberta.

### Accomplishments and Highlights

#### Clinical Service:

Currently, the division is planning for a teleophthalmology project to service unmet eye needs of specific patient populations in southern Alberta, and server storage for Alberta.

#### Education:

**Dr. Amin Kherani** continues as residency program director until June 30, 2010, to be replaced by **Dr. Linda Cooper**. The residency program in Ophthalmology commenced in 2006 with one resident per year, and starting July 1, 2010 we will take two residents every second year. There continues to be a significant number of residents in Ophthalmology from other Canadian programs who take electives in Ophthalmology at the University of Calgary (UofC).

**Dr. Andy Crichton** continues as chair of our divisional fellowship. There are continuing fellowship programs in cornea,

pediatric ophthalmology, medical retina and surgical retina. Our fellowship program in Pediatric Ophthalmology is certified by the American Association for Pediatric Ophthalmology and Adult Strabismus, and participates in their annual match.

Teaching of undergraduates continues in small group settings, surgical clinical clerkship rotations and electives; **Dr. Vivian Hill** and **Dr. Karin Verstratin** have taken leadership roles in teaching ophthalmology in the newly reorganized medical student curriculum at the UofC. Dr. Hill received the 2009/10 Letters of Excellence Award for teaching in Course V (Neurosciences and Aging) from Undergraduate Medical Education with the UofC.

**Dr. John Huang** continues as chair of our divisional undergraduate medical education activities.

Mentorship continues for several UofC undergraduates in small research projects, as well as undergraduates from other Canadian universities.

### Research

We continue our annual divisional research day to recognize vision-related research in Calgary, both clinical and basic science; **Dr. Bryce Ford** is chairman of the organizing committee. Ongoing research projects are listed in the Appendices - please note that much of the basic science (bench) research in ophthalmology is performed through the basic science departments of the UofC, and not directly under the Division of Ophthalmology. This basic science research is often presented annually at our combined Eye Research Day and is eligible for awards on this day.

## Division of Orthopaedics

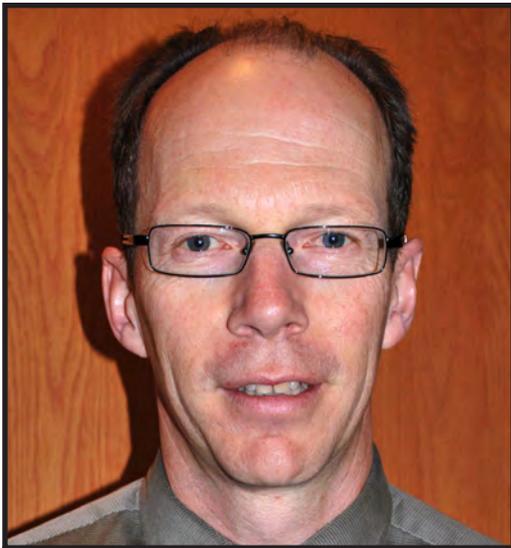


Photo: Katie Fisher/2010

**Dr. Kevin Hildebrand, Chief, Division of Orthopaedics.**

### Division Structure and Organization

The Division of Orthopaedics has the following Committees: Executive; Clinical Operations; Education; Research; Orthopaedic Surgery Residency Training Committee, Full Division; Various sub-committees of the Sections listed below; Orthopaedic Review Committee of HRC.

The Division of Orthopaedics has the following clinical sections: Core Orthopaedics, Orthopaedic Trauma, Joint Reconstruction/Arthroplasty, Upper Extremity, Orthopaedic Oncology, Foot and Ankle, Spine, Sport Medicine, and Pediatric Orthopaedics, as well as our Education, Research and Administration portfolios.

Our Division of Orthopaedics membership has a total of 48 teaching members, which includes eight GFT's, plus eight retired/semi-retired orthopaedic surgeons (who provide service in our education and clinical service delivery portfolios), eight basic scientists and three neurosurgeons.

### Accomplishments and Highlights

The Bone and Joint Clinical Network was established by Alberta Health Services in 2009. There are three working groups with Orthopaedic leadership and these include: Hip and Knee Arthroplasty, Soft Tissue Knee Injury and Trauma, with a Focus on Hip Fracture Management.

### Appointments

**Dr. Simon Goldstein** has assumed the role of Program Director from **Dr. Jacques Bouchard** for the residency training program.

### Education

#### Continuing Medical Education (CME):

The CME was a part of several symposiums and forums this

year, including the Canadian Orthopaedic Foot and Ankle Symposium (COFAS) on April 25 - 26, 2009 at the Health Sciences Centre, the 12th Annual Glen Edwards Day on May 22, 2009 at the Health Sciences Centre and the 2009 Canadian Orthopaedic Resident Forum (CORF) on April 3 - 6, 2009 at the Fairmont Palliser Hotel. CORF was attended by 65 final year Orthopaedic Residents and four auditors. Educational and oral examination sessions were facilitated by 33 Faculty members from across the nation. 2010 Canadian Orthopaedic Resident Forum (CORF) is scheduled for April 9 - 12, 2010 at the Palliser Hotel.

The CME was also involved in: Afternoon in Arthroplasty on September 28, 2009, at the Radisson Hotel; the 37th Annual Paediatric Orthopaedic Seminar and Townsend Lecture on October 23, 2009 at the Alberta Children's Hospital with guest speakers **Dr. Marie-Andree Cantin** (Montreal) and **Dr. Michael Busch** (Atlanta) and local speaker **Dr. Kelly Johnston** giving the RD Dewar Lecture and Points on Joints on November 6, 2009 at the Health Sciences Centre.

Citywide Orthopaedic Surgery Rounds are held the third Friday of every month except July and August.

#### Graduate Medical Education (GME)

**Dr. Jim Powell**, Orthopaedic Fellowship Program Director, has nine fellowship programs of which six had active fellows. Fellows in the Orthopaedic fellowship program include: **Dr. Alexander Trompeter** (AO Trauma), **Dr. Matthew Denkers** (Arthroscopy and Trauma), **Dr. Jacob Alant** (Combined Spine), **Dr. Sohail Bajammal** (Combined Spine), **Dr. Aleksa Cenic** (Combined Spine), **Dr. John Cunningham** (Combined Spine), **Dr. Alexandre Denault** (Combined Spine), **Dr. Jonathon Parkinson** (Combined Spine), **Dr. Raoul Pope** (Combined Spine), **Dr. Mark Winder** (Combined Spine), **Dr. Elizabeth Pedersen** (Foot and Ankle), **Dr. Timoret Keren** (Hand and Wrist), **Dr. Abdullah Alzahrani** (Joint Reconstruction), **Dr. Satish Kutty** (Joint Reconstruction), **Dr. David Lee** (Joint Reconstruction), **Dr. Matthew Oliver** (Joint Reconstruction), **Dr. Arkan Al-Huneiti** (Pediatric Orthopaedics), **Dr. Geberth Urbaneja** (Pediatric Spine), **Dr. Paige Demong** (Sport Medicine), **Dr. Hani Alsulaimany** (Trauma), **Dr. Ernest Kwok** (Trauma) and **Dr. Steve McChesney** (Trauma).

The 2nd Annual Orthopaedic Fellows Research Symposium took place on May 13th, 2009 and the winners were as follows: Norman Schachar Research Award: **Dr. Hashel Al-Tunaiji** (1st Place) followed by Dr. Denkers in 2nd Place with Dr. Kutty in 3rd Place. **Dr. Don Garbuz** from the University of British Columbia was the guest adjudicator for this event.

#### Undergraduate Medical Education (UME)

The Division of Orthopaedic Surgery received 66 clerkship electives from April 1, 2009 - March 31, 2010 from all over Canada as well as abroad with many applying to our program based on their positive experience here.

The 2009 MSK Course II was very successful, thanks to our faculty, residents and fellows for contributing their countless hours teaching this course. The 2010 MSK Course II is scheduled from October 25th - December 17th, 2010 and we will apply *Division highlights continue on the next page*

*Orthopaedics continues*

Team Based Learning for the Orthopaedics portion of the course.

## Research

The Division of Orthopaedic Surgery research activity has remained productive. **Dr. Richard Boorman** won the 2009 COREF Research Award for: "A Retrospective Regression Analysis of Operative vs. Non-Operative Treatment of Full-Thickness Rotator Cuff Tears." Dr. Bouchard was awarded a Certificate of Merit by CAME. **Dr. Carmen Brauer** won the Department of Surgery Research Prize for \$75,000. **Dr. Robert C. Bray** was selected as the winner of the American Orthopaedic Society for Sports Medicine's (AOSSM) \$250,000 Ligament and Tendon Repair and Regeneration Grant for his project: "Biological Augmentation of Ligament and Tendon Healing: Role of Neuropeptides." **Dr. Paul Duffy** and **Dr. Prism Schneider** were awarded the 2009 Canadian Orthopaedic Research Legacy (CORL) Grant for their research proposal entitled: "A Randomized Clinical Trial Comparing Open Reduction and Internal Fixation with Non-operative Treatment of Isolated Ulnar Diaphyseal Fractures." **Dr. Cy Frank** was named President of the Canadian Orthopaedic Association. **Dr. John Grant** won the 2009 COREF Research Award for: "Knee Dislocation in the Calgary Health Region: Demographics and Outcomes." **Dr. Kevin Hildebrand** was awarded the 2009 J. Edouard Samson Award for his research proposal entitled: "Post-traumatic Joint Contractures: Correlation between the Human Condition and an Animal Model, and Identification of a Potential Preventative Intervention."

**Dr. Ian Lo** won the 2009 COREF Research Award for: "Patient Outcomes and MRI Assessment of Partial Thickness Tears of the Rotator Cuff Managed Non-Operatively." **Dr. Beth Pedersen** won the 2009 COREF Research Award for: "Functional Outcome of Achilles Tendon Ruptures: A Pedobarographic Assessment of the Results of Operative vs. Non-Operative Treatment." Dr. Schneider was awarded the 2009 COREF Research Award for: "A Prospective Randomized Trial Comparing Open Reduction and Internal Fixation with Non-Operative Treatment of Isolated Ulnar Shaft Fractures." Dr. Al-Tunaiji was awarded the Norman Schachar Research Award for "Validity & Reliability of Measuring the Resting Foot Angle," at the 2nd Annual Fellows Research Symposium. **Dr. Luke Harmer** was awarded the 2008 Hip Hip Hooray Grant (Announced April 2009), \$2,425.00, for "Extension bracing after total knee arthroplasty to prevent flexion contracture." **Dr. Christina Hiscox** was awarded the 2008 Hip Hip Hooray Grant (Announced April 2009), \$1,200.00, for "The Early Definitive Diagnosis of Occult Scaphoid Fractures: A randomized controlled trial comparing early definitive diagnosis to the current standard of care." **Dr. Jeremy LaMothe** was awarded the 2008 Hip Hip Hooray Grant (Announced April 2009), \$2,500.00, for "Treatment of Medial Epicondyle Fractures in Children: A Systematic Review."

## Division of Otolaryngology



Photo: Katie Fisher/2010

**Dr. Wayne Matthews, Chief, Division of Otolaryngology.**

### Division Structure and Organization

Current Committees within the division include: the Division Executive Committee, with members, **Dr. Thomas Gillis**, **Dr. Joseph Dort**, and **Dr. Derek Drummond** and chaired by **Dr. Wayne Matthews**; the Resident Training Committee, with members **Dr. Dort**, **Dr. S. Joseph Warshawski**, **Dr. James Brookes**, **Dr. Paul Marck**, and **Dr. T. Wayne Matthews** and chaired by

**Dr. Doug Bosch**; the Simulation Committee, with members **Dr. Chau**, and **Dr. Phillip Park** and chaired by **Dr. James Brookes**. The Undergraduate Director is **Dr. Paul Marck (R Burke)**, the CME Director is **Dr. Anita Hui** and the Research Director is **Dr. Dort**.

Current programs within the division include the Resident Training Program and the Ohlson Research Initiative. The Resident Training Program currently accepts year one and two residents on alternating years through the CaRMS process. The Ohlson Research Initiative is directed by **Dr. Dort**.

### Accomplishments and Highlights

**Clinical Service:** **Dr. Bud (Worth) Shandro** was granted Senior Surgeon status in recognition of his many years of service.

**Professional Service:** **Dr. Beth Lange** served as President of the Alberta Otolaryngology – Head and Neck Surgery Society.

**Dr. Dort** served as President of the Canadian Society of Otolaryngology – Head and Neck Surgery. **Dr. Drummond** sat as a Board member of the Royal College of Physicians and Surgeons - Otolaryngology - Head and Neck Surgery Examination. **Dr. Matthews** acted as Vice Chair of the Royal College of Physicians and Surgeons Specialty Committee - Otolaryngology - Head and Neck Surgery.

#### Education

**Medical Students:** **Dr. Breanne Everett** (UofC PG1 Plastic Surgery July 2009) and **Dr. Max Klein** (UofA PG1 Oto-HNS July 2010) successfully completed and presented research

*Division highlights continue on the next page*

*Otolaryngology continues*

projects with faculty.

**Research:**

Peer reviewed publications are listed in the Appendices.

**Future Directions and Initiatives**

The division is currently engaged in surgical simulation of

temporal bone (middle and inner ear) surgery in the Temporal Bone (wet) Lab. We have recently acquired the equipment to allow similar cadaveric simulation of endoscopic sinus surgery. Funding has been obtained to expand our future simulation capacity as space is available in the planned University of Calgary (UofC) simulation facility.

## Division of Pediatric Surgery

**Division Structure and Organization**

There are nine active sections within the Division of Pediatric Surgery; General Surgery, Orthopaedic Surgery, Otolaryngology, Urology, Plastic Surgery, Dentistry, Ophthalmology, Neurosurgery and Pediatric Gynecology. Pediatric Cardiac Surgery continues to be done in Edmonton, except for some minor procedures that are performed by **Dr. David Sigalet** and **Dr. Mary Brindle**.

There are 26 full-time pediatric surgeons who continue to work at the Alberta Children's Hospital with 32 surgeons who do part-time pediatric surgery work. Four divisions, Pediatric Orthopaedics, Pediatric General Surgery, Pediatric Plastic Surgery and Pediatric Dentistry do only pediatric call. The Divisions of Pediatric Orthopaedics and Pediatric General Surgery continue to do the bulk of the emergency surgery, accounting for 61 per cent of the surgery. The number of emergency cases remained the same but the complexity of the cases has increased. The general surgical residents will have to remain in-house in future if a surgical step-down unit is developed along with a trauma ward.

The foreign body call schedule was set up to deal with rigid bronchoscopy removal or foreign bodies in children and is provided by Otolaryngology.

Each subspecialty is lead by a section head. They are as follows: Pediatric Orthopaedic Surgery is lead by **Dr. Elaine Joughin**, Pediatric General Surgery is lead by **Dr. Andrew Wong**, Pediatric Otolaryngology by **Dr. Derek Drummond** and Pediatric Ophthalmology by **Dr. William Astle**. **Dr. Mark Hamilton** leads Pediatric Neurosurgery, **Dr. Anthony Cook** leads Pediatric Urology, **Dr. Warren Loeppky** leads Pediatric Dentistry and will be installed as National President of The Canadian Academy of Pediatric Dentistry, and **Dr. Sarah Hulland** serves as President of the Alberta Academy of Pediatric Dentistry. **Dr. Bill Hyndman** is the Regional Division Chief of Pediatric Surgery and the Site Chief of the Alberta Children's Hospital. **Dr. Rob Harrop** continues as the present Chief of the Division of Pediatric Plastic Surgery, **Dr. Philippa Brain** is the Regional Division Chief of Pediatric Gynecology and **Dr. Frank Dicke** is the Director of the Division of Cardiology.

**Dr. Fabio Ferri-de-Barros** joined Alberta Children's Hospital in January 2010 as the new Pediatric Orthopaedic Surgeon and **Dr. Henry Lau** has retired from Pediatric General Surgery but will continue to teach on a part-time basis.

**Education and Research**

All three Full-Time Ophthalmologists enrol patients into multi-center studies funded by the Pediatric Eye Disease Inves-

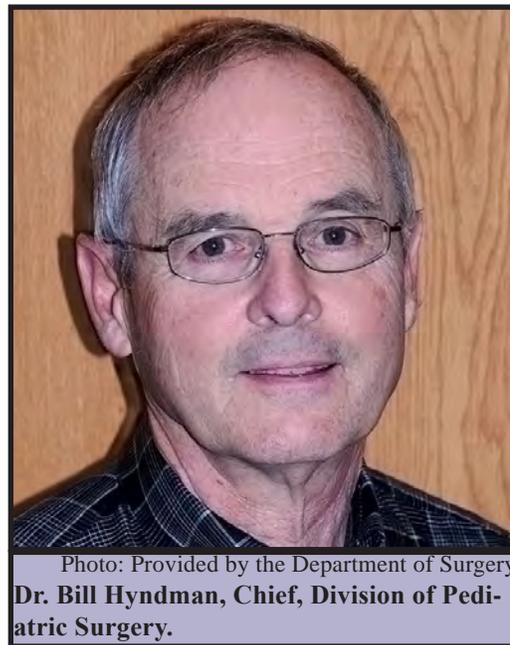


Photo: Provided by the Department of Surgery  
**Dr. Bill Hyndman, Chief, Division of Pediatric Surgery.**

tigational Group (PEDIG) based in the US. As well, all three GFT's are working collaboratively with Endocrinology and Neurology on studies of corneal nerve pathology pertaining to childhood Type I Diabetes.

**Dr. Kenneth Romanchuk** is involved in strabismus research as well as the projects previously noted.

**Dr. Linda Cooper** is also working on children with optic nerve disorders and is setting up the new ERG lab in the clinic which will lead to further research into multiple congenital retinal disorders.

All members of the Pediatric Neurosurgery Division are active in teaching medical students and Residents. As of July 2009, all Neurosurgery Residents will complete a six block rotation in Pediatric Neurosurgery as part of their training program.

Pediatric Otolaryngology is committed to research. **Dr. Drummond** is continuing a randomized control trial on the use of Coblation technology for tonsillectomy in the pediatric population with obstructive sleep apnea.

**Dr. Sigalet** from the Division of Pediatric General Surgery continues his excellent work as the Head of Research in the Division of General Surgery and continues to run his experimental laboratory in short gut syndrome. He also continues to play a very active role in the training of post-graduate residents in pediatric surgery and also continues to present his papers both nation-

*Division highlights continue on the next page*

### *Pediatric Surgery continues*

ally and internationally at the Canadian Association of Pediatric Surgeons and the American Pediatric Surgery Association. Dr. Sigalet also continues his work as an examiner for Pediatric General Surgery at the Royal College of Canada. Dr. Sigalet is the Assistant Head of the Department of Surgery. The support for a Research Chair in Pediatric Surgery as part of the Alberta Children's Hospital Research Institute Chairs and Professorships, was increased from \$2 million to \$3 million. This is subject to donor funding. The Foundation also increased the interim support for his ongoing research.

**Dr. Paul Beaudry** has established an interest in pediatric oncology as a clinical focus. He has established a lab under the direction of **Steve Robbins**, Co-Director of the Southern Alberta Cancer Institute. The overall direction of the research is to develop and explore new therapies and strategies for the treatment of neuroblastoma. Specific projects that are underway are determining the utility of oncolytic virus therapy alone and in conjunction with angiogenesis inhibition for high-risk neuroblastoma; and characterization of neuroblastoma tumour initiating cells as targets for therapy. Dr. Beaudry started a strong collabora-

tion with **Dr. Peter Forsyth**, whose lab is a world leader in oncolytic virus therapy for brain tumours. He has also established collaboration with **David Kaplan** at Sick Kids, where his lab has led the field of neuroblastoma tumour initiating cells.

Dr. Brindle continues her fetal research on congenital diaphragmatic hernias and pulmonary hyperplasia. Additionally Dr. Brindle and Dr. Wong have joined the Robotic Group run by **Dr. Garnette Sutherland** and **Dr. Alex Greer**. The group will be doing research to develop the technique of operating on children and hopefully the fetus, under MR and laparoscopic control.

Dr. Brindle continues her work with CAPSNET and has presented this work at APSA. Dr. Sigalet presented the work of CHIRP at the BAPS meeting. This clinical work will revolutionize the treatment with TPN in infants and children.

Dr. Hyndman and Dr. Wong continue their work on fecal and urinary incontinence in children. The surgeons at Alberta Children's Hospital continue their work on using the laparoscope in multiple fields and these continue to expand in thoracoscopy, urology, otolaryngology and orthopaedics.

## Division of Oral and Maxillofacial Surgery

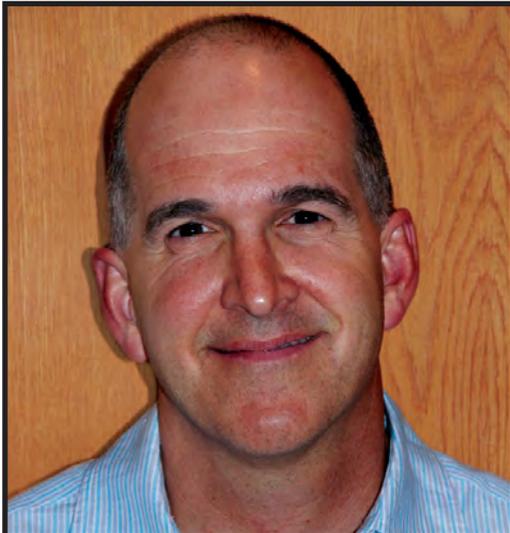


Photo: Provided by the Department of Surgery  
**Dr. Brian Whitestone, Chief, Division of Oral and Maxillofacial Surgery.**

### **Accomplishments and Highlights**

The Division of Oral and Maxillofacial Surgery has had a productive year, serving the needs of Calgarians and people from peripheral outlying regions, including central and south Alberta and southeast British Columbia.

The Divisional Members have taken on an increased role from a teaching standpoint. Specifically, there has been significant engagement with members of the general practice residency from the Foothills Dental Program. These residents have had multiple opportunities to engage and participate in advanced oral surgical care. On a going forward basis, the Division hopes to increase

this collaborative relationship.

Additionally, several residents from the Division of Plastic and Reconstructive Surgery have participated in clinical rotations with the Division of Oral and Maxillofacial Surgery. This relationship has provided excellent opportunities for joint patient care and collaboration between the two Divisions.

The principle challenges to the Division are related to the environment. There is consistently increasing utilization of the NHSF's for basic and more advanced oral maxillofacial surgical procedures. This increased emphasis on performing efficient and effective delivery of care using the out patient model has reduced the overall impact on hospital based resources.

### **Future Directions and Initiatives**

Members of the Division are reviewing possible transitions with senior members. The division will actively seek post graduate trainees with advanced reconstructive skills, cleft and craniofacial training, research and educational experience.

## Division of Plastic Surgery

### Division Structure and Organization

The division is comprised of 25 surgeons and seven residents. **Dr. Robert Lindsay** is the Division Chief of Plastic Surgery. He is assisted by four site chiefs: **Dr. William de Haas** at FMC, **Dr. Alan Lin** at PLC, **Dr. Mark Haugrud** at the RGH and **Dr. Rob Harrop** at the ACH.

### Accomplishments and Highlights

#### Clinical Service:

Plastic Surgery services of a broad spectrum are required at all sites to address relevant trauma and infections presenting to the emergency department of each hospital in numbers that would make centralization under current resources impossible. Urgent and elective plastic surgery is also carried out at each institution and covers many fields including congenital and acquired conditions of the extremities, trunk, head and neck.

As the FMC has the sole Neurosurgery presence, all major facial injuries accompanied by significant head injury are treated at that site. The regional burn centre is also at FMC, dealing with all major and most more minor such injuries that require hospital admission for southern Alberta and southeast British Columbia. Emergency microsurgery for the reattachment or revascularization of amputated or near-amputated parts is performed at all sites.

The association with the Tom Baker Cancer Centre and Divisions of Surgical Oncology, Otolaryngology, Thoracic surgery and Gynecology-Oncology provides a constant stream of patients treated by combinations of extirpative and reconstructive surgery in the areas of breast cancer, head and neck cancer, sarcoma and other sites where reconstruction is required, such as with pelvic exenteration and chest wall tumours.

Hand surgery has always been a major component of plastic surgery in this region and across the country. Each site has a Hand Clinic where there are assembled members of a team of several disciplines to analyze and treat a large number of patients who present hand problems of congenital or acquired nature – trauma, degenerative disease, neoplasia, infections, etc. Peripheral nerve surgery including brachial and sacral plexus work remains largely in the hands of plastic surgery. Aesthetic surgery is an ever expanding part of plastic surgery and it is our mandate to ensure that it is performed safely and effectively according to public demand.

#### Education:

**Dr. Frankie Fraulin** is the Director of the Clerkship for Plastic Surgery. Clerks may choose a three week rotation in plastic surgery as part of their surgical rotation. Increasing numbers in clerks will pose challenges for the division but nothing that cannot be dealt with efficiently.

**Dr. David McKenzie** is the Director of Residency Training for Plastic Surgery, a five year program that currently has seven residents. The division was granted two positions for 2010 and selected two University of Calgary applicants to join the program on July 1, 2010. The Royal College Review was successfully completed in 2009.



Photo: Provided by Marie McEachern/2010  
**Dr. Robert Lindsay, Chief, Division of Plastic Surgery.**

As of March 2010, the Inaugural Microsurgery Surgery Training Course, founded by **Dr. Christiaan Schrag**, was attended by four plastic surgery residents and mentored by five plastic surgeons. The course lasted one week and involved intensive microvascular training using a rodent model. We anticipate making this course available to all surgical residents in the coming years. Currently numbers are limited by space and the number of microscopes, but we hope to grow as the new surgical simulation centre opens.

**Dr. Duncan Nickerson** was appointed Chair of the Plastic Surgery Examination Development Committee for the Royal College of Physicians and Surgeons of Canada. In addition, Dr. Nickerson served his first year of a five year term as an oral examiner for the Royal College of Physicians and Surgeons of Canada, Plastic Surgery Examination.

As of January 2010, **Dr. Douglas Humphreys** has assumed divisional responsibility from **Dr. Frankie Fraulin**.

The first annual Birdsell Lecture, created to recognize the immense contributions of **Dr. Dale Birdsell** in plastic surgery locally, nationally and internationally was delivered by **Dr. Louise Caoette-Laberge**, a pediatric plastic surgeon, whose talk was entitled “Breast Reconstruction in Teenage Girls.”

On February 25, 2010, **Dr. Navin Singh** spoke about “Advanced Abdominal Wall and Breast Reconstruction Repair techniques using Biologics (Alloderm).”

#### Research:

Dr. Nickerson has been appointed the Division of Plastic Surgery Director of Research, effective July 2009.

### Resident Research Day

• **Dr. Christopher Doherty** - “Cost Effectiveness Analysis of the Management of Metacarpal and Phalanx Fractures in the Minor Surgery Suite versus Main Operating Theatre.”

*Division highlights continue on the next page*

*Plastic Surgery continues*

- **Dr. Jennifer Matthews** - "The birth prevalence and epidemiology of orofacial clefts in Canada."
- **Dr. Fred Loiselle** - "A randomized controlled trial that compares the incidence and duration of pillar pain following carpal tunnel release with and without closure of the Palmar Fascia."
- **Dr. James Kennedy** - "The effect of topical application of an anti-inflammatory dominant negative I- $\kappa$ B vector on the burn milieu of a murine scald wound model."
- **Dr. Jeff Dawes** - "Pediatric burns at Alberta Children's Hospital: A retrospective review during 1997-2004."
- **Dr. Ryan Frank** - "Visual Development in Infants: Visual complications of periocular hemangiomas."
- Visiting Professor: **Dr. Louise Caouette-Laberge** – Montreal, Ste. Justine's "Correction of Ear Deformities."
- Invited Speaker Dr. Sigalet – Associate Director, Department of Surgery, "Balancing life as a Researcher and Clinician – Following your passion."
- Best Research Presentation went to **Ryan Frank** for his presentation "Visual Development in Infants: Visual Complications of Periocular Hemangiomas." He was presented this award by Dr. Caotte-Laberge.

## Division of Podiatric Surgery



Photo: Provided by the Department of Surgery  
**Dr. Brent Haverstock, Chief, Division of Podiatric Surgery.**

closely with the Division of Vascular Surgery. The service is also consulted to see in-patients at the Foothills Medical Centre and Rockyview Hospital on a regular basis.

### Future Directions and Initiatives

The Division of Podiatric Surgery continues to work on the development of a residency training program. The development of this program is directly related to the need for increased surgical resources to insure appropriate practical experience for the residents.

The division is also developing the framework for a Diabetic Foot Clinic. The purpose of the clinic is to develop a single entry point in the city for individuals with a diabetes related foot complication. Once in the clinic patients can be evaluated and treated and those individuals identified for consultation to other medical and surgical services. This type of program will result in less fragmentation of care in Calgary and improved patient outcomes.

### Division Structure and Organization

The Division of Podiatric Surgery has now been a part of the Department of Surgery for 12 years. The division continues to see its role in patient care continue to grow in the Calgary area.

The Division of Podiatric Surgery is composed of two sections, an Out-Patient section and a Hospital section. The members of the Outpatient section provide ambulatory surgical care for a number of common foot disorders. The members of the Hospital section provide in-patient hospital care working with the vascular surgeons, internists and infectious disease specialists in the prevention of lower limb amputations. The staff podiatric surgeons at the Peter Lougheed Centre also provide emergency department coverage and provide in-hospital consultations.

### Highlights

The members of Podiatric Surgery continue to integrate their clinical services in the Calgary area. The division has a very active in-patient service at the Peter Lougheed Centre working

## Division of Thoracic Surgery

### Accomplishments and Highlights

The Division of Thoracic Surgery has been active on many fronts over the past year.

From a clinical viewpoint, volumes remain high. Wait times have been greatly improved by a central referral system which insures some of the fastest access times in Canada. **Dr. Sean Grondin**, the division manager, coordinates this, and all the other practical aspects for the smooth running of the division. Operating room access was given a boost this spring, with additional cancer surgery operating time on weekends. While difficult on Thoracic Surgery team members, it has helped reduce patient backlogs. The introduction of VATS or minimally invasive lobectomies has been completed and a substantial number of patients have benefited from this approach. Patients appear to have less pain, and thus surgery can be offered to those who might not have been surgical candidates in the past.

The members of the division are extremely active, both locally and at a national level. **Dr. Sean McFadden** is the ombudsman for the Department of Surgery, as well as the divisional Director of Research and our representative on the Department Research Committee. Dr. McFadden also runs the Quality Assurance Council, which meets biweekly, and continues to work diligently to insure outstanding patient care. Dr. Grondin has been active in research, having completed an important study on medical manpower in Thoracic Surgery for the Canadian Association of Thoracic Surgery. In addition he has published a number of papers and book chapters and is an associate editor for Diseases of the Esophagus. Dr. Grondin also examines for the Royal College. In his spare time, he is the President of the Foothills Medical Staff Association and has shown great enthusiasm in this role. **Dr. Andrew Graham** remains program director and is on the Royal College Nucleus Committee in Thoracic Surgery. He too has had a number of publications and is an associate editor for the Canadian Journal of Surgery. Dr. Graham is one of the first in the Department of Surgery to work with STATIT in order identify quality indicators that are readily accessible from standard hospital data. Dr. Gelfand is completing his second year as President of the Canadian Association of Thoracic Surgeons and is the Department of Surgery representative on the UCMG council. He has continued his association with members of the Department of Radiology and Faculty of Engineering looking at the development of three dimensional algorithms for imaging patients with lung cancer.

From an educational perspective, **Dr. Colin Schieman** has just completed his residency and will be sitting his exams this fall. Dr. Schieman was a superb resident clinically and extremely productive from a research point of view, with seven publications during the past two years. He also continued the example of his predecessors, winning the Ginsberg Research Prize for the best resident paper at the annual meeting of the Canadian Association of Thoracic Surgeons. Dr. Schieman will be spending a year at the Mayo Clinic in Rochester doing an advanced clinical fellowship where we are certain he will perform superbly. Our new resident is **Dr. Shaun Deen**, who completed his fellowship in General Surgery at the University of British Columbia, as well



Photo: Katie Fisher/2010

**Dr. Gary Gelfand, Chief, Division of Thoracic Surgery.**

as a Masters in Education. We welcome him to the program. Continuing medical education remains an important goal of the division and we were honoured to have two visiting professors this past year, **Dr. Eric Vallieries**, from the Swedish Hospital in Seattle and **Dr. Michael Johnston**, one of the most respected clinical and basic science researchers in Thoracic Surgery, from Dalhousie University.

Finally, and most importantly, the Division of Thoracic Surgery continues to benefit from an outstanding team of health professionals we are proud to work alongside. These include our dedicated OR team, the nurses and other health professionals on our ward and in our clinic and the outstanding secretaries in our offices.

## Division of Transplant Surgery

### Division Structure and Organization

The Division of Transplant Surgery continues to have three surgeons, working within a very multidisciplinary environment, in the Southern Alberta Transplant Program.

### Accomplishments and Highlights

The third year general surgery residents and nephrology fellows have a rotation in transplant surgery. The division also has a multi-organ fellowship program which is under the leadership of **Dr. Mauricio Monroy**.

A national organ and tissue registry has been developed by Canadian Blood Services where incompatible donor-recipient pairs can now be included in the Living Donor Paired Exchange.

Every quarter, Canadian Blood Services run a match search in the registry to identify potential two-way, paired exchanges (between two incompatible pairs) or domino transplants involving multiple pairs. Proposed matches are reviewed by an advisory board and, if all parties approve, arrangements are made for multiple transplant surgeries, which usually occur on the same day.

A surgical transplant team from FMC including Dr. Monroy participated in a national 'domino' kidney transplant that involved eight co-ordinated surgeries at hospitals in three provinces.

Domino and paired exchange transplants are a possibility for individuals who wish to donate a kidney to a family member or

friend with end-stage renal disease but cannot because the match proves incompatible.

Up to July 2010, 107 donor recipient pairs and 14 individuals have been entered into the registry and 39 Canadians have received a new kidney through the domino model.

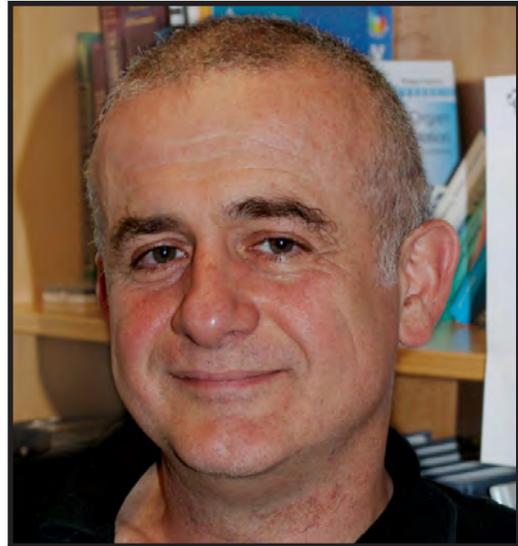


Photo: Provided by the Department of Surgery  
**Dr. Serdar Yilmaz, Chief, Division of Transplant Surgery.**

## Division of Urology

### Division Structure and Organization

The Division of Urology is situated primarily at the Rockyview General Hospital with 12 Adult and two Pediatric Urologists participating in urological care. Within the Division there are several urologists focusing on specific sub-specialties including pediatrics, oncology, urethral strictures, percutaneous stone removals, robotics, female urology. In addition **Dr. Brian Donnelly** is performing cryotherapy for cancer of the prostate as a primary treatment and a secondary treatment. Also, with Interventional Diagnostic Imaging, cryotherapy is being used for small renal cell cancer.

### Accomplishments and Highlights

This year was highlighted with the opening of the Southern Alberta Institute of Urology located at the Rockyview General Hospital. All the urologists in the city are now situated at the Rockyview above the parkade, and in addition there is the Prostate Centre where all the prostatic biopsies are being performed. A Bladder Centre has been opened under the direction of **Dr. Kevin Carlson** and **Dr. Richard Baverstock**. This will treat male and female patients with bladder incontinence. The privately funded DaVinci robot is certainly a technological advancement for prostatic and other urological procedures and is a great addition to the Rockyview General Hospital Urology Department. The Green light laser is being used for benign prostate disease.



Photo: Katie Fisher/2010  
**Dr. John Dushinski, Chief, Division of Urology.**

The Division of Urology at the new Southern Alberta institute will continue to provide excellent urologic care for the population of Southern Alberta and area.

*Division highlights continue on the next page*

*Urology continues***Alberta Bladder Centre**

An innovative, multidisciplinary centre dedicated to bladder care will open its doors this fall

Located in the Southern Alberta Institute of Urology at the Rockyview Hospital, the Alberta Bladder Centre will officially open its doors this fall as a dedicated referral centre expressly established to support the diagnosis, treatment and education of male and female patients with neurological and non-neurological conditions affecting bladder and voiding function.

The centre began as the vision of Co-Medical Directors, **Dr. Kevin V. Carlson**, MD, FRCSC and **Dr. Richard J. Baverstock**, MD, FRCSC, both members of the Division of Urology, who saw an opportunity to improve the access, quality and cost of care for

this complex group of patients by bringing together a multidisciplinary team of professionals in one place. The team will include urologists, general practitioners, gynecologists, physiotherapists and registered nurses. The Alberta Bladder Centre practitioners also envision a role in educating the medical community and the population at large about bladder health.

Initial funding to launch the centre came from corporate donations and The Alberta Bladder Foundation will be established in the near future to allow the acceptance of private donations which will be directed to support research and educational initiatives related to bladder function. The Alberta Bladder Centre website ([www.albertabladdercentre.com](http://www.albertabladdercentre.com)) is currently under development and will launch this fall as well.

**Division of Vascular Surgery****Highlights and Achievements**

The Division of Vascular Surgery has seen changes in manpower and staffing last year and will see more changes in the coming year. In August 2009, **Dr. Matt Smith** relocated his practice to the greater Vancouver area. **Dr. Mark Nutley** joined the Division in October 2009, leaving a practice at Laval University in Québec City. He brings to the division expertise in minimally invasive peripheral arterial interventions, rounding out the endovascular expertise of the group, which is amongst the most advanced in Canada. Welcome Dr. Nutley! With five present members, the Division is still short one surgeon (compared to its staffing level from 2004 - 2009) and hoping to be able to recruit, to fulfill a manpower plan that has identified a need for eight vascular surgeons, to serve the population of southern Alberta by 2016.

In 2006, the division proposed a plan that would reorganize the service to a more patient-focused model of care (centralized referral with option of directing referrals to the first available surgeon, partnering with nurse clinicians for more patient education and family support, partnering with allied specialties for vascular risk reduction and safe foot care). This model depends upon infrastructure improvements at PLC (in the OR, ambulatory clinics and in-patient unit). Most recently, a business plan was given to Alberta Health Services Senior Management. The Division is hopeful this plan will be considered for capital development at the next allocation of funding, in spring 2011.

A Clinical Pathways project was launched on the vascular in-patient unit this spring. The project aims to improve clinical outcomes and reduce lengths of stay for the most common elective major vascular operations by standardizing care and setting clear goals for patients at each stage in their recovery. When the project is fully deployed, patients, families and all caregivers will be aware of day by day recovery goals and work towards these targets on their pathway to a speedy and uneventful recovery.

Calgary vascular surgeons continue to lead Canada in the use of endovascular treatment for ruptured aortic aneurysms. Published data from Calgary's early experience demonstrated a halving of operative mortality when this minimally invasive



Photo: Provided by Dr. Paul Petrasek  
**Dr. Paul Petrasek, Chief, Division of Vascular Surgery.**

technique is used. This pioneering work has now been adopted at many centers in Canada; however none achieve the high proportion of endovascular repairs available to patients in Calgary.

**Dr. Randy Moore** leads a group of three surgeons who have recruited the greatest number of patients of any centre participating in the Anaconda endovascular graft Phase 2 FDA trial. More Calgary patients have been entered into this study than at any other major academic medical centre in North America.

The Division's research assistant, **Christi Findlay** has completed a project charter with IT that will obtain a comprehensive and fully supported QI/QA database to replace an older database that was no longer functional. This is crucial to monitoring patient outcomes and was an enormous project – thank you and excellent work Christi!

In May 2010, **Dr. Paul Petrasek** was awarded a Master's degree in Health Care Management from Harvard University, culminating two years of intensive study that included bi-monthly weeks of lectures in Boston.



***TOGETHER, LEADING AND  
CREATING EXCELLENCE IN  
SURGICAL CARE***



# APPENDICES

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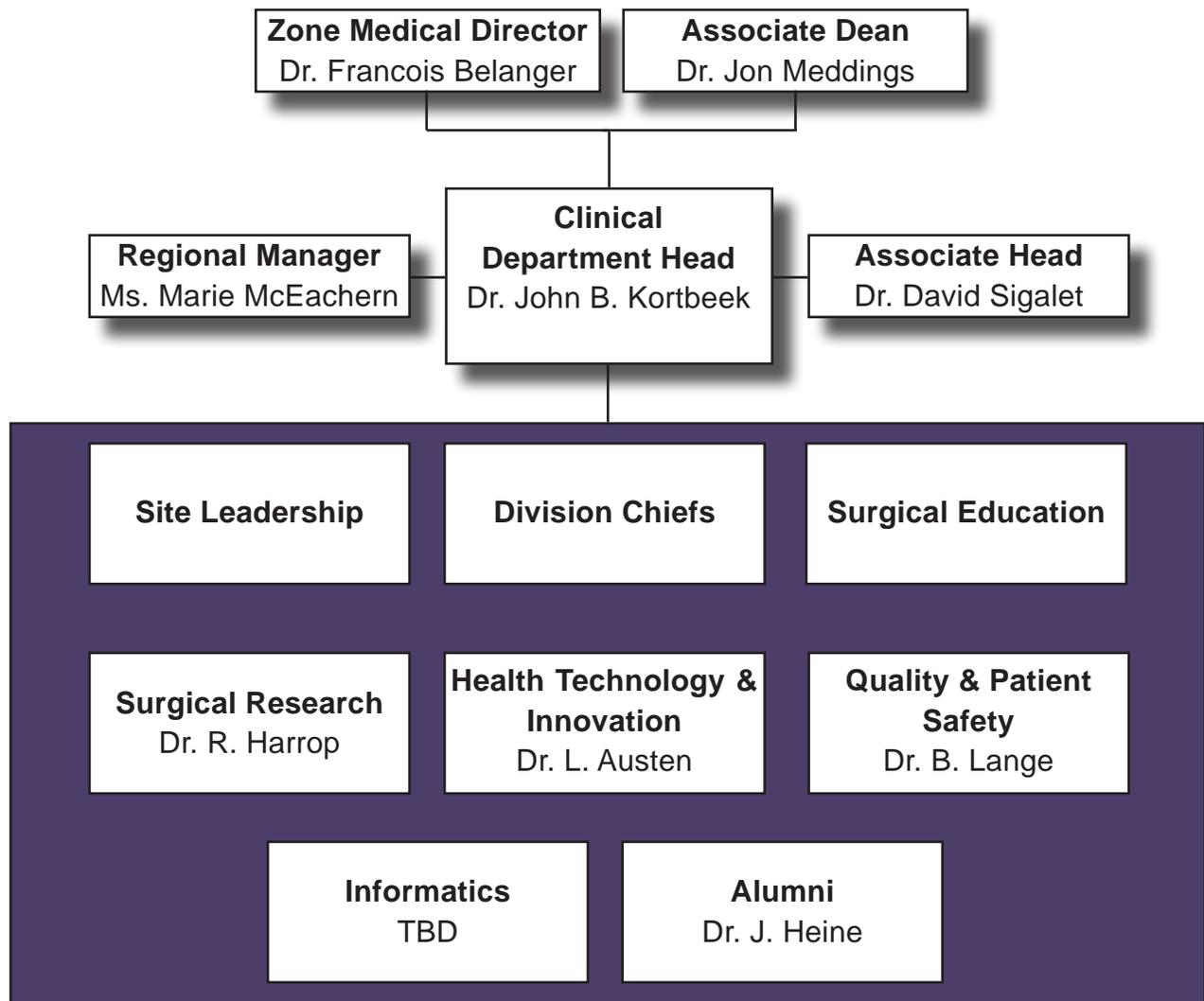
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# APPENDICES

## APPENDIX 1: DEPARTMENTAL STRUCTURE AND ORGANIZATION

### 1.1 GOVERNANCE

#### Leadership – Department of Surgery



## Division Chiefs – Department of Surgery

**Regional Clinical Department Head**  
Dr. John B. Kortbeek

**Division Chief**  
Dentistry & Oral Health  
Dr. E. Kalaydjian

**Division Chief**  
General Surgery  
Dr. F. Sutherland

**Division Chief**  
Physician Leader  
Surgical Oncology  
Dr. W. Temple

**Division Chief**  
Ophthalmology  
Dr. K Romanchuk

**Division Chief**  
Oral / Maxillary  
Dr. B. Whitestone

**Division Chief**  
Orthopedics  
Dr. K. Hildebrand

**Division Chief**  
Otolaryngology  
Dr. W. Matthews

**Division Chief**  
Paediatric Surgery  
Dr. W. Hyndman

**Division Chief**  
Plastic Surgery  
Dr. R. Lindsay

**Division Chief**  
Podiatry  
Dr. B. Haverstock

**Division Chief**  
Thoracic Surgery  
Dr. G. Gelfand

**Division Chief**  
Transplant  
Dr. S. Yilmaz

**Division Chief**  
Urology  
Dr. J. Dushinski

**Division Chief**  
Vascular Surgery  
Dr. P. Petrasek

## Site Leadership – Department of Surgery

### Regional Clinical Department Head

Dr. John B. Kortbeek

#### Site Chief, Alberta Children’s Hospital

Dr. W. Hyndman

#### Site Chief, Foothills Medical Centre

Dr. R. Hu

#### Site Chief, Peter Lougheed Centre

Dr. J. Nixon

#### Site Chief, Rockyview General Hospital

Dr. J. Dushinski

#### Alberta Children’s Hospital

- Dr. William Hyndman, Site Chief
- Dr. Peter Farran, Division Chief, Anesthesia
- Ms. Susan Reader, OR Manager

#### Foothills Medical Centre

- Dr. Richard Hu, Site Chief
- Dr. Gerald Eschun, Division Chief, Anesthesia
- Ms. Darcee Clayton, OR Manager
- Ms. Denise Brind, Director

#### Peter Lougheed Centre

- Dr. James Nixon, Site Chief
- Dr. Craig Pearce, Division Chief, Anesthesia
- Dr. David Halpenny, Chair, OR Committee
- Ms. Lori Gervais, OR Manager
- Ms. Marg Semel, Director

#### Rockyview General Hospital

- Dr. John Dushinski, Site Chief
- Dr. Kevin Torsher, Division Chief, Anesthesia
- Ms. Linda Makar, OR Manager
- Ms. Janice Stewart, Director

## Surgical Research – Department of Surgery

### Regional Clinical Department Head

Dr. John B. Kortbeek

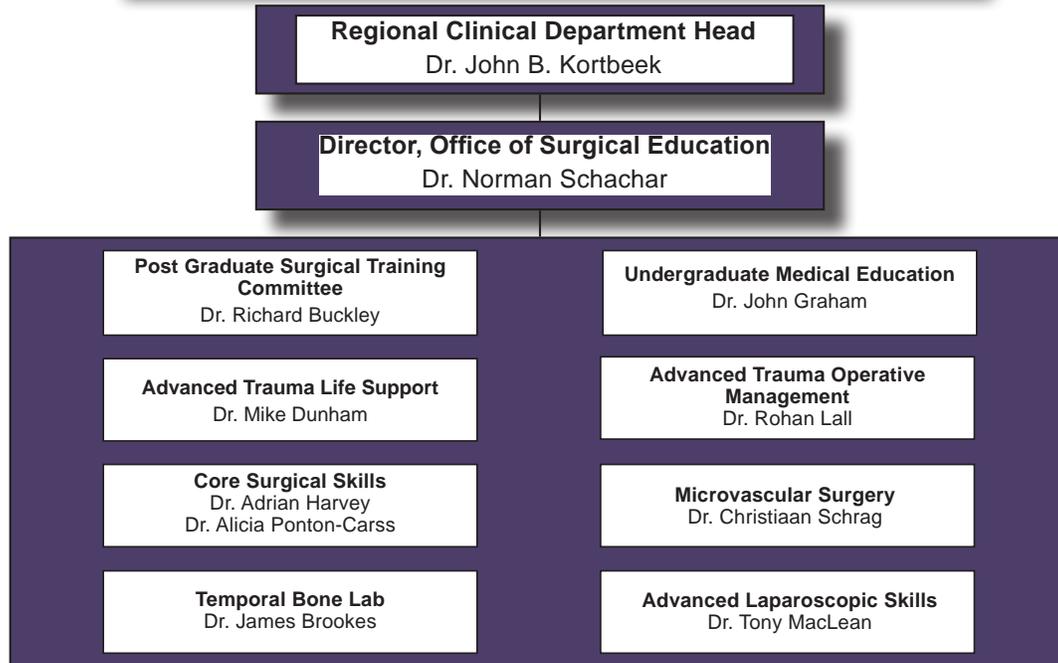
### Director, Office of Surgical Research

Dr. Rob Harrop

### Associate Director

Dr. Elizabeth Oddone - Paolucci

## Surgical Education – Department of Surgery



Residency Programs	Program Director	Administrative Support
Colorectal Surgery	Dr. W. Donald Buie	Sabine MacKinnon
General Surgery	Dr. Tony MacLean	Donna Smith
Ophthalmology	Dr. Amin Kherani	Heather Summersgill
Orthopedic Surgery	Dr. Simon Goldstein	Tracy Burke
Otolaryngology	Dr. Doug Bosch	Vivian Brien
Pediatric General Surgery	Dr. David Sigalet	Gail Wright Wilson
Plastic Surgery	Dr. David McKenzie	Michelle Mills
Surgical Oncology	Dr. Greg McKinnon	Lynn Steele
Thoracic Surgery	Dr. Andrew Graham	Carol Smith
Vascular Surgery	Dr. Joyce Wong	Sonya Falez

### 1.2 Departmental Committees

**Department of Surgery Executive Committee,**

Chair: Dr. John Kortbeek

**Site OR Committees (ACH, FMC, PLC, RGH),**

Chair: Site Chiefs

**Site Leadership Committee,**

Chair: Dr. John Kortbeek

**Block Booking Committee,**

Chair: Dr. Jeff Way

**Health Technology and Innovation**

Chair: Dr. Lea Austen

**Safety,**

Chair: Dr. Beth Lange

**Surgical Research,**

Chair: Dr. Robertson Harrop

**Educational Executive,**

Chair: Dr. John Kortbeek

**Postgraduate Surgical Training Committee,**

Chair: Dr. Richard Buckley

**Undergraduate Education Committee,**

Chair: Dr. John Graham

### 1.3 DEPARTMENT MEMBERS

#### Division of Dentistry and Oral Health

Kalaydjian, Eduardo; Division Chief, Clinical Associate Professor  
 Abougoush, Joel  
 Abougoush, Tallel  
*Barsky, Robert (primary in pediatric surgery)*  
*Baylin, Steven (primary in pediatric surgery)*  
*Bell, Christine (primary in pediatric surgery)*  
*Bindman, Michael (primary in pediatric surgery)*  
 Brown, Duncan  
 Budihal, Pravleen  
 Choi, Susan  
*Cholette, Marie-Claude; Clinical Associate Professor (primary in pediatric surgery)*  
 Chow, Kuen A.  
 Dabagh, Shatha  
 Dalla Lana, Eugene  
 David, Dionysius  
 Dyck, Willy  
 Frydman, Albert  
 Houghton, Alan  
 Huckstep, Richard  
*Hulland, Sarah (primary in pediatric surgery)*  
 Hussein, Jabeen  
 Jivraj, Munira  
 Kopec, Perry  
 Krusky, J. Bradley  
 Kuruliak, Russell  
 Lakhani, Moez  
 Lee, Morley  
 Lekhi, Veenu  
*Loepky, Warren (primary in pediatric surgery)*  
 Lovick, David  
 McCracken, Kenneth  
*Mehra, Tarun (primary in pediatric surgery)*  
*Narvey, Allan (primary in pediatric surgery)*  
 Nathu, Akbar  
 Olowe, Adebayo  
 Paladino, Antonietta; Clinical Lecturer  
 Petty, Trey; Adjunct Associate Professor  
*Pilipowicz, Orest (primary in pediatric surgery)*  
 Quach, Quoc  
 Rabie, Heidi  
 Rehak, Robert  
 Scarlett, Darren  
*Schwann, Sandra (primary in pediatric surgery)*  
 Shariff, Galib  
 Shwaluk, Kenneth  
 Shwart, E. Luke  
 Skaria, Sylla  
*Smith, Leonard (primary in pediatric surgery)*

*Stein, Kari (primary in pediatric surgery)*

Switzer, Samuel  
 Tamminen, John  
 Tetteh-Wayoe, Mercy  
 Tung, Albert  
 Varshney, Sheila  
*Vinsky, Rory (primary in pediatric surgery)*  
 Wiebe, Colin  
 Wong, Elise  
 Yaholnitsky, Stephen  
 Yates, Gregory

#### Division of General Surgery

Sutherland, Francis R.; Division Chief, Professor  
 Anderson, Ian B.; Clinical Assistant Professor  
 Armstrong, C. Paul; Clinical Lecturer  
 Austen, Lea; Clinical Assistant Professor  
 Bathe, Oliver F.; Associate Professor  
 Brzezinski, Wojciech; Clinical Lecturer (Medicine Hat)  
 Buie, W. Donald; Associate Professor  
 Church, Neal G.; 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  
 Hardy, Mark; Clinical Assistant Professor  
 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  
 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  
 Rosen, Wayne S.; Clinical Assistant Professor

Rothwell, Bruce C.; Clinical Assistant Professor  
 Selman, W. Gary  
*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)*

### Division of Ophthalmology

*Romanchuk, Kenneth G.; Division Chief, Professor (primary in Pediatric Surgery)*  
 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  
 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; Associate Professor  
 Ford, Bryce; Clinical Assistant Professor  
 Gibson, Peter F.; Clinical Assistant Professor  
 Gimbel, Howard V.; Clinical Associate Professor  
 Goel, Nand K.; Clinical Assistant Professor  
 Gohill, Jitendra; Clinical Assistant Professor  
 Gordon, Robert; Clinical Assistant Professor  
 Hill, Vivian E.; Clinical Lecturer  
 Huang, John T.; Clinical Associate Professor  
 Huang, Peter T.; Clinical Professor  
 Kassab, Jacinthe; Clinical Lecturer  
 Kherani, Amin; Clinical Assistant Professor  
 Kherani, Femida; Clinical Assistant Professor  
 Kirk, Angus; Clinical Associate Professor  
 McWhae, John A.; Clinical Associate 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  
 Williams, R. Geoff; Clinical Assistant Professor  
 Wyse, J. Patrick; Clinical Associate Professor

### Division of Oral Maxillofacial Surgery

Whitestone, Brian; Division Chief, Clinical Lecturer  
 Bureau, Stephen  
 Edwards, Richard

Goos, Ryan  
 Habijanac, Brett  
 Kroetsch, Lorne  
 Skulsky, Francis  
 Summers, Terence  
 Vincelli, Douglas J.; Clinical Assistant Professor  
 Wakeham, Donald  
 Williams, Hedd-Wyn  
 Young, Carl Wayne

### Division of Orthopaedic Surgery

Hildebrand, Kevin A.; Division Chief, Professor  
 Abelseth, Gregory A.; Clinical Assistant Professor  
 Bauman, John; Clinical Assistant Professor  
 Bazant, Francis J.; Clinical Assistant Professor  
 Bell, G. 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  
 De Souza, F. Kelley; Clinical Lecturer  
 Donaghy, John J.; Clinical Assistant Professor  
 Dougall, Hugh R.; Clinical Associate Professor  
 Duffly, 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 Associate 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  
 Murphy, Vincent  
 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  
 Russell, Iain S.; Clinical Assistant Professor  
 Salo, Paul T.; Associate Professor  
 Schachar, Norman S.; Professor  
 Stewart, James I.; Clinical Lecturer  
 Swamy, Ganesh; Clinical Assistant Professor  
 Thomas, Kenneth C.; Clinical Assistant Professor  
 Thornton, Gail M.; Associate Professor  
 Timmermann, Scott; Clinical Lecturer  
 Van Zuiden, Lowell J.; Clinical Assistant Professor  
 Werle, Jason R.; Clinical Associate Professor  
 Zernicke, Ronald F.; Professor

### **Division of Otolaryngology**

Matthews, T. Wayne; Division 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  
 Shandro, W.G. (Bud)  
 Wagner, Garth A.L.; Clinical Associate Professor  
 Warshawski, S. Joseph; Clinical Lecturer  
 Zakhary, Kristina

### **Division of Paediatric Surgery**

Hyndman, C. William; Division 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 Lecturer (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  
*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*

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Urology)

Lange, Elizabeth J.; *Clinical Associate Professor (primary in Otolaryngology)*

Lau, Henry

Lee, Jay; *(primary in Urology)*

Leong, James *(primary in Urology)*

Loeppky, Warren

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)*

Wong, Andrew L.; *Clinical Associate Professor*

### Division of Plastic Surgery

Lindsay, Robert L.; *Division 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)*

Frauln, 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.

### Division of Podiatric Surgery

Haverstock, Brent D.; *Division 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*

Paul, Darrell

Purych, Megan

Unger, Kenneth

Zivot, Mark L.; *Clinical Assistant Professor*

### Division of Surgical Oncology

Temple, Walley J.; *Division Chief, Professor*

Arlette, John; *Clinical Associate Professor*

Bathe, Oliver F.; *Associate 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)*

Hardy, Mark; *Clinical Assistant Professor (primary in General 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)***Division of Thoracic Surgery**

Gelfand, Gary A.J.; Division Chief, Clinical Assistant Professor

Graham, Andrew J.; Clinical Associate Professor

Grondin, Sean C.; Clinical Associate Professor

McFadden, Sean; Clinical Assistant Professor

**Division of Transplant Surgery**

Yilmaz, Serdar; Division Head, Associate Professor

Hayry, Pekka; Clinical Professor

Monroy, F. Mauricio; Assistant Professor

Salazar, Anastasio; Associate Professor

**Division of Urology**

Dushinski, John W.; Division Chief, Clinical Assistant Professor

Barr, Richard;

Baverstock, Richard;

Carlson, Kevin; Clinical Lecturer

*Cook, Anthony J.; Clinical Assistant Professor (primary in Pediatric Surgery)*

Donnelly, Bryan J.; Clinical Assistant Professor

Duffy, Martin; Clinical Lecturer

*Hyndman, C. William; Clinical Assistant Professor (primary in Pediatric Surgery)*

Kawakami, Jun; Clinical Assistant Professor

Kozak, Gregory N.; Clinical Assistant Professor

Lee, Jay;

Leong, James;

Metcalf, Donald G.; Clinical Assistant Professor

Shields, William R.; (Lethbridge)

Wilkin, R. Peter; Clinical Assistant Professor

**Division of Vascular Surgery**

Petrasek, Paul F.; Division Chief, Associate Professor

Moore, Randy D.; Associate Professor

Nutley, Mark; Assistant Professor

Samis, Gregory A.; Assistant Professor

Wong, Joyce; Clinical Assistant Professor

**Department of Surgery**

Oddone Paulocci, Elizabeth; Assistant Professor

**Joint Appointments**Appoo, Jehangir; Clinical Assistant Professor, Cardiac Sciences  
Bayes, Alexander J.; Clinical Associate Professor, Cardiac SciencesBurgess, John J.; Clinical Associate Professor, Cardiac Sciences  
Costello, Fiona; Clinical Assistant Professor, Clinical Neurosciences

Dobson, Gary M.; Associate Professor, Anaesthesia

Fedak, Paul W. M.; Assistant Professor, Cardiac Sciences

Kidd, William T.; Clinical Assistant Professor, Cardiac Sciences

Maitland, Andrew; Associate Professor, Cardiac Sciences

Muldrew, Kenneth B.; Assistant Professor, Cell Biology &amp; Anatomy

Prieur (Kieser), Teresa M.; Associate Professor, Cardiac Sciences

Stell, William K.; Professor, Cell Biology &amp; Anatomy

Casha, Steven; Assistant Professor, Clinical Neurosciences

Duplessis, Stephan J.; Clinical Assistant Professor, Clinical Neurosciences

Fletcher, William A.; Professor, Clinical Neurosciences

Hamilton, Mark; Associate Professor, Clinical Neurosciences

Hurlbert, R. John; Associate Professor, Clinical Neurosciences

Russell, Margaret L.; Associate Professor, Community Health Sciences

Bech-Hansen, N. Torben; Professor, Medical Genetics

Kline, Donald W.; Professor, Psychology

**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

Poulin, Paule; Adjunct Assistant Professor

Rangayyan, Rangaraj M.; Adjunct Professor

Shrive, Nigel G.; Adjunct Professor

Wishart, Paul M.; Adjunct Assistant Professor

**Clinical Safety Leaders**

Bush, Kathryn; Foothills Medical Centre

Davidson, Teresa; Rockyview General Hospital

Mork, Mikie; South Patient Safety Team

Sommerville, Kimberley; Peter Lougheed Hospital

Taylor, Denise; Alberta Children's Hospital

THE SURGICAL EFFICIENCY ACCESS TARGETS PROGRAM (SEATP) CONTINUOUSLY PRODUCES UP TO DATE REPORTS. PLEASE VISIT THE SURGICAL SERVICES INTERNAL WEBSITE FOR COMPLETE, UPDATED AND CURRENT REPORTS.

VISIT

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## APPENDIX 2: ACTIVITY REPORTS

### 2.1 SURGICAL ACTIVITY REPORTS - MAJOR CALGARY HOSPITALS

#### TOTAL ACTIVITY CASES

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

as of: 2010/03

Service	Total Cases	Total Cases	Total Cases	Current Year 2009/2010												Current	%	Variance
	06/07	07/08	08/09	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	YTD	Change	
*	6	55	76			1	8			1	2	1		1	1	15	-0.80	-61
ANA	107	97	73	2	15	5	6	3	10	9	6	5		2	8	71	-0.03	-2
CAR	1,130	1,240	1,281	110	88	104	119	93	111	121	111	107	121	94	117	1,296	0.01	15
COH	1,159	1,030	1,033	85	91	102	100	74	95	93	88	87	91	90	104	1,100	0.06	67
DEN	802	827	812	75	59	55	51	56	73	81	76	51	76	69	91	813		1
ENT_ORL	5,519	6,192	6,107	516	491	561	427	389	570	540	531	403	551	428	576	5,983	-0.02	-124
GEN	12,895	12,992	13,149	1,161	1,122	1,082	972	943	1,162	1,154	1,137	1,036	1,067	1,016	1,180	13,032	-0.01	-117
GI	419	506	500	41	39	40	50	20	40	54	56	41	49	46	52	528	0.06	28
GYN	8,033	7,630	7,317	627	603	692	528	409	630	638	669	558	642	554	723	7,273	-0.01	-44
MED	142	106	88	11	4	3	3	7	2	5	2	2	6	2	8	55	-0.38	-33
NEU	1,678	1,642	1,616	140	141	141	127	125	140	153	156	135	152	151	179	1,740	0.08	124
OBS	1,044	1,439	1,678	147	190	123	149	171	202	195	131	136	137	151	199	1,931	0.15	253
OPH	2,165	2,177	2,161	225	194	232	169	160	180	178	222	181	177	198	208	2,324	0.08	163
ORA	412	369	400	40	37	43	24	30	36	28	30	21	35	32	40	396	-0.01	-4
ORT	12,187	12,210	12,338	1,107	1,044	1,098	911	826	980	1,020	959	997	1,094	1,002	1,159	12,197	-0.01	-141
PLS	3,326	3,425	3,466	280	354	291	257	203	305	297	254	263	271	255	319	3,349	-0.03	-117
POD	319	349	404	53	36	43	40	46	36	38	40	39	36	54	42	503	0.25	99
PSY		27																
RAD	144	96	166	34	22	23	14	11	24	30	24	21	34	18	27	282	0.70	116
RES	95	72	96	8	6	9	7	6	4	13	8	9	13	10	12	105	0.09	9
SATP	21	5	22															-22
THO	558	597	560	51	41	48	51	43	52	72	64	42	55	39	56	614	0.10	54
TRN	646	552	522	45	48	42	52	41	43	50	39	22	28	33	38	481	-0.08	-41
URO	5,332	5,889	6,101	541	560	502	455	427	567	540	545	512	538	486	618	6,291	0.03	190
VAS	803	752	814	68	73	86	69	52	65	54	55	56	66	54	71	769	-0.06	-45
<b>Total</b>	<b>58,942</b>	<b>60,276</b>	<b>60,780</b>	<b>5,367</b>	<b>5,258</b>	<b>5,326</b>	<b>4,589</b>	<b>4,135</b>	<b>5,327</b>	<b>5,364</b>	<b>5,205</b>	<b>4,725</b>	<b>5,239</b>	<b>4,785</b>	<b>5,828</b>	<b>61,148</b>		

# CASES BY SURGICAL CLASSIFICATION

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

as of: 2010/03

Service	Admit Type	Total Cases 06/07	Total Cases 07/08	Total Cases 08/09	Current Year 2009/2010												YTD	% Change	
					Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar			
*	Elective	1	12	24			1	1			1							3	-87.50
	Emergency	3	26	38				6				1			1		1	9	-75.00
	Urgent	2	17	16				1			1	1						3	-81.25
	<b>Total</b>	<b>6</b>	<b>55</b>	<b>78</b>			<b>1</b>	<b>8</b>			<b>1</b>	<b>2</b>	<b>1</b>		<b>1</b>	<b>1</b>	<b>1</b>	<b>16</b>	
ANA	Elective	4	5	2															-100.00
	Emergency	92	88	65	1	15	5	8	3	9	9	5	5		2	4		64	-1.54
	Urgent	11	4	6	1					1		1					3	6	
	<b>Total</b>	<b>107</b>	<b>97</b>	<b>73</b>	<b>2</b>	<b>16</b>	<b>5</b>	<b>6</b>	<b>3</b>	<b>10</b>	<b>9</b>	<b>6</b>	<b>5</b>		<b>2</b>	<b>7</b>	<b>7</b>	<b>70</b>	
CAR	Elective	334	401	533	58	49	50	58	38	56	68	68	57	64	52	62		681	27.77
	Emergency	85	137	93	8	9	4	10	14	13	15	11	11	11	11	13		130	39.78
	Urgent	711	702	655	43	30	50	51	41	42	38	32	39	46	31	42		485	-25.95
	<b>Total</b>	<b>1,130</b>	<b>1,240</b>	<b>1,281</b>	<b>110</b>	<b>88</b>	<b>104</b>	<b>118</b>	<b>93</b>	<b>111</b>	<b>121</b>	<b>111</b>	<b>107</b>	<b>121</b>	<b>94</b>	<b>117</b>		<b>1,296</b>	
COH	Elective	58	21	53	3	1	3	1	1	5	1		1	2	3	5		26	50.94
	Emergency	235	228	221	12	20	26	28	19	21	20	30	27	14	31	21		267	20.81
	Urgent	888	781	758	70	70	73	73	54	89	72	58	59	75	56	78		807	8.32
	<b>Total</b>	<b>1,179</b>	<b>1,030</b>	<b>1,033</b>	<b>85</b>	<b>91</b>	<b>102</b>	<b>100</b>	<b>74</b>	<b>95</b>	<b>93</b>	<b>88</b>	<b>87</b>	<b>91</b>	<b>90</b>	<b>104</b>		<b>1,100</b>	
DEN	Elective	759	773	788	70	55	54	45	53	68	73	75	47	72	64	91		765	-2.67
	Emergency	24	27	10	2	2	1	3	3	4	4		3	1	1			24	140.00
	Urgent	19	27	16	3	2		3		3	4	1	1	3	3			23	43.75
	<b>Total</b>	<b>802</b>	<b>827</b>	<b>812</b>	<b>75</b>	<b>59</b>	<b>56</b>	<b>51</b>	<b>56</b>	<b>73</b>	<b>81</b>	<b>78</b>	<b>51</b>	<b>78</b>	<b>68</b>	<b>91</b>		<b>812</b>	
ENT_ORI	Elective	4,369	5,135	5,125	452	421	477	345	313	493	480	464	352	485	366	488		5,136	0.21
	Emergency	237	283	311	21	26	26	22	26	33	23	21	14	38	25	32		307	1.29
	Urgent	913	774	671	43	44	58	60	50	44	37	46	37	28	37	55		539	-19.67
	<b>Total</b>	<b>5,519</b>	<b>6,192</b>	<b>6,107</b>	<b>516</b>	<b>491</b>	<b>561</b>	<b>427</b>	<b>389</b>	<b>570</b>	<b>540</b>	<b>531</b>	<b>463</b>	<b>551</b>	<b>428</b>	<b>575</b>		<b>5,982</b>	
GEN	Elective	5,516	5,691	5,735	537	487	448	352	366	504	508	500	414	502	428	542		5,588	-2.56
	Emergency	4,304	4,386	4,575	382	387	365	386	389	412	394	394	361	362	338	385		4,566	0.20
	Urgent	3,075	2,933	2,839	242	248	269	234	178	246	252	243	261	263	244	254		2,874	-1.23
	<b>Total</b>	<b>12,895</b>	<b>12,992</b>	<b>13,149</b>	<b>1,161</b>	<b>1,122</b>	<b>1,082</b>	<b>972</b>	<b>843</b>	<b>1,162</b>	<b>1,154</b>	<b>1,137</b>	<b>1,036</b>	<b>1,067</b>	<b>1,011</b>	<b>1,181</b>		<b>13,028</b>	
GI	Elective	301	420	402	31	32	28	35	12	30	47	44	32	42	40	45		418	-3.98
	Emergency	63	31	54	6	5	8	8	6	6	6	7	7	5	3	5		72	33.33
	Urgent	55	55	44	4	2	4	7	2	4	1	5	2	2	3	2		30	-13.64
	<b>Total</b>	<b>419</b>	<b>506</b>	<b>500</b>	<b>41</b>	<b>39</b>	<b>40</b>	<b>50</b>	<b>20</b>	<b>40</b>	<b>54</b>	<b>56</b>	<b>41</b>	<b>49</b>	<b>48</b>	<b>52</b>		<b>520</b>	
GYN	**		1										1					1	100.00
	Elective	5,661	5,316	5,001	443	409	504	339	253	457	462	489	377	452	389	525		5,079	1.56
	Emergency	1,416	1,313	1,341	105	129	111	120	81	103	102	108	116	106	78	105		1,264	-5.74
	Urgent	956	1,000	975	79	65	77	69	75	70	74	92	65	83	87	97		933	-4.31
<b>Total</b>	<b>8,033</b>	<b>7,630</b>	<b>7,317</b>	<b>627</b>	<b>603</b>	<b>692</b>	<b>529</b>	<b>409</b>	<b>630</b>	<b>638</b>	<b>669</b>	<b>558</b>	<b>645</b>	<b>554</b>	<b>727</b>		<b>7,277</b>		
MED	Elective	92	63	39	6	3	2	2	3		4	1	1	4	2	6		34	-12.02
	Emergency	47	35	42	3	1	1	1	2			1				1		10	-76.19
	Urgent	3	8	7	2				2	2	1		1	2		1		11	57.14
	<b>Total</b>	<b>142</b>	<b>106</b>	<b>88</b>	<b>11</b>	<b>4</b>	<b>3</b>	<b>3</b>	<b>7</b>	<b>2</b>	<b>5</b>	<b>2</b>	<b>2</b>	<b>6</b>	<b>2</b>	<b>8</b>		<b>55</b>	
NEU	**															1		1	100.00
	Elective	866	816	704	53	58	58	50	51	66	76	78	61	69	71	84		775	10.09
	Emergency	314	328	297	25	25	22	28	30	22	33	34	23	30	31	35		338	13.80
	Urgent	498	496	615	62	58	61	49	44	52	44	44	51	53	48	60		526	1.79
<b>Total</b>	<b>1,678</b>	<b>1,640</b>	<b>1,616</b>	<b>140</b>	<b>141</b>	<b>141</b>	<b>127</b>	<b>125</b>	<b>140</b>	<b>153</b>	<b>155</b>	<b>135</b>	<b>152</b>	<b>150</b>	<b>180</b>		<b>1,740</b>		
OBS	Elective	717	872	1,104	103	140	86	106	116	142	151	84	98	105	97	128		1,356	22.83
	Emergency	274	472	493	35	41	32	39	51	45	40	46	35	28	44	52		486	-1.42
	Urgent	53	95	81	9	9	5	4	4	15	4	1	3	6	10	19		89	9.88
	<b>Total</b>	<b>1,044</b>	<b>1,439</b>	<b>1,678</b>	<b>147</b>	<b>190</b>	<b>123</b>	<b>149</b>	<b>171</b>	<b>202</b>	<b>195</b>	<b>131</b>	<b>136</b>	<b>137</b>	<b>151</b>	<b>199</b>		<b>1,931</b>	
OPH	Elective	1,382	1,438	1,448	154	114	142	89	94	120	111	144	105	115	132	119		1,439	0.68
	Emergency	485	491	387	44	43	41	45	36	26	38	49	43	37	42	55		499	28.94
	Urgent	288	247	325	27	37	49	35	30	34	29	29	33	25	24	34		386	18.77
	<b>Total</b>	<b>2,155</b>	<b>2,177</b>	<b>2,161</b>	<b>225</b>	<b>194</b>	<b>232</b>	<b>169</b>	<b>160</b>	<b>180</b>	<b>178</b>	<b>222</b>	<b>181</b>	<b>177</b>	<b>198</b>	<b>208</b>		<b>2,324</b>	

Surgical Statistical Activity by Admit Type  
All Hospitals (FMC, RGH, PLC, ACH)  
continued.

as of: 2010/03

ORA	Elective	355	321	322	33	29	33	18	22	33	22	27	18	32	27	37	331	2.80
	Emergency	53	45	78	7	0	9	5	8	3	8	3	3	3	5	3	53	-17.11
	Urgent	4	3	2			1	1									2	
	<b>Total</b>	<b>412</b>	<b>369</b>	<b>400</b>	<b>40</b>	<b>37</b>	<b>43</b>	<b>24</b>	<b>30</b>	<b>36</b>	<b>28</b>	<b>30</b>	<b>21</b>	<b>35</b>	<b>32</b>	<b>40</b>	<b>296</b>	
ORT	Elective	6,719	6,673	6,735	636	585	831	433	403	552	614	581	538	507	606	683	6,860	1.88
	Emergency	3,165	3,050	3,299	279	266	303	292	276	259	226	215	270	289	234	260	3,169	3.94
	Urgent	2,303	2,487	2,304	192	192	164	186	147	169	180	163	189	208	160	215	2,165	6.03
	<b>Total</b>	<b>12,187</b>	<b>12,210</b>	<b>12,338</b>	<b>1,107</b>	<b>1,044</b>	<b>1,098</b>	<b>911</b>	<b>825</b>	<b>880</b>	<b>1,020</b>	<b>959</b>	<b>987</b>	<b>1,094</b>	<b>1,000</b>	<b>1,168</b>	<b>12,194</b>	
PLS	Elective	2,244	2,306	2,383	213	252	204	133	123	222	199	190	177	212	186	230	2,341	-1.76
	Emergency	531	524	577	31	59	52	62	45	37	47	28	38	25	33	52	509	-11.79
	Urgent	551	595	508	36	43	35	82	35	46	51	36	48	34	35	37	498	-1.58
	<b>Total</b>	<b>3,326</b>	<b>3,426</b>	<b>3,468</b>	<b>280</b>	<b>354</b>	<b>291</b>	<b>267</b>	<b>203</b>	<b>205</b>	<b>297</b>	<b>254</b>	<b>263</b>	<b>271</b>	<b>264</b>	<b>319</b>	<b>3,348</b>	
MOD	Elective	181	162	217	39	27	25	27	24	20	23	25	28	21	35	30	324	49.31
	Emergency	130	181	181	13	9	17	13	22	15	15	15	10	12	17	10	168	7.18
	Urgent	8	6	6	1		1			1			1	3	2	2	11	83.33
	<b>Total</b>	<b>319</b>	<b>349</b>	<b>404</b>	<b>53</b>	<b>36</b>	<b>43</b>	<b>40</b>	<b>46</b>	<b>38</b>	<b>38</b>	<b>40</b>	<b>38</b>	<b>38</b>	<b>54</b>	<b>42</b>	<b>503</b>	
PSY	Elective		10															
	Urgent		9															
	<b>Total</b>		<b>27</b>															
RAD	Elective	41	32	85	12	13	5	7	4	13	9	10	8	14	12	4	111	70.77
	Emergency	91	52	80	18	8	14	6	6	10	20	12	11	19	4	23	151	86.75
	Urgent	12	12	21	4	1	4	1	1	1	1	2	2	1	2		20	-4.78
	<b>Total</b>	<b>144</b>	<b>86</b>	<b>166</b>	<b>34</b>	<b>22</b>	<b>33</b>	<b>14</b>	<b>11</b>	<b>24</b>	<b>30</b>	<b>24</b>	<b>21</b>	<b>34</b>	<b>18</b>	<b>27</b>	<b>282</b>	
RES	Elective	23	12	23	1	1	3	1		1	5	1	1	1	4	5	24	4.35
	Emergency	40	25	46	3	1	3	3	3	1	4	3	5	9	1	3	39	-15.22
	Urgent	32	35	27	4	4	3	2	3	2	4	4	3	3	5	4	41	51.85
	<b>Total</b>	<b>95</b>	<b>72</b>	<b>96</b>	<b>8</b>	<b>6</b>	<b>9</b>	<b>6</b>	<b>6</b>	<b>4</b>	<b>13</b>	<b>8</b>	<b>9</b>	<b>13</b>	<b>10</b>	<b>12</b>	<b>104</b>	
SATP	Emergency	20	5	22														-100.00
	Urgent	1																
	<b>Total</b>	<b>21</b>	<b>5</b>	<b>22</b>														
THO	Elective	44	23	32	4	1	3	7	6	3	3	2	3	1	5	3	41	28.13
	Emergency	35	51	48	6	3	3	8	3	6	19	13	7	2	2	4	76	58.33
	Urgent	479	523	480	41	37	42	36	34	43	50	49	32	52	32	49	497	3.54
	<b>Total</b>	<b>558</b>	<b>597</b>	<b>560</b>	<b>51</b>	<b>41</b>	<b>48</b>	<b>51</b>	<b>43</b>	<b>52</b>	<b>72</b>	<b>64</b>	<b>42</b>	<b>55</b>	<b>39</b>	<b>56</b>	<b>614</b>	
TRN	Elective	274	93	53	2	13	6	12	3	3	4	3	2	7	6	7	68	28.30
	Emergency	142	79	72	5	4	6	9	2	6	2	8	3	4	9	4	62	-13.89
	Urgent	230	380	397	38	31	30	31	36	34	44	28	17	17	18	27	351	-11.59
	<b>Total</b>	<b>646</b>	<b>552</b>	<b>522</b>	<b>45</b>	<b>48</b>	<b>42</b>	<b>52</b>	<b>41</b>	<b>43</b>	<b>50</b>	<b>39</b>	<b>22</b>	<b>28</b>	<b>33</b>	<b>38</b>	<b>481</b>	
URO	Elective	3,086	3,268	3,569	325	355	295	243	240	340	315	321	257	329	275	351	3,646	2.16
	Emergency	1,626	1,991	1,839	155	155	134	167	157	170	147	161	188	157	154	181	1,926	4.73
	Urgent	608	630	693	61	50	73	45	30	57	78	63	67	52	57	88	721	4.04
	<b>Total</b>	<b>5,320</b>	<b>5,889</b>	<b>6,101</b>	<b>541</b>	<b>560</b>	<b>502</b>	<b>455</b>	<b>427</b>	<b>567</b>	<b>540</b>	<b>545</b>	<b>512</b>	<b>538</b>	<b>486</b>	<b>620</b>	<b>6,293</b>	
VAS	Elective	344	355	445	26	43	53	33	24	42	33	31	26	26	28	35	400	-10.11
	Emergency	193	212	192	15	10	16	19	12	11	9	14	18	23	10	17	174	-9.38
	Urgent	266	185	177	27	20	17	17	16	12	12	10	12	17	16	19	195	10.17
	<b>Total</b>	<b>803</b>	<b>752</b>	<b>814</b>	<b>68</b>	<b>73</b>	<b>86</b>	<b>69</b>	<b>52</b>	<b>65</b>	<b>54</b>	<b>55</b>	<b>56</b>	<b>66</b>	<b>54</b>	<b>71</b>	<b>789</b>	
<b>Summary</b>	**		1												1		1	2
Elective	33,393	34,197	34,801	3,202	3,089	3,111	2,337	2,149	3,168	3,209	3,118	2,603	3,152	2,828	3,480	35,446		
Emergency	13,605	14,072	14,357	1,176	1,226	1,199	1,284	1,204	1,212	1,179	1,179	1,198	1,173	1,077	1,266	14,373		
Urgent	11,944	12,006	11,622	989	943	1,016	967	782	947	976	908	924	913	870	1,086	11,321		
<b>Total</b>	<b>58,942</b>	<b>60,275</b>	<b>60,780</b>	<b>5,367</b>	<b>5,258</b>	<b>5,326</b>	<b>4,588</b>	<b>4,135</b>	<b>5,327</b>	<b>5,364</b>	<b>5,205</b>	<b>4,725</b>	<b>5,239</b>	<b>4,775</b>	<b>5,833</b>	<b>61,142</b>		

# INPATIENT/OUTPATIENT CASES

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

as of: 2010/03

Service	Patient Type	Total Cases 06/07	Total Cases 07/08	Total Cases 08/09	Current Year 2009/2010												YTD
					Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	
*	InPatient	5	49	60				8				1	1		1		11
	OutPatient	1	6	16			1				1	1					3
	<b>Total</b>	<b>6</b>	<b>55</b>	<b>76</b>			<b>1</b>	<b>8</b>			<b>1</b>	<b>2</b>	<b>1</b>		<b>1</b>		<b>14</b>
ANA	InPatient	105	93	72	2	15	5	6	3	10	9	6	5		2		63
	OutPatient	2	4	1													
	<b>Total</b>	<b>107</b>	<b>97</b>	<b>73</b>	<b>2</b>	<b>15</b>	<b>5</b>	<b>6</b>	<b>3</b>	<b>10</b>	<b>9</b>	<b>6</b>	<b>5</b>		<b>2</b>		<b>63</b>
CAR	InPatient	810	879	848	68	57	66	67	73	73	80	78	69	84	66	3	784
	OutPatient	320	381	433	42	31	38	52	20	38	41	33	38	37	28	1	389
	<b>Total</b>	<b>1,130</b>	<b>1,240</b>	<b>1,281</b>	<b>110</b>	<b>88</b>	<b>104</b>	<b>119</b>	<b>93</b>	<b>111</b>	<b>121</b>	<b>111</b>	<b>107</b>	<b>121</b>	<b>94</b>	<b>4</b>	<b>1,183</b>
COH	InPatient	1,123	1,017	1,023	85	91	101	100	74	95	93	88	87	91	90	5	1,000
	OutPatient	36	13	10			1										1
	<b>Total</b>	<b>1,159</b>	<b>1,030</b>	<b>1,033</b>	<b>85</b>	<b>91</b>	<b>102</b>	<b>100</b>	<b>74</b>	<b>95</b>	<b>93</b>	<b>88</b>	<b>87</b>	<b>91</b>	<b>90</b>	<b>5</b>	<b>1,001</b>
DEN	InPatient	80	96	69	5	5	4	7	7	9	8	2	7	2	3		59
	OutPatient	742	731	743	70	54	51	44	49	64	73	74	44	74	66		663
	<b>Total</b>	<b>802</b>	<b>827</b>	<b>812</b>	<b>75</b>	<b>59</b>	<b>55</b>	<b>51</b>	<b>56</b>	<b>73</b>	<b>81</b>	<b>76</b>	<b>51</b>	<b>76</b>	<b>69</b>		<b>722</b>
ENT_ORL	InPatient	1,030	1,191	1,291	117	94	116	91	84	128	114	131	70	122	85	10	1,172
	OutPatient	4,489	5,001	4,816	399	397	445	336	305	442	426	400	333	429	333	14	4,259
	<b>Total</b>	<b>5,519</b>	<b>6,192</b>	<b>6,107</b>	<b>516</b>	<b>491</b>	<b>561</b>	<b>427</b>	<b>389</b>	<b>570</b>	<b>540</b>	<b>531</b>	<b>403</b>	<b>551</b>	<b>428</b>	<b>24</b>	<b>5,431</b>
GEN	InPatient	7,901	7,879	8,140	696	685	669	653	649	739	716	699	654	658	657	28	7,503
	OutPatient	4,994	5,113	5,009	465	437	413	319	294	423	438	438	382	409	359	27	4,404
	<b>Total</b>	<b>12,895</b>	<b>12,992</b>	<b>13,149</b>	<b>1,161</b>	<b>1,122</b>	<b>1,082</b>	<b>972</b>	<b>943</b>	<b>1,162</b>	<b>1,154</b>	<b>1,137</b>	<b>1,036</b>	<b>1,067</b>	<b>1,016</b>	<b>55</b>	<b>11,907</b>
GI	InPatient	114	88	117	12	10	14	14	9	11	10	9	9	5			112
	OutPatient	305	418	383	29	29	26	36	11	31	43	46	32	40	41		384
	<b>Total</b>	<b>419</b>	<b>506</b>	<b>500</b>	<b>41</b>	<b>39</b>	<b>40</b>	<b>50</b>	<b>20</b>	<b>40</b>	<b>54</b>	<b>56</b>	<b>41</b>	<b>49</b>	<b>46</b>		<b>478</b>
GYN	InPatient	3,733	3,570	3,528	288	292	297	273	209	291	290	289	262	315	272	18	3,096
	OutPatient	4,300	4,080	3,791	339	311	395	255	200	339	348	380	296	327	282	16	3,488
	<b>Total</b>	<b>8,033</b>	<b>7,650</b>	<b>7,317</b>	<b>627</b>	<b>603</b>	<b>692</b>	<b>528</b>	<b>409</b>	<b>630</b>	<b>638</b>	<b>669</b>	<b>558</b>	<b>642</b>	<b>554</b>	<b>34</b>	<b>6,584</b>
MED	InPatient	60	45	52	6	1	2	2	4	1	1	1		2			20
	OutPatient	82	61	36	5	3	1	1	3	1	4	1	2	4	2		27
	<b>Total</b>	<b>142</b>	<b>106</b>	<b>88</b>	<b>11</b>	<b>4</b>	<b>3</b>	<b>3</b>	<b>7</b>	<b>2</b>	<b>5</b>	<b>2</b>	<b>2</b>	<b>6</b>	<b>2</b>		<b>47</b>
NEU	InPatient	1,574	1,453	1,451	115	122	123	111	111	125	137	138	120	138	139	5	1,384
	OutPatient	104	189	165	25	19	18	16	14	15	16	18	15	14	12		182
	<b>Total</b>	<b>1,678</b>	<b>1,642</b>	<b>1,616</b>	<b>140</b>	<b>141</b>	<b>141</b>	<b>127</b>	<b>125</b>	<b>140</b>	<b>153</b>	<b>156</b>	<b>135</b>	<b>152</b>	<b>151</b>	<b>5</b>	<b>1,566</b>
OBS	InPatient	407	675	711	62	58	53	60	74	75	74	69	55	55	63	3	701
	OutPatient	637	764	967	85	132	70	89	97	127	121	62	81	82	88	6	1,040
	<b>Total</b>	<b>1,044</b>	<b>1,439</b>	<b>1,678</b>	<b>147</b>	<b>190</b>	<b>123</b>	<b>149</b>	<b>171</b>	<b>202</b>	<b>195</b>	<b>131</b>	<b>136</b>	<b>137</b>	<b>151</b>	<b>9</b>	<b>1,741</b>
OPH	InPatient	908	849	797	68	52	47	51	40	31	42	55	47	42	45	1	521
	OutPatient	1,257	1,326	1,364	157	142	185	118	120	149	136	167	134	135	153		1,586
	<b>Total</b>	<b>2,165</b>	<b>2,177</b>	<b>2,161</b>	<b>225</b>	<b>194</b>	<b>232</b>	<b>169</b>	<b>160</b>	<b>180</b>	<b>176</b>	<b>222</b>	<b>181</b>	<b>177</b>	<b>190</b>	<b>1</b>	<b>2,117</b>
ORA	InPatient	354	328	341	36	30	36	20	24	26	26	23	19	28	25	1	294
	OutPatient	58	41	59	4	7	7	4	6	10	2	7	2	7	7		63
	<b>Total</b>	<b>412</b>	<b>369</b>	<b>400</b>	<b>40</b>	<b>37</b>	<b>43</b>	<b>24</b>	<b>30</b>	<b>36</b>	<b>26</b>	<b>30</b>	<b>21</b>	<b>35</b>	<b>32</b>	<b>1</b>	<b>357</b>
ORL	InPatient	8,279	8,332	8,457	753	718	740	659	591	703	674	644	663	748	676	33	7,622
	OutPatient	3,908	3,878	3,881	354	326	358	252	235	277	346	315	314	346	326	16	3,465
	<b>Total</b>	<b>12,187</b>	<b>12,210</b>	<b>12,338</b>	<b>1,107</b>	<b>1,044</b>	<b>1,098</b>	<b>911</b>	<b>826</b>	<b>980</b>	<b>1,020</b>	<b>959</b>	<b>997</b>	<b>1,094</b>	<b>1,002</b>	<b>49</b>	<b>11,087</b>
PLS	InPatient	1,621	1,789	1,712	117	164	147	157	120	149	159	130	130	119	128	4	1,524
	OutPatient	1,505	1,636	1,754	163	190	144	100	83	156	138	124	133	152	127	6	1,516
	<b>Total</b>	<b>3,126</b>	<b>3,425</b>	<b>3,466</b>	<b>280</b>	<b>354</b>	<b>291</b>	<b>257</b>	<b>203</b>	<b>305</b>	<b>297</b>	<b>254</b>	<b>263</b>	<b>271</b>	<b>255</b>	<b>10</b>	<b>3,040</b>
POD	InPatient	232	305	320	32	26	36	30	35	22	26	24	18	23	36		308
	OutPatient	87	44	84	21	10	7	10	11	14	12	16	21	13	18		153
	<b>Total</b>	<b>319</b>	<b>349</b>	<b>404</b>	<b>53</b>	<b>36</b>	<b>43</b>	<b>40</b>	<b>46</b>	<b>36</b>	<b>38</b>	<b>40</b>	<b>39</b>	<b>36</b>	<b>54</b>		<b>461</b>
PSY	InPatient		18														
	OutPatient		9														
	<b>Total</b>		<b>27</b>														
RAD	InPatient	134	75	125	25	12	18	7	7	13	25	14	14	24	7	2	168
	OutPatient	10	21	41	9	10	5	7	4	11	5	10	7	10	11		89
	<b>Total</b>	<b>144</b>	<b>96</b>	<b>166</b>	<b>34</b>	<b>22</b>	<b>23</b>	<b>14</b>	<b>11</b>	<b>24</b>	<b>30</b>	<b>24</b>	<b>21</b>	<b>34</b>	<b>18</b>	<b>2</b>	<b>257</b>

Surgical Statistical Activity by Patient Type  
All Hospitals (FMC, RGH, PLC, ACH)  
continued.

as of: 2010/03

RES	InPatient	75	52	75	7	4	6	7	6	3	11	8	8	12	5	1	78	
	OutPatient	20	20	21	1	2	3			1	2		1	1	5		16	
	<b>Total</b>	95	72	96	8	6	9	7	6	4	13	8	9	13	10	1	94	
SATP	InPatient	21	5	22														
	<b>Total</b>	21	5	22														
THO	InPatient	539	584	521	49	38	46	50	40	45	68	60	41	50	35	2	524	
	OutPatient	19	13	39	2	3	2	1	3	7	4	4	1	5	4		36	
	<b>Total</b>	558	597	560	51	41	48	51	43	52	72	64	42	55	39	2	560	
TRN	InPatient	252	179	161	12	20	9	22	8	13	10	13	9	11	16		143	
	OutPatient	394	373	361	33	28	33	30	33	30	40	26	13	17	17	4	304	
	<b>Total</b>	646	552	522	45	48	42	52	41	43	50	39	22	28	33	4	447	
URO	InPatient	3,669	3,964	3,826	310	305	281	299	252	332	319	339	345	309	310	17	3,418	
	OutPatient	1,663	1,925	2,275	231	255	221	156	175	235	221	206	167	229	176	3	2,275	
	<b>Total</b>	5,332	5,889	6,101	541	560	502	455	427	567	540	545	512	538	486	20	5,693	
VAS	InPatient	666	630	624	52	51	55	40	38	46	51	44	41	57	41	1	517	
	OutPatient	137	122	190	16	22	31	28	14	19	3	11	15	9	13		182	
	<b>Total</b>	803	752	814	68	73	86	69	52	65	54	55	56	66	54	1	699	
<b>Summary</b>		InPatient	33,872	34,145	34,341	2,917	2,850	2,871	2,734	2,458	2,938	2,944	2,866	2,694	2,899	2,717	134	31,022
	OutPatient	25,070	26,131	26,439	2,450	2,406	2,455	1,855	1,677	2,389	2,420	2,339	2,031	2,340	2,068	93	24,525	
	<b>Total</b>	58,942	60,276	60,780	5,367	5,258	5,326	4,589	4,135	5,327	5,364	5,205	4,726	5,239	4,785	227	55,547	

TOTAL ACTIVITY HOURS

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

as of: 2010/03

Service	Total Patient Hours 06/07	Total Patient Hours 07/08	Total Patient Hours 08/09	Current Year 2009/2010												Curr YTD	% Change	Var
				Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar			
*	8.16	27.20	51.00			0.53	6.20			1.09	2.37	-		0.55	1.54	13.48	-0.73	-37.12
ANA	97.32	99.36	82.20	1.14	18.48	4.05	5.20	3.10	7.55	12.02	9.20	5.07		2.22	6.18	75.41	-0.08	-6.39
CAR	2,237.07	2,201.49	2,141.38	160.52	154.24	172.51	162.55	167.40	163.51	187.32	176.05	155.45	202.34	183.51	207.05	2,095.25	-0.02	-46.13
COH	4,563.56	4,474.41	4,621.45	360.38	374.58	445.58	424.14	318.49	404.04	378.40	367.54	386.28	396.56	396.26	424.58	4,680.03	0.01	58.18
DEN	1,033.53	1,130.17	1,100.18	103.41	86.48	72.38	63.06	69.13	104.21	107.38	98.20	70.42	109.53	94.32	122.29	1,103.21		3.03
ENT_ORL	5,226.02	6,119.32	6,304.20	565.19	511.56	602.42	467.42	404.18	565.37	563.24	538.29	414.17	559.26	453.44	611.39	6,258.33	-0.01	-45.47
GEN	21,516.36	21,694.09	22,569.14	1,963.54	1,951.28	1,875.41	1,810.11	1,716.14	1,979.00	2,047.09	1,935.42	1,727.13	1,816.58	1,765.54	2,096.38	22,686.02	0.01	116.48
GI	368.36	390.36	418.12	32.34	35.04	30.11	53.54	21.36	33.00	43.14	51.28	32.23	49.28	43.44	40.48	467.24	0.12	49.12
GYN	8,385.22	8,184.33	8,024.05	701.21	640.14	720.22	560.27	454.13	666.58	656.46	696.21	562.22	718.28	587.11	782.25	7,747.08	-0.03	-276.57
MED	101.51	82.57	66.28	9.44	3.24	1.09	4.42	6.33	3.45	5.33	2.46	3.42	5.27	1.16	3.13	51.14	-0.23	-15.14
NEU	5,927.53	5,846.32	5,869.31	521.03	556.02	535.58	471.49	450.16	560.29	611.17	664.22	475.55	587.45	538.20	683.23	6,656.39	0.13	787.08
OBS	890.56	1,311.32	1,495.37	155.34	158.55	109.40	133.54	148.33	187.37	188.32	128.17	119.43	143.10	116.54	158.25	1,749.14	0.17	253.37
OPH	2,630.23	2,882.09	2,732.45	259.46	243.22	270.26	224.14	212.12	231.02	227.38	285.22	236.11	229.52	246.28	258.57	2,925.30	0.07	192.45
ORA	1,005.04	915.42	1,001.57	93.24	90.28	98.24	55.42	66.23	85.14	62.21	80.49	55.40	86.50	82.55	94.44	952.54	-0.05	-49.03
ORT	21,997.08	22,388.50	23,118.04	2,031.46	2,042.43	2,055.33	1,798.54	1,600.20	1,914.19	2,004.00	1,843.39	1,829.32	2,087.47	1,946.43	2,242.33	23,397.49	0.01	279.45
PLS	7,337.10	7,392.36	7,202.21	588.21	670.31	575.08	574.56	469.12	647.44	655.29	610.53	554.10	583.33	546.57	657.42	7,134.36	-0.01	-67.45
POD	410.12	428.13	497.27	61.57	45.20	64.09	51.12	55.44	49.36	48.44	47.14	47.05	41.55	59.12	58.08	630.16	0.27	132.49
PSY		4.35																
RAD	201.31	80.32	136.40	27.21	23.33	20.58	12.20	13.47	21.34	26.57	18.01	18.26	34.41	13.59	24.07	255.44	0.87	119.04
RES	127.00	98.37	178.22	13.20	6.50	14.54	18.08	14.28	8.39	27.25	13.43	18.22	22.26	13.53	17.54	190.02	0.06	11.40
SATP	66.24	23.09	74.38														-1.00	-74.38
THO	1,607.00	1,710.30	1,641.54	148.22	128.20	137.57	169.47	116.04	139.50	195.18	162.47	149.19	152.08	127.39	184.15	1,811.46	0.10	169.52
TRN	1,206.15	1,042.16	903.23	80.00	86.35	73.10	113.10	73.06	69.04	72.33	69.46	43.07	70.04	68.24	70.52	889.51	-0.01	-13.32
URO	5,807.35	6,119.47	6,258.08	512.37	544.45	493.46	470.48	407.33	579.39	556.55	544.13	507.16	531.18	506.59	609.01	6,264.50		6.42
VAS	2,972.02	2,838.35	2,738.29	213.21	229.27	229.22	196.32	151.16	185.08	178.45	180.46	164.41	211.48	153.23	198.03	2,292.32	-0.16	-445.57
<b>Total</b>	95,725.44	97,489.05	99,228.36	8,606.09	8,603.55	8,605.55	7,850.17	6,940.40	8,608.26	8,859.01	8,528.54	7,577.26	8,642.27	7,951.41	9,555.31	100,330.22		

## 2.2 NHSF SURGICAL INDICATOR REPORT

NHSF Activity	Fiscal	Fiscal	Fiscal
	2007/08	2008/09	2009/10
Cataracts	10,340	8,498	9,291
Non-Cataracts	3,559	3,261	3,464
<b>Ophthalmology Total</b>	<b>13,899</b>	<b>11,759</b>	<b>12,755</b>
Oral Maxillofacial Surgery	531	514	534
Restorative Dentistry	1,001	679	569
Podiatry	929	776	764
Vestibular Testing	70	155	178
Orthopedics (HRC)	916	916	1,046
Kensington Clinic		4,252	4,289
<b>Total NHSF Activity</b>	<b>17,346</b>	<b>19,051</b>	<b>20,134</b>
NHSF Mean Wait Time (Weeks)	2007/08	2008/09	2009/10
Cataracts	20	19	28
Non-Cataracts	11	10	11
Oral Maxillofacial Surgery	7	6	6
Restorative Dentistry	10	10	10
Podiatry	31	26	40
Vestibular Testing	8	4	8
NHSF Waiting List	2007/08	2008/09	2009/10
Cataracts	4,699	6,924	8,500
Non-Cataracts	2,306	2,208	1,906
<b>Ophthalmology Total</b>	<b>7,005</b>	<b>9,132</b>	<b>10,406</b>
Oral Maxillofacial Surgery	508	416	180
Restorative Dentistry	336	233	416
Podiatry	1,337	1,464	1,099
Vestibular Testing	41	48	34
<b>Total NHSF Wait List</b>	<b>9,227</b>	<b>11,293</b>	<b>12,135</b>

## 2.3 RURAL VOLUME SURGERIES REPORT

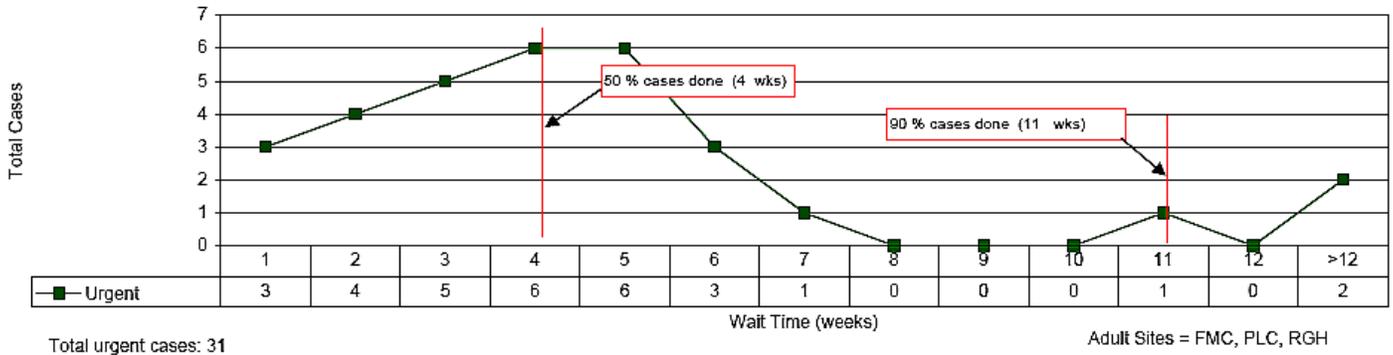
IP/DS	Surgeon Service	Number of Cases				Percent of Grand Total Cases			
		CAN	HRN	MSH	Total	CAN	HRN	MSH	Total
Inpatient	01-Family Medicine	9	27	58	94	1.0%	1.4%	2.4%	1.8%
	30-General Surgeon	76	2	2	80	8.8%	0.1%	0.1%	1.5%
	34-Orthopedics	1		916	917	0.1%		38.0%	17.7%
	35-Plastic Surgeon	36		309	345	4.2%		12.8%	6.6%
	50-Obs/Gyne	87	154		241	10.1%	8.0%		4.6%
	57-Anesthesiology			1	1			0.04%	0.02%
	3011-Kinesiologist	1			1	0.1%			0.02%
	11004-Midwife		2		2		0.1%		0.04%
	<b>Total</b>	<b>210</b>	<b>185</b>	<b>1,286</b>	<b>1,681</b>	<b>24.3%</b>	<b>9.6%</b>	<b>53.4%</b>	<b>32.4%</b>
Day Surgery	01-Family Medicine	59	59	56	174	6.8%	3.1%	2.3%	3.4%
	30-General Surgeon	176	1,211		1,387	20.4%	63.0%		26.7%
	34-Orthopedics			518	518			21.5%	10.0%
	35-Plastic Surgeon	100		548	648	11.6%		22.8%	12.5%
	37-Vascular Surgeon	158			158	18.3%			3.0%
	39-Urology		30		30		1.6%		0.6%
	50-Obs/Gyne	160	288		448	18.5%	15.0%		8.6%
	62-Ophthalmology		150		150		7.8%		2.9%
	<b>Total</b>	<b>653</b>	<b>1,738</b>	<b>1,122</b>	<b>3,513</b>	<b>75.7%</b>	<b>90.4%</b>	<b>46.6%</b>	<b>67.6%</b>
Total	01-Family Medicine	68	86	114	268	7.9%	4.5%	4.7%	5.2%
	30-General Surgeon	252	1,213	2	1,467	29.2%	63.1%	0.1%	28.2%
	34-Orthopedics	1		1,434	1,435	0.1%		59.6%	27.6%
	35-Plastic Surgeon	136		857	993	15.8%		35.6%	19.1%
	37-Vascular Surgeon	158			158	18.3%			3.0%
	39-Urology		30		30		1.6%		0.6%
	50-Obs/Gyne	247	442		689	28.6%	23.0%		13.3%
	57-Anesthesiology			1	1			0.04%	0.02%
	62-Ophthalmology		150		150		7.8%		2.9%
	3011-Kinesiologist	1			1	0.1%			0.02%
	11004-Midwife		2		2		0.1%		0.04%
<b>Grand Total</b>	<b>863</b>	<b>1,923</b>	<b>2,408</b>	<b>5,194</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	

**2.4 WAIT TIME REPORTS BY PROCEDURE GROUP**

**EARS, NOSE, THROAT - OTOLARYNGOLOGY**

2009/04 - 2010/03

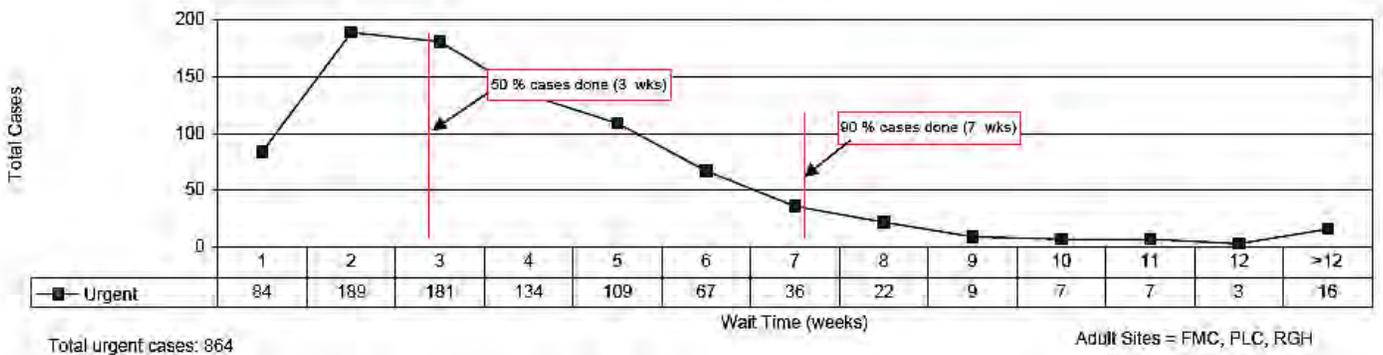
Urgent Head-Neck Cancer Wait Time



**GENERAL SURGERY**

2009/04 - 2010/03

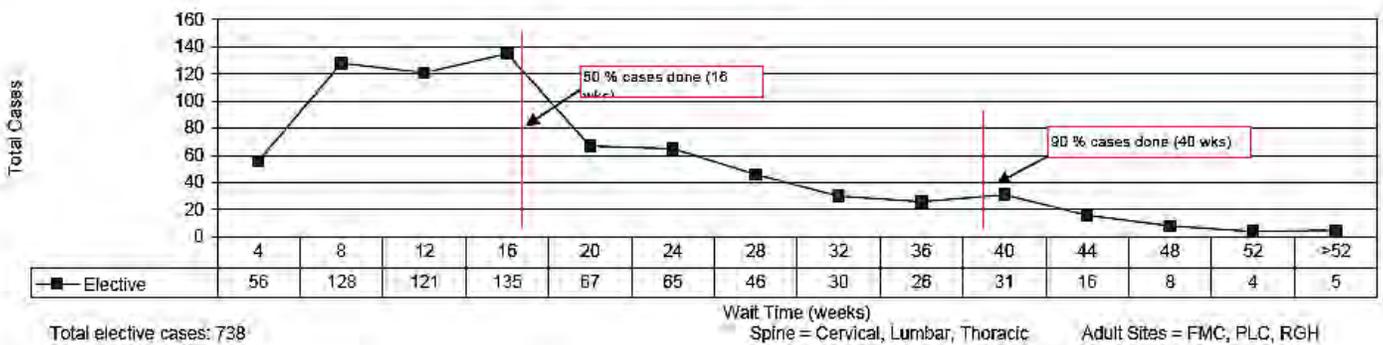
Urgent Breast Mastectomy Wait Time



**NEUROSURGERY/ORTHOPAEDIC SURGERY**

2009/04 - 2010/03

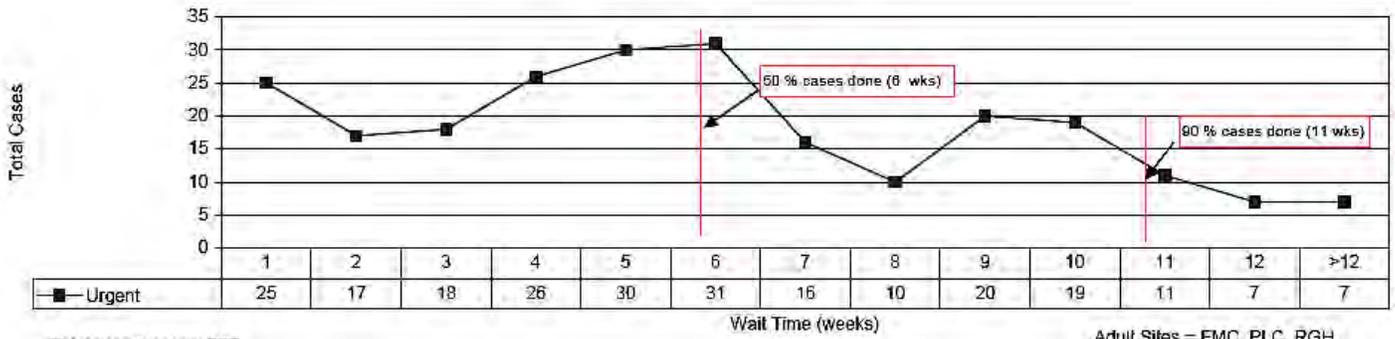
Elective Spine Wait Time



GYNECOLOGY/OBSTETRICS SURGERY

2009/04 - 2010/03

Urgent Hysterectomy Other Wait Time



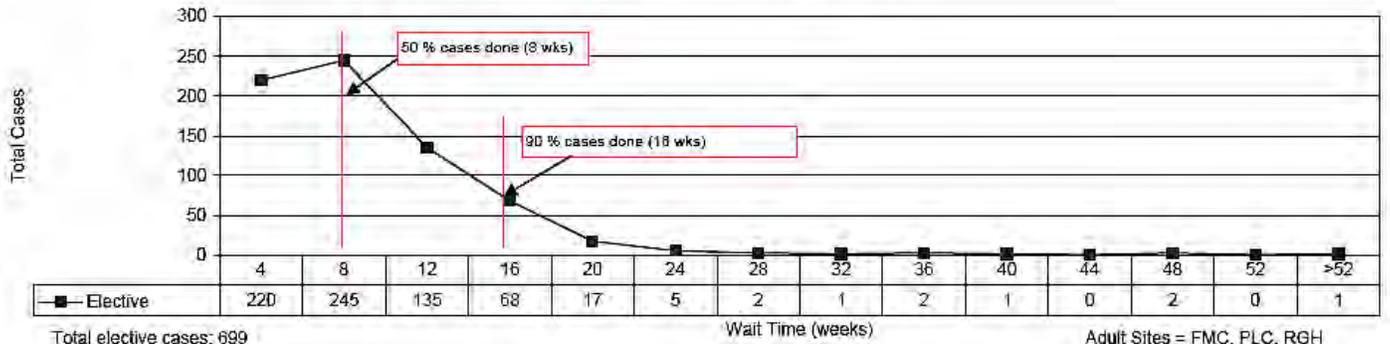
Total urgent cases: 237

Adult Sites = FMC, PLC, RGH

OPHTHALMOLOGY

2009/04 - 2010/03

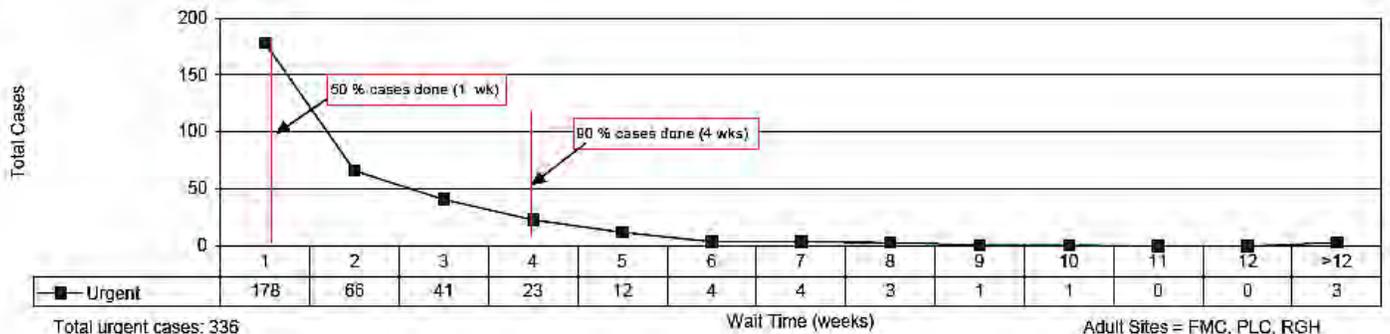
Elective Eye Retina/Choroid/Vitreous Wait Time



Total elective cases: 699

Adult Sites = FMC, PLC, RGH

Urgent Eye Retina/Choroid/Vitreous Wait Time



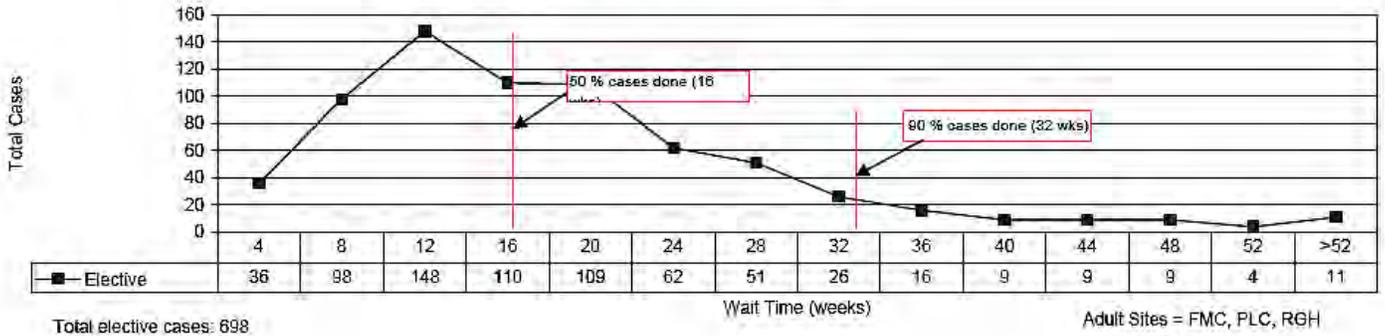
Total urgent cases: 336

Adult Sites = FMC, PLC, RGH

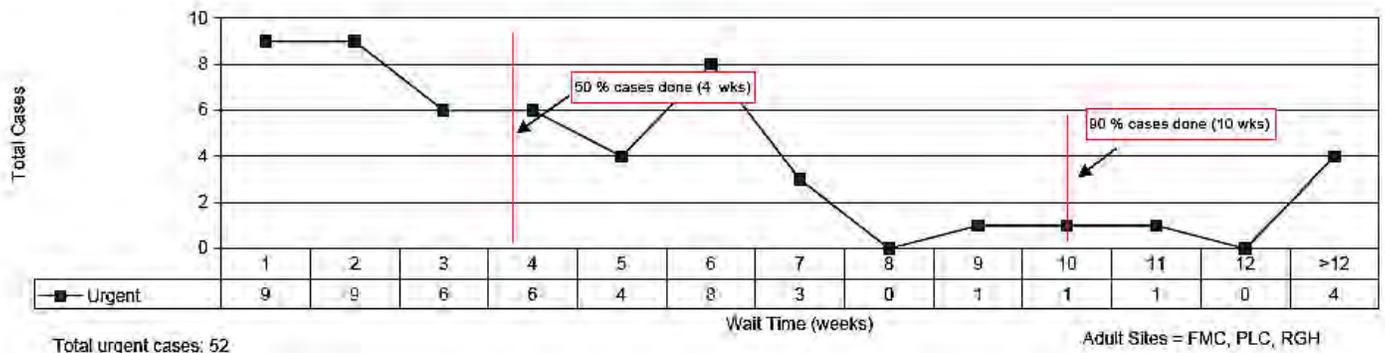
ORTHOPAEDIC

2009/04 - 2010/03

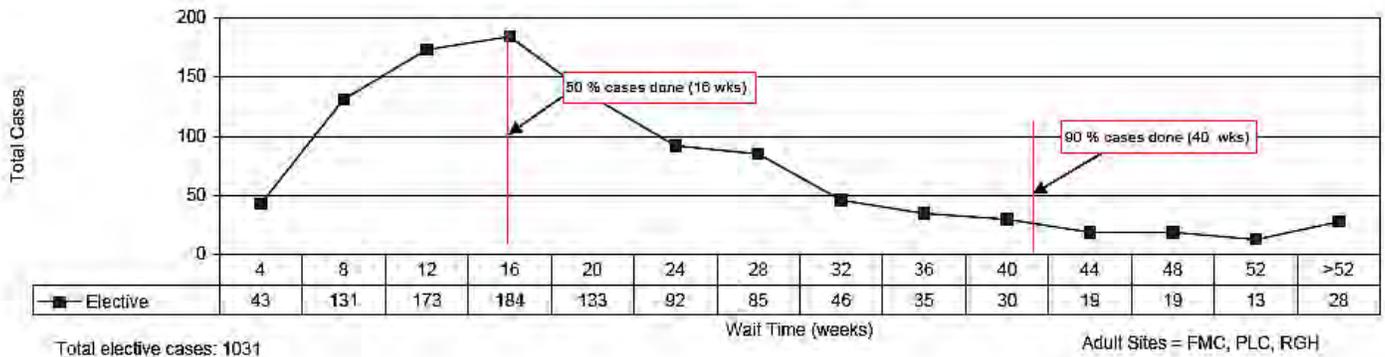
Elective Hip Arthroplasty Wait Time



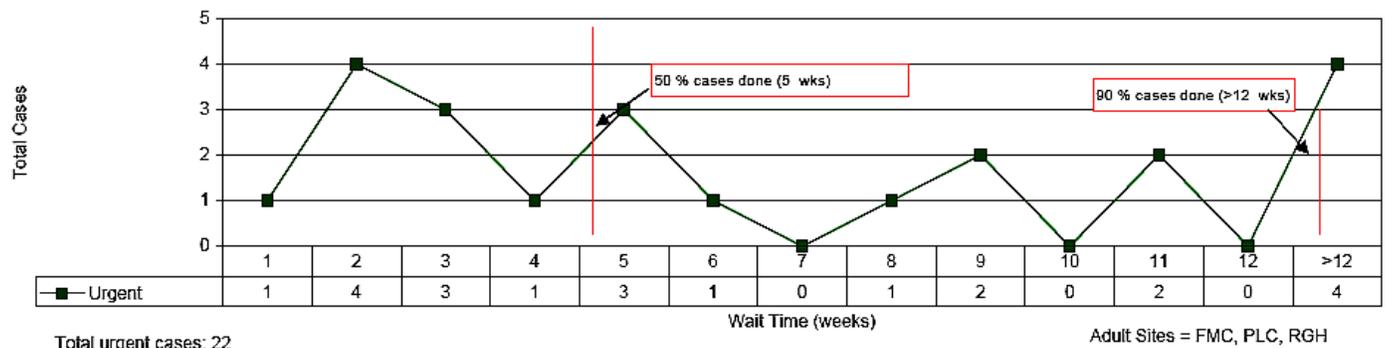
Urgent Hip Arthroplasty Wait Time



Elective Knee Arthroplasty Wait Time



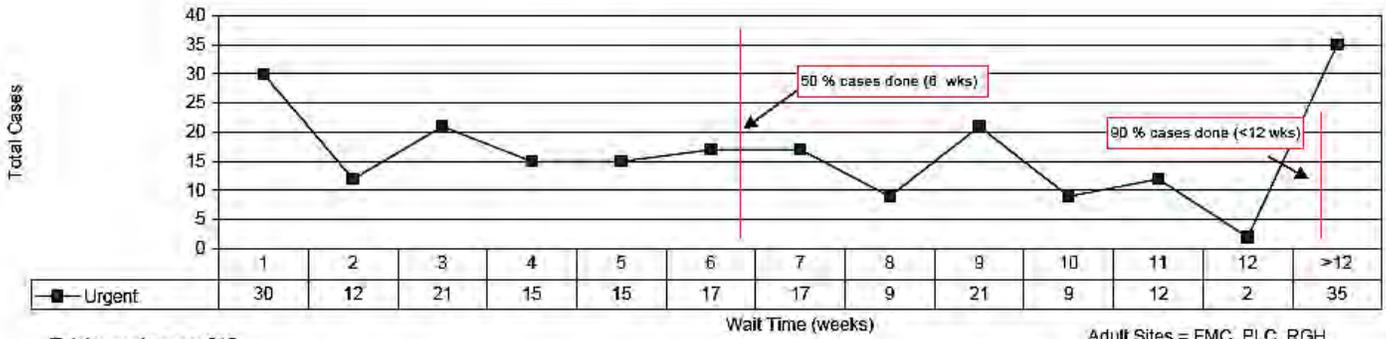
Urgent Knee Arthroplasty Wait Time



THORACIC

2009/04 - 2010/03

Urgent Lung Wait Time



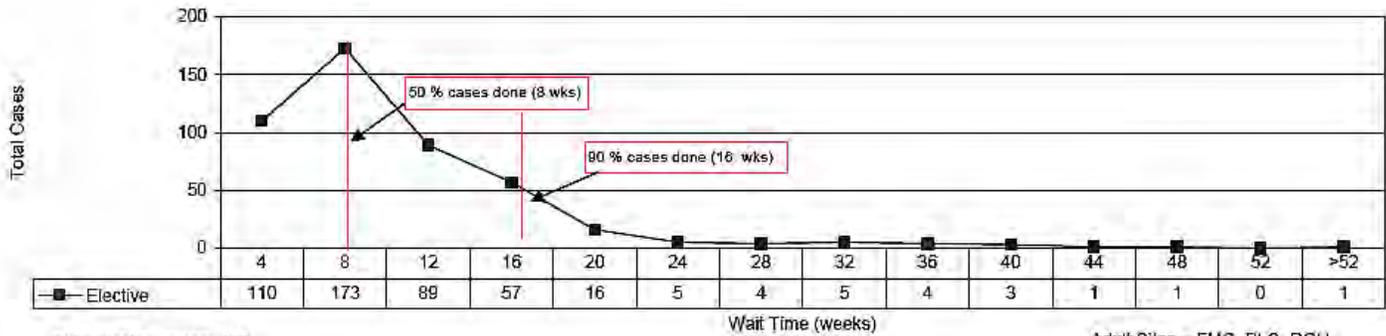
Total urgent cases: 215

Adult Sites = FMC, PLC, RGH

UROLOGY

2009/04 - 2010/03

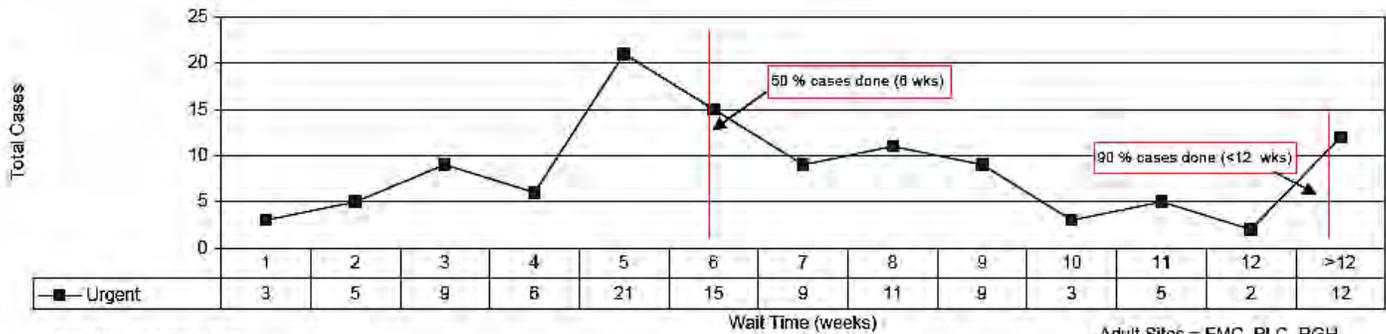
Elective Prostate Other Wait Time



Total elective cases: 469

Adult Sites = FMC, PLC, RGH

Urgent Prostate Cancer Wait Time



Total urgent cases: 110

Adult Sites = FMC, PLC, RGH

## 2.5 MCKESSON OR BENCHMARKS BY SITE FOR APRIL 2009 - MARCH 2009

### ORBC Scorecards by Site for 12 months up to: March 31, 2010

ACH OR Benchmarks Collaborative		Freestanding Children's: 2 Comparators in Canada 2 Comparators All Subscribers		
Indicator	Actual	Internal Targets	Median Canada Only	75th Percentile All Subscribers
% First Case On-Time or Early +/- 5	68.5%	60.00%	68.5%	77.0%
Average Turnover Minutes	14.0	15.0	21.0	13.0
% Utilized 7am-3pm	98%	85.0%	86.9%	97.8%
% Utilized 3pm-5pm	93%	85.0%	93.4%	112.4%
% Utilized 5pm-7pm	102%	85.0%	84.2%	102.1%
% Utilized 7pm-11pm	50%	70.0%	43.3%	50.2%
% Same Day Add-On Weekdays	15.7%	10.0%	15.7%	13.9%

FMC OR Benchmarks Collaborative		Short Term Acute Care/Academic: 3 Comparators in Canada 22 Comparators All Subscribers		
Indicator	Actual	Internal Targets	Median Canada Only	75th Percentile All Subscribers
% First Case On-Time or Early +/- 5	50.8%	60.0%	77.1%	80.2%
Average Turnover Minutes	25.3	22.0	25.0	25.0
% Utilized 7am-3pm	93%	85.0%	93.7%	84.3%
% Utilized 3pm-5pm	93%	85.0%	104.6%	99.2%
% Utilized 5pm-7pm	123%	85.0%	107.6%	93.1%
% Utilized 7pm-11pm	102%	70.0%	73.3%	75.2%
% Same Day Add-On Weekdays	23.5%	10.0%	18.8%	9.9%

PLC OR Benchmarks Collaborative		Short Term Acute Care: 33 Comparators in Canada 91 Comparators All Subscribers		
Indicator	Actual	Internal Targets	Median Canada Only	75th Percentile All Subscribers
% First Case On-Time or Early +/- 5	48.6%	60.0%	72.2%	83.8%
Average Turnover Minutes	22.1	16.0	17.0	19.0
% Utilized 7am-3pm	95%	85.0%	94.7%	94.1%
% Utilized 3pm-5pm	90%	85.0%	100.2%	97.8%
% Utilized 5pm-7pm	90%	85.0%	83.5%	90.4%
% Utilized 7pm-11pm	58%	70.0%	64.7%	68.7%
% Same Day Add-On Weekdays	17.2%	10.0%	12.4%	10.4%

RGH OR Benchmarks Collaborative		Short Term Acute Care: 33 Comparators in Canada 91 Comparators All Subscribers		
Indicator	Actual	Internal Targets	Median Canada Only	75th Percentile All Subscribers
% First Case On-Time or Early +/- 5	52.0%	60.0%	72.2%	83.8%
Average Turnover Minutes	17.2	16.0	17.0	19.0
% Utilized 7am-3pm	95%	85.0%	94.7%	94.1%
% Utilized 3pm-5pm	85%	85.0%	100.2%	97.8%
% Utilized 5pm-7pm	88%	85.0%	83.5%	90.4%
% Utilized 7pm-11pm	69%	70.0%	64.7%	68.7%
% Same Day Add-On Weekdays	25.0%	10.0%	12.4%	10.4%

## APPENDIX 3: RESEARCH FROM WITHIN THE DEPARTMENT

### 3.1 PEER REVIEWED PUBLICATIONS FROM APRIL 2009-MARCH 2010

#### DIVISION OF GENERAL SURGERY

1. Al Eissa S, Reed JG, **Kortbeek JB**, **Salo PT**. (2009). Airway compromise secondary to upper cervical spine injury. *J Trauma*. 67(4): 692-696.
2. Al-Homoudi W, **Pasieka, JL**, Urbanski S, Lee S. (2009). Hepatic nodular regenerative hyperplasia in a patient with advanced carcinoid tumor. *Eur J Gastroenterol Hepatol*. 21(9): 1083-1085.
3. Al-Kadi A, Dyer D, Ball CG, McBeth PB, Hall R, Lan S, Gauthier C, Boyd J, Cusden J, Turner C, Hamilton DR, **Kirkpatrick AW**. (2009). User's perceptions of remote trauma teleonography. *J Telemed Telecare*. 15(5): 251-254.
4. Ball CG, **Dixon E**, **Kirkpatrick AW**. (2009). The utility of organ procurement procedures for operative trauma training. *J Trauma*. 67(5): 1128.
5. Ball CG, **Dixon E**, **Kirkpatrick AW**, **Sutherland FR**, Laupland KB, Feliciano DV. (2010). A decade of experience with injuries to the gallbladder. *J Trauma Manag Outcomes*. 4:3.
6. Ball CG, Jafri SM, **Kirkpatrick AW**, Rajani RR, Rozycki GS, Feliciano DV, Wyrzykowski AD. (2009). Traumatic urethral injuries: does the digital rectal examination really help us? *Injury*. 40(9): 984-986.
7. Ball CG, **Kirkpatrick AW**, Feliciano DV. (2009). The occult pneumothorax: what have we learned? *Can J Surg*. 52(5): E173-179.
8. Ball CG, **Kirkpatrick AW**, Pelosi P, De Waele J. (2010). Intra-abdominal hypertension, prone ventilation, and abdominal suspension. *J Trauma*. 68(4): 1017.
9. Ball CG, **Kirkpatrick AW**, Rajani RR, et al. (2009). Temporary intravascular shunts: when are we really using them according to the NTDB? *Am Surg*. 75(7): 605-607.
10. Ball CG, Ranson K, Dente CJ, Feliciano DV, Laupland KB, Dyer D, Inaba K, Trottier V, Datta I, **Kirkpatrick AW**. (2009). Clinical predictors of occult pneumothoraces in severely injured blunt polytrauma patients: A prospective observational study. *Injury*. 40(1): 44-47.
11. Ball CG, Ranson MK, Rodriguez-Galvez M, **Lall R**, **Kirkpatrick AW**. (2009). Sonographic depiction of posttraumatic alveolar-interstitial disease: the hand-held diagnosis of a pulmonary contusion. *J Trauma*. 66(3): 962.
12. Ball CG, **Sutherland FR**, **Dixon E**, Feliciano DV, Datta I, Rajani RR, Hannay S, Gomes A, **Kirkpatrick AW**. (2009). Surgical trauma referrals from rural level III hospitals: should our community colleagues be doing more, or less? *J Trauma*. 67(1): 180-184.
13. Ball JE, Ball C, **Mulloy RH**, Datta I, **Kirkpatrick AW**. (2009). Ten years of major equestrian injury: are we addressing functional outcomes? *J Trauma Manag Outcomes*. 3:2.
14. Barabas AZ, Cole CD, Barabas AD, Graeff RM, **Lafreniere R**, Weir DM. (2009). Correcting autoimmune anomalies in autoimmune disorders by immunological means, employing the modified vaccination technique. *Autoimmun Rev (Netherlands)*. 8(7): 552-557.
15. Barabas AZ, Cole CD, Barabas AD, Graeff RM, **Lafreniere R**, Weir DM. (2010). Modified vaccination technique for prophylactic and therapeutic applications to combat endogenous antigen-induced disorders. *Scand J Immunol*. 71(3): 125-133.
16. Barabas AZ, Weir DM, Cole CD, Barabas AD, Bahlis NJ, Graeff RM, **Lafreniere R**. (2009). Preventing and treating chronic disorders using the modified vaccination technique. *Front Biosci*. 14: 892-898.
17. **Bathe OF**. (2009). Molecular determinants of outcomes: linking tissue banks to outcomes databases. *J Surg Oncol*. 99(8): 513-516.
18. **Bathe OF**, Ernst S, **Sutherland FR**, **Dixon E**, Butts C, Bigam D, Holland D, Porter GA, Koppel J, Dowden S. (2009). A phase II experience with neoadjuvant irinotecan (CPT-11), 5-fluorouracil (5-FU) and leucovorin (LV) for colorectal liver metastases. *BMC Cancer*. 9:156.
19. **Bathe OF**, McGuire AL. (2009). The ethical use of existing samples for genome research. *Genet Med*. 11(10): 712-715.
20. Bawahab M, **Mitchell P**, **Church N**, **Debru E**. (2009). Management of acute paraesophageal hernia. *Surg Endosc*. 23(2): 255-259.
21. Blaivas M, **Kirkpatrick AW**, Rodriguez-Galvez M, Ball CG. (2009). Sonographic depiction of intraperitoneal free air. *J Trauma*. 67(3): 675
22. Caron NR, **Pasieka JL**. (2009). What symptom improvement can be expected after operation for primary hyperparathyroidism? *World J Surg*. 33(11): 2244-2255.
23. Chambers AJ, **Magi E**, **Temple WJ**. (2009). Abdominal wall reconstruction utilizing posterior rectus sheath fascia: a spare part for all reasons. *J Surg Oncol*. 99(5): 311-313.
24. Chambers AJ, **Pasieka JL**, **Temple WJ**. (2009). Improvement in the accuracy of reporting key prognostic and anatomic findings during thyroidectomy by using a novel Web-based synoptic operative reporting system. *Surgery*. 146(6): 1090-1098.
25. Chan AK, Wong AO, **Jenken DA**. (2010). Preoperative capecitabine and pelvic radiation in locally advanced rectal cancer--is it equivalent to 5-FU infusion plus leucovorin and radiotherapy? *Int J Radiat Oncol Biol*

- Phys. 76(5):1413-1419.
26. Chatten C, **Bathe OF**. (2010). Immunoregulatory cells of the tumor microenvironment. *Front Biosci.* 15: 291-308.
  27. Cheatham ML, De Waele JJ, De Laet I, De Keulenaer B, Widder S, **Kirkpatrick AW**, Cresswell AB, Malbrain M, Bodnar Z, Mejia-Mantilla JH, Reis R, Parr M, Schulze R, Puig S. (2009). The impact of body position on intra-abdominal pressure measurement: a multicenter analysis. *Crit Care Med.* 37(7): 2187-2190.
  28. Datta I, Ball CG, Rudmik LR, Paton-Gay D, Bhayana D, Salat P, Schieman C, Smith DF, Vanwijngaarden-Stephens M, **Kortbeek JB**. (2009). A multicenter review of deep venous thrombosis prophylaxis practice patterns for blunt hepatic trauma. *J Trauma Manag Outcomes.* 3:7.
  29. Datta I, Brar SS, Andrews CN, Dupre M, Ball CG, **Buie WD**, Beck PL. (2009). Microscopic colitis: a review for the surgical endoscopist. *Can J Surg.* 52(5): E167-172.
  30. De Waele JJ, Cheatham ML, Malbrain ML, **Kirkpatrick AW**, Sugrue M, Balogh Z, Ivatury R, De Keulenaer B, Kimball EJ. (2009). Recommendations for research from the International Conference of Experts on Intra-abdominal Hypertension and Abdominal Compartment Syndrome. *Acta Clin Belg.* 64(3): 203-209.
  31. Francis WP, Zippel D, **Mack LA**, DiFrancesco LM, Kurien E, **Schachar NS**, **Temple WJ**. (2009). Desmoids: a revelation in biology and treatment. *Ann Surg Oncol.* 16(6): 1650-1654.
  32. Gillman LM, Alkadi A, **Kirkpatrick AW**. (2009). The "pseudo-lung point" sign: all focal respiratory coupled alternating pleural patterns are not diagnostic of a pneumothorax. *J Trauma.* 67(3): 672-673.
  33. Gillman LM, Ball CG, Panebianco N, Al-Kadi A, **Kirkpatrick AW**. (2009). Clinician performed resuscitative ultrasonography for the initial evaluation and resuscitation of trauma. *Scand J Trauma Resusc Emerg Med.* 17(1): 34.
  34. **Harvey A**, **Pasieka JL**. (2010). Sporadic Medullary Thyroid Cancer. *Cancer Treat Res.* 53: 57-74.
  35. Hennessy D, Widder S, Zygun D, Hurlbert RJ, Burrowes P, **Kortbeek JB**. (2010). Cervical spine clearance in obtunded blunt trauma patients: a prospective study. *J Trauma.* 68(3):576-582.
  36. Hui CM, MacGregor JH, Tien HC, **Kortbeek JB**. (2009). Radiation dose from initial trauma assessment and resuscitation: review of the literature. *Can J Surg.* 52(2): 147-152.
  37. Kaplan GG, **Dixon E**, Panaccione R, Fong A, Chen L, Szyzkowicz M, Wheeler A, **MacLean A**, **Buie WD**, Leung T, Heitman SJ, Villeneuve PJ. (2009). Effect of ambient air pollution on the incidence of appendicitis. *CMAJ.* 181(9): 591-597.
  38. Khosravani H, Shahpori R, Stelfox HT, **Kirkpatrick AW**, Laupland KB. (2009). Occurrence and adverse effect on outcome of hyperlactatemia in the critically ill. *Crit Care.* 13(3): R90.
  39. **Kirkpatrick AW**. (2010). Trauma Association of Canada 2009 presidential address: trauma ultrasound in Canada—have we lost a generation? *J Trauma.* 68(1): 2-8.
  40. **Kirkpatrick AW**, Ball CG, Campbell M, Williams DR, Parazynski SE, Mattox KL, Broderick TJ. (2009). Severe traumatic injury during long duration spaceflight: Light years beyond ATLS. *J Trauma Manag Outcomes.* 2009, 3:4.
  41. **Kirkpatrick AW**, Ball CG, **Nickerson D**, D'Amours SK. (2009). Intraabdominal hypertension and the abdominal compartment syndrome in burn patients. *World J Surg.* 33(6): 1142-1149.
  42. **Kirkpatrick AW**, Ball CG, Rodriguez-Galvez M, Chun R. (2009). Sonographic depiction of the needle decompression of a tension hemo/pneumothorax. *J Trauma.* 66(3): 961.
  43. **Kirkpatrick AW**, Keaney M, Hemmelgarn B, Zhang J, Ball CG, Groleau M, Tyssen M, Keyte J, Campbell MR, Kmet L, McBeth P, Broderick TJ. (2009). Intra-abdominal pressure effects on porcine thoracic compliance in weightlessness: implications for physiologic tolerance of laparoscopic surgery in space. *Crit Care Med.* 37(2): 591-597.
  44. **Kirkpatrick AW**, Keaney M, Kmet L, Ball CG, Campbell MR, Kindratsky C, Groleau M, Tyssen M, Keyte J, Broderick TJ. (2009). Intraperitoneal gas insufflation will be required for laparoscopic visualization in space: a comparison of laparoscopic techniques in weightlessness. *J Am Coll Surg.* 209(2): 233-241.
  45. Lanuke K, **Mack LA**, **Temple WJ**. (2009). Phase II study of regional treatment for peritoneal carcinomatosis. *Am J Surg.* 197(5): 614-618.
  46. Laupland KB, Ball CG, **Kirkpatrick AW**. (2009). Hospital mortality among major trauma victims admitted on weekends and evenings: a cohort study. *J Trauma Manag Outcomes.* 3:8.
  47. Laupland KB, Svenson LW, Grant V, Ball CG, Mercado M, **Kirkpatrick AW**. (2010). Long-term mortality outcome of victims of major trauma. *Injury.* 41(1):69-72.
  48. Latosinsky S, Thirlby R, Urbach D, Baxter NN, Brasel KJ, Brown CJ, Chaudhury P, Cutter CS, Divino C, **Dixon E**, Dubois L, Fitzgerald GW, Henteleff HJ, **Kirkpatrick AW**, Latosinsky S, **MacLean A**, Mastracci TM, McLeod RS, Morris A, Neumayer LA, Temple LR, McKenzie ME. (2010). CAGS and ACS evidence based reviews in surgery. 32: Use of a surgical safety checklist to reduce morbidity and mortality. *Can J Surg.* 53(1): 64-66.
  49. Leung TT, **Dixon E**, Gill M, Mador BD, Moulton KM, Kaplan GG, **Maclean AR**. (2009). Bowel obstruction following appendectomy: what is the true incidence? *Ann Surg.* 250(1): 51-53.
  50. **Mack LA**, **Bathe OF**, Hebert MA, Tamano E, **Buie WD**, Fields T, **Temple WJ**. (2009). Opening the black box of cancer surgery quality: WebSMR and the Alberta experience. *J Surg Oncol.* 99(8): 525-530.
  51. **Mack LA**, Cook LS, **Temple WJ**, Carlson LE, Hilsden RJ, **Paolucci EO**. (2009). Colorectal cancer screening among first-degree relatives of colorectal cancer patients: benefits and barriers. *Ann Surg Oncol.* 16(8):

2092-2100.

52. **McBeth PB, Ball CG, Mulloy RH, Kirkpatrick AW.** (2009). Alpine ski and snowboarding traumatic injuries: incidence, injury patterns, and risk factors for 10 years. *Am J Surg.* 197(5): 560-564.
53. **McBeth PB, Widder S, McColl RJ, Graham A, Kirkpatrick AW.** (2009). Traumatic abdominal hernia with pre-sternal herniation. *Can J Surg.* 52(5): E207-208.
54. **Nowak MR, Kirkpatrick AW, Bouffard JA, Amponsah D, Dulchavsky SA.** (2009). Snowboarding injuries: a review of the literature and an analysis of the potential use of portable ultrasound for mountainside diagnostics. *Curr Rev Musculoskelet Med.* 2(1), 25-29.
55. **Ouellet JF, Trottier V, Kmet L, Rizoli S, Laupland K, Ball CG, Sirois M, Kirkpatrick AW.** (2009). The OPTICC trial: a multi-institutional study of occult pneumothoraces in critical care. *Am J Surg.* 197(5): 581-586.
56. **Pasieka JL.** (2009). Carcinoid tumors. *Surg Clin North Am.* 89(5): 1123-1137.
57. **Pasieka JL.** (2009). Training of the endocrine surgical scientist. *Am J Transl Res.* 2(2): 126-128.
58. **Pasieka JL, Parsons L, Jones J.** (2009). The long-term benefit of parathyroidectomy in primary hyperparathyroidism: a 10-year prospective surgical outcome study. *Surgery.* 146(6): 1006-1013.
59. **Pasieka JL, Schnell G, Hassan, Abdel-Aty, Rorstad O.** (2009). Metastatic midgut carcinoid to the heart demonstrated on cardiac magnetic resonance imaging. *Am J Clin Oncol.* 32(3): 328-329.
60. **Reso A, Ball CG, Sutherland FR, Bathe O, Dixon E.** (2009). Rupture and intra-peritoneal bleeding of a hepatocellular carcinoma after a transarterial chemoembolization procedure: a case report. *Cases J.* 2(1): 68.
61. **Rizoli S, Mamtani A, Scarpelini S, Kirkpatrick AW.** (2010). Abdominal compartment syndrome in trauma resuscitation. *Curr Opin Anaesthesiol.* 23(2): 251-257.
62. **Sarkhosh K, Bathe OF, Stewart DA, Mack LA.** (2009). The role of surgical intervention in the management of duodenal lymphoma. *J Surg Oncol.* 99(7): 428-432.
63. **Schieman C, Pasieka JL, McFadden SD, Cole M, Graham AJ.** (2010). Resolution of chronic diarrhea after resection of a localized pulmonary carcinoid tumor. *Ann Thorac Surg.* 89(4): 1275-1276.
64. **Schieman C, Rudmik LR, Dixon E, Sutherland F, Bathe OF.** (2009). Complementary and alternative medicine use among general surgery, hepatobiliary surgery and surgical oncology patients. *Can J Surg.* 52(5): 422-426.
65. **Temple WJ.** (2009). Quality of surgery increases survival of the cancer patient. *J Surg Oncol.* 99(8): 461.
66. **Temple WJ.** (2009). Tribute to Marija Auersperg. *Surg Oncol.* 99(8):459-460.
67. **Yeung MJ, Pasieka JL.** (2009). Gastrinomas: a historical perspective. *J Surg Oncol.* 100(5): 425-433.
68. **Zwicker K, Chatten C, Gratton K, Demetrick D, Serra P, Shameli A, Santamaria P, Bathe OF.** (2009). Spontaneous autoimmunity sufficiently potent to induce diabetes mellitus is insufficient to protect against insulinoma. *J Immunol.* 183(3): 1705-1714.

## DIVISION OF OPHTHALMOLOGY

1. **Astle WF.** (2009). The critical need for trained and certified ophthalmic medical personnel: fall survey of staff and productivity. *Can J Ophthalmol.* 44(3):254-256.
2. **Astle WF, Alewenah O, Ingram AD, Paszuk A.** (2009). Surgical outcomes of primary foldable intraocular lens implantation in children: understanding posterior opacification and the absence of glaucoma. *J Cataract Refract Surg.* 35(7):1216-22.
3. **Astle WF, Huang PT, Erefej I, Paszuk A.** (2010). Laser-assisted subepithelial keratectomy for bilateral hyperopia and hyperopic anisometropic amblyopia in children: one-year outcomes. *J Cataract Refract Surg.* 36(2): 260-267.
4. **Boucher MC, Desroches G, Garcia-Salinas R, Kherani A, Maberley D, Olivier S, Oh M, & Stockl F.** (2009) *Can J Ophthalmol.* 44(1):100-1.
5. **Boshra J, Narvaez J, Gimbel HV.** (2009). Simplified technique for combined silicone oil removal during phacoemulsification with standard or toric intraocular lens implantation. *J Cataract Refract Surg.* 35(11): 1853-1856.
6. **Buyts YM, Nicolela MT, Cohen S, Douglas G, Ford BA, Gould L, Hutnik C, Lajoie C, Leblanc RP, Schertzer R, Taylor J.** (2009). Interprofessional care and collaboration: are ophthalmologists and optometrists ready? *Can J Ophthalmol.* 44(3): 254-256.
7. **Crichton A.** (2010). Management of coexisting cataract and glaucoma. *Curr Opin Ophthalmol.* 21(2): 129-134.
8. **Dardzhikova A, Shah CR & Gimbel HV.** (2009). Early experience with the AcrySof toric IOL for the correction of astigmatism in cataract surgery. *Can J Ophthalmol.* 44:269-273.
9. **Darlow BA, Gilbert C, Quinn GE, Azad R, Ells AL, Fielder A, Zin A.** (2009). Promise and potential pitfalls of anti-VEGF drugs in retinopathy of prematurity. *Br J Ophthalmol.* 93(7): 986.
10. **Ells A, Guernsey DL, Wallace K, Zheng B, Vincer M, Allen A, Ingram A, Da Silva O, Siebert L, Sheidow T, Beis J, Robitaille JM.** (2010). Severe retinopathy of prematurity associated with FZD4 mutations. *Ophthalmic Genet.* 31(1): 37-43.
11. **Fielder AR, Hildebrand PL, Ells A, Lorenz B, Trese MT, Capone A Jr, Gordon RA, Wilson C, Floeck BW & Chiange MF.** (2009). Systematic review of digital imaging screening strategies for retinopathy of prematurity. *Pediatrics.* 2:360-361.
12. **Gimbel HV, Pereira CR, Niemeyer MS.** (2009). Conjunctival advancing scleral tunnel (CAST) incision. *Clinical & Surgical Ophthalmology.* 27(2): 54-58.
13. **Lodha N, Bonfield S, Orton NC, Doering CJ, McRory JE, Mema SC, Rehak R, Sauve Y, Tobias R, Stell WK, Bech-Hansen NT.** (2010). Congenital stationary night blindness in mice - a tale of two cacna1f mutants. *Adv Exp Med Biol.* 664: 549-558.
14. **Repka MX, Kraker RT, Beck RW, Cotter SA, Holmes JM, Arnold RW, Astle WF, Sala NA, Tien DR;** Pediatric

Eye Disease Investigator Group. Contrast sensitivity following amblyopia treatment in children. *Arch Ophthalmol.* 2009 Sep; 127(9):1225-7.

15. Solarte CE, Awad AH, Wilson CM, **Ells A.** (2010). Plus Disease: Why is it Important in Retinopathy of Prematurity? *Middle East Afr J Ophthalmol.* 17(2): 148-155.

## DIVISION OF ORTHOPAEDIC SURGERY

1. Ackermann PW, **Salo PT, Hart DA.** (2009). Neuronal pathways in tendon healing. *Front Biosci.* 14: 5165-5187.
2. Al Eissa S, Reed JG, **Kortbeek JB, Salo PT.** (2009). Airway compromise secondary to upper cervical spine injury. *J Trauma.* 67(4): 692-696.
3. **Bell D,** Pedersen E. (2009). Lateral transfer of the medial hamstring tendons to the fibula to treat anterolateral rotatory instability of the knee. A case report. *J Bone Joint Surg Am.* 91(5): 1214-1218.
4. Bhandari M, Sprague S, Schemisch EH, and the International Hip Fracture Research Collaborative (consists of 308 collaborators of which **Frank CB** is one). (2009). Resolving controversies in hip fracture care: The need for large collaborative trials in hip fractures. *J. Orthop. Trauma.* 23(6):479-484.
5. **Brauer CA,** Bozic KJ. (2009). Using observational data for decision analysis and economic analysis. *J Bone Joint Surg Am.* 91 Suppl 3: 73-79.
6. **Brauer CA,** Coca-Perrillon M, Cutler DM, Rosen AB. (2009). Incidence and mortality of hip fractures in the United States. *JAMA.* 302(14): 1573-1579.
7. Bring DK-I, Reno C, Renstrom P, **Salo P, Hart DA,** Ackermann PW. (2009). Joint immobilization reduces the expression of sensory neuropeptide receptors and impairs healing after tendon rupture in a rat model. *Journal of Orthopaedic Research.* 27(2): 274-280.
8. Chan RK, Lockyer J, **Hutchison C.** (2009). Block to succeed: the Canadian orthopedic resident research experience. *Can J Surg.* 52(3): 187-195.
9. Demcoe AR, Verhulsdonk M, **Buckley RE.** (2009). Complications when using threaded K-wire fixation for displaced intra-articular calcaneal fractures. *Injury.* 40(12): 1297-1301.
10. **Frank C,** and Nason E. (2009). Health research: Measuring the social, health and economic benefits. *Canadian Medical Association Journal.* 180(5): 528-534.
11. Frigg A, **Dougall H,** Boyd S, Nigg B. (2010). Can porous tantalum be used to achieve ankle and subtalar arthrodesis?: A pilot study. *Clin Orthop Relat Res.* 468(1): 209-216.
12. Goel DP, **Buckley R,** de Vries G, **Abelseth G,** Ni A, Gray R. (2009). Prophylaxis of deep-vein thrombosis in fractures below the knee: a prospective randomised controlled trial. *J Bone Joint Surg Br.* 91(3): 388-394.
13. Gooch K, Smith D, Wasylak T, Faris P, Marshall D, Khong H, Hibbert J, Parker R, Zernicke R, Beaupre L, Pearce T, Johnston B, and **Frank C.** (2009). The Alberta hip and knee replacement pilot project: A model for health technology assessment based on comparative effectiveness or clinical pathways. *International Journal of Technology Assessment in Health Care.* 25(2):113-123.
14. Grant JA, Howard J, Luntley J, **Harder J,** Aleissa S, **Parsons D.** (2009). Perioperative blood transfusion requirements in pediatric scoliosis surgery: the efficacy of tranexamic acid. *J Pediatr Orthop.* 29(3): 300-304.
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# DEPARTMENT OF SURGERY

## ANNUAL REPORT 2009

***"WE ARE WHAT WE REPEATEDLY DO. EXCELLENCE, THEN, IS NOT AN ACT, BUT A HABIT."***

***- ARISTOTLE***



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