

DEPARTMENT OF SURGERY

ANNUAL REPORT 2008

FOR THE PERIOD: APRIL 1, 2008 TO MARCH 31, 2009



TOGETHER, LEADING AND CREATING EXCELLENCE IN SURGICAL CARE



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and Marie McEachern.

Content and Photographs Provided by Sarah Urbanowski, Marie
McEachern, Dr. John Kortbeek, and numerous
Department Members.



Sarah Urbanowski

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 2008/2009 fiscal year ended with the arrival of a new CEO, **Dr. Stephen Duckett**, and rapid changes to the organizational structure of Alberta Health Services. There is clear direction from the Board that budget targets must be met in order to support a sustainable health delivery system going forward. Alberta Health Services has released a strategic direction document, which I would encourage you to visit at the website posted at the bottom of this address.

It describes three pillars which are important to us all. These include access, sustainability and quality. The Department has worked diligently with Surgical Services in the Calgary Zone to maximize access through ensuring 100 per cent utilization of funded OR capacity. We have clearly documented efficiency and utilization. We currently contract 25 per cent of our surgical volume to ambulatory non-hospital surgical facilities. Wait times across the Zone, through procedural groupings, are clearly documented and as the city has grown and demand has increased in fixed capacity, to no one's surprise, these times are increasing. The Department, in concert with the Division Chiefs, has developed a strategic growth plan to prioritize and meet population health needs while ensuring a sustainable system by meeting our academic mission goals of education and innovation. We look forward to working with senior management in Alberta Health Services to address these needs as the system recovers from the current reorganization and economic challenges.

The focus of Alberta Health Services on quality is timely. The Department hosted a Retreat focused on patient safety. Important short-term goals of introducing the W.H.O Checklist, which will build on our present time-out procedures, as well as developing outcome reporting projects across the Department, were immediate goals that we hope to achieve by 2010. Working with Alberta Health Services, the W.H.O project is proposing a dashboard reporting surgical outcomes across the province. This will be a significant accomplishment of the new organization. There were over 50 members in attendance at the Retreat and I appreciate the leadership of **Dr. Beth Lange** in organizing and hosting the Retreat.

This past year was also a sentinel year for education with a majority of our post-graduate programs undergoing review by the Royal College. All programs received either full or provisional approval. The leadership provided by our Program Directors and the Office of Post-Graduate Surgical Training was impressive, as was the incredible effort behind the scenes that supported this successful review. The commitment of our Faculty to education was evident throughout the preparation and final review. Simulation remains a priority for the Department and a development of a Core Surgical Skills curriculum was identified as a "to do" following the 2008 Retreat. This course was introduced in July of 2009 and will be a significant addition to the quality of education experienced by our residents across the surgical programs. Congratulations to **Dr. Alicia Ponton-Carss** and **Dr. Carolyn Hutchison**, with the support of **Ms. Anita Jenkins**, in launching the Core Surgical Skills curriculum.

We look forward to working with the new Alberta Health Services' team. Surgery faces significant challenges and we are prepared with innovative solutions to address these. Once again, I am impressed by the incredible amount of work, energy and enthusiasm of the surgical community in Calgary and look forward to working with all of you to meet the challenges in the coming year.

Please visit: http://iweb.calgaryhealthregion.ca/communications/pdf/draft_ahs_strategic_direction.pdf.



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



Foothills Medical Centre



Alberta Children's Hospital



Peter Lougheed Centre



Rockyview General Hospital

SURGICAL EXECUTIVE

These are the members of the Surgical Executive Team as of March 31, 2009.

Dr. John Kortbeek, Regional Clinical Department Head
Dr. David Sigalet, Deputy Head
Dr. Eduardo Kalaydjian, Division Chief, Dentistry & Oral Health
Dr. Francis Sutherland, Division Chief, General Surgery
Dr. Ken Romanchuk, Division Chief, Ophthalmology
Dr. Brian Whitestone, Division Chief, Oral Maxillofacial Surgery
Dr. Kevin Hildebrand, Division Chief, Orthopedics
Dr. Wayne Matthews, Division Chief, Otolaryngology
Dr. William Hyndman, Division Chief, Pediatrics, and Site Chief, ACH
Dr. Brent Haverstock, Division Chief, Podiatry
Dr. Robert Lindsay, Division Chief, Plastic Surgery
Dr. Walley Temple, Division Chief, Surgical Oncology
Dr. Gary Gelfand, Division Chief, Thoracic
Dr. Serdar Yilmaz, Division Chief, Transplant
Dr. Paul Petrasek, Division Chief, Vascular
Dr. John Dushinski, Division Chief, Urology, and Site Chief, RGH
Dr. James Nixon, Site Chief, PLC
Dr. Richard Hu, Site Chief, FMC
Dr. A. Robertson Harrop, Director, Office of Surgical Research
Dr. Norm Schachar, Director, Office of Surgical Education
Dr. Beth Lange, Physician Leader, Quality and Safety
Dr. Lea Austen, Physician Leader, Health Technology and Innovation
Dr. Andrew Kirkpatrick, Regional Medical Director, Trauma Services
Dr. Greg Abelseth, Physician Leader, Informatics
Ms. Marie McEachern, Regional Manager, Department of Surgery
Ms. Christine Bourgeois, Administrative Assistant to Dr Kortbeek
Ms. Andrea Robertson, Vice President, Interventional Services
Ms. Marg Semel, Director, Surgical Inpatients & Ambulatory Surgery
Ms. Shawna Syverson, Director, Bone & Joint Health
Dr. JN Armstrong, Department Head, Anesthesia
Dr. Doug Wilson, Department Head, Obstetrics & Gynecology
Dr. William Kidd, Representative, Cardiac Sciences
Dr. Raj Midha, Representative, Clinical Neurosciences
Dr. Mark Heard, Representative, Rural Health
Ms. Michele Austad, Regional Manager, Department of Anesthesia
Ms. Susan Reader, Senior Manager, ACH, Pediatric Surgery
Dr. David Halpenny, Chair, PLC OR Committee
Ms. Lynda Phelan, Communications

The Department of Surgery, in the Calgary Health Region, is among the largest Surgical Departments in North America.

We are a total of 280 members

- 208 Surgeons
- 48 Members in Dentistry & Oral Health
- 12 Members in Oral Maxillo-facial Surgery
- 12 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 Health Region 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.

Dr. Norm Schachar is the Director of the Office of Surgical Education. This office manages all levels of Surgical Education, from Undergraduate and Clerkship through to Residency, Fellowship and Continuing Medical Education.

Dr. Rob Harrop has completed his first full year as the Director of the Office of Surgical Research, along with Dr. Elizabeth Oddone Paolucci, Associate Director, who provides assistance and consultation in surgical research.

The Department would like to acknowledge the following promotions, new members and appointments which all occurred in the 2008-2009 fiscal year.

PROMOTIONS

✚ **Dr. Lea Austen** in the Division of General Surgery has been promoted to **Clinical Assistant Professor** effective July 1, 2009.

✚ **Dr. Doug Bosch** in the Division of Otolaryngology has been promoted to **Clinical Assistant Professor** effective July 1, 2009.

✚ **Dr. Hugh Dougall** in the Division of Orthopedic Surgery has been promoted to **Clinical Associate Professor** effective July 1, 2009.

✚ **Dr. Richard Buckley** in the Division of Orthopedic Surgery has been promoted to **Clinical Professor** effective July 1, 2009.

✚ **Dr. Bryce Ford** in the Division of Ophthalmology has been promoted to **Clinical Associate Professor** effective July 1, 2009.

✚ **Dr. Greg Kozak** in the Division of Urology has been promoted to **Clinical Associate Professor** effective July 1, 2009.

✚ **Dr. Donald McPhalen** in the Division of Plastic Surgery has been promoted to **Clinical Associate Professor** effective July 1, 2009.

PROMOTIONS CONTINUED

✿ **Dr. Elijah Dixon** in the Division of General Surgery has been promoted to **Associate Professor** effective April 1, 2009.

✿ **Dr. Gwen Hollaar** in the Division of General Surgery has been promoted to **Associate Professor** effective April 1, 2009.

✿ **Dr. Randy Moore** in the Division of Vascular Surgery has been promoted to **Associate Professor** effective April 1, 2009.



NEW FACULTY

✿ **Dr. Justin Chau** joined the Division of Otolaryngology in January 2009.

✿ **Dr. David Longino** joined the Division of Orthopedic Surgery in January 2009.

✿ **Dr. Gordon Douglas** joined the Division of Ophthalmology in July 2009.

✿ **Dr. Jonathan Lee** joined the Division of Plastic Surgery in July 2009.

✿ **Dr. May Lynn Quan** joined the Division of General Surgery in August 2009.

✿ **Dr. Adrian Harvey** joined the Division of General Surgery in August 2009.



APPOINTMENTS

✿ **Dr. Kevin Hildebrand** has been appointed **Division Chief of Orthopedic Surgery** in the Department of Surgery, Alberta Health Services, and the University of Calgary effective in July 2008.



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

RETREAT ADDRESSES INITIATIVES WITHIN QUALITY AND SAFETY

The Interventional Surgical Services Clinical Safety Committee continues to perform Safety Reviews with no change in format. Recommendations are presented to the Surgical Executive for review and proper procedure for implementation. My thanks go to **Shawna Syverson**, the Co-Chair of the committee, and to **Kathryn Bush**, the Clinical Safety Leader for their continued support and experience.

This year the Department of Surgery Annual Retreat topics were 'Quality, Safety and Outcomes'. The Retreat was well attended and the speakers were excellent.

The topics presented were: Disclosure; by **Dr. Ward Flemons**, 'Patient and Family Perspective' by **Sharon Nettleton** and the World Health Organization (WHO) Surgery Checklist, as well as the Canadian Safe Surgery Checklist developed by the Canadian Patient Safety Initiative by **Dr. Bryce Taylor**.

Alberta Health Services ongoing commitment to Quality and Safety and the Surgical Checklist was discussed by AHS Regional Director of Quality, **Grant Frame**, Local experience with the WHO checklist was presented by **Dr. P. Petrasek**, **Dr. D. Halpenny** and **Lori Gervais**.

The following presentations focused on three different ways of reporting surgical outcomes.

Dr. Walley Temple presented Synoptic Reporting for Quality Improvement in Cancer Surgery.

Dr. Andrew Kirkpatrick's presentation focused on the Dedicated Registry for Trauma Outcomes and TQIP.

Dr. Andrew Graham and **Ms. Monica Hess** (Information Technology) discussed their experience with the Statit/Electronic Health Record use in Thoracic Surgery.

It is likely that within the next five years, most divisions will be using a combination of outcome reporting, specific to their division.

Small and large group discussion on the above topics was key in developing suggestions for 'Next Steps' These were:

1. **Dr. Kortbeek** recommended that all members of the Department attend Disclosure Training. Division Heads will consider whether to sponsor a division specific training session.
2. Dr. Kortbeek and others will continue to provide input to the provincial group championing the CPSI Safe Surgery Checklist.
3. Each division is challenged to initiate at least one surgical outcome reporting initiative by year end (December 2009).

Divisions can contact **Marie McEachern** for a list of data sets that they can access to support their surgical outcome reporting.

Divisions can contact Monica Hess for assistance in setting up a Statit/EHR outcome reporting system.

4. Surgical Executive Committee will consider the input from the retreat regarding use of the WHO/CPSI Checklist, and the various options for reporting surgical outcomes. Using this input, the Surgical Executive Committee will develop the Department's Policy regarding the Checklist and Reporting, and develop implementation plans.

Thanks and congratulations to Marie McEachern for her excellent organization of the Retreat and to **Diane MacDonald**, the facilitator.



Dr. Beth Lange is the Safety Officer for the Department of Surgery.

Photos (Below): Dr. Rob Harrop, Dr. Andrew Kirkpatrick, and Dr. Craig Pearce.



Above: Dr. Walley Temple, Dr. Andrew Graham, and Dr. Frankie Fraulin.

Below: Huijun Yu and Dr. Bill Hyndman



Photos: Marie McEachern/ 2009

The following is the Canadian Patient Safety Institute's (CPSI) surgical safety checklist criteria, which was adapted from the World Health Organization's (WHO) safety checklist. The Department discussed adapting a similar list at the Banff retreat.

BRIEFING – Before induction of anesthesia	BRIEFING (continued)	DEBRIEFING – Before patient leaves OR
<p>Hand-off from ER, Nursing Unit or ICU</p> <p>■ Anesthesia equipment safety check completed</p> <p>■ Patient information confirmed</p> <ul style="list-style-type: none"> - Identity (2 identifiers) - Consent(s) - Site and procedure - Site, side and level marked - Clinical documentation - History, physical, labs, biopsy and x-rays <p>■ Review final test results</p> <p>■ Confirm essential imaging displayed</p> <p>■ ASA Class</p> <p>■ Allergies</p> <p>■ Medications</p> <ul style="list-style-type: none"> - Antibiotic prophylaxis: double dose? - Glycemic control - Beta blockers - Anticoagulant therapy (e.g., Warfarin)? <p>■ VTE Prophylaxis</p> <ul style="list-style-type: none"> - Anticoagulant - Mechanical <p>■ Difficult Airway / Aspiration Risk</p> <ul style="list-style-type: none"> - Confirm equipment and assistance available <p>■ Monitoring</p> <ul style="list-style-type: none"> - Pulse oximetry, ECG, BP, arterial line, CVP, temperature and urine catheter <p>■ Blood loss</p> <ul style="list-style-type: none"> - Anticipated to be more than 500 ml (adult) or more than 7 ml/kg (child) - Blood products required and available - Patient grouped, screened and cross matched 	<p>■ Surgeon(s) review(s)</p> <ul style="list-style-type: none"> - Specific patient concerns, critical steps, and special instruments or implants <p>■ Anesthesiologist(s) review(s)</p> <ul style="list-style-type: none"> - Specific patient concerns and critical resuscitation plans <p>■ Nurses(s) review(s)</p> <ul style="list-style-type: none"> - Specific patient concerns, sterility indicator results and equipment / implant issues <p>■ Patient positioning and support / Warming devices</p> <p>■ Special precautions</p> <p>■ Expected procedure time/ Postoperative destination</p>	<p>■ Surgeon reviews with entire team</p> <ul style="list-style-type: none"> - Procedure - Important intra-operative events - Fluid balance / management <p>■ Anesthesiologist reviews with entire team</p> <ul style="list-style-type: none"> - Important intra-operative events - Recovery plans (including postoperative ventilation, pain management, glucose and temperature) <p>■ Nurse(s) review(s) with entire team</p> <ul style="list-style-type: none"> - Instrument / sponge / needle counts - Specimen labeling and management - Important intraoperative events (including equipment malfunction) <p>■ Changes to post-operative destination?</p> <p>■ What are the KEY concerns for this patient's recovery and management?</p> <p>■ Could anything have been done to make this case safer or more efficient?</p> <p>Hand-off to PACU / RR, Nursing Unit or ICU</p>
	<p>TIME OUT – Before skin incision</p> <p>■ All team members introduce themselves by name and role</p> <p>■ Surgeon, Anesthesiologist, and Nurse verbally confirm</p> <ul style="list-style-type: none"> - Patient - Site, side and level - Procedure - Antibiotic prophylaxis: repeat dose? - Final optimal positioning of patient <p>■ "Does anyone have any other questions or concerns before proceeding?"</p>	

FROM THE OFFICE OF SURGICAL EDUCATION



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 continued medical education / continuing professional development. The Office of Surgical Education is central for all of the educational undertakings in the Department of Surgery, and exists to assist and facilitate educational offerings and undertakings within the Department of Surgery and its divisions and beyond to the external community.

Dr. Norman Schachar, Director of the Office of Surgical Education sits on the University of Calgary Undergraduate Medical Education committee (UME) and the Post Graduate Medical Education (PGME) committee at the University of Calgary 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) which is a faculty wide committee formulating overall policy for the undergraduate years. UMEC is chaired by the Associate Dean, UME, University of Calgary.

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

PROGRAM	PHYSICIAN CHAIR	FUNCTION
UGME / SUGEC	Dr. John Graham	Course Chair of the Surgery Clerkship and chairs SUGEC. The division representatives of the Undergraduate Clerkship sit on the Surgical Undergraduate Education Committee (SUGEC).
	Dr. Norman Schachar	Sits on the University of Calgary UMEC, and the U of C Clerkship Committee.
PGME / PGSTC	Dr. Rick Buckley	Chairs the Post Graduate Committee and sits on PGME, University of Calgary 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 University of Calgary CME / CPD committee, chaired by Associate Dean CME / CPD.

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** is the Evaluation Coordinator and **Anita Jenkins** is the Education Coordinator for the surgery clerkship. The educational representatives, from each of the participating divisions, sit on the Surgical Undergraduate Education Committee (SUGEC). The mandate of this committee is to revise and improve clerkship experiences in core general surgery, and in all selectives, 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 size has increased to 145 clerks. The Department receives 20-25 University of Calgary clerks for each of the six, eight week Surgery/ Anesthesia blocks. The current eight week rotation is combined with Anesthesia to include one week of Anesthesia, three weeks in general surgery and two week assignments in either Orthopedic or Plastic surgery, as well as a one week assignment in any one of Thoracic surgery, Vascular surgery, Neurosurgery or Urologic surgery. In addition clerks attend Ophthalmology clinics. The number of visiting elective clerks has increased with the addition of new surgical residency programs, now averaging eight to 30 per month.

The electronic E-log is required to track clerk experiences during the clerkship, and the formative exam has been changed to an online 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 of Surgery in discussions related to the increase in class size, changes to year one and two curriculum, and to the clerkship.

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 residents.

The PGSTC assisted all of the surgical residency programs to prepare for the six yearly on-site survey, which was conducted by the Royal College of Physicians and Surgeons to accredit all of the post graduate residency education programs at the University of Calgary. The survey was conducted in February 2009, and all programs were successfully reviewed.



**Anita Jenkins, Education
Coordinator**



**Dr. Ian Anderson, Evaluation
Coordinator**



**Dr. John Graham,
Course Chair of the
Surgery Clerkship**

OFFICE OF SURGICAL EDUCATION CONTINUES...

SURGERY RESIDENCY PROGRAMS & FELLOWSHIPS

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

The OSE manages the ongoing accreditation and approval of surgery fellowships with the teaching divisions. There are four divisions with accredited fellowships. There are 12 fellows in the Division of Orthopedic Surgery, one in General Surgery Trauma, three in Ophthalmology, and one in the Division of Urology.

CONTINUING MEDICAL EDUCATION & CONTINUING PROFESSIONAL DEVELOPMENT (CME/CPD)

Dr. Paul Petrasek is the Department of Surgery representative on the University of Calgary 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 and there are also plans underway to create a Department of Surgery CME committee that will host all of the various CME representatives from each division to improve and enhance CME for surgical specialists. Dr. Petrasek has become a champion of CME/CPD and has plans to assist surgeons as we move forward toward re-validation in Alberta as the College of Physicians and Surgeons of Alberta (CPSA) plans develop.

Dr. Petrasek represents the Department of Surgery on the University of Calgary'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 a collaboration with **Dr. Paule Poulin**, Associate Director Office of Surgical Research 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 the 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 loss of time for the midterm OSCE clinical time has decreased the formative assessment for each clerkship block. A proposed reduction to a six week Surgery clerkship structure for the Class of 2011 will further accentuate these ongoing concerns.

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. Our goal is 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.

CORE SURGICAL SKILLS CURRICULUM

TRAINING PROGRAM FOR PGY 1 COMMENCES



Photo: (Above) Dr. Alicia Ponton-Carss helps instruct residents in module 2 - Knot tying, sutures and suturing techniques.

Right: Dr. John Kortbeek lends a helping hand at the Core Surgical Skills program.

Below: Dr. Don Buie instructs General Surgery residents.



This year, the Department of Surgery implemented a new program called PGY-1 Core Surgical Skills Curriculum to train all new surgical residents. The program's main objective is to familiarize residents with selected procedures that have been chosen because they are basic and common to all surgical specialties. The program will benefit residents by providing them with an opportunity to gain "hands on" experience in a simulated environment.

The course will combine the practice of CanMEDS roles (professional, communicator, scholar, collaborator, health advocate and manager) and surgical skills in order to provide residents with real life scenarios. The surgical skills curriculum will be taught in nine modules of two-hour sessions each. Each module will begin with an instructional video, then a live demonstration by members of the Department, followed by practice scenarios. The program will be instructed by surgeons, educators and facilitators. At the end of the nine modules, residents will be asked to complete a formative test and summative test as additional modules, which will assess all of the tasks taught in combination with the CanMEDS roles.

MODULES

The tasks that will be taught in each module, and the organization of the modules, are as follows:

1. Asepsis and instrument identification
2. Knot tying, sutures and suturing techniques
3. Tissue handling, dissection, wound closure and management
4. Catheterization: urethral and suprapubic
5. Airway management
6. Chest tube insertion and thoracocentesis
7. Central line insertion, arterial lines
8. Surgical biopsy
9. Optional according to specialty: osteosynthesis, microsurgery, laparoscopic task, and skin grafting

These nine modules will be followed by additional modules for testing purposes.

Congratulations to **Dr. Alicia Ponton - Carss** and **Dr. Carolyn Hutchison** for developing this program.

FROM THE OFFICE OF SURGICAL RESEARCH

FUNCTION, PURPOSE, AND PRIORITIES OF THE OSR

The main purpose of the Office of Surgical Research (OSR) is to enable research excellence among members of the Department of Surgery for the benefit of patients. We support and foster surgical research and an evidence-based introduction of new technology for the Department of Surgery. We provide methodological and statistical research consultation services, as well as provide information on how to access research resources and assistance in completing research grant submissions. We compile and disseminate research activities for the Department and work closely with the Office of Surgical Education to develop research education and workshops to build research capacity for the Department. Our goal is to ultimately assist in formulating research policy, direction, goals, and priorities within the Department of Surgery, and work in consultation with the Research Committee and Surgical Executive. We administer the Surgeon Scientist Program (SSP), plan and execute the annual Surgeons' Day Research Symposium, and administer the Department of Surgery Prizes for Research and Education. As well, we oversee the distribution of small research grants from the Calgary Surgical Education and Trust Fund.

In December 2008, 17 physicians, research coordinators, and administration staff met for a half day strategic planning session to confirm the mission and vision for the OSR, and agree on the critical priorities for the OSR for the coming three to five years.

Retreat participants confirmed the mission or role of the OSR (as stated above), and identified three critical priorities for what the OSR should focus on in order to move toward that vision. The first was to develop an information package and mentorship program, for existing and new members of the Department. The second priority was to foster the surgical research community. The third priority was to establish an internal grant review process.

While we are aware that it will take substantial efforts to establish and maintain the effective operation of some of these priorities over others, we are pleased at our successful start over the last six months in the significant and active steps we've taken to approach these identified priorities. Our six month assessment suggests that we have a great deal more work to do before we can say with any confidence that we have met this first priority.

The Calgary Surgical Education and Research Trust Fund generates revenues through the Annual Department of Surgery Golf Tournament, which are in turn used to directly support new research projects within the Department of Surgery. There is an annual competition for these grants, which involves the submission of a structured abstract no more than two pages in length, including a clear description of the roles of all project investigators and their respective CVs. Funding amounts vary depending on the submitted budget requests, but are limited to a potential maximum awarded amount of \$4,000 per project. In the 2008 - 2009 funding year, 10 research projects across all divisions were supported, in comparison to seven in the previous year. 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, 2010.



Dr. Rob Harrop is the Director of the Office of Surgical Research.

SURGEON SCIENTIST PROGRAM

UPDATES AND HIGHLIGHTS FROM THE 2008/2009 YEAR

The Surgeon Scientist Program (SSP) is a degree-based program for research training of residents within the Department of Surgery. The program provides the opportunity for residents to develop an effective scientific approach to the study of basic and 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 our Department.

In 2006, **Dr. Steve Johnson** was accepted into the SSP, with the intent to earn his Master of Science Degree in the Medical Science Graduate Program. With the support of his supervisory committee (**Dr. Paul Kubes, Dr. Dave Sigalet, Dr. Rene Lafreniere, and Dr. Donna-Marie McCafferty**), Dr. Johnson transferred to the doctoral program in July of 2008 and has focused his research project on "Altered Neutrophil Trafficking in Sepsis." As of July 1, 2009, Dr. Johnson has returned to his residency training program and while he is no longer receiving financial support in the SSP, we are all eagerly awaiting the completion of his research and dissertation defence, so we can add him to our list of successful "graduates" of the SSP.

In July 2008, **Dr. Justin LeBlanc** competed for and successfully obtained funding from the SSP. Working towards earning a Master of Science Degree in Medical Education, Dr. LeBlanc's research has focused on "The Feasibility and Fidelity of Practicing ORIF of a Radius Fracture on Virtual Bone." His supervisory committee consists of **Dr. Tyrone Donnon, Dr. Carol Hutchison, Dr. Yaoping Hu, and Dr. Tanya Beran**. We are pleased to report that Dr. LeBlanc has resumed his residency program as of July 1, 2009, and is wrapping up his research with the hopes of defending his thesis by the end of the year.

The 2009 SSP selection process was completed in May, 2009 after reviewing applications from several worthy applicants. The SSP Review Committee and OSR staff are pleased to announce that **Dr. Luke Harmer** (orthopedic surgery) and **Dr. Christopher Doherty** (plastic surgery) have been accepted to the SSP this year. Both are working towards MSc degrees. Perhaps a sign of the changing needs of our surgeons-in-training, both Dr. Harmer and Dr. Doherty are pursuing graduate programs focused on public health and economics.

Dr. Harmer is a second year resident in the orthopedic surgery residency-training program pursuing graduate training in Global Health at the Harvard School of Public Health. He is confident that his training at the HSPH will provide him with the academic foundation required to excel in the planning, implementation, management, and analysis of health interventions.

Dr. Doherty was accepted to the Harvard School of Public Health to pursue a Master's Degree in Public Health, with a concentration in quantitative methods. Dr. Doherty is enthusiastic about the opportunity he has to develop his skills related to sound clinical research and health care administration and management, as well as to focus his studies on health economics, with the long-term goal of helping provide efficient and cost effective delivery of healthcare in Alberta.

Our most sincere congratulations and best wishes for continued success go out to both Dr. Harmer and Dr. Doherty! Welcome to the Department of Surgery's Surgeon Scientist Program.



Dr. Elizabeth Oddone Paolucci, is the Assistant Director of the Office of Surgical Research.

OFFICE OF HEALTH TECHNOLOGY & INNOVATION



Dr. Lea Austen is the Health Technology & Innovation Physician Leader.

Ultimately, whether a health technology is adopted depends on the end-users: that is, the health care providers and administrators in the setting of their local environment. The Health Technology & Innovation (HT&I) office was established as a Local Health Technology Assessment (HTA) Advisory Committee 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. It is composed of members from diverse areas, representing medical/clinical expertise and support functions including finance, surgical administration and purchasing, and developed a Local HTA Decision Support Program. The program, which is administered by the Local HTA Advisory Committee, provides a well defined framework for evaluating health technology requests within our local environment and has great potential to optimize both, patient care as well as health care resources management.

Taken together, the main purpose of HT&I in Surgery is to consider how local circumstances affect the adoption of new health technologies to support innovation in a safe, effective and sustainable manner.

ACCOMPLISHMENTS AND HIGHLIGHTS

From its inception, the Local HTA Decision Support Program has undergone substantial revisions. This year, the HT&I team worked with many departments to develop a set of agreed-upon Criteria for Technology Assessment, as well as a Technology Evaluation Tool, a Decision Guideline Tool, and a Technology Prioritization Tool based on these criteria. These tools were designed to facilitate the task of translating and interpreting the evidence in regard to the safety, efficacy, organizational, and financial impact of the requested health technologies for making recommendations and decisions about whether to adopt or prioritize competing technologies for funding and purchase in a systematic, consistent and transparent manner.



Paule Poulin, PhD, Health Technology & Innovation Scientific Administrator.

INNOVATION AWARD IN SURGERY

This year, the HT&I office was also given the opportunity to develop a Surgical Innovation Award for the Department of Surgery to be presented at the annual Surgeons' Day Gala Dinner. For its first call for nomination, 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. Serdar Yilmaz** and the Transplant Team have been selected by our surgical colleagues as the 2009 recipient of the "1st Annual Surgical Innovation Award" for their work on the "Patients Hemodialysis Vascular Access Management Program".

The impact of replacing the conventional "hospital/physician centered care model of chronic kidney disease management" with the "Patient-centered Hemodialysis Vascular Access Management Program" has led to many innovation in surgical patient care and/or health care resources including:

- shorter clinical/surgical waiting time (especially for urgent cases)
- reduced hospital admission and duration
- more efficient use of health care resources (for example, operating room utilization)
- improved patient satisfaction
- improved morbidity and mortality of chronic kidney disease patients
- standardized and equitable care
- shared responsibility, which reduces physician stress

This new patient-centered care model could be used by others in any chronic disease management under limited resources allocation conditions.

Once again, congratulations to Dr. Yilmaz and the Transplant Team 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.

FUTURE DIRECTIONS & INITIATIVES

The Local HTA Decision Support Program provides a well defined framework for evaluating health technology requests within the local application setting and has great potential to optimize patient care as well as health care resource management. To enhance this potential, the HT&I Office recognizes that there is a need to further educate members of the clinical department about the program, as well to provide an opportunity for the Local HTA Advisory and Executive Committee members to enhance their skills and experience in systematically integrating the wide variety of evidence into recommendation and decisions when considering new health technologies

In its commitment 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 HT&I office proposes to develop a peer-reviewed Local HTA education program to address the critical need for health care providers to become aware and gain a better understanding of processes to integrate a wide variety of evidence to best support decisions about the adoption of health technologies within a local setting. The principal objectives of this education program are to engage participants in learning about the Local HTA Decision Support 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.

MEET THE DIRECTORS

Janice Stewart is the Director for Surgery and Women's Health at the Rockyview General Hospital. Her new role with Alberta Health Services makes her accountable for planning services, determining budgets, administrative reporting, leadership for the management team and working collaboratively with the physicians and surgeons. Janice is a born and raised Calgarian and was born at the Holy Cross Hospital. She attended the University of Manitoba to complete her Bachelor's Degree in Nursing. She went on to Central Michigan University for her Master of Science in Administration. Janice has devoted many years to Alberta Health Services. She started as a staff Nurse in Cardiology/CV&T Surgery at the Holy Cross Hospital in 1984. She was 22 years old at the time. Janice went on to work in health care as the Administrative Leader for Program Planning in Heart Health from 1995 to 1997, where she planned and put together the Regional Cardiac Program in collaboration with Cardiology and Cardiac Surgery. From 1997 to 2003 and again from 2005 to 2009, she was Director of Cardiac Sciences for the Calgary Health Region. And for a short time (2003 to 2005), she was Interim Director of Home Care for the Calgary Health Region. Janice and her husband, Richard, have four children between them. Alexander is the oldest at 24- years-old, Nicholas is 22- years-old, Graham is 19-years-old, and Cayleigh is eight-years-old. Their dog, Roxy, is three-years-old and is considered a big part of the family. Janice enjoys reading, gardening and sailing.



Janice Stewart

Shawna Svyerson is the Director of Surgical Services for Women's Health and the Southern Alberta Organ and Tissue Donation Program. Shawna is a born and raised Calgarian. She obtained her Bachelor of Arts from the University of Calgary and also completed a certificate in Business Administration from Heriot Watt University in Edinburgh, Scotland. Shawna has been with Alberta Health Services since 1985 and has filled many roles in her years of service in health care. When Shawna joined AHS, she was completing her undergrad degree and was in the position of Food Services Aide at Rockyview General Hospital. Subsequently, she held various positions, including Critical Care Service Coordinator, Service Manager of the Heart Health Administration, Director of Operations, Administrative Director, Director of Cardiac Sciences, Chief Executive Officer of Surgical Centre Incorporated, and Director of Bone and Joint Health.



Shawna Svyerson

Shawna is looking forward to focusing her efforts on patient care at the Foothills Medical Centre. She said that she considers capacity and access to services one of the challenges in her clinical area and she is working on structuring a strategic plan for continued resolution. As a leader, Shawna brings years of experience, as well as commitment, care and ethical solutions. Shawna enjoys working with Alberta Health Services because she has the opportunity to work in a multi-disciplinary collaborative team effort for the betterment of patient care for Calgary and southern Alberta residents. Shawna spends her free time as an avid participator in amateur athletics by participating in many team sports, including ringette, ball hockey, hockey and golf.

Margaret Fullerton is the Director of Child Health at the Alberta Children's Hospital. Margaret grew up in Regina, Saskatchewan, where she attended Wascana Institute of Applied Arts and Sciences. She later attended the University of British Columbia to complete a Bachelor of Science in Nursing.

She joined Alberta Health Services in 2000, as an interim patient care manager in the operating room at Rockyview General Hospital. Margaret's experience and leadership in previous roles has made her a valuable addition to the team of directors.

In her new position, Margaret has said her immediate goal is to support the staff in the transition of the new organizational structure. She is also looking forward to providing support for the Alberta Children's Hospital within AHS in providing a health system for Southern Albertan children and their families, which provides quality, accessible, and sustainable care for years to come. She is motivated by performing her job in a way that has a positive impact on patient care, and particularly on those people who are providing direct patient care. Margaret likes to be connected with people who strive to provide their best effort. She enjoys working on an acute care site, where there is continuous learning, and where she gets to work with many enthusiastic health care providers who are proud of their work, and who strive for a high standard of patient care every day, which she said is certainly the case at Alberta Children's Hospital.

Margaret has been married for 19 years and has two children, Grace, 14, and Luke, 10. In her free time, she enjoys spending time with her family. She also plays the piano and loves doing outdoor activities such as biking, walking and skiing.



Margaret Fullerton

Marg Semel is the Alberta Health Services' Director of Surgery and Women's Health for the Peter Lougheed Centre. Marg grew up in Peterborough, Ontario and attended the University of Guelph for a Bachelor in Applied Science with a focus in marketing. She completed a Master of Health Services from the University of Alberta with a focus in long term care. Marg initially joined Alberta Health Services in 1988 and held the position of Coordinator of Administrative Resources in Nursing Administration at the Calgary General Hospital. As an experienced leader, Marg has held numerous positions that have lead her to success. These positions include her work as a researcher for the Alberta Legislature, Executive Assistant to the Assistant Deputy Minister, Alberta Hospitals and Medical Care, Regional Manager for Departments of Surgery and Anaesthesia, Director of Medical Outpatient Services, and Director of Surgical Inpatient and Outpatient Services. Her new area of responsibilities include OR's, Minor Surgery, PACU, Processing, Surgical Inpatient Units, Preadmission Clinic, Day Surgery/24 Hour Care, Cast Clinic, L&D, Post Partum/Ante partum, Women's Health Clinic, Cast Clinic, and the Kensington Clinic. Marg's positive and enthusiastic attitude makes her a fabulous team player and leader. When asked what she brings to the Alberta Health Services team she said, "A sense of humour and the first line from hundreds of songs."



Marg Semel

Marg and her husband, Adam, have been married for 21 years. They have two daughters, Hanna, 16, and Rachel, 19. In her spare time, she said she enjoys marathon shopping with her teenage girls, planning trips and traveling to Europe.

ALUMNI STORIES

SURGEON FOCUSES ON THE IMPORTANCE OF QUALITY CARE

Dr. Elijah Dixon is a man of many accomplishments. But if you were to acknowledge any of those achievements, he would probably act like it's no big deal and change the subject on to you. He would not mention that in his relatively young career he has contributed 59 peer-reviewed publications. There would be no mention of the numerous abstracts, or national and international presentations he has given. It is unlikely that Dr. Dixon would talk about his significant and on-going research focused on health technology assessments and quality improvement initiatives. However, his colleagues will certainly boast for him calling him modest, intelligent and an all-around nice guy. However there is one area of mention in which Dr. Dixon will be keen to give praise; his two daughters, Natalie, 6, and Gabrielle, 4. "They are awesome, they make me not want to work," Dr. Dixon said. "They are super cute."

Dr. Dixon initially joined the Department of Surgery as a general surgery resident in 1996. After he had completed his residency in 2001, he departed for the University of Toronto to do a Clinical Fellowship in Hepatobiliary - Pancreatic Surgery and Oncology - Liver Transplant. Following the completion of his fellowship he went to Boston, where he completed a Master's Degree in Epidemiology at the Harvard School of Public Health.

Dr. Dixon, who is originally from Winnipeg, had not solidified any career choices early on, but his Uncle's career as a physician intrigued him. "You didn't really have to know what you wanted to do, there were so many options when you got into medicine. You could go work in a lab, or be a physician, or be a surgeon," he said. After high school, he attended the University of Manitoba for his Bachelor of Science, where he subsequently completed his Medical Degree. In 1996 he joined the Department of Surgery for his residency in the Division of General Surgery.

"I like asking questions, especially questions where there are no answers."

- Dr. Elijah Dixon , General Surgeon



Dr. Elijah Dixon, General Surgeon

"I liked General Surgery because of the breadth of what you do," Dr. Dixon said. He said that one of the reasons he choose General Surgery was because he enjoyed the "technical part" of the surgery. But Dr. Dixon was also influenced by the doctors he met as a medical student. "Although they were surgeons, they were also good doctors," he said. Furthermore, he "liked the fact that a lot of the emergency surgery they did made a big difference. Patients were often critically ill, you would operate on them and they would often get better."

Story continues on the next page

One of his greatest role models from early in medical school was Dr. Jeremy Lipschitz, a liver and pancreas surgeon. "He was a really positive role model, he was a really good surgeon, he was good with the patients, and he spent a lot of time with the patients," he said. Now, as a liver and pancreas surgeon himself, Dr. Dixon has a similar reputation among his colleagues and patients. He hopes that he can provide residents with a positive experience, similar to the one he had with Dr. Lipschitz. Dr. Dixon said that he finds working with residents "super rewarding." "They are fun to work with and it's neat to see someone really get excited about research and get really involved," he said.

His own research has been a satisfying experience as well. "I like asking questions, especially questions where there are no answers," he said. Dr. Dixon said that he enjoys the process of research, figuring out how to answer the question and working his way through it. "It's delayed gratification," he said. "It takes a long time to ask the question and then answer the question." But even so, Dr. Dixon believes the end result is the biggest reward when it comes to doing research. "A lot of the research is important and has an impact on patients and improves patient outcomes," he said.

In recent years, Dr. Dixon has done research on surgical outcomes and impact on patients.

He recently looked at surgical outcomes after liver surgery in Canada over the past 10 years. "It showed that we are doing a good job in Canada and that the results in Canada have been getting better over the past ten years." He also pointed out that the surgical outcomes in Canada were better than those of the United States, which he feels is important "because we often undervalue ourselves, especially when we compare ourselves to the States."

In his objective to provide quality care, he also conducted a study to determine what characteristics of care are required for patients that undergo liver surgery resection for metastatic colorectal cancer are associated with better outcomes. "I think that other places can use these results to help direct quality improvement initiatives and to improve their outcomes," he said. Even more recently, Dr. Dixon has studied the rates and waits for cancer surgery



Photos: Courtesy of Dr. Elijah Dixon

Natalie, 6, (on the right) and Gabrielle, 4, (on the left) as they head off to school.



The girls enjoyed some pizza and pop at a graduation party.

in Canada and postoperative outcomes following colectomy in elderly ulcerative colitis patients. He also chaired a consensus conference on Treatment Recommendations for Resectable and Borderline Resectable Pancreatic Cancer.

Providing quality care will continue to play a major role in Dr. Dixon's work. He stated that one of his academic goals is to continue to look at factors that are important in ensuring that patients have high quality surgery and good outcomes. Clinically, he wants to continue to develop a premier liver and pancreas surgery program in Canada. And although he loves his job, and enjoys the people he works with, he said that being a good father is going to remain the first priority.

ANNUAL LAFRENIERE LECTURE

DR. KELLY JOHNSTON LECTURES ON ADULT HIP DISEASES

Dr. Kelly Johnston was the honoured speaker at the **Dr. Rene Lafreniere Alumni Lecture** for 2009. His presentation focused on "Current Concepts in Adult Hip Disease" where he looked at potential causes of osteoarthritis of the hip. Dr. Johnston challenged the concept of primary idiopathic osteoarthritis of the hip, suggesting that the cause is secondary. He also emphasized the importance of joint preserving surgery around the hip.

Dr. Johnston graduated from high school with the highest academic ranking and received the Governor General of Canada Bronze Academic Medal. His hard work paid off and he was awarded the University of Calgary's Chancellor's Club Scholarship, in which he was given a full four-year tuition scholarship. "I am very appreciative to the University of Calgary for that scholarship," Dr. Johnston said. "It is kind of fitting that here I am now, working here and I can contribute something back to the University," he said. After spending four years at the U of C, completing his Undergraduate Degree in Biochemistry, he went on to complete his Doctor of Medicine at the University of Alberta. When Dr. Johnston joined the Department of Surgery for his Residency in 2001, he started in General Surgery. It wasn't until his second year of residency that he decided to switch into Orthopedics.

However, Dr. Johnston recalls a time when he thought that he could never be an Orthopedic Surgeon. As a medical student, he remembers going to watch a hip replacement and the sound of the hip dislocating caused him to pass out. "I thought to myself, I am never going to be an Orthopedic Surgeon because I thought I couldn't handle it, yet here I am today, a hip and knee surgeon," Dr. Johnston said, as he laughed at the incident. "At an early stage in your medical career you are often influenced by very small things that can have dramatic consequences down the road in your medical career," he said.

In 2005, Dr. Johnston and his wife, Jennifer, who is an OR Tech at Rockyview Hospital, traveled to Angola, Africa to offer his skills to Samaritan's Purse International. "They are a wonderful organization," Dr. Johnston said. "Part of my future plans are to spend a little time every one to two years doing some international medicine," he said. But in the future, he hopes that Jennifer won't be the only one joining him. "I want my kids exposed to those kinds of trips so that they can see living conditions in other parts of the world, so they can understand how fortunate we are in Canada," Dr. Johnston said. His sons are three-year-old Mateo and one-year-old Micah.

Along with his desire to help in international medicine, Dr. Johnston looks forward to teaching new residents joining the Department of Surgery. He wants to provide residents with the same quality of instruction that he received during his time as a resident. "I want to be a good teacher and pass my skills along to the residents so that they get good training," he said. Dr. Johnston hopes to do more work and research in young adult hip disease, hoping to prevent hip replacements by using early intervention. "We have assembled in Calgary, a lot of other surgeons that are also interested in young adult hip disease. There is potential to develop a group that would have a young adult hip clinic, where we would all work together to help treat young adult hip problems, but also become a research unit." He is very keen to do further research in this area and hopes to further collaborate with other orthopedic surgeons in the future.



Dr. Kelly Johnston, Orthopedic Surgeon

THE SURGEON SCIENTIST PROGRAM

RESIDENT DISCUSSES THE BENEFITS OF THE SSP

Dr. Michael Monument, a fourth year resident, recently graduated from the Surgeon Scientist Program with a Master's Degree in Medical Science. He started the program in July 2007 and finished in September 2008. "It's a unique program that not every surgical residency program has access to ... It is certainly something that I think we are lucky to have here," he said. The Surgeon Scientist Program allows students to pursue a Masters or PhD, in conjunction with their respective residency program, providing them with one to three years to complete the program and still receive their resident privileges and salary. "A major benefit to this program is that you get to step aside from the normal daily requirements of the residency program to focus exclusively on research and teaching, with the ultimate goal of obtaining a Masters or a PhD," Dr. Monument said.

One of the many reasons Dr. Monument decided to enroll in the program was because of his passion for basic science. "My first degree was a genetics degree, which had a strong foundation in molecular and cellular biology. I have done basic science research prior to medical school and I wanted to do it again," he said. Dr. Monument had a strong inclination to get back to his roots and the program was able to provide that opportunity for him. "It's tough to do basic science research at the same time as you are doing your clinical training because they are two different academic settings, as time in the lab is often far removed from clinical encounters, and vice versa," he said.

Dr. Kevin Hildebrand, an elbow and upper extremity specialist, was his supervisor for his research project in which they looked at joint stiffness and joint contractures after injury. Dr. Hildebrand receives a lot of referrals for post-traumatic or post-injury stiffness of the elbow, was already immersed in the subject. It is a condition, where excessive scar tissue develops in the elbow and if motion loss fails to improve with physiotherapy and splinting, then surgery is a last resort treatment, he said. "We have to remove the joint capsule, which becomes laced with abnormal scar tissue and unfortunately this approach is essentially treating scar tissue with more scar tissue, as joint stiffness commonly



Dr. Michael Monument is a fourth year, orthopedic surgery resident.

returns after surgery" Dr. Monument said. The objective motivating his Master's thesis was to unravel the "basic science behind what makes these people develop more scar tissue in their elbow after injury, resulting in chronic motion loss."

"Using an animal model that parallels the human condition of post-traumatic joint stiffness, we tested a drug that inhibits a specific part of the immune system thinking that modulation of the immune system might be a novel way to prevent excessive scar tissue formation after trauma," he said. Using this rabbit model, joint injury was surgically recreated and a population of rabbits were then administered a drug that inhibits mast cells. "It was a drug that initially was designed to inhibit that anaphylactic action of the mast cell," Dr. Monument said. "The results were quite encouraging. There was a very significant reduction in joint stiffness and scar tissue formation within the joint from a cellular level and even down to the protein level in the animals that received the drug."

Dr. Monument believes that the experience he gained in the program will be extremely valuable in the years to come. "You get to be involved in every facet of the research, from the idea creation, to the writing of the grant proposals, and research proposals to the whole execution of the study itself," he said. Dr. Monument won the Best Basic Research for his study at the 2008 Surgeons' Day.

SURGEONS' DAY

RESIDENT RESEARCH IS RECOGNIZED AND AWARDED



“A day to celebrate achievement and young talent and a chance to catch up with old colleagues and meet new friends.”

- Dr. John Kortbeek, Department Head

Top left: Dr. Harrop, Dr. Kortbeek, Dr. Casson, and Dr. McFadden

Top right: Dr. Janet Edwards and Dr. Terry Leung

Bottom left: Dr. Harrop and Dr. Dort

Bottom middle: Dr. Casson and Dr. Dort

Bottom right: Dr. Bogdan Paun

Photos: Courtesy of Shelley Vandervelde, SVP Photography and Sarah Urbanowski

Every year, the Department of Surgery comes together to recognize and reward the research achievements of surgical residents and fellows. This year's 27th Annual Surgeons' Day was held on June 26, 2009. The symposium was held at the Alberta Children's Hospital Auditorium, where residents gave their presentations and the awards dinner was held at Gasoline Alley at Heritage Park.

In keeping with tradition of previous years, two highly regarded doctors, **Dr. Joseph Dort** and **Dr. Alan Casson** were invited to the symposium to hear and judge the presentations.

Dr. Joseph Dort is a Professor with the University of Calgary and an otolaryngologist, who specializes in head, neck, skull base and craniofacial surgery in the Department of Surgery. Dr. Alan Casson is from the University of Saskatchewan. He is well-known for his extensive work in molecular biology of esophageal cancer.

As invited guests they also presented lectures to the audience. Dr. Dort gave the McMurtry Lecture, which was titled "Clinical Research in Surgery: Lessons Learned" and Dr. Casson gave the McPhedran Lecture titled "Picking a Research Problem." Both of the gentlemen focused on choosing mentors, collaborating with colleagues, challenges that come with doing research and focusing on research subjects that are relevant to their clinical work.

The residents and fellows, who work diligently on their projects throughout the year, were given the opportunity to present their work. The day was divided into four sessions, with each session moderated by chairs. Sessional chairs, **Drs. Frankie Fraulin, Paul Duffy, Mary Brindle and Jeanie Kanashiro** were responsible for introducing each speaker and moderating question periods.

The range of topics included "Recent Trends of Hepatic Resection in Canada," "Improving Wait Times and Resource Utilization in the Cast Clinic," and "The Resting Foot Angle: A Comparative Study Using Various Standardized Measurement Methods."

There were numerous posters entered into the poster competition, which also included a range of topics. This included a comparison of Lasek and PRK following Corneal transplantation to topics like Alpine Ski and Snowboarding Traumatic Injuries.

Following the day of presentations and lectures, the Department of Surgery gathered at Gasoline Alley to celebrate a year of vigorous work. The dinner was themed as 'dressy western,' perfectly suited to the venue, which was vibrant and amiable. There was a series of awards handed out after the main course was served. First, the Symposium awards and then the Distinguished Services awards.

This year it was decided that there would be two 'Educator of the Year' awards. Residents were asked to nominate a surgeon within their own division, as well as someone outside their division. This year's Educator of the Year was **Dr. Paul Duffy** and the Ectopic Educator of the Year went to **Dr. Duncan Nickerson**.

This year, the Department also presented the first Surgical Innovation Award, which went to **Dr. Serdar Yilmaz**.



The dinner was held at Gasoline Alley at Heritage Park.

The winners from both the Symposium and Service awards were:

Best Overall Resident Research

- Dr. Janet Edwards
- Dr. Terry Leung

Honourable Mention for Overall Research

- Dr. Ryan McColl

Best Poster

- Dr. Paul McBeth

Best Paper by a Surgical Fellow

- Dr. Bogdan Paun

Distinguished Service, FMC

- Dr. Robert Lindsay

Distinguished Service, PLC

- Dr. George Miller

Distinguished Service, ACH

- Dr. James Harder

Distinguished Service, RGH

- Dr. Jiri Horsky

Educator of the Year

- Dr. Paul Duffy

Ectopic Educator of the Year

- Dr. Duncan Nickerson

Surgical Innovation Award

- Dr. Serdar Yilmaz

DIVISION HIGHLIGHTS

DIVISION OF DENTISTRY AND ORAL HEALTH

The Division of Dentistry and Oral Health is composed of Adult Dentistry, located at FMC, Pediatric Dentistry at ACH and Public Health Community programs.

ADULT DENTISTRY

Division Structure and Organization

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 General Practice Residency Program, and the Dental Specialty Clinics, including oral medicine, endodontics, periodontics, and dental sedation. The FMC dental clinic has three full-time dentists (Drs. Lekhi, Paladino and Kalaydjian) and two casual part-time dentists (Dr. Olowe and Dr. Hussein). There are three casual part-time dental specialists Dr. Shariff (Oral Medicine), Dr. Wiebe (Periodontology) and Dr. Switzer (Endodontics). There are also 15 non-dentist auxiliary staff members. As of April 2009, Adult Dentistry Sub-Division membership is composed of 47 members privileged in Adult Dentistry Sub-Division. Thirty-nine of 47 members hold privileges based entirely on their affiliation with them providing surgical dental services at Non-Hospital Surgical Facilities (NHSF).



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

Accomplishments and Highlights

The creation of a Dental General Practice Residency Program at FMC has been a great success. The division was also pleased to implement an Endodontic specialty clinic staffed by endodontic dental specialists. The FMC Dental Clinic's Sedation Program allows dental work to be completed in the dental clinic and helps decrease the usage of the OR, thus allowing to free up OR time for other medical cases.

From July 2008 until June 2009 there was one Dental General Practice Resident in the training program. It was also the first year Dental General Practice Residency Program was based at Dental Clinic at Foothills Medical Centre. The Foothills Dental Residency Program applied for accreditation status in year 2009, and in June 2009, the program was reviewed by Commission on Dental Accreditation of Canada. We had many dental students throughout the academic year of 2008/2009. The dental clinic based at Foothills Medical Centre continued in tradition to host third year dental students from University of Alberta doing elective in "Hospital Dentistry." The Dental Continuing Education Program created by the Division of Dentistry and Oral Health with the University of Calgary Continuing Medical Education Department held two full day presentations, "Medical Emergencies in Dentistry" and "Achieving and Maintaining Oral Health for People with Disabilities: Young and Old." The division continued participation in Clinical Trial (SWOG S0307). The Phase III Trial of Bisphosphonates as adjunctive therapy for Primary Breast Cancer commenced, which is lead by Dr. Patterson at the Tom Baker Cancer Centre.

PEDIATRIC DENTISTRY

Division Structure and Organization

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 behavior guidance and minimal/moderate sedation, or in the Alberta Children's Hospital operating room under general anesthesia. Community pediatric dentists with privileges also provide dental care for children and participate in on-call services.

Accomplishments and Highlights (Pediatrics)

Comprehensive care for children with special health care needs (outpatients and inpatients); provision of service under general anaesthetic, with local anaesthetic, oral sedation and nitrous oxide/oxygen sedation and the Royal College Fellowship Board Examiners.

There will be one full-time pediatric dentistry general practice resident at the Alberta Children's Hospital. 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 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 is being developed. A study club application has been submitted to the Alberta Dental Association & College with the goal of establishing a strong evidence-based educational opportunity for local pediatric dentists.

DENTAL PUBLIC HEALTH CLINIC PROGRAM

Division Structure and Organization

The division is currently involved with the following committees and programs. The Dental Public Health Clinic Program is an active member of the Community Infection Prevention and Control Subcommittee, as well as the Eligibility (for reduced-fee services) Committee. The Dental Public Health Clinic Program serves as a safety-net delivering low-fee dental care to disadvantaged people who have no dental plan. The program operates from two sites in Calgary: Sheldon M. Chumir Health Centre and Northeast (Sunridge Mall); and a satellite clinic in Airdrie Community Health Centre.

Accomplishments and Highlights

Clinical Service:

The Chumir Dental Clinic opened in 2008 August replacing the old City Hall Dental Clinic, and including one more dental operatory (to total five). The Project Homeless Connect program allowed us to help our community. On three occasions dozens of people were screened for oral disease, received information and resources to prevent and control dental disease, and received free dental care for urgent conditions.

Education:

FMC Dental General Practice Resident worked for 10 days in Dental Public Health Clinics, where fellows and medical student received orientation and experience.

Challenges

The Global economic downturn has affected Albertans through loss of employment and dental plan benefits. Calgary continues to receive a significant number of refugees from overseas; most of these people have had very limited access to health care. These factors increase demand for reduced-fee dental care in the Dental Public Health Clinics. The 2007 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 program and division continue working to address this issue.

Workforce Planning

Dental Public Health Clinics recruited a trained Aide III to help dental teams with instrument reprocessing. The Dental Public Health Clinic Program joined the Organization for Safety and Asepsis Procedures (OSAP) – dentistry's resource for infection control and safety information, and uses the routine bulletins as the basis for staff's continuing education on infection control. In September 2008, there was a review session for staff related to Patient Privacy & Confidentiality about standards related to laptop security, confidential faxing, chart folder transferring, etc.

Future Directions and Initiatives

The Calgary Health Trust has found philanthropic support for a digital panorex x-ray machine at Chumir Dental Clinic to facilitate dental care for disadvantaged clients. The program has initiated discussions with First Nations and Inuit Health Branch (Health Canada) about funding a dental team at Chumir Clinic to deliver care to aboriginal people. Provincial focus of the new Alberta Health Services organization may trigger changes for Dental Public Health Clinics (e.g. redefining eligibility for access to care).

Division highlights continue on the next page

DIVISION OF GENERAL SURGERY

Division Structure and Organization

The Calgary Zone Division of General Surgery continues to push forward with future growth in support of population health. Improvements in clinical care, research and education are ongoing. We have seen consolidation in laparoscopic colon resection at all sites and have moved into the area of laparoscopic liver and pancreas resections at Foothills Medical Centre. A very successful ambulatory surgery program is up and running at the High River Hospital to provide for the needs of patients with anorectal, hernia and gallbladder problems.

Accomplishments and Highlights

The division continues to provide high quality educational experiences to an increasing number of medical students, residents, and fellows. The success of our programs are a testament to the dedication of our faculty. This year we have seen a record eight residents have success in their General Surgery Fellowship examinations under the direction of Dr. Tony Maclean. A further three fellows have graduated from our surgical oncology program under Dr. Greg Mckinnon. Our Colorectal Fellowship also graduated a student under Dr. Don Buie. Our residency program received full approval during our recent External Royal College Review.

Research efforts of our division are ongoing. Dr. Elijah Dixon completed a Society of Surgery of the Alimentary Tract Traveling Fellowship. Our resident research day was a marked success with Dr. David Urbach giving the Roy Preshaw lecture and acting as our guest judge. The winner of this years "best paper" was Dr. Terry Leung who presented her research paper "Bowel Obstruction after Appendectomy: what is the true incidence?" Her preceptors were Drs. Dixon and Maclean and their manuscript is accepted for publication in Annals of Surgery- Congratulations Terry.

During the year our visiting professor program was very active with site visits by national leaders such as Dr. Markus Bernstein, Dr. Paul Greg, Dr. Bryce Taylor and Dr. Richard Nason. We also had two international guests Dr. William Jarnagin and Dr. Peter Fabri. All gave state of the art lectures to our city-wide division and educational sessions to our residents. Credit for this program goes to Dr. Lloyd Mack.

Workforce Planning

Our division experienced a very active year in recruitment of new faculty. A position for a new Academic Breast Surgeon and Population Health Researcher was advertised. Dr. May Lynn Quan was the successful applicant and accepted the position to begin work in the fall of 2009. Her expertise in the development of quality indicators for breast surgery will compliment Dr. Dixon's population health research. A second position for an Endocrine surgeon with expertise in medical education was won by Dr. Adrian Harvey who will join us in August. Dr. Harvey will compliment Dr. Pasieka in our endocrine surgery program.

Future Directions and Initiatives

Quality and safety continue to be a focus of the division. Regular morbidity and mortality rounds have been established at all three sites and efforts are ongoing to "close the loop" on all safety reviews. The Foothills division has pioneered an electronic sign over format in Sunrise clinical manager that is now available for adoption by other divisions. This improves communication for the surgeon covering patients on the weekend. Finally the division sponsored Dr. Bryce Taylor to visit and present his groundbreaking research on "The Surgical Checklist." The division will be moving forward with plans to implement the checklist and formulate outcome measures for ongoing feedback to division members. An audit of wait-times for patients with common general surgical problems will be completed in the coming year.

These are exciting times for our division and in the next year we will be moving forward with plans to restructure the delivery of general surgery emergency services and develop a model for a city-wide alternative relationship plan.



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

DIVISION OF OPHTHALMOLOGY

Division Structure and Organization

The division holds monthly business meetings, which includes all ophthalmologists with privileges in AHS, two neuro-ophthalmologists and two vision research scientists. The current committees the division is involved in are as follows; Recruitment & Retention Committee, chaired by Dr. Geoff Williams; On-Call Committee, chaired by Dr. Nand Goel; Retinal Working Group, chaired by Dr. Amin Kherani, and Divisional Research Committee, which is chaired by Dr. Don Kline.

Programs in the division include; Retinopathy of Prematurity screening service to Neonatal Intensive Care Units at FMC, PLC & RGH (500 plus per year) and follow-up neonatal clinic at ACH, and the Sight Enhancement Clinic (Low Vision Clinic) at RGH. Division members participate in the Craniofacial and Vascular Birthmark Clinics at ACH. There are many subspecialty clinics at RGH, which include; corneal, glaucoma, neuro-ophthalmology, retinal, urgent eye, & uveitis. Dr. Astle participates in the travelling Sight Enhancement Clinic for Southern Alberta.

Accomplishments and Highlights

Clinical Service:

Annually, the RGH eye clinic saw 26,000 patient visits & 68,000 tests. There were 15,000 patient visits at ACH vision clinic. The number of eye surgeries that occurred were as follows: 8,900 cataract (8,500 at contracted NHSF), 3,500 non-cataract eye surgeries (NHSF), 1,800 eye surgeries at RGH, and 670 pediatric eye surgeries at ACH. Our division was successful in the accreditation of our Lions Eye Bank of Southern Alberta (based at RGH) by the Eye Bank Association of America. The organization recently started a deep lamellar endothelial keratoplasty program. Early planning for a teleophthalmology project to service unmet eye needs of specific patient populations in southern Alberta has also commenced.

Education:

Dr. Amin Kherani continues as our residency program director. The residency program in ophthalmology commenced in 2006, and beginning July 1, 2009, there will be one resident in place for each of the five PGY years. Our first graduating resident (repatriated from the USA) successfully passed the certification examinations in ophthalmology of the RCPSC. We have approval to take two residents every second year starting in 2010. There continues to be a significant number of residents in ophthalmology from other Canadian programs who take electives in ophthalmology here at the University of Calgary.

Dr. Andy Crichton continues as chair of our Divisional Fellowship committee. There are continuing fellowship programs in cornea, glaucoma, pediatric ophthalmology, medical retina, surgical retina, & oculoplastic surgery - the first five being active in the last year. 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 & Dr. Karin Verstratin have taken leadership roles in teaching ophthalmology in the newly reorganized medical student curriculum at the U of C. Dr. John Huang continues as chair of our divisional undergraduate medical education activities. Mentorship continues for several U of C undergraduates in small research projects, as well as undergraduates from other Canadian universities.

Research:

The annual divisional research day is an on-going event to recognize vision-related research in Calgary, both clinical and basic science. Dr. Bryce Ford is chairman of the organizing committee. The 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 University of Calgary, and not directly under the division of ophthalmology. This basic science research is presented annually at our combined Eye Research Day, and is eligible for awards on this day.



Dr. Kenneth Romanchuk,
Chief, Division of Ophthalmology

Division highlights continue on the next page

DIVISION OF ORTHOPEDIC SURGERY

Division Structure and Organization

The Division of Orthopedics has the following Committees: Executive, Clinical Operations, Education, Research, and Orthopedic Surgery Residency Training Committee. There are various sub-committees of the Sections listed; Orthopedic Review Committee of HRC, and Regional Bone and Joint Health Program.

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

Our division of Orthopedics membership has a total of 47 teaching members, which includes eight GFT's, plus nine retired/semi-retired orthopedic surgeons (who provide service in our education and clinical service delivery portfolios), eight basic scientists and three neurosurgeons.

Accomplishments and Highlights

The Provincial Osteoporosis Initiative was a recent agreement (effective November 30, 2007) between the Minister of Alberta's Health and Wellness and Capital Health on behalf of project partners, Capital Health and Alberta Health Services - Calgary. The agreement provides funding for the development of a province wide service by Capital Health and Alberta Health Services - Calgary related to the management of osteoporosis and includes a framework to promote bone health, prevent osteoporosis and manage fractures associated with osteoporosis. This project involves both the Bone and Joint and Health Link regional programs. The Clinic's staff and physicians will be the key to the success of the two-year project and sustainability of best practices for osteoporosis care.

The Bone and Joint Health/SARCC Pilot Project will be examining current supporting systems and practices for patient flow through the continuum of care. Initial work has focused on revising the July 2006 SARCC algorithm for orthopedics to smooth out the flow of trauma patient distribution using principles of available time/ beds and specialty care needs.

The Amputee Program at MSK Glenmore continues to be a successful example of a coordinated approach to this small, but important patient population. Monitoring and evaluation will be ongoing.

Workforce Planning

The South Health Campus planning continues for an MSK multi-disciplinary clinic. The West Tower (McCaig Tower) planning is ongoing for refinements of detail designs. The Bone and Joint Health Service Delivery Optimization is a Collaborative Opportunity between the Alberta Health Services - Calgary and the YMCA Calgary as part of Wellness Service delivery at the South Health Campus. The pilot project is ongoing and is being evaluated for effectiveness. Continued work with the Alberta Bone & Joint Health Institute and their provincial initiatives is ongoing. Specifically for Hip & Knee, the local Calgary group has participated in the Provincial Hip & Knee Replacement Project Steering Group, the Incentives Steering Committee, and the Gap Analysis. In the fall of 2008, Calgary developed a new team called 'JOINT' (Joint Optimization INcentive Team). The group developed a 'scorecard' based on the six quality dimensions to optimize the current continuum of care. The Foot and Ankle Provincial Working Group in Calgary is the lead and continues to work on pathway development for Foot and Ankle. Calgary had representatives working on the Alberta Spine Care Project: Phase 1 Alberta Wait times Management Project. Major accomplishments were the development of six surgical pathways and integrating these pathways into the project's overall goal of an evidence-informed continuum (including approaches to secondary prevention and wellness programs, and non-surgical (medical) care).



Dr. Kevin Hildebrand , Chief, Division of Orthopedic Surgery

ORTHOPEDIC SURGERY CONTINUED

Clinical Trials / Studies:

The PLC and RGH inpatient units have been involved in the CAM study designed to improve outcomes in fractured hip patients who suffer from post operative delirium, a collaborative with the Geriatrics team. The post operative order set was first changed to include assessments and now has been changed to include investigative and treatment measures. FOCUS study completed on all sites in February, 2009. RGH site was the top enrolling site out of 52 in North America in 2007/2008. RGH was also awarded top honors for having zero protocol violations when conducting the study. The Bone and Joint Orthopedic Trauma CNS Joyce Mammel has launched an osteoporosis initiative at all three sites involving an inpatient visit for patients who have suffered an orthopedic injury. This visit involves interview, history and screening, patient education and better follow-ups in the community post discharge. The bone and joint program has introduced its first Nurse Practitioner into the program. Pam Gossmann has been active at all three adult inpatient sites with a varied approach to improving patient care. Some examples would be working towards a more seamless preparation of trauma patients for the OR an assessment based linking of physician groups as a primary care coordinator, and liaison to improve transition of patients back into the community.

Education:

Undergraduate Medical Education (UME):

The 2008 MSK Course II was very successful. A special thanks to our Course Co-Chair, Dr. Scott Timmermann, for a superb job and thanks to our faculty for contributing their countless hours teaching this course. The 2009 MSK Course II is scheduled from October 26th to December 2nd, 2009. We continue to accommodate an increased number of clerkship electives and selectives on an ongoing basis.

Postgraduate Medical Education (PGME):

Welcome to the six incoming residents: Michael Carroll, Andrew Dodd, Matthew Furey, Heather Hurdle, Lisa Phillips and Brendan Sheehan. We received FULL Approval status for the RCPSC on site survey that took place in February 2009 noting many strengths and only one weakness. It was stated that our program should be the model for all orthopedic programs across the country. All residents successfully passed their FRCSC exam in June 2009. Residency positions increased to six for the 2009 CaRMS match. Alberta Orthopedic Resident Research day is scheduled for April 23, 2010 in Edmonton.

Graduate Medical Education (GME):

Dr. Jim Powell, Director of Orthopedic Fellowship Programs, currently has 11 fellowship programs of which eight currently have fellows totaling 14 as of July 1. They are as follows: Arkan Al-Huneiti (Pediatric Orthopedics), Jacob Alant, John Cunningham, Alexandre Denault and Mark Winder (Combined Spine), Paige Demong (Sport Medicine), Matthew Denkers, Ernest Kwek and Steve McChesney (Orthopedic Trauma), Timoret Keren (Hand & Wrist), David Lee and Matthew Oliver (Joint Reconstruction), Beth Pedersen (Foot and Ankle), Geberth Urbaneja (Pediatric Spine) with Hani Alsulaimany (Orthopedic Trauma) joining us January 1, 2010 and Jonathon Parkinson (Combined Spine) on February 1, 2010. The 2nd Annual Orthopedic Fellows Research Symposium took place on May 13, 2009 and the winners were as follows: the Norman Schachar Research Award: Dr. Hashel Al-Tunaiji (1st Place) followed by Dr. Matthew Denkers in 2nd Place with Dr. Satish Kutty in 3rd Place.

Research

The Division of Orthopedic Surgery research activity has remained productive. The COREF research grant deadline has just closed and grant reviews will take place with awards announced in July. Our members have been successful at national competitions and receiving awards. Dr. Justin LeBlanc with Dr. Carol Hutchison received a COREF research award for "The Feasibility and Fidelity of Practicing ORIF of an Ulna Fracture on Vitual Bone". Dr. Curtis Myden with Dr. Richard Buckley, Dr. Paul Duffy and Dr. Shannon Puloski received a COREF research award for "Operative Treatment of Tibial Plateau Fractures. Does Submeniscal Arthrotomy Improve the Long-Term Patient Outcome?". Dr. Kevin Hildebrand received two grants from the Canadian Institutes for Research Health: "Neuroinflammatory Mechanisms in Joint Contracture Development" and; "Primary elbow osteoarthritis: Transdisciplinary analysis of a predominantly male condition with a unique phenotype". Dr. Michael Monument with Dr. Kevin Hildebrand was awarded an American Foundation for Surgery of the Hand grant for their research project: "The role of the fracture-induced hemarthrosis in the formation of posttraumatic joint contractures."

Division highlights continue on the next page

DIVISION OF OTOLARYNGOLOGY

Division Structure and Organization

Current Committees within the division include; Resident Training Committee, which is lead by Program Director, Dr. Doug Bosch. Dr. Paul Marck is the Undergraduate Director, Dr. Anita Hui is the Continuing Medical Education Director, and Dr. Joseph Dort is the Research Director. The Recruitment and Manpower Committee is lead by Dr. Joseph Warshawki.

The division successfully recruited Dr. Justin Chau. Dr. Chau completed his residency at the University of Alberta and practiced for five years in Comox B.C. In 2007/2008 he pursued a fellowship in Otology-Neuro-otology at the University of British Columbia. Dr. Chau's practice foci are general otolaryngology with a special interest in otology in adults and children. His clinic practice is based at the UCMC Health Sciences building, his primary hospital affiliation is at the Peter Lougheed Centre. Dr. Chau also has a surgical pediatric practice at the Alberta Children's Hospital. He is a very welcome addition to the division and we look forward to his future clinical and academic contributions. Dr. Garth Wagner has retired from his surgical practice at the Peter Lougheed Hospital. Dr. Wagner had very productive Otolaryngology career in Calgary, including serving as Division Chief. He continues to serve the community at his office practice located in Kensington and participates in the academic and social activities of the division. His many past contributions are very much appreciated and we wish him all the best in the current phase of his career.



Dr. Wayne Matthews, Chief, Division of Otolaryngology

Accomplishments and Highlights

Clinical Service:

There are 18 otolaryngologists practicing in Calgary. Otolaryngologists are based at all four acute care hospitals and provide a full range of subspecialty services as well as general otolaryngology care.

Education:

The resident training program continues to develop and mature under the leadership of Dr. Bosch. Clinical Rotations are performed at all acute care hospitals in Calgary. There are currently five residents training in the Otolaryngology division and as of July 1, 2009, we will welcome a sixth resident. Otolaryngology continues to attract a number of high quality elective students from across the country as well as strong applicants to the resident program through CaRMS. The program will be accepting two students into the residency program July 1, 2010.

Research:

The research accomplishments of the division continue to expand under the direction of Dr. Dort. All of the residents are involved in clinical research projects and several presentations have been given at local, national and international conferences. The Ohlson Research Initiative has been established through a generous donation from the Ohlson family and is under the direction of Dr. Dort. The Ohlson Initiative's mandate is to conduct research that impacts the treatment of patients with head and neck cancer. Research priorities are molecular epidemiology, clinical trials, treatment innovation and health services research. The Ohlson Research Initiative operates under the umbrella of the Southern Alberta Cancer Research Institute and will establish the University of Calgary as major contributor of new knowledge of head and neck cancer.

Challenges

The newly constructed ambulatory Otolaryngology Clinic at the Richmond Road Diagnostic and Treatment Centre has not been opened pending AHS approval and funding for the RRDTTC expansion. Head and Neck Surgery will continue to be done at all three existing adult sites until such time as additional resources dedicated to Head and Neck Surgery come on stream at the FMC. Expanded capacity may be available as early as 2010 if the opening of the McCaig Centre results in net new operating rooms being made available. Future recruitment of otolaryngologists to Calgary is dependant on available resources. Failure to recruit will eventually affect patient care and the academic growth of the division.

DIVISION OF PEDIATRIC SURGERY

Division Structure and Organization

There are nine sections within the division: General Surgery, Orthopedic Surgery, Otolaryngology, Urology, Plastic Surgery, Dentistry, Ophthalmology, Neurosurgery and Pediatric Gynecology.

There are 26 full-time pediatric surgeons who continue to work at the Alberta Children's Hospital with another 32 surgeons who do part-time pediatric surgery work.

Four divisions; Pediatric Orthopedics, Pediatric General Surgery, Pediatric Plastic Surgery and Pediatric Dentistry do only pediatric call. The Divisions of Pediatric Orthopedics 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 Orthopedic is lead by Dr. Elaine Joughin, Pediatric General Surgery by Dr. Andrew Wong, Pediatric Otolaryngology by Dr. Derek Drummond, Pediatric Ophthalmology by Dr. William Astle, Pediatric Dentistry was lead by Dr. Marie Claude Cholette who resigned and has been replaced by Dr. Warren Loeppky. Dr. Mark Hamilton leads Pediatric Neurosurgery, Dr. William Hyndman leads Pediatric Urology, Dr. Rob Harrop leads Pediatric Plastic Surgery, and Dr. Philippa Brain leads Gynecology.



Dr. Bill Hyndman, Chief, Division of Pediatric Surgery

Education and Research

All three full-time Ophthalmologists enroll patients into multi-center studies funded by the Pediatric Eye Disease Investigational 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 1 Diabetes. Dr. Astle continues his research in Pediatric Refractive Laser Techniques, congenital cataract surgery, congenital glaucoma surgery, and strabismus. Dr. Romanchuk is involved in strabismus research as well as the projects previously noted. Dr. 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. Starting in July, all Neurosurgery Residents will each be completing a six block rotation in Pediatric Neurosurgery as part of their training program. Monthly Pediatric Grand Rounds are organized by Dr. Frankie Fraulin.

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. He presented a poster at the ASPO meeting in Orlando in May of 2008 reviewing atypical mycobacterial infections involving the mastoid bone in pediatric patients. Image guided surgery is the standard of care in many Children's Hospitals throughout North America. We now have obtained this specialized equipment. Also, there have been efforts to develop a critical airways program and lecture series at ACH with the involvement of ENT, Pulmonary Medicine, and Pediatric Surgery.

Dr. David 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 nationally 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.

Division highlights continue on the next page

Dr. Sigalet is also the Associate Head of the Department of Surgery. Dr. Sigalet was a traveling professor in Japan.

Dr. Paul Beaudry has established an interest in pediatric oncology as a clinical focus. He has established a lab under the direction of Dr. 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 tumor initiating cells as targets for therapy. Dr. Beaudry started a strong collaboration with Dr. Peter Forsyth, whose lab is a world leader in oncolytic virus therapy for brain tumors. He has also established a collaboration with David Kaplan at Sick Kids, where his lab has led the field of neuroblastoma tumor initiating cells.

Dr. Mary Brindle continues her fetal research on congenital diaphragmatic hernias and pulmonary hyperplasia. Additionally Dr. Mary Brindle and Dr. Andrew 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. Mary 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. Bill Hyndman and Dr. Andrew 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 thorascopy, urology, otolaryngology and orthopedics.

DIVISION OF ORAL AND MAXILLOFACIAL SURGERY

Accomplishments and Highlights

The Division of Oral and Maxillofacial Surgery has had another productive year. Members of the division have been active in practicing all facets of oral and maxillofacial surgery. Several members have been actively involved at the University of Alberta – Faculty of Dentistry, in a teaching capacity. Teaching has involved presentation of both didactic lectures and hands-on clinical teaching at the Surgery Clinic. In conjunction with the Department of Nuclear Medicine, a pilot project is being developed to research diagnosis of chronic osteomyelitis using FDG PET. The study will be spearheaded by Dr. Eric Kloiber of radiology and Dr. Brian Whitestone.

Workforce Planning

Dr. John Conley tendered his resignation this year. He is to be lauded for providing over 30 years of exceptional oral and maxillofacial surgical service to the patients of Calgary and surrounding area. Furthermore, Dr. Conley was actively involved in resident education and teaching at the University of Calgary. He will be greatly missed by his colleagues. Due to demographics and transition of several senior surgeons, the division will be actively recruiting two new members. Expertise will be sought in the areas of cleft palate/craniofacial reconstruction and education/research. From a quality assurance perspective, frequent audits are performed on all significant complications. The division is also initiating a study to look at length of stay parameters and to see if enhanced surgical techniques and discharge parameters are reducing the overall impact on patients' hospital time.



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

Future Directions and Initiatives

We are looking at ways to improve our overall contribution to medical student and resident education, and further increase our participation in hospital based clinics. Overall, it has been another successful year for the Division of Oral and Maxillofacial Surgery.

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, he is accompanied by four site chiefs; Dr. de Haas at the FMC, Dr. Lin at the PLC, Dr. Haugrud at the RGH, and Dr. Harrop at the ACH.

Accomplishments and Highlights

Clinical Service:

Plastic Surgery services of 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 tumors.

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 with 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:

Undergraduates will spend half of each class working Clerkship and will be spending two weeks on the plastic surgery service at any one of the four sites, during the surgical block (the other half does orthopedics). Increasing numbers will pose challenges, but we feel we can deal with them efficiently.

Residency Training is a five year program and we currently have six residents in plastic surgery. Two residents took the Royal College Certification examination this year. One will embark upon a Cranio-facial Pediatric Fellowship in San Diego. In 2009 we will have three new residents, two from the CaRMS process and one transferring from Radiology in Saskatchewan. We have been granted two positions for 2010, but with no guarantee that this will be ongoing.

Research:

Members are currently involved in the following investigations. Dr. Duncan Nickerson is a Co-investigator in an ongoing nationwide surveillance study of antibiotic resistant organisms in Canadian burn units. Dr. F. Fraulin is working on "The Epidemiological Profile of Children presenting with vascular birthmarks" in the Calgary Health Region. Dr. Jennifer Matthews has been working on "A retrospective review of breast reconstruction using autologous tissue from 1996-2005" (supervisor: Dr. de Haas) Dr. Matthews is also working on "The construction of a prospective database on autologous breast reconstruction" (supervisor: Dr. de Haas) and "The birth prevalence and epidemiology of orofacial clefts in Canada from 1997-2008" (supervisor: Dr. Harrop).



Dr. Robert Lindsay, Chief, Division of Plastic Surgery

Division highlights continue on the next page

DIVISION OF PODIATRIC SURGERY

Division Structure and Organization

The members of the Division 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 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. According to statistics in the Alberta Diabetes Atlas, the Calgary region has the lowest rate of amputation diabetes related amputation in the province. Calgary is the only city in Alberta that currently has an active hospital based podiatric service dedicated to diabetic limb salvage.

Accomplishments, Highlights and Challenges

Education:

Work continues on the development of a three-year podiatric surgical residency program. It is anticipated that the division will have a resident in place in July of 2010.

The division added a new recruit last year, but until operating room resources improve the division has no future recruitment plan.

Challenges

The biggest challenge facing the division has been to meet population demands for services.



Dr. Brent Haverstock, Chief, Division of Podiatric Surgery

DIVISION OF THORACIC SURGERY

Accomplishments and Highlights

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

From an education perspective we were delighted to be fully accredited by the Royal College of Physicians after their recent visit. The reviewer gave our program outstanding comments. Kudos goes to Dr. Andrew Graham, the residency program director, and all the members of the division, for their hard work in supporting residency training. We have accepted our fourth resident since our residency began for July 2010. This is a terrific accomplishment when many programs, often much longer standing than ours, are having spots go unfilled. I think this is an excellent reflection on the people involved.

Residents:

Our last resident in Thoracic Surgery, Dr. Maurice Blitz, successfully completed his Royal College examinations. Dr. Blitz also won the Ginsberg Research Prize for the best resident paper at the annual meeting of the Canadian Association of Thoracic Surgeons. He has spent the last year at the Swedish Hospital in Seattle in a fellowship in Minimally Invasive Thoracic Surgery and is now starting his career on staff at St. Joseph's Hospital with an appointment at the University of Toronto. Dr. Blitz and his wife Sandra, have also just had their second child.



Dr. Gary Gelfand, Chief, Division of Thoracic Surgery

DIVISION OF THORACIC SURGERY CONTINUED

Accomplishments and Highlights continued

Our current resident, Dr. Colin Schieman is doing an outstanding job and very active on a research front, completing, amongst other things, a study looking at the ability of CT scans to predict pulmonary anatomy in lung cancer patients.

Dr. Schieman has just been accepted to do a very prestigious fellowship at Duke University with one of the major innovators in Video Assisted Thoracic Surgery (VATS) lobectomies starting a year from now. Even with all this, Dr. Schieman and his wife Nicole have found time to have their second child, congratulations on all accounts.

Clinical:

From a clinical viewpoint, a major initiative of the division has been the introduction of VATS lobectomies. Thoracotomy is one of the most painful procedures routinely performed and often exposes the patient to significant morbidity because of this. Until recently minimally invasive surgery had only modest impact on lung resections, but newer techniques have improved matters greatly. Over the past two years the division has spent significant time and energy in learning this new procedure – substantially more than almost any other program in Canada. We have recently completed a set number of cases for which we have been gathering data prospectively and will present a report on this to the Committee for Health Technology Assessment to garner their approval. We believe this will offer significant improvement in the care of our patients and offer surgery to patients who in the past could not tolerate the surgery.

Challenges

Maintaining quality of care remains a vital issue to the division. Dr. McFadden continues to run our Quality Council meetings on a biweekly basis. The Council has identified many significant issues and offered substantial improvement in patient care. Wait times in Thoracic Surgery are substantial, but greatly improved by a central referral system, which insures patients are seen in the timeliest fashion possible.

Dr. Sean Grondin continues as the division manager to make sure this, and all the other practical aspects of the division run smoothly. Certainly maintaining quality of care will be a critical issue with the current challenges in health care funding.

Continuing education remains important for all members of the division and helped by our annual visiting professor. This year it was Dr. Bill Nelems, a thoracic surgeon from Kelowna, who has pioneered many innovations in thoracic surgery, who offered fascinating incites on a variety of topics.

Research

Research remains of great interest to the members, though we hope to make even more substantial contributions in the future. Dr. McFadden remains the head of research for the division and is involved with several resident projects. In addition, he is an active member of the Department Research Committee and important in coordinating all our efforts.

Dr. Grondin has been very productive, in addition to projects with residents; he is editing a number of book chapters in such varied fields as gastroesophageal reflux and surgery for hyperhydrosis. He has been an invited speaker to a number of international conferences and courses on the later subject. His most important project however, done in conjunction with the entire division and the Canadian Association of Thoracic Surgeons, is the Canadian Thoracic and Manpower Study, T-MED, a manpower survey to determine the current state of thoracic surgery in Canada. It is the first study of its kind and will have significant impact on the future of the specialty.

Dr. Graham continues to explore a variety of fascinating epidemiological issues in Thoracic Surgery, and interact with a number of other disciplines, including the use of echocardiography in assessing postpneumonectomy patients. He was also actively involved in Dr. Janet Edwards's award winning project at Surgeons' Day on the importance of randomized trials in breast cancer treatment studies. We are very fortunate to have Ms. Elizabeth Kelly, who vary ably assists and guides us in these endeavors. Dr. Gelfand is involved with members of the Department of Radiology and the Schulich School of Engineering looking at the development of three dimensional algorithms for imaging patients with lung cancer. He is also the president of the Canadian Association of Thoracic Surgeons for the next two years.

Division highlights continue on the next page

DIVISION OF TRANSPLANT SURGERY

Division Structure and Organization

Almost twelve years have passed since the inception of the Division of Transplantation and currently there are three surgeons, working within a very multidisciplinary environment, in the Southern Alberta Transplant Program.

Accomplishments and Highlights

The division is continuously developing and establishing its role in education. Since 1998, the third year general surgery residents and nephrology fellows have had a rotation in transplant surgery. The division also has a Multi-organ Fellowship Program, in which five multi-organ transplant surgeons/transplant nephrologists have been trained. There is also a Research Fellowship Program. Congratulations to Dr. Mauricio Monroy, who recently completed his Master's Degree in Epidemiology.

Our program organized a retreat, "Inter-Professional Collaboration of Pharmacists and Exercise Physiologists for Transplant Patient Care" in Banff, January 2009, to explore the new methods, and new ideas for the next stage of integrated care in transplant. In addition, we had a Living Donor Appreciation night, which was held during Organ Awareness Week to celebrate the Gift of Life. Our program had nine peer-reviewed publications in 2008, in prestigious journals and we were involved in a number of research projects.

Currently, we are planning to explore the new methods and ideas for the next stage of integrated care in transplant patient population, as well as a program of non-simultaneous living donor chain (NEXUS).



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

DIVISION OF UROLOGY

Division Structure and Organization

Urology is a small, surgical specialty division with 13 members. As such, there are very few committees as a whole. The group does meet regularly to discuss issues and generally all members of the division are present for those meetings. There is a residency committee, which is composed of Dr. Richard Barr, the program director designate, Dr. Dushinski, Dr. Baverstock, Dr. Duffy and Dr. Carlson.

Accomplishments, Highlights and Challenges

Work continues on the Southern Alberta Urology Institute with an expected completion in terms of construction in late 2009. It is expected that the Prostate Cancer Institute and the urology offices will be moving in to the new building in March 2010. A part of the entire project is also the development of a urology residency program in Calgary. The urology residency application process is currently nearing completion, which is still awaiting the provincial approval, Royal College certification and adequate OR time for teaching. It is also expected that research within the division will improve with the completion of the institute.

The second main challenge in the last year actually falls outside of the time period for the annual report; however the passing of Dr. Ted Elliott has had a profound effect on the division. Dr. Elliott was responsible for student education and his surgical skill at retroperitoneal lymph node dissection is currently lacking in Calgary. Our workforce planning had already identified a need for more urologists. Dr. Jun Kawakami will be joining the division later this month. He is relocating from Kingston where he had been in practice for several years. He has a fellowship in urologic oncology and robotics. He will help take over Dr. Elliott's retroperitoneal lymph node dissection practice and will ease us in to the robotics generation as well.



**Dr. John Dushinski, Chief,
Division of Urology**

DIVISION OF VASCULAR SURGERY



Dr. Paul Petrasek, Chief, Division of Vascular Surgery

Division Structure and Organization

The Division of Vascular Surgery is the sole provider of vascular medicine and vascular surgery care to all of southern Alberta and the East Kootenay area of B.C. The division also provides tertiary surgical care to Saskatchewan, for thoracoabdominal aortic reconstructions. We offer a fellowship training program, which was granted full reaccreditation during the 2009 RCPSC review.

Accomplishments and Highlights

Vascular surgery has evolved over the past decade towards catheter-based endovascular procedures, which are less traumatic and have improved outcomes for the typically elderly cohort of patients brought to treatment. Calgary surgeons lead Canada in the application of endovascular techniques, with the largest volume of endovascular aortic aneurysm repair of any single Canadian hospital (175 in 2008-2009) and the greatest proportion of all aneurysms repaired by an endovascular route (70 per cent in 2008-2009).

Further, the division is one of very few worldwide that can offer patients with ruptured aortic aneurysm "endovascular first" treatment, which has halved mortality for this devastating condition. The Calgary-developed "REACT" (Ruptured Aortic Aneurysm Control Time) and "TEAR" (Thoracic Endovascular Aortic Repair) protocols for aortic emergency treatment are designed to minimize "hospital arrival to endovascular graft insertion" time. These protocols have

been adopted by numerous centres in Canada, as have Calgary-developed techniques for balloon control of aortic haemorrhage.

During 2008-2009, division members developed (in conjunction with suppliers) pre-packaged equipment kits for treating aortic rupture, to further streamline and speed care of acutely unstable patients. More than half of patients with abdominal aortic rupture were treated by endovascular techniques; the highest proportion of any Canadian centre.

Challenges

Vascular surgery volumes have increased by 9 per cent each year, during the past five years, while ambulatory clinic volume has increased by 10 per cent per year. Both are expected to continue to grow well into the future. Despite progress and innovation in new endovascular techniques, the greatest threat facing the division in the near term is inadequate patient care resources, which have been an important cause of manpower loss from the division. By November 2009, the division will have lost 50 per cent of its 2008 manpower roster, as surgeons find opportunity elsewhere in Canada. In response to this problem, in 2006 the division proposed a complete redesign of vascular services, with a centralized referral mechanism that can route patients to the first available vascular surgeon. Integral with this is a proposed ambulatory care facility for vascular patients where surgeons partner with nurse navigators, to speed care and assist patients through the process of pre-operative care.

The final (but not least important) component is an upgrade of OR facilities to current standards for vascular surgery, with adequate powered imaging for endovascular procedures. Although funding and space has not been available for our redesign, we are hopeful for such in our future. We look forward to a well-equipped facility that will allow recruitment of new faculty who share our remaining group's dedication to the highest standard of patient care, with national leadership in the application of innovative techniques.

TOGETHER, LEADING AND CREATING EXCELLENCE IN SURGICAL CARE



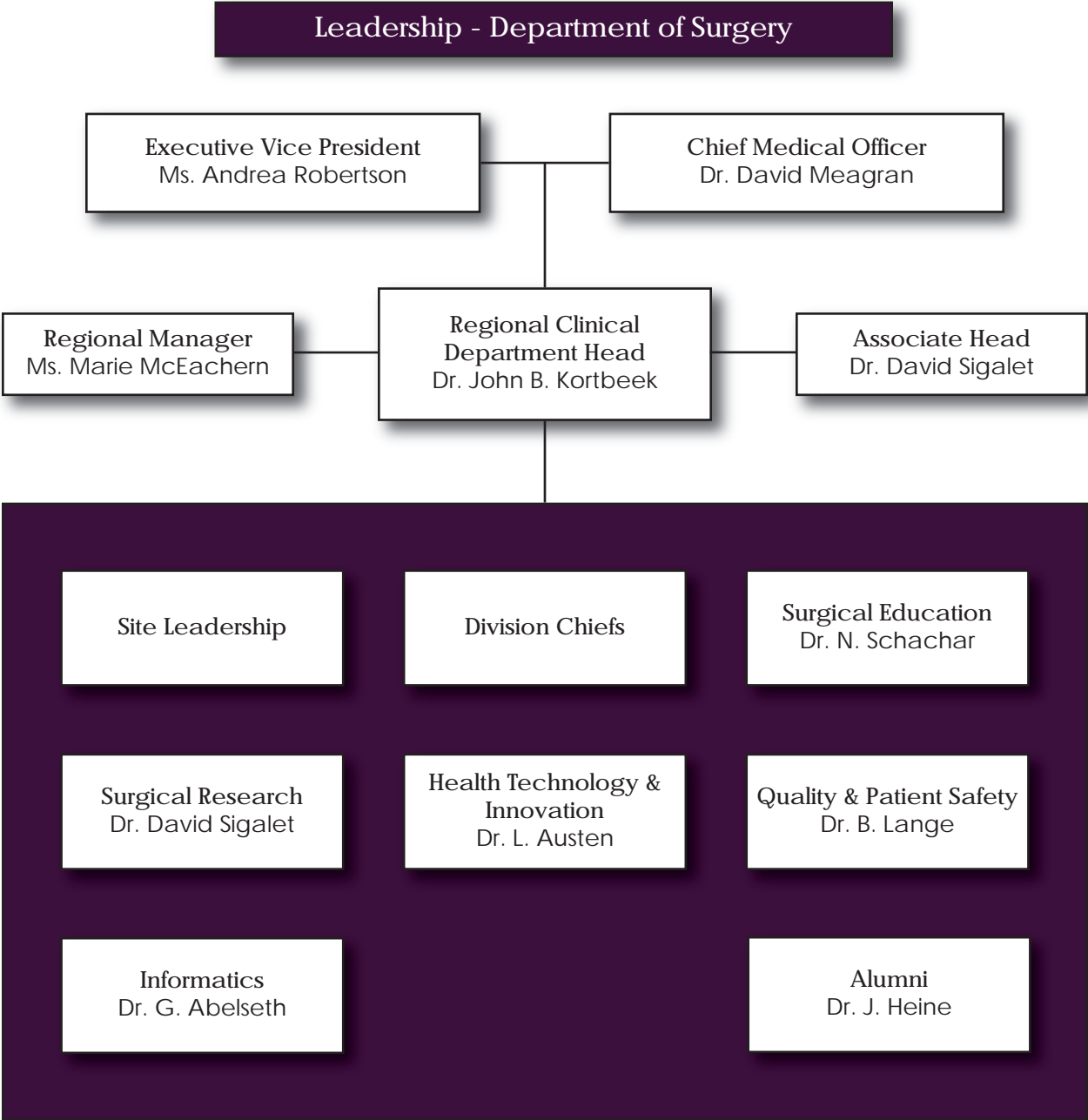
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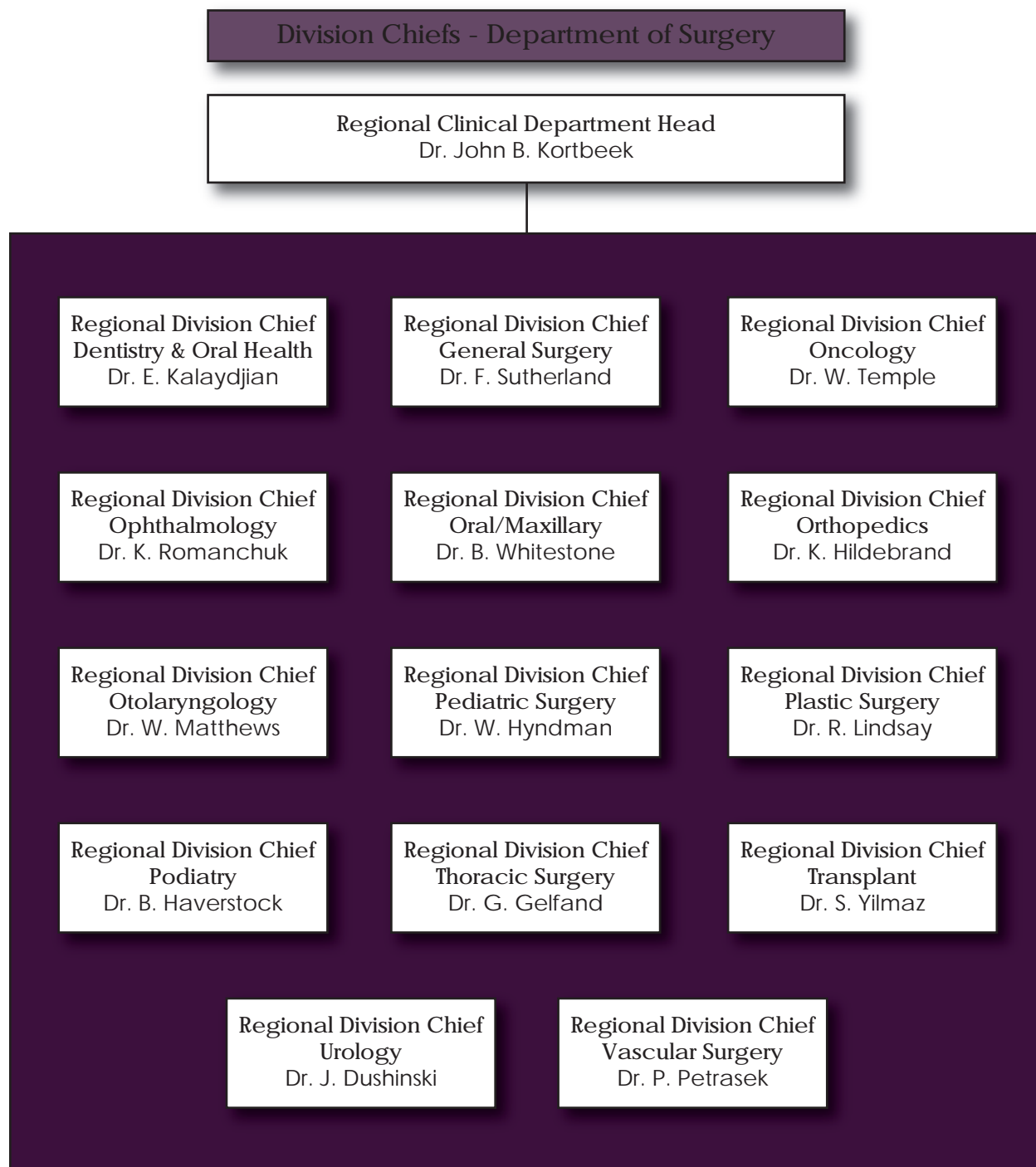
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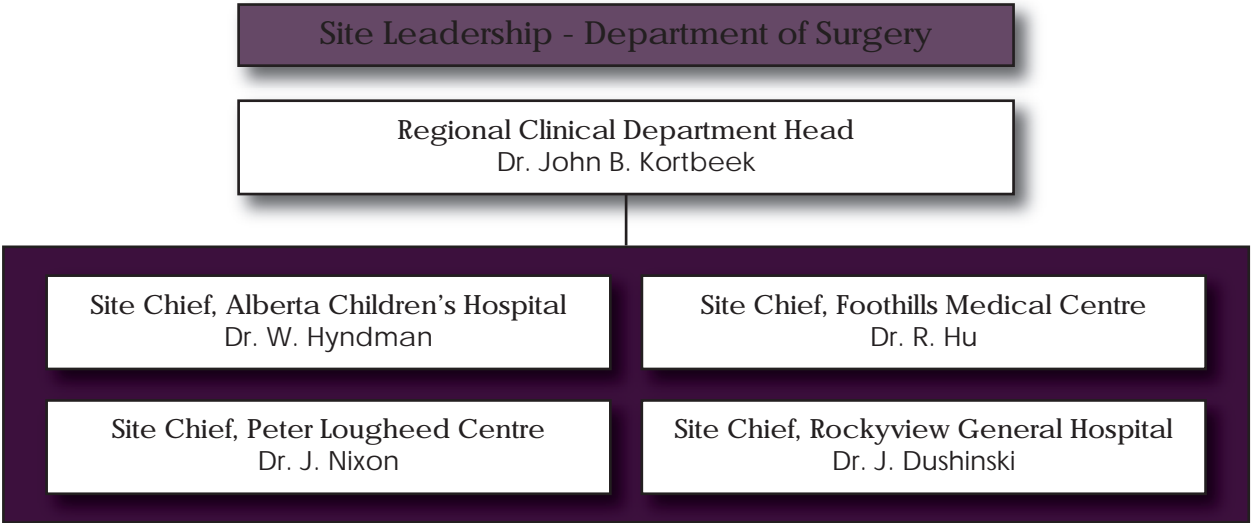
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APPENDIX 1: DEPARTMENTAL STRUCTURE AND ORGANIZATION

1.1 GOVERNANCE

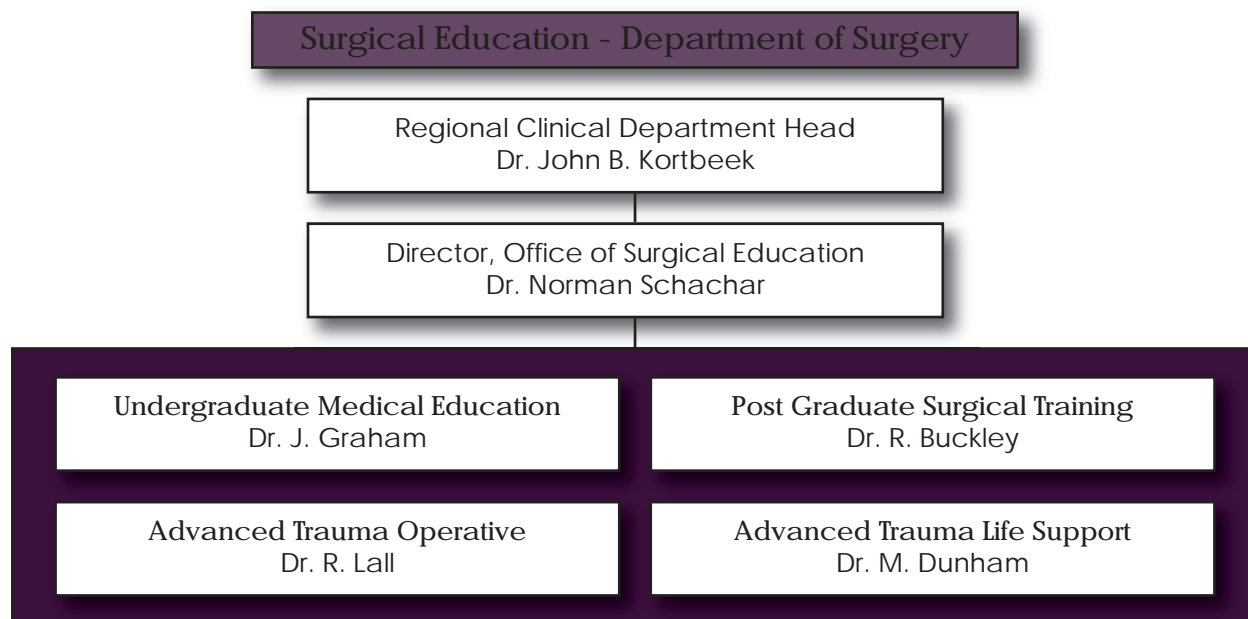






Alberta Children's Hospital Dr. William Hyndman, Site Chief Dr. Peter Farran, Division Chief, Anesthesia Ms. Susan Reader, SR Manager	Foothills Medical Centre Dr. Richard Hu, Site Chief Dr. Gerald Eschun, Division Chief, Anesthesia Ms. Darcee Clayton, OR Manager
Peter Lougheed Centre Dr. James Nixon, Site Chief Dr. Craig Pearce, Division Chief, Anesthesia Dr. David Halpenny, Chair, OR Committee Ms. Lori Gervais, OR Manager	Rockyview General Hospital Dr. John Dushinski, Site Chief Dr. Kevin Torsher, Division Chief, Anesthesia Ms. Linda Makar, OR Manager





Residency Programs	Program Director	Administrative Support
Colorectal Surgery	Dr. W. Donald Buie	Donna Smith
General Surgery	Dr. Tony MacLean	Donna Smith
Ophthalmology	Dr. Amin Kherani	Heather Summersgill
Orthopedic Surgery	Dr. Jacques Bouchard	Tracy Burke
Otolaryngology	Dr. Doug Bosch	Vivian Brien
Pediatric General Surgery	Dr. David Sigalet	Pam White
Plastic Surgery	Dr. Earl Campbell	Holly Underhill
Surgical Oncology	Dr. Greg McKinnon	Lynn Steele
Thoracic Surgery	Dr. Andrew Graham	Carol Smith
Vascular Surgery	Dr. Leonard Tse	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
IT, Chair: Dr. Greg Abelseth
Surgical Research, Chair: Dr. David Sigalet
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
Kastner, Uwe (primary in pediatric surgery)
Kopec, Perry
Krusky, J. Bradley
Kuruliak, Russell
Lakhani, Moez
Lee, Morley
Lekhi, Veenu
Leong, Christopher
Loeppky, Warren (primary in pediatric surgery)
Lovick, David
Mccracken, Kenneth
Mehra, Tarun (primary in pediatric surgery)
Morden, Darrell
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
Schow, Brian
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
Zealand, Cameron; (primary in pediatric surgery)

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
Descoteaux, Jean-Gaston; Associate Professor
Dixon, Elijah; Assistant Professor
Dunham, Michael B.; Clinical Assistant Professor
Graham, John S.; Clinical Assistant Professor
Hagerman, Neil
Heine, John A.; Clinical Assistant Professor
Hollaar, Gwendolyn; Assistant Professor
Ibbottson, Geoff; Clinical Lecturer (Grande Prairie)
Jenken, Daryl
Johnson, Douglas R.E.; Clinical Assistant Professor
Kanashiro, Jeanie; Clinical Assistant Professor
Kirkpatrick, Andrew W.; Associate 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
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
 Jans, Ronald G.; Clinical Assistant Professor
 Kassab, Jacinthe; Clinical Lecturer
 Kherani, Amin; Clinical Associate 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 Associate 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 ORTHOPEDIC SURGERY

Hildebrand, Kevin A.; Division Chief, Associate 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 Associate 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
 Duffy, Paul J.; Clinical Assistant Professor
Edwards, Glen E.; Clinical Professor
 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;
 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
 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 Lecturer
 Thomas, Kenneth C.; Clinical Assistant Professor
Thornton, Gail M.; Assistant Professor
 Timmermann, Scott; Clinical Lecturer
 Van Zuiden, Lowell J.; Clinical Assistant Professor
 Werle, Jason R.; Clinical Assistant 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
 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 Assistant 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
Warszawski, S. Joseph; Clinical Lecturer
Zakhary, Kristina

DIVISION OF PEDIATRIC 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 Lecturer (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
Elliott, Frederick G.; Clinical Assistant Professor (primary in Urology)
Ford, Bryce; Clinical Lecturer (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 Lecturer (primary in Urology)
Lange, Elizabeth J.; Clinical Assistant Professor (primary in Otolaryngology)
Lau, Henry

Lee, Jay; (primary in Urology)
Leong, James (primary in Urology)
Loeppky, Warren
McKenzie, C. David; (primary in Plastic Surgery)
McPhalen, Donald F.; Clinical Assistant Professor
Metcalfe, Donald G.; Clinical Assistant Professor (primary in Urology)
Park, Phillip S.; Clinical Assistant Professor (primary in Otolaryngology)
Parsons, David L.; Clinical Associate Professor
Romanchuk, Kenneth G.; Professor
Savage, Paul R.G.; Clinical Assistant Professor (primary in Ophthalmology)
Skov, Carolyn M.B.; Clinical Lecturer
Shandro, W.G. (Bud) (primary in Otolaryngology)
Sigalet, David L.; Professor
Stein, Kari
Wagner, Garth A.L.; Clinical Associate Professor (primary in Otolaryngology)
Warszawski, S. Joseph; Clinical Lecturer (primary in Otolaryngology)
Wong, Andrew L.; Clinical Associate Professor

DIVISION OF PODIATRIC SURGERY

Haverstock, Brent D.; Division Chief, Clinical Assistant Professor
Bulanda, Catherine S.; Clinical Lecturer
Crosby, Wayne; 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 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)
Fraulin, Frankie; Clinical Assistant Professor (primary in Pediatric Surgery)
Hall-Findlay, Elizabeth; primary in Rural Medicine
Hamilton, George D.; Clinical Assistant Professor
Harrop, A. Robertson; Clinical Associate Professor (primary in Pediatric Surgery)
Haugrud, Mark J.
Humphreys, Douglas;
Lee, Jonathan; Clinical Lecturer
Lin, Alan; Clinical Assistant Professor
Magi, Enzo; Clinical Associate Professor
McKenzie, C. David;
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 SURGICAL ONCOLOGY

Temple, Walley J.; Division Chief, Professor (primary in General Surgery)
 Arlette, John; Clinical Associate Professor
Bathe, Oliver F.; Associate Professor (primary in General Surgery)
Buie, W. Donald; Clinical Associate Professor (primary in General Surgery)
Dixon, Elijah; Assistant Professor (primary in General Surgery)
Dort, Joseph C.; Professor (primary in Otolaryngology)
 Hardy, Mark
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 Assistant 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; Assistant 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
 Elliott, Frederick G.; Clinical Assistant Professor
Hyndman, C. William; Clinical Assistant Professor (primary in Pediatric Surgery)
 Kozak, Gregory N.; Clinical Assistant Professor
 Lee, Jay;
 Leong, James;
 Metcalfe, 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.; Assistant Professor
 Samis, Gregory A.; Assistant Professor
 Smith, R. Matthew; Assistant Professor
 Wong, Joyce; Clinical Assistant Professor

JOINT APPOINTMENTS

Appoo, Jehangir; Assistant Professor, Cardiac Sciences
 Bayes, Alexander J.; Clinical Associate Professor, Cardiac Sciences
 Burgess, John J.; Clinical Associate Professor, Cardiac Sciences
 Costello, Fiona; Clinical Assistant Professor, Clinical Neurosciences
 Dobson, Gary M.; Associate Professor, Anaesthesia
 Kidd, William T.; Clinical Assistant Professor, Cardiac Sciences
 Maitland, Andrew; Associate Professor, Cardiac Sciences
 Muldrew, Kenneth B.; Assistant Professor, Cell Biology & Anatomy
 Prieur (Kieser), Teresa M.; Associate Professor, Cardiac Sciences
 Stell, William K.; Professor, Cell Biology & 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
 Oddone Paulocci, Elizabeth; Adjunct Assistant 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

THE SURGICAL EFFICIENCY ACCESS TARGETS PROGRAM (SEATP) CONTINUOUSLY PRODUCES UP TO DATE REPORTS. PLEASE VISIT THE SURGICAL SERVICES INTERNAL WEBSITE FOR UPDATED AND CURRENT REPORTS IWEB.CALGARYHEALTHREGION.CA/SURGICALSERVICES

APPENDIX 2: ACTIVITY REPORTS (EXAMPLES)

2.1 SURGICAL ACTIVITY REPORTS - MAJOR CALGARY HOSPITALS

Surgical Statistical Activity by Service All Facilities

Service	Total Cases 05/06	Total Cases 06/07	Total Cases 07/08	Current Year 2008/2009												Current		
				Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	YTD	% Change	Variance
*	9	6	55	9	10	7	10	6	9	8	2	4	11	1	2	79	0.44	24
ANA	99	107	98		1	7	4	9	7	12	7	9	3	7	8	74	-0.24	-24
CAR	749	858	841	72	64	91	77	54	70	80	81	68	86	60	59	882	0.02	21
COH	1,285	1,431	1,430	131	133	109	109	98	115	130	122	123	114	137	159	1,480	0.03	50
DEN	728	802	828	73	66	74	47	51	87	83	61	62	71	72	78	825		-3
ENT_ORL	5,438	5,521	6,194	546	594	529	423	291	589	570	563	450	516	485	578	6,134	-0.01	-60
GEN	11,174	12,897	13,001	1,192	1,189	1,147	959	921	1,123	1,175	1,111	1,046	1,159	1,025	1,130	13,177	0.01	176
GI	400	419	506	48	34	43	43	33	41	48	40	27	47	47	52	503	-0.01	-3
GYN	7,621	8,036	7,640	653	635	653	495	469	643	685	610	602	606	560	721	7,332	-0.04	-308
MED	195	142	107	8	10	7	9	7		11	6	9	11	5	5	88	-0.18	-19
NEU	1,451	1,678	1,644	129	149	133	128	125	114	137	132	109	145	148	174	1,623	-0.01	-21
OBS	663	1,046	1,438	168	164	127	129	75	127	169	125	161	136	162	154	1,697	0.18	259
OPH	1,879	2,167	2,179	198	156	186	150	135	202	195	158	175	192	194	231	2,172		-7
ORA	356	412	369	45	33	37	27	22	37	40	29	30	24	32	45	401	0.09	32
ORT	10,880	12,190	12,218	1,074	1,098	1,055	892	802	1,059	1,068	979	1,036	1,032	1,045	1,241	12,381	0.01	163
PLS	2,935	3,326	3,432	313	314	267	234	245	337	352	282	251	296	285	303	3,479	0.01	47
POD	165	319	349	40	28	40	34	25	28	32	42	20	44	43	34	410	0.17	61
PSY	2		27															-27
RAD	32	144	99	6	6	10	12	4	3	9	21	20	30	26	21	168	0.70	69
RES	80	95	72	7	8	13	5	6	4	20	6	8	6	6	7	96	0.33	24
SATP	19	22	5	1		5	2		2	5	7					22	3.40	17
THO	523	558	598	49	45	55	40	43	60	49	46	54	44	33	42	560	-0.06	-38
TRN	511	646	552	43	45	41	37	40	48	45	41	40	47	44	55	526	-0.05	-26
URO	4,362	5,332	5,897	548	550	528	415	407	564	567	479	514	543	500	506	6,121	0.04	224
VAS	669	803	754	61	81	70	66	52	66	80	72	64	83	53	72	820	0.09	66
Total	52,225	58,957	60,333	5,414	5,413	5,234	4,347	3,920	5,335	5,570	5,022	4,882	5,246	4,970	5,677	61,030		

Surgical Statistical Activity by Service

as of: 2009/03

All Facilities

Service	Total Patient Hours 05/06	Total Patient Hours 06/07	Total Patient Hours 07/08	Current Year 2008/2009												Curr YTD	% Change	Var
				Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar			
*	33.35	8.16	27.20	7.17	6.20	4.41	1.20	5.37	3.29	4.34	1.09	5.25	10.17	0.53	1.22	52.24	0.92	25.04
ANA	104.23	97.32	99.36		1.10	8.45	5.14	12.52	6.02	13.37	6.45	9.41	4.20	8.07	6.47	83.20	-0.16	-16.16
CAR	1,390.33	1,631.32	1,615.28	139.44	111.48	157.13	136.46	116.43	131.59	175.12	153.27	138.23	164.22	118.36	120.30	1,664.43	0.03	49.15
COH	4,482.21	5,169.31	5,065.13	458.12	431.04	442.58	414.33	351.48	432.57	421.31	440.34	405.18	443.18	407.58	463.46	5,113.57	0.01	48.44
DEN	1,031.29	1,033.53	1,130.17	105.21	101.07	93.53	61.21	66.58	109.03	105.48	91.26	81.32	95.28	94.14	95.33	1,101.44	-0.03	-28.33
ENT_ORL	4,945.03	5,226.33	6,118.38	585.41	563.00	534.27	439.32	389.35	572.21	584.15	565.35	468.47	546.50	462.02	594.13	6,306.18	0.03	187.40
GEN	18,530.20	21,521.04	21,702.43	2,000.26	1,963.58	1,926.53	1,785.53	1,611.43	1,894.23	1,015.19	1,854.19	1,799.52	1,042.30	1,788.30	1,889.16	22,573.02	0.04	870.19
GI	328.57	368.36	390.36	35.30	28.22	36.40	41.04	33.02	34.20	41.54	40.33	22.23	32.45	35.33	34.43	416.49	0.07	26.13
GYN	7,634.37	8,386.21	8,192.27	705.41	669.49	693.49	566.30	542.17	702.08	755.14	685.08	629.40	729.38	592.56	747.06	8,019.56	-0.02	-172.31
MED	122.52	101.51	82.57	4.46	6.09	4.15	7.48	4.13		6.42	4.33	8.06	8.01	8.07	3.42	66.22	-0.20	-16.35
NEU	5,165.19	5,927.53	5,842.14	511.58	561.58	471.56	475.33	445.36	407.22	492.04	476.18	388.41	565.33	489.18	583.23	5,869.40		27.26
OBS	597.52	893.05	1,311.10	145.30	142.04	121.34	116.23	67.00	112.20	143.47	103.58	146.57	129.05	136.45	142.53	1,508.16	0.15	197.06
OPH	2,274.26	2,632.10	2,883.25	271.46	185.57	248.24	185.43	173.04	254.04	256.16	210.01	222.28	242.38	209.57	273.01	2,733.19	-0.05	-150.06
ORA	899.54	1,005.04	915.42	99.29	95.45	81.30	78.39	60.05	109.31	96.41	66.18	73.19	65.03	71.52	102.37	1,000.49	0.09	85.07
ORT	20,054.14	21,999.42	22,399.30	1,987.30	2,021.25	1,888.51	1,749.43	1,490.19	2,074.59	2,094.11	1,825.35	1,889.56	1,977.42	1,898.56	2,262.31	23,161.38	0.03	762.08
PLS	6,345.42	7,337.10	7,395.02	683.50	655.08	571.56	504.19	482.37	657.25	716.52	592.34	527.59	584.49	611.11	619.46	7,208.26	-0.03	-186.36
POD	201.14	410.12	428.13	51.13	33.52	48.14	42.06	32.06	32.21	43.43	52.49	24.29	52.57	45.12	39.30	498.32	0.16	70.19
PSY	0.26		4.35														-1.00	-4.35
RAD	51.46	201.31	80.32	3.30	7.37	7.59	4.00	2.26	0.31	2.50	14.01	22.37	27.31	23.38	19.20	136.00	0.69	55.28
RES	104.31	127.00	98.37	11.51	11.14	24.02	11.12	5.12	10.55	32.31	7.18	21.36	9.23	15.44	17.24	178.22	0.81	79.45
SATP	88.09	70.24	23.09	4.32		15.08	7.25		4.23	23.50	19.20					74.38	2.22	51.29
THO	1,399.36	1,607.00	1,710.30	138.37	150.07	153.14	125.26	118.23	187.52	144.08	133.30	138.40	130.17	112.47	108.53	1,641.54	-0.04	-68.36
TRN	1,006.43	1,206.15	1,042.16	77.00	74.53	63.49	69.08	69.31	73.47	75.47	61.24	70.47	93.28	77.14	96.35	903.23	-0.13	-138.53
URO	4,717.36	5,807.35	6,123.20	584.42	523.13	538.29	443.31	413.42	599.33	569.30	495.00	503.12	558.40	487.18	547.49	6,264.39	0.02	141.19
VAS	2,612.37	2,972.02	2,845.57	239.05	282.06	238.41	215.00	196.18	212.26	279.07	227.25	218.08	238.39	171.27	240.18	2,758.40	-0.03	-87.17
Total	84,124.15	95,742.12	97,529.27	8,853.11	8,628.06	8,377.21	7,488.09	6,691.07	8,624.11	9,095.23	8,129.00	7,817.56	8,753.14	7,868.15	9,010.58	99,336.51		

Surgical Statistical Activity by Admit Type

as of: 2009/03

All Facilities

Service	Admit Type	Total Cases 05/06	Total Cases 07/08	Total Cases 08/09	Current Year 2008/2009												YTD	% Change
					Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar		
*	Elective		1	12	2	5	3	6		3	3			1		1	24	100.00
	Emergency	9	3	26	3	4	2	2	5	2	4	2	4	9	1	1	39	50.00
	Urgent		2	17	4	1	2	2	1	4	1			1			16	-5.88
	Total	9	6	55	9	10	7	10	6	9	8	2	4	11	1	2	79	
ANA	Elective	3	4	5						1						1	2	-60.00
	Emergency	93	92	88		1	4	4	9	5	12	6	8	3	7	7	66	-25.00
	Urgent	3	11	5			3			1		1	1				6	20.00
	Total	99	107	98		1	7	4	9	7	12	7	9	3	7	8	74	
CAR	**							1							2	5	8	800.00
	Elective	235	271	282	26	34	27	26	15	26	35	36	20	39	26	23	333	18.09
	Emergency	42	55	81	4	1	10	7	4	7	4	2	9	6	4	7	65	-19.75
	Urgent	472	532	478	42	29	54	43	35	37	41	43	39	41	28	24	456	-4.60
	Total	749	858	841	72	64	91	77	54	70	80	81	68	86	60	59	852	
COH	**			1	1						1				5	9	17	1,800.00
	Elective	120	121	141	22	26	9	11	15	15	22	21	35	20	27	31	254	80.14
	Emergency	188	285	283	23	16	19	24	20	26	19	28	19	18	25	14	251	-11.31
	Urgent	977	1,045	1,005	85	91	81	74	63	74	88	73	69	76	79	105	958	-4.68
	Total	1,285	1,431	1,430	131	133	109	109	98	115	130	122	123	114	137	159	1,480	
DEN	**			1											5	7	12	1,100.00
	Elective	673	759	773	72	63	73	46	48	83	82	60	62	70	63	65	787	1.81
	Emergency	34	24	27			1	1	1	2	1				2	2	10	-62.96
	Urgent	21	19	27	1	3			2	2		1		1	2	4	16	-40.74
	Total	728	802	828	73	66	74	47	51	87	83	61	62	71	72	78	825	
ENT_ORL	**		1	2											10	11	21	950.00
	Elective	4,411	4,370	5,136	461	501	424	335	235	489	472	466	382	461	408	496	5,130	-0.12
	Emergency	236	237	282	29	21	28	36	18	25	32	31	26	16	23	26	311	10.28
	Urgent	781	913	774	56	72	77	52	38	75	66	66	42	39	44	45	572	-13.18
	Total	5,438	5,521	6,194	546	594	529	423	291	589	570	563	450	516	485	578	6,134	

Surgical Statistical Activity by Admit Type All Facilities

as of: 2009/03

Service	Admit Type	Total Cases 05/06	Total Cases 07/08	Total Cases 08/09	Current Year 2008/2009												YTD	% Change
					Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar		
GEN	**	1		8	2	1									7	14	24	200.00
	Elective	4,985	5,516	5,662	558	519	508	316	321	522	555	501	431	536	456	517	5,740	1.38
	Emergency	3,516	4,306	4,398	377	406	409	408	400	356	367	370	390	398	343	349	4,573	3.98
	Urgent	2,672	3,075	2,933	255	263	230	235	200	245	253	240	225	225	219	250	2,840	-3.17
	Total	11,174	12,897	13,001	1,192	1,189	1,147	959	921	1,123	1,175	1,111	1,046	1,159	1,025	1,130	13,177	
GI	**														1	2	3	300.00
	Elective	279	301	420	34	28	31	36	19	34	40	32	23	39	41	45	402	-4.29
	Emergency	71	63	31	7	4	6	6	4	1	4	6	4	5	4	3	54	74.19
	Urgent	50	55	55	7	2	6	1	10	6	4	2		3	1	2	44	-20.00
	Total	400	419	506	48	34	43	43	33	41	48	40	27	47	47	52	503	
GYN	**		2	7	1										5	14	20	185.71
	Elective	5,387	5,662	5,317	460	431	444	308	262	463	508	408	399	403	396	503	5,005	-5.87
	Emergency	1,453	1,416	1,315	105	125	122	108	123	114	105	108	108	99	102	113	1,332	1.29
	Urgent	781	956	1,001	67	79	87	79	84	66	72	94	95	104	57	91	975	-2.80
	Total	7,621	8,036	7,640	635	635	653	495	469	643	685	610	602	606	560	721	7,332	
MED	**			1														-100.00
	Elective	134	92	63	4	6	4	4	5		4	3	4	3		2	39	-38.10
	Emergency	49	47	35	4	4	3	5	1		6	2	5	6	4	2	42	20.00
	Urgent	12	3	8					1		1	1		2	1	1	7	-12.50
	Total	195	142	107	8	10	7	9	7		11	6	9	11	5	5	88	
NEU	**			1											2	4	6	500.00
	Elective	753	866	817	69	77	55	46	44	48	53	53	42	61	72	84	704	-13.83
	Emergency	284	314	328	17	20	28	27	38	20	26	31	21	17	22	30	297	-9.45
	Urgent	434	498	498	43	52	50	55	43	46	58	48	46	67	52	56	616	23.69
	Total	1,451	1,678	1,644	129	149	133	128	125	114	137	132	109	145	148	174	1,623	
OBS	**														1	4	5	500.00
	Elective	429	718	672	119	116	94	77	37	88	98	78	107	87	105	101	1,107	26.95
	Emergency	198	275	471	41	37	30	51	37	29	62	40	47	44	45	40	503	6.79
	Urgent	36	53	95	8	11	3	1	1	10	9	7	7	5	11	9	82	-13.68
	Total	663	1,046	1,438	168	164	127	128	75	127	169	125	161	138	162	154	1,697	
OPH	**			2											3	6	9	350.00
	Elective	1,257	1,394	1,440	122	111	117	91	73	151	144	100	114	124	143	161	1,451	0.76
	Emergency	377	485	490	40	17	40	37	32	25	29	33	38	36	28	32	387	-21.02
	Urgent	245	288	247	36	28	29	22	30	26	22	25	23	20	32	32	325	31.68
	Total	1,879	2,167	2,179	198	156	186	150	135	202	195	158	175	192	194	231	2,172	
ORA	**														2		2	200.00
	Elective	312	355	321	36	25	32	21	15	32	29	21	23	21	27	40	322	0.31
	Emergency	39	53	45	6	7	5	6	7	5	11	6	7	3	3	5	75	66.67
	Urgent	5	4	3	1	1											2	-33.33
	Total	356	412	369	45	33	37	27	22	37	40	29	30	24	32	45	401	
ORT	**	1	2	5	3							1			5	17	26	420.00
	Elective	6,250	6,720	6,675	621	644	589	398	366	609	610	564	572	569	545	656	6,743	1.02
	Emergency	2,639	3,165	3,050	239	262	272	311	272	255	251	238	277	265	311	349	3,302	6.26
	Urgent	1,990	2,303	2,488	211	192	194	183	164	195	207	176	187	188	184	219	2,310	-7.15
	Total	10,880	12,190	12,218	1,074	1,098	1,055	892	892	1,059	1,068	979	1,036	1,032	1,045	1,241	12,381	
PLS	**			9											5	3	8	-11.11
	Elective	2,058	2,244	2,306	227	241	191	136	142	235	219	195	172	215	210	202	2,385	3.43
	Emergency	416	531	523	44	27	34	55	71	61	71	54	43	41	35	44	580	10.90
	Urgent	461	551	594	42	46	42	43	32	41	62	33	36	40	35	54	508	-14.81
	Total	2,935	3,326	3,423	313	314	267	234	245	337	352	282	251	296	285	303	3,479	
POD	**				1										5		6	600.00
	Elective	83	181	162	24	14	26	16	11	12	16	24	9	30	16	19	217	33.95
	Emergency	80	130	181	16	13	14	18	14	16	16	17	11	12	22	12	181	
	Urgent	2	8	6								1		2		3	8	
	Total	165	319	349	40	28	40	34	25	28	32	42	20	44	43	34	410	
PSY	Elective	2		18														-100.00
	Urgent			9														-100.00

Surgical Statistical Activity by Admit Type All Facilities

as of: 2009/03

Service	Admit Type	Total Cases 05/06	Total Cases 07/08	Total Cases 08/09	Current Year 2008/2009												YTD	% Change
					Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar		
	Total	663	1,046	1,438	168	164	127	128	75	127	169	125	161	136	162	154	1,697	
OPH	**			2											3	6	9	350.00
	Elective	1,257	1,394	1,440	122	111	117	91	73	151	144	100	114	124	143	161	1,451	0.76
	Emergency	377	485	490	40	17	40	37	32	25	29	33	38	36	28	32	387	-21.02
	Urgent	245	288	247	36	28	29	22	30	26	22	25	23	32	20	32	325	31.58
	Total	1,879	2,167	2,179	198	156	186	150	135	202	195	158	175	192	194	231	2,172	
ORA	**														2		2	200.00
	Elective	312	355	321	36	25	32	21	15	32	29	21	23	21	27	40	322	0.31
	Emergency	39	53	45	6	7	5	6	7	5	11	6	7	3	3	5	75	66.67
	Urgent	5	4	3	1	1											2	-33.33
	Total	396	412	369	45	33	37	27	22	37	40	29	30	24	32	45	401	
ORT	**	1	2	5	3							1			5	17	26	420.00
	Elective	6,250	6,720	6,675	621	644	588	398	366	609	610	564	572	569	545	656	6,743	1.02
	Emergency	2,639	3,165	3,050	239	262	272	311	272	255	251	238	277	265	311	349	3,302	6.26
	Urgent	1,990	2,303	2,488	211	192	194	183	164	195	207	176	187	188	184	219	2,310	-7.15
	Total	10,880	12,190	12,218	1,074	1,098	1,055	892	892	1,059	1,068	979	1,036	1,032	1,045	1,241	12,381	
PLS	**			9											5	3	8	-11.11
	Elective	2,058	2,244	2,306	227	241	191	136	142	235	219	195	172	215	210	202	2,385	3.43
	Emergency	416	531	523	44	27	34	55	71	61	71	54	43	41	35	44	580	10.90
	Urgent	461	551	594	42	46	42	43	32	41	62	33	36	40	35	54	506	-14.81
	Total	2,935	3,326	3,432	313	314	267	234	245	337	352	282	251	298	285	303	3,479	
POD	**					1									5		6	600.00
	Elective	83	181	162	24	14	26	16	11	12	16	24	9	30	16	19	217	33.95
	Emergency	60	130	181	16	13	14	18	14	16	16	17	11	12	22	12	181	
	Urgent	2	8	6								1		2		3	6	
	Total	185	319	349	40	28	40	34	25	28	32	42	20	44	43	34	410	
PSY	Elective	2		18														-100.00
	Urgent			9														-100.00

**Surgical Statistical Activity by Admit Type
All Facilities**

as of: 2009/03

Service	Admit Type	Total Cases 05/06	Total Cases 07/08	Total Cases 08/09	Current Year 2008/2009												YTD	% Change
					Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar		
RAD	Total	2		27														
	**			3	1											1	2	4 39.33
	Elective	11	41	32	1	1	1	7	2	2	2	7	10	15	9	7	64	100.00
	Emergency	20	91	52	4	3	8	4	2	1	3	11	8	14	15	9	80	53.85
	Urgent	1	12	12		2	3	1			4	3	2	1	1	3	20	86.67
RES	Total	32	144	99	6	6	10	12	4	3	9	21	20	30	26	21	168	
	Elective	10	23	12	1	2	5		1	1	7	3		3			23	91.67
	Emergency	32	40	25	5	2	6	3	4	2	11	1	4	1	4	3	46	84.00
	Urgent	38	32	35	1	4	2	2	1	1	2	2	4	2	2	4	27	-22.86
	Total	80	95	72	7	8	13	5	6	4	20	6	8	6	6	7	96	
SATP	**		1															
	Emergency	19	20	5	1		5	2		2	5	7					22	340.00
	Urgent		1															
THO	Total	19	22	5	1		5	2		2	5	7					22	
	Elective	16	44	23	3	4	3	1	1	5	2	3	1	6	2	1	32	39.13
	Emergency	51	35	51	2	2	4	3	4	6	2	9	8	3	3	2	48	-5.88
	Urgent	456	479	524	44	39	48	36	38	49	45	34	45	35	28	39	480	-8.40
	Total	523	558	598	49	45	55	40	43	60	49	46	54	44	33	42	560	
TRN	**													1	1	1	3	300.00
	Elective	341	274	93	8	7	4	4	1	5	7	5	3	6	3		53	-43.01
	Emergency	76	142	79	3	2	3	7	12	5	2	2	6	9	12	9	72	-8.86
	Urgent	94	230	380	32	36	34	26	27	38	36	34	31	31	28	45	388	4.74
	Total	511	646	552	43	45	41	37	40	48	45	41	40	47	44	55	526	
URO	**			2											3	7	10	400.00
	Elective	2,462	3,098	3,269	325	283	309	209	181	341	378	312	309	338	296	296	3,577	9.42
	Emergency	1,340	1,626	1,996	151	182	145	160	178	171	143	121	151	159	140	139	1,840	-7.82
	Urgent	560	608	630	72	85	74	46	48	52	46	46	54	46	61	64	684	10.16
	Total	4,362	5,332	5,897	548	550	528	415	407	564	567	479	514	543	500	506	6,121	

**Surgical Statistical Activity by Admit Type
All Facilities**

as of: 2009/03

Service	Admit Type	Total Cases 05/06	Total Cases 07/08	Total Cases 08/09	Current Year 2008/2009												YTD	% Change
					Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar		
VAS	**			1													1	
	Elective	293	344	356	36	41	42	32	22	37	47	40	35	46	28	43	450	26.40
	Emergency	171	193	212	11	19	11	21	14	13	18	18	23	22	9	13	192	-9.43
	Urgent	205	286	185	14	21	17	13	16	16	15	14	8	15	15	15	177	-4.32
	Total	669	803	754	61	81	70	66	52	66	80	72	64	83	53	72	820	
Summary	**	2	6	43	8	2		1			1	1		1	64	107	185	
	Elective	30,504	33,399	34,207	3,251	3,179	2,991	2,126	1,816	3,202	3,333	2,932	2,753	3,093	2,874	3,294	34,844	
	Emergency	11,413	13,608	14,074	1,134	1,175	1,207	1,306	1,270	1,149	1,204	1,145	1,217	1,186	1,164	1,211	14,368	
	Urgent	10,306	11,944	12,009	1,021	1,057	1,036	914	834	984	1,032	944	912	966	868	1,065	11,633	
	Total	52,225	58,957	60,333	5,414	5,413	5,234	4,347	3,920	5,335	5,570	5,022	4,882	5,246	4,970	5,677	61,030	

Surgical Statistical Activity by Patient Type All Facilities

as of: 2009/03

Service	Patient Type	Total Cases 05/06	Total Cases 06/07	Total Cases 07/08	Current Year 2008/2009													YTD
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar					
T	InPatient	9	5	49	8	8	6	6	6	6	5	2	4	10	1	1	63	
	OutPatient		1	6	1	2	1	4		3	3			1		1	16	
	Total	9	6	55	9	10	7	10	6	9	8	2	4	11	1	2	79	
ANA	InPatient	97	105	94		1	7	4	9	7	12	7	9	3	7	7	73	
	OutPatient	2	2	4												1	1	
	Total	99	107	98		1	7	4	9	7	12	7	9	3	7	8	74	
CAR	InPatient	550	601	596	52	45	61	56	41	54	61	48	51	67	47	43	626	
	OutPatient	199	257	245	20	19	30	21	13	16	19	33	17	19	13	16	236	
	Total	749	858	841	72	64	91	77	54	70	80	81	68	86	60	59	862	
COH	InPatient	1,230	1,332	1,301	114	112	101	101	86	103	115	101	101	98	113	126	1,271	
	OutPatient	55	99	129	17	21	8	8	12	12	15	21	22	16	24	33	209	
	Total	1,285	1,431	1,430	131	133	109	109	98	115	130	122	123	114	137	159	1,480	
DEN	InPatient	74	60	96	4	8	8	3	4	9	6	5	4	5	4	9	69	
	OutPatient	654	742	732	69	58	66	44	47	78	77	56	58	66	68	69	756	
	Total	728	802	828	73	66	74	47	51	87	83	61	62	71	72	78	825	
ENT_ORL	InPatient	949	1,030	1,190	138	104	98	101	84	119	104	116	97	107	107	122	1,297	
	OutPatient	4,489	4,491	5,004	408	490	431	322	207	470	466	447	353	409	378	456	4,837	
	Total	5,438	5,521	6,194	546	594	529	423	291	589	570	563	450	516	485	578	6,134	
GEN	InPatient	6,724	7,903	7,887	711	699	729	683	638	653	699	658	670	718	635	655	8,148	
	OutPatient	4,450	4,994	5,114	481	490	418	276	283	470	476	453	376	441	390	475	5,029	
	Total	11,174	12,897	13,001	1,192	1,189	1,147	959	921	1,123	1,175	1,111	1,046	1,159	1,025	1,130	13,177	
GI	InPatient	113	114	88	14	8	10	12	9	7	11	10	8	11	7	12	119	
	OutPatient	287	305	418	34	26	33	31	24	34	37	30	19	36	40	40	384	
	Total	400	419	506	48	34	43	43	33	41	48	40	27	47	47	52	503	
GYN	InPatient	3,520	3,735	3,576	306	288	321	264	260	301	326	294	276	307	274	307	3,524	
	OutPatient	4,101	4,301	4,064	347	347	332	231	209	342	359	316	326	299	286	414	3,808	
	Total	7,621	8,036	7,640	653	635	653	495	469	643	685	610	602	606	560	721	7,332	
MED	InPatient	76	60	45	4	4	4	6	2		7	3	7	8	4	3	52	
	OutPatient	119	82	62	4	6	3	3	5		4	3	2	3	1	2	36	

Surgical Statistical Activity by Patient Type All Facilities

as of: 2009/03

Service	Patient Type	Total Cases 05/06	Total Cases 06/07	Total Cases 07/08	Current Year 2008/2009													YTD
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar					
NEU	Total	195	142	107	8	10	7	9	7		11	6	9	11	5	5	88	
	InPatient	1,379	1,574	1,455	114	139	119	115	111	105	125	120	101	128	126	155	1,458	
	OutPatient	72	104	169	15	10	14	13	14	9	12	12	8	17	22	19	165	
OBS	Total	1,451	1,678	1,644	129	149	133	128	125	114	137	132	109	145	148	174	1,623	
	InPatient	300	409	674	64	58	50	71	45	41	84	52	68	66	65	58	722	
	OutPatient	363	637	764	104	106	77	58	30	86	85	73	93	70	97	96	975	
OPH	Total	663	1,046	1,438	168	164	127	129	75	127	169	125	161	136	162	154	1,697	
	InPatient	694	908	849	72	59	76	62	56	65	60	67	78	79	58	69	801	
	OutPatient	985	1,259	1,330	126	97	110	88	79	137	135	91	97	113	136	162	1,371	
ORA	Total	1,879	2,167	2,179	198	156	186	150	135	202	195	158	175	192	194	231	2,172	
	InPatient	289	354	328	35	32	28	26	21	34	38	24	28	18	25	32	341	
	OutPatient	67	58	41	10	1	9	1	1	3	2	5	2	6	7	13	60	
ORT	Total	356	412	369	45	33	37	27	22	37	40	29	30	24	32	45	401	
	InPatient	7,314	8,281	8,339	729	722	698	666	565	729	728	661	685	727	713	860	8,483	
	OutPatient	3,566	3,909	3,879	345	376	357	226	237	330	340	318	351	305	332	381	3,898	
PLS	Total	10,880	12,190	12,218	1,074	1,098	1,055	892	802	1,059	1,068	979	1,036	1,032	1,045	1,241	12,381	
	InPatient	1,481	1,821	1,796	150	127	134	136	128	154	202	134	126	144	132	149	1,716	
	OutPatient	1,454	1,505	1,636	163	187	133	98	117	183	150	148	125	152	153	154	1,763	
POD	Total	2,935	3,326	3,432	313	314	267	234	245	337	352	282	251	296	285	303	3,479	
	InPatient	129	232	305	33	24	31	28	20	26	28	38	17	27	30	22	324	
	OutPatient	36	87	44	7	4	9	6	5	2	4	4	3	17	13	12	86	
PSY	Total	165	319	349	40	28	40	34	25	28	32	42	20	44	43	34	410	
	InPatient	1		18														
	OutPatient	1		9														
RAD	Total	2		27														
	InPatient	27	134	76	6	6	7	10	3	1	8	17	15	20	19	16	128	
	OutPatient	5	10	23			3	2	1	2	1	4	5	10	7	5	40	
RES	Total	32	144	99	6	6	10	12	4	3	9	21	20	30	26	21	168	
	InPatient	73	75	52	6	7	8	5	5	4	13	4	7	3	6	7	75	

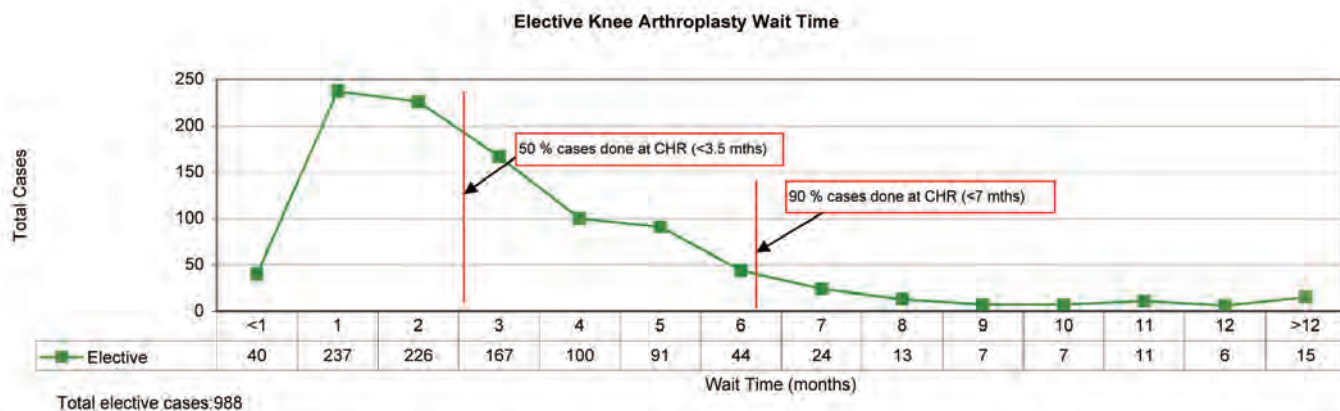
**Surgical Statistical Activity by Patient Type
All Facilities**

as of: 2009/03

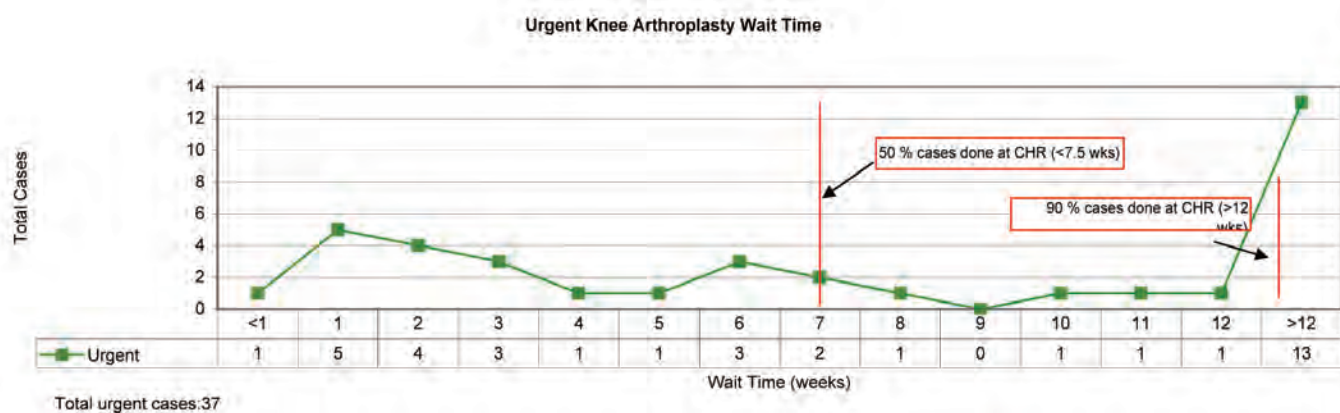
Service	Patient Type	Total Cases 05/06	Total Cases 06/07	Total Cases 07/08	Current Year 2008/2009												YTD
					Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	
RES	OutPatient	7	20	20	1	1	5		1		7	2	1	3			21
	Total	80	95	72	7	8	13	5	6	4	20	6	8	6	6	7	96
	SATP InPatient	19	22	5	1		5	2		2	5	7					22
THO	Total	19	22	5	1		5	2		2	5	7					22
	InPatient	513	539	585	42	44	52	40	41	53	47	45	49	39	32	37	521
	OutPatient	10	19	13	7	1	3		2	7	2	1	5	5	1	5	39
TRN	Total	523	558	598	49	45	55	40	43	60	49	46	54	44	33	42	560
	InPatient	157	252	179	10	10	10	8	15	13	14	14	17	18	19	14	162
	OutPatient	354	394	373	33	35	31	29	25	35	31	27	23	29	25	41	364
URO	Total	511	646	552	43	45	41	37	40	48	45	41	40	47	44	55	526
	InPatient	3,112	3,669	3,972	337	351	339	283	294	365	326	283	310	338	283	328	3,837
	OutPatient	1,250	1,663	1,925	211	199	189	132	113	199	241	196	204	205	217	178	2,284
VAS	Total	4,362	5,332	5,897	548	550	528	415	407	564	567	479	514	543	500	506	6,121
	InPatient	580	666	632	54	62	45	52	45	55	60	53	50	59	42	53	630
	OutPatient	89	137	122	7	19	25	14	7	11	20	19	14	24	11	19	190
Summary	Total	669	803	754	61	81	70	66	52	66	80	72	64	83	53	72	820
	InPatient	29,610	33,881	34,187	3,004	2,918	2,947	2,740	2,488	2,906	3,084	2,763	2,778	3,000	2,749	3,085	34,462
	OutPatient	22,615	25,076	26,146	2,410	2,495	2,287	1,607	1,432	2,429	2,486	2,259	2,104	2,246	2,221	2,592	26,568
Total		52,225	58,957	60,333	5,414	5,413	5,234	4,347	3,920	5,335	5,570	5,022	4,882	5,246	4,970	5,677	61,030

2.2 WAIT TIME REPORTS

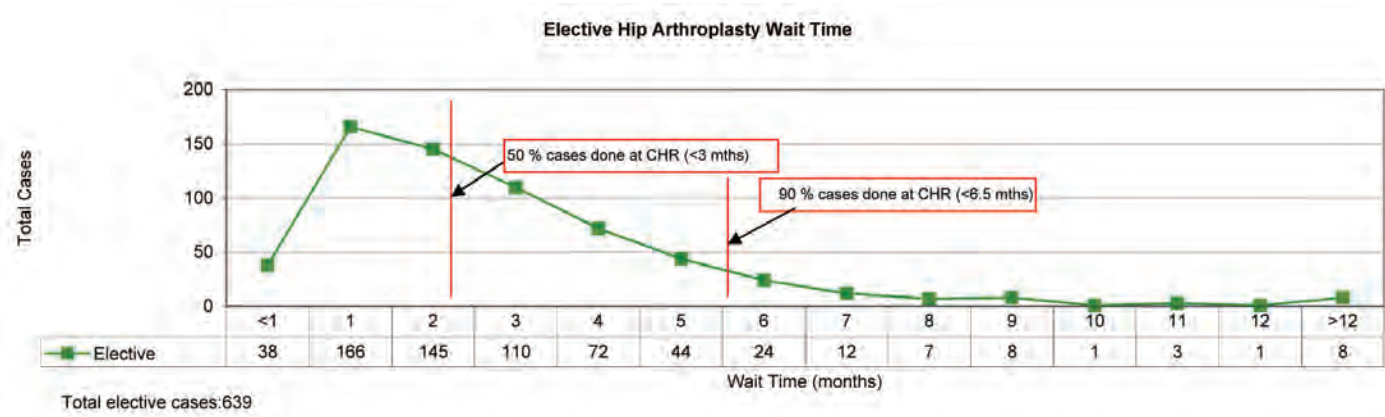
Elective Knee Arthroplasty Wait Time 2008/04/01 to 2009/03/31



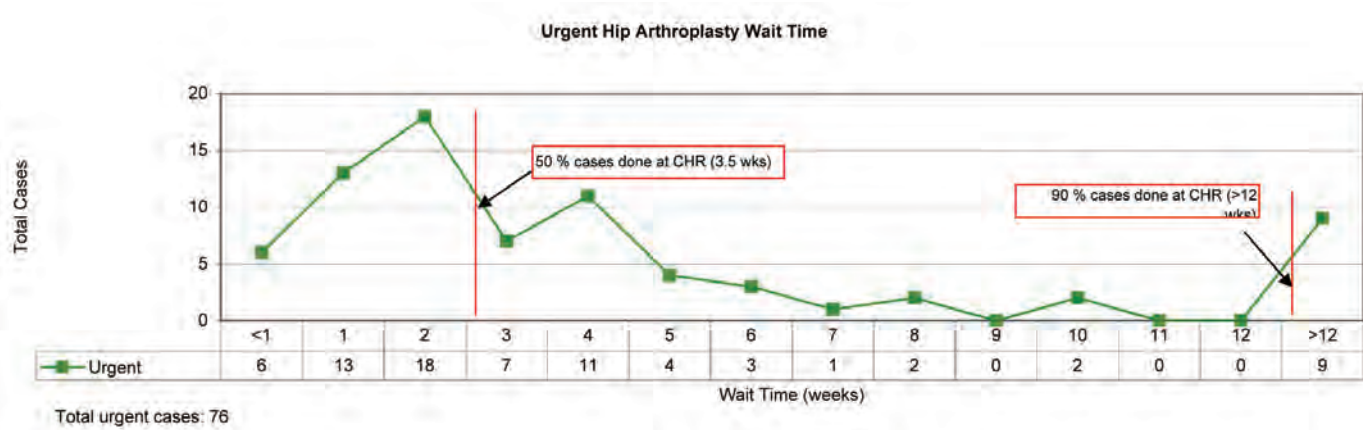
Urgent Knee Arthroplasty Wait Time 2008/04/01 to 2009/03/31



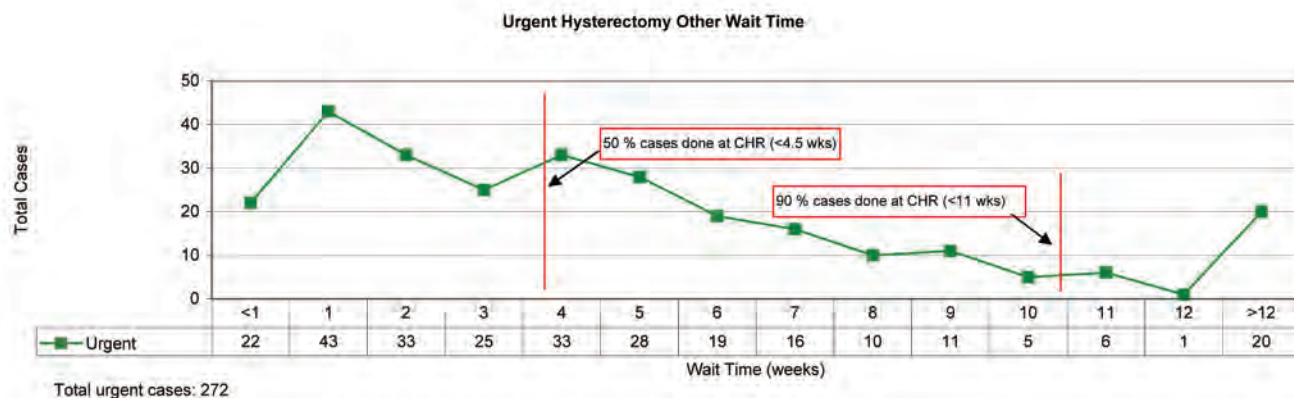
Elective Hip Arthroplasty Wait Time
2008/04/01 to 2009/03/31



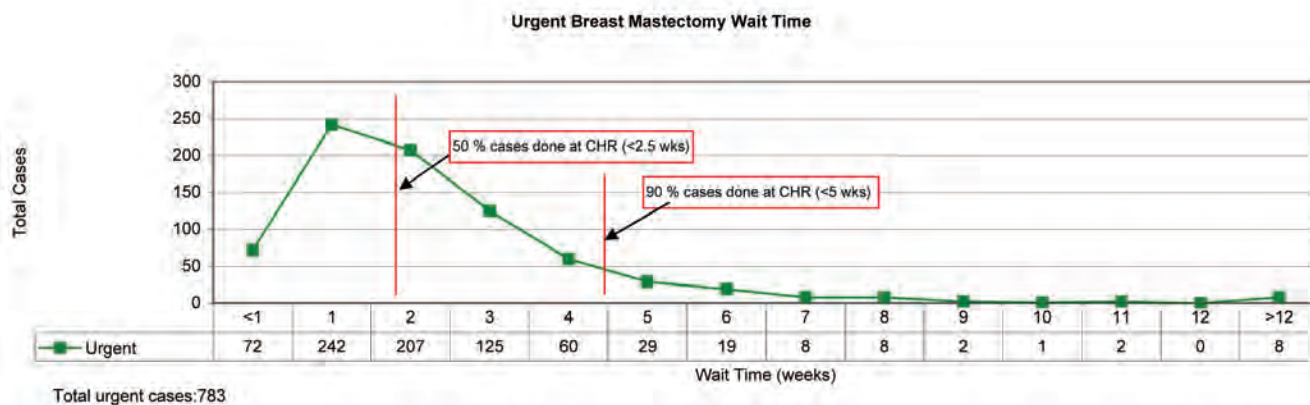
Urgent Hip Arthroplasty Wait Time
2008/04/01 to 2009/03/31



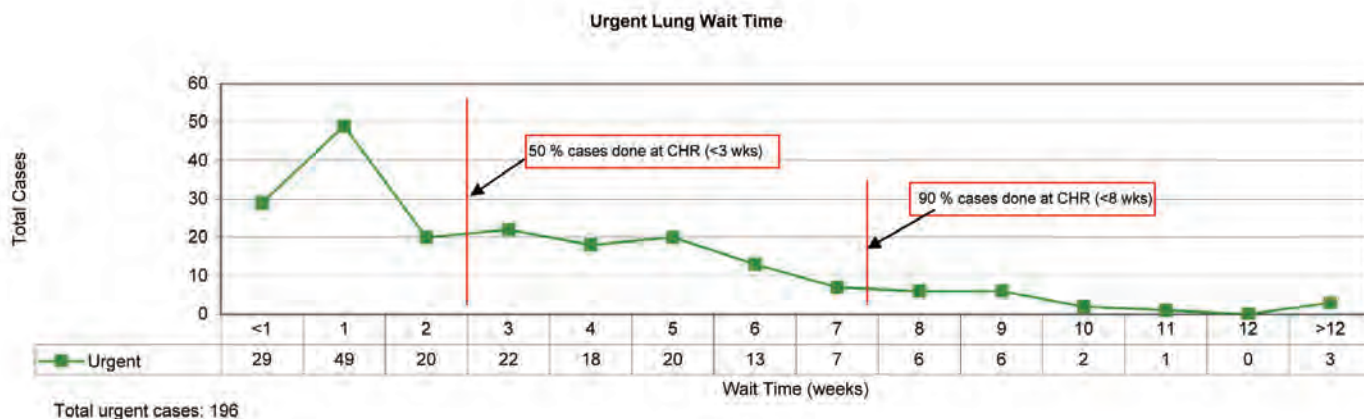
Urgent Hysterectomy Wait Time 2008/04/01 to 2009/03/31



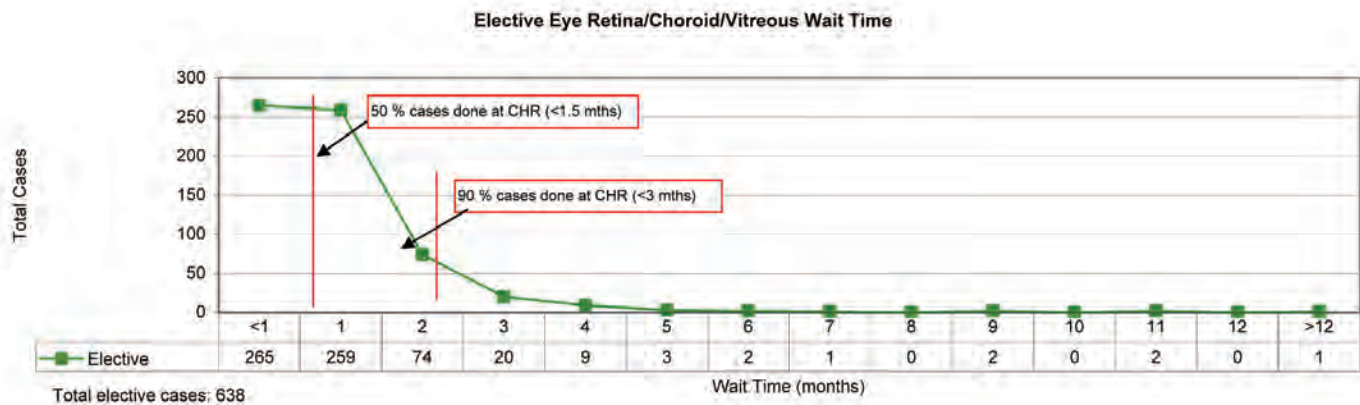
Urgent Breast Mastectomy Wait Time 2008/04/01 to 2009/03/31



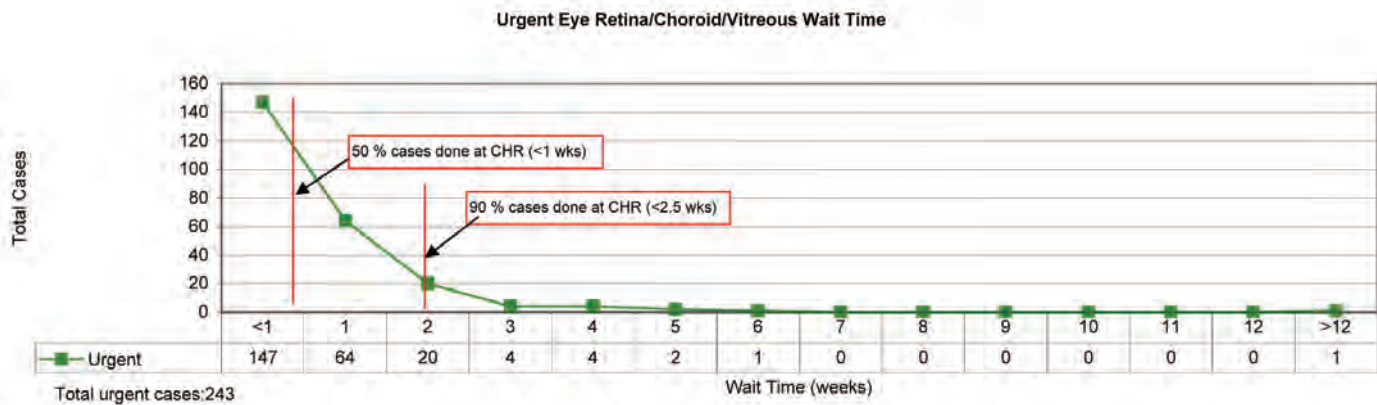
Urgent Lung Wait Time 2008/04/01 to 2009/03/31



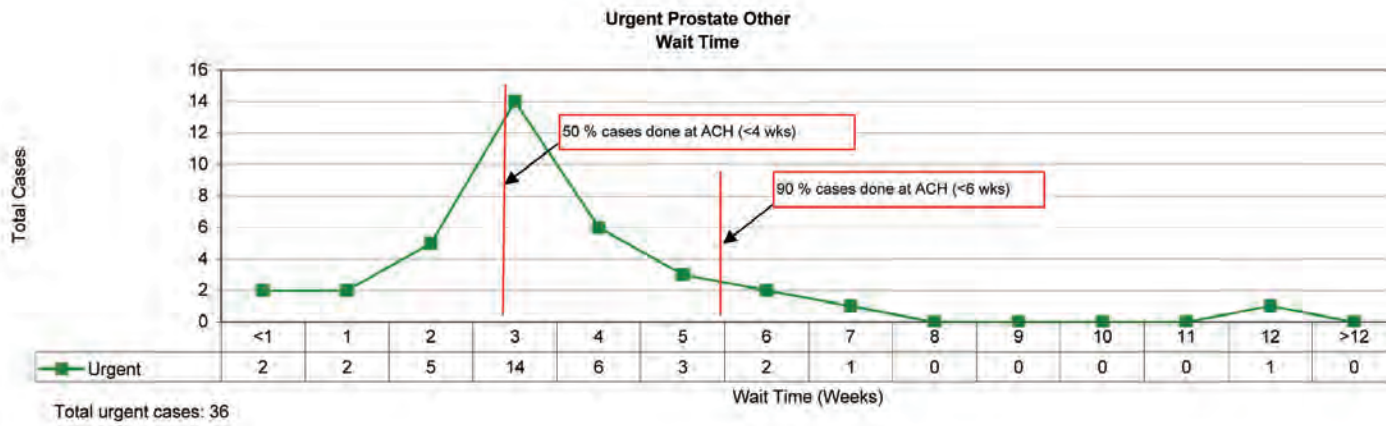
Elective Eye Retina/Choroid/Vitreous Wait Time
2008/04/01 to 2009/03/31



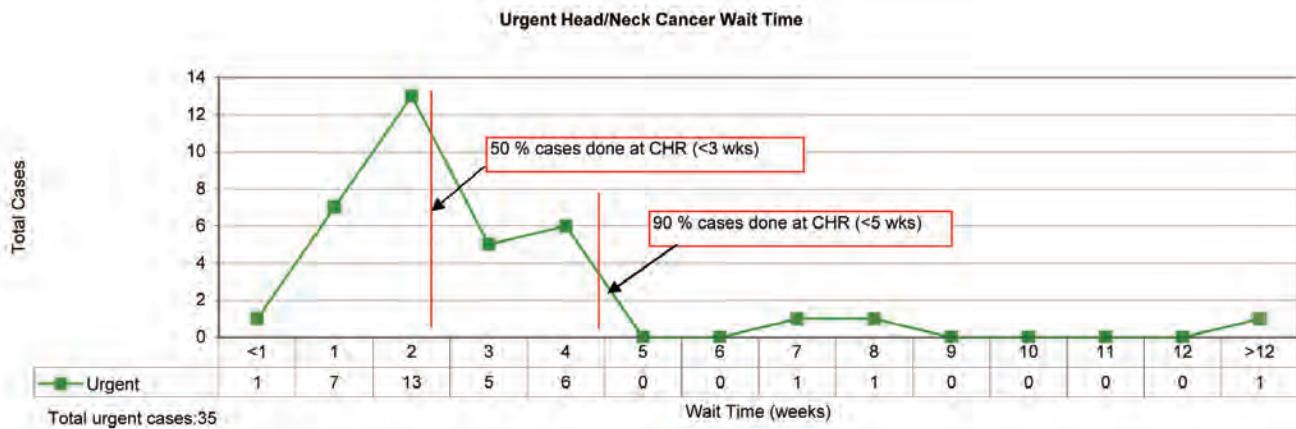
Urgent Eye Retina/Choroid/Vitreous Wait Time
2008/04/01 to 2009/03/31



Urgent Prostate Wait Time 2008/04/01 to 2009/03/31



Urgent Head/Neck Cancer Wait Time 2008/04/01 to 2009/03/31



2.3 McKesson OR Benchmarks by Site for April 2008 March 2009

ORBC Dashboards by Site for 12 months up to: March 31, 2009

NOTE: Same Day Add-On Weekdays and % First Case On-Time or Early +/- 5 data for March 2009 is missing due to a data issue.

ACH OR Benchmarks Collaborative		Freestanding Children's: 3 Comparators in Canada 3 Comparators All Subscribers		
Indicator	Actual	Internal Targets	Median Canada Only	75th Percentile All Subscribers
% First Case On-Time or Early +/- 5	49.9%	60.00%	66.3%	68.1%
Average Turnover Minutes	13.8	15.0	20.0	14.5
% Utilized 7am-3pm	91%	85.0%	90.6%	91.0%
% Utilized 3pm-5pm	90%	85.0%	90.2%	102.6%
% Utilized 5pm-7pm	106%	85.0%	80.2%	105.8%
% Utilized 7pm-11pm	48%	70.0%	46.2%	47.8%
% Same Day Add-On Weekdays	21.5%	10.0%	21.5%	7.1%

FMC OR Benchmarks Collaborative		Short Term Acute Care/Academic: 4 Comparators in Canada 23 Comparators All Subscribers		
Indicator	Actual	Internal Targets	Median Canada Only	75th Percentile All Subscribers
% First Case On-Time or Early +/- 5	47.7%	60.0%	74.4%	73.8%
Average Turnover Minutes	25.1	22.0	24.5	25.0
% Utilized 7am-3pm	92%	85.0%	95.0%	91.4%
% Utilized 3pm-5pm	95%	85.0%	109.8%	96.0%
% Utilized 5pm-7pm	120%	85.0%	108.9%	91.6%
% Utilized 7pm-11pm	104%	70.0%	74.0%	76.0%
% Same Day Add-On Weekdays	28.7%	10.0%	17.8%	9.4%

PLC OR Benchmarks Collaborative		Short Term Acute Care: 35 Comparators in Canada 93 Comparators All Subscribers		
Indicator	Actual	Internal Targets	Median Canada Only	75th Percentile All Subscribers
% First Case On-Time or Early +/- 5	42.9%	60.0%	70.3%	81.4%
Average Turnover Minutes	21.4	16.0	17.0	18.0
% Utilized 7am-3pm	94%	85.0%	94.5%	94.2%
% Utilized 3pm-5pm	96%	85.0%	95.9%	96.4%
% Utilized 5pm-7pm	100%	85.0%	82.4%	91.0%
% Utilized 7pm-11pm	64%	70.0%	64.6%	71.3%
% Same Day Add-On Weekdays	24.1%	10.0%	12.6%	9.9%

RGH OR Benchmarks Collaborative		Short Term Acute Care: 35 Comparators in Canada 93 Comparators All Subscribers		
Indicator	Actual	Internal Targets	Median Canada Only	75th Percentile All Subscribers
% First Case On-Time or Early +/- 5	38.1%	60.0%	70.3%	81.4%
Average Turnover Minutes	17.7	16.0	17.0	18.0
% Utilized 7am-3pm	91%	85.0%	94.5%	94.2%
% Utilized 3pm-5pm	85%	85.0%	95.9%	96.4%
% Utilized 5pm-7pm	82%	85.0%	82.4%	91.0%
% Utilized 7pm-11pm	66%	70.0%	64.6%	71.3%
% Same Day Add-On Weekdays	30.1%	10.0%	12.6%	9.9%

APPENDIX 3: RESEARCH FROM WITHIN THE DEPARTMENT

3.1 PEER REVIEWED PUBLICATIONS FOR THE CALENDAR YEAR 2008

DIVISION OF DENTISTRY AND ORAL HEALTH

1. Kopycka-Kedzierawski D, **Bell C**, Billings R. Prevalence of Dental Caries in Early Head start Children as Diagnosed using Teledentistry. *Pediatric Dentistry*. 2008. 30(4): 329 – 33.

DIVISION OF GENERAL SURGERY

1. Al-Hamoudi WK, **Pasioka JL**, Urbanski SJ, Lee SS. Hepatic nodular regenerative hyperplasia in a patient with advanced carcinoid tumor. *Eur J Gastroenterol Hepatol (England)*. 2009. Epub Mar 21 2009.
2. Ball CG, **Kirkpatrick AW**, Feliciano DV, Reznick R, McSwain NE. Surgeons and astronauts: so close, yet so far apart. *Canadian Journal of Surgery*. 2008. 51(4): 247-250.
3. Ball CG, **Kirkpatrick AW**, McBeth P. The secondary abdominal compartment syndrome: not just another post-traumatic complication. *Canadian Journal of Surgery*. 2008. 51(5): 399-405.
4. Ball CG, Ranson MK, Rodriguez-Galvez M, **Lall R**, **Kirkpatrick AW**. Sonographic depiction of posttraumatic alveolar-interstitial disease: the hand-held diagnosis of a pulmonary contusion. *Journal of Trauma*. 2009. 66(3): 962.
5. Barabas A, Cole CD, Barabas AD, Bahlis NJ, **Lafreniere R**. New vaccination technology for endogenous antigen-derived ailments. *IDrugs*. 2008. 11(2): 111-115.
6. **Bathe OF**, Ernst S, **Sutherland FR**, **Dixon E**, Butts C, Bigam D, Holland D, Porter GA, Koppel J, Dowden S. A phase II experience with neoadjuvant irinotecan (CPT-11), 5-fluorouracil (5-FU) and leucovorin (LV) for colorectal liver metastases. *BMC Cancer*. 2009. 9: 156.
7. Bawahab M, **Mitchell P**, **Church N**, **Debru E**. Management of acute paraesophageal hernia. *Surgical Endoscopy*. 2009. 23(2): 255-259.
8. Chambers AJ, Magi E, **Temple WJ**. Abdominal wall reconstruction utilizing posterior rectus sheath fascia: a spare part for all reasons. *J Surg Oncol (United States)*. 2009. 99(5): 311-313.
9. Chambers AJ, **Pasioka JL**, **Dixon E**, Rorstad O. The palliative benefit of aggressive surgical intervention for both hepatic and mesenteric metastases from neuroendocrine tumors. *Surgery*. 2008. 144(4): 645-51; discussion 651-653.
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DEPARTMENT OF SURGERY

ANNUAL REPORT 2008

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

–ARISTOTLE