

DEPARTMENT OF MEDICINE

ANNUAL REPORT

April 1, 2011 - March 31, 2012



OUR VISION

“Building the medical network of the 21st century, a network without walls, without boundaries, without limits to quality patient care, research and education”

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EXECUTIVE SUMMARY

During the fiscal year 2011-2012 the Department of Medicine (DOM) has embarked on a number of changes. Dr. Sylvain Coderre has been appointed as Vice Chair of Education. The Section of Rheumatology is planning to move the majority of its clinics to the Richmond Road Diagnostic and Treatment Centre (RRDTC). Strategic Clinical Networks (SCN) have a number of leaders from the Department of Medicine, notably Dr. Alun Edwards who was appointed the Director of the Endocrinology, Metabolism and Nutrition SCN. Physician recruitment for South Health Campus has commenced after completion of the workforce planning. The Department of Medicine is planning its transition to the Provincial Academic Alternate Relationship Plan (PAARP) in 2013. The Department of Medicine has introduced a number of changes to its administrative structure and focused on quality of care, safety and access in all its clinical sections. The Department has a strong focus on patient centred care as well as providing care for special populations. Scholarly activities were particularly significant over this fiscal year with a real focus on translational science.

Recruitment and retention

Over this fiscal year 22 new members were recruited to the Department of Medicine. In addition, the Department also recruited Dr. Debra Marshall to the Arthur JE Child Chair in Rheumatology Research. Dr. David Hogan renewed the Brenda Strafford Endowed Chair. Dr. Brenda Hemmelgarn was awarded the Roy and Vi Baay Chair for Kidney Disease Research. Dr. Norm Campbell renewed his CIHR Canadian Chair for hypertension prevention and control.

Clinical and Administration

Dr. Mark Swain was appointed as the Chief for the Section of Gastroenterology. Dr. Stefan Mustata was appointed the Site Chief for Department of Medicine at the Rockyview General Hospital. Dr. Greg Kline was appointed Interim Chief for the Section of Endocrinology. South Health Campus Site Chiefs have been appointed and these include Dr. Ralph Hawkins for General Internal Medicine, Dr. Charlene Fell for Respiratory Medicine and Dr. Alex Aspinall for Gastroenterology. Administrative appointments include the recruitment of Rhianna Hibberd as the AARP manager and plan for appointment of a Physician Recruitment Coordinator.

The Department of Medicine admitted over 9000 patients in the 2011-12 fiscal year. The average length of stay decreased from 10.9 to 10 days. Over this period, the DOM members provided over 15,000 inpatient consults while the Central Access and Triage handled approximately 34,070 outpatients.

The Sections of Endocrinology and Dermatology were successfully re-located to the Richmond Road Diagnostic and Treatment Centre as well as General Internal Medicine Outpatient clinics. This provided additional space and infrastructure facilities that were beneficial to patient access and patient care quality. Planning is underway to relocate other Sections to the RRDTC in 2012, including Rheumatology. This will bring several complementary clinics in a multidisciplinary setting together at RRDTC.

The DOM has significant involvement in the care of vulnerable populations. These include diabetes clinics and General Internal Medicine clinics at Stoney Health Centre, CUPS Health Centre, Calgary Zone tuberculosis clinic, Alexandra Community Health Clinic, Elbow River Healing Lodge at Sheldon Shumir Health Centre and Southern Alberta Clinic for patients with HIV. This has been a significant deliverable for the Department's AARP.

A significant Quality Assurance/Quality Improvement (QA/QI) initiative across the Department is being led by Dr. Jayna Holroyd-Leduc. She leads the Department of Medicine's QA/QI committee with representatives from all the sections. This initiative includes the following focus areas:

- Establishment of In Patient data report
- Medicine/DOM Data dashboard

- Examination and optimization of clinic flow within various Sections improve access (decreasing wait times) to specialists
- Collaborate with Seniors Health and Alberta Health Services (AHS) Calgary Zone operations on initiation of HELP (Hospital Elders Life Program) in order to help address issues around in hospital delirium management
- Ensuring Seniors are provided with patient-centered high quality care while in hospital
- Hospital length of stay and downstream effects on Emergency Department wait times
- Support of Divisional QI initiatives that focus in the areas of quality and access
- AHS Calgary Zone Elder Friendly Hospital Initiative. This includes the development and implementation of three evidence-informed key clinical practice strategies within Calgary-area hospitals.
- Provincial Hip Fracture Clinical Care Pathway, AHS Bone and Joint Strategic Clinical Network Trauma Working Group
- Resident-driven Project Targeted at Decreasing ED-LOS for Department of Medicine Patients
- Targeting Discharge Resources for Department of Medicine Inpatients
- A QI initiative to reduce the use of physical restraints among older hospitalized patients

A number of projects were accomplished over the fiscal year, these include:

- Introduction of dyspepsia/GERD nurse navigator in gastroenterology to improve access and quality of care
- Introduction of the Cerner Millennium for outpatient scheduling
- Direct to Procedure program in GI (reduced wait times)
- Successful FACT accreditation of the BMT program (Foundation for the Accreditation of Cellular Therapy)
- Successful accreditation of the Pulmonary Function testing labs
- The expansion and redevelopment of the Thoracic Oncology program (in partnership with the Cancer Care Strategic Clinical network)
- Introduction of new technologies into GI: the Confocal program / Thin scope clinics

South Health Campus

Workforce planning for the Department of Medicine at South Health Campus (SHC) has been completed with recruitment aligning with the vision of the SHC as an academic site. Educational research will focus on simulation and new models of learning. Research priorities will centre on pillars III and IV with health outcomes and health policy in special populations being a particular strength. In addition, specific integrated clinical and research programs will be sited at SHC in digestive motility and airways obstructive disease. Recruitment will also align with present or planned Strategic Clinical Networks.

All sections will provide on-site consultative services. Our In-Patient presence will start with the opening of a General Internal Medicine (GIM) Unit scheduled to open in February 2013. GIM is also partnering with the hospitalists to provide care to patients in the Rapid Access Unit. The Digestive Motility Centre has relocated to the SHC with next generation equipment.

Education and Research

The ARP members of the Department offered 7701.33 hours of UME and 13899.43 hours of PGME teachings. The Internal Medicine Residency Program has 85 residents in the “core” PGY 1 to 3 years. The Subspecialty Residency Programs within the DOM contribute an additional 65 residents soon to join the medical workforce as independent specialists. In total, the DOM educates 180 Residents in its own specialty programs. The Department also provides clinical education to Residents from other residency training programs and our undergraduate medical training program. In 2011, the Department’s Residency Programs included 16 Alberta International Medical Graduates (AIMG) whose residency level ranges from their first to fifth year of residency. The Internal Medicine clerkship program had 159 students in 2012.

Over the fiscal year, over 490 peer reviewed publications were authored by DOM members. Over the 2011-12 fiscal year nearly 50 million dollars of external funding was obtained by DOM members.

Recognition and Awards

The Department of Medicine had a very successful year in terms of recognition and awards. Dr. Brenda Hemmelgarn and Dr. Braden Manns received the highly prestigious AHS President's Excellence Award in Research for their leadership with the Interdisciplinary Chronic Disease Collaboration (ICDC). Dr. Jayna Holroyd-Leduc was a finalist in the Quality and Safety category for her work with the Hip Fracture Delirium Prevention Team. Dr. Jane Lemaire was also a finalist in the workforce, Health and Safety Category for her work in Physician Health and Wellness.

Dr. Chris Mody was inducted into the Canadian Academy of Health Sciences. Dr. Paul Beck received the Faculty of Medicine Watanabe award for excellence in research. Dr. Beck also received the American Gastroenterology Association Mentorship award. Dr. Marvin Fritzler received the CIHR-CMAJ award for top achievements in health research. Dr. John Conly received the Dr. John M. Embil Mentorship award in Infectious Diseases. Dr. Tom Enta was the inaugural recipient of the Dr. Tom Enta Award for Clinical Excellence in the Department of Medicine in the Calgary Community setting. Dr. Karen Rimmer received the Dr. Howard McEwen Award for Clinical Excellence at the Peter Lougheed Centre. Dr. Bob Cowie received the Dr. John Dawson Award for Clinical Excellence at the Foothills Medical Centre. Dr. Martin Cole received the Dr. Terry Groves Award for Clinical Excellence at the Rockyview General Hospital. Dr. Ray Lewkonja received the Professionalism Award. The Dr. John M. Conly Innovation Award was presented to the Siksika Outreach Program and the Quality Improvement and Patient Safety award went to The Basal Bolus Insulin Therapy (BBIT) Team.

The Department would also like to acknowledge Drs. Paul Beck and Sylvain Coderre for their promotions to Full Professor and to Dr. Gil Kaplan, who was promoted to Associate Professor. Other promotions include Drs. Lyn Savoie and Peter Duggan, who were promoted to Clinical Associate Professor.

Department of Medicine Communications

Department of Medicine has revamped its website which provides up to date information about events, deadlines, educational programs, member information, recognition and awards and other useful information for its members. The Department hosted Meet the Department meetings at Foothills Medical Centre and Peter Loughheed Centre at which Dr. Ed McCauley spoke about the University of Calgary research vision and Dr. Tom Noseworthy spoke about Strategic Clinical Networks. Further Meet the Departments events are planned at all four sites. Interdisciplinary rounds were held between Rheumatology and Gastroenterology.

Future Vision and plans

The Department of Medicine held its Annual Retreat under Dr. Subrata Ghosh in December 2011 to formalize its strategic and operational plans for the next 1 year, 3 years and 5 years. The Department has also conducted a survey of its members to identify priorities, strengths and weaknesses. The DOM will develop two important programs via its office – Office for the Care of Vulnerable Populations and Office for Patient Centred Care in alignment with the ZCMO office and its programs. A strong focus over the next year will be on QA/QI and access, projects to reduce ED length of stay and discharge planning to reduce hospital length of stay, implementation of plan for further development of DOM presence at RRDTTC site, planning and initiation of the SHC site including physician workforce recruitment, further linkages with PCNs via nurse navigators and innovative access programs to improve patient access, manage demand and referral, reduction of length of stay via proactive discharge planning, improved accountability of physician ISAs, involvement of the DOM in the Province-wide AARP planning and support of clinician scientists in the post-AHFMR era. It is anticipated that the workforce will have a modest growth at best and optimization of workforce through renewal will be essential.

DEPARTMENT OF MEDICINE – STRUCTURE AND ORGANIZATION

April 1, 2011 to March 31, 2012

Department Head	Dr. Subrata Ghosh
Deputy Head	Dr. C. Maria Bacchus

Site Chiefs

Foothills Medical Centre	Dr. C. Maria Bacchus
Peter Lougheed Centre	Dr. Ian Scott
Rockyview General Hospital	Dr. Stefan Mustata

Section Chiefs

Dermatology	Dr. Richard Haber
Endocrinology & Metabolism (Interim)	Dr. Greg Kline
Gastroenterology	Dr. Mark Swain
General Internal Medicine	Dr. Kelly Zarnke
Geriatric Medicine	Dr. Karen Fruetel
Hematology & Hematological Malignancies	Dr. Douglas Stewart
Infectious Diseases	Dr. Donna Holton
Nephrology	Dr. Nairne Scott-Douglas
Respiratory Medicine	Dr. Christopher Mody
Rheumatology	Dr. Dianne Mosher

Education Directors

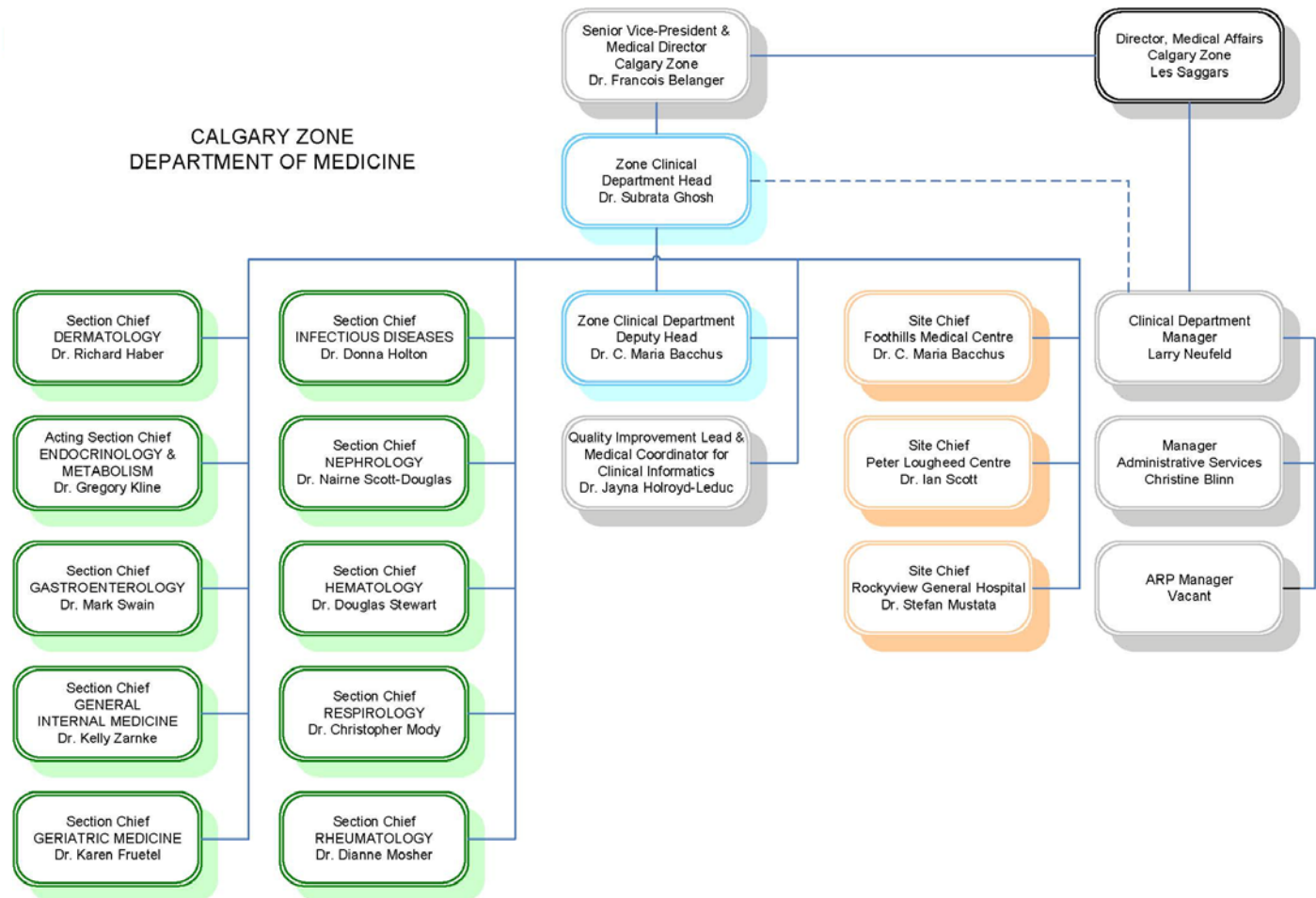
PGME Director	Dr. Jeffrey Schaefer
Clerkship Director	Dr. Fiona Dunne
CME Director	Dr. David Lau (April 2011- July 2011) Dr. Subrata Ghosh (July 2011- present)

Quality

QI Lead	Dr. Jayna Holroyd-Leduc
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DEPARTMENT OF MEDICINE – ORGANIZATION CHART

April 1, 2011 to March 31, 2012



Internal Medicine Residency Training Program – Annual Report April 1, 2011 to March 31, 2012

The Internal Medicine Residency Program (IMRP) is the second largest Post-Graduate training program in the Faculty of Medicine and the largest of the Specialty Programs. The IMRP represents the 'core' training program that is 3 years in duration. After their third year of training, residents undertake either a fourth internal medicine year or enter into a subspecialty of Internal Medicine or Critical Care Medicine. Of note, the Royal College has classified General Internal Medicine (GIM) as a specialty of Internal Medicine. Accordingly, GIM programs in Canada are preparing for accreditation by the Royal College of Physicians and Surgeons of Canada. An effect of this is that GIM programs must develop and provide 2 years of training which shall be undertaken after core residency.

Owing to maternity and medical leave and that some residents are 'off-cycle' the following resident numbers are approximate. During the 2011-2012 academic year there were 85 core internal medicine residents (R1 to R4). The majority of residents entering the Program will do so through the CaRMS Matching Service. Our Program receives approximately 260 applications for the 26 positions offered. Interviews are undertaken over 3 days. Approximately 55% of CaRMS entrants were from the University of Calgary medical school, in the year ahead approximately 45% will be from the University of Calgary. The remaining residents are weighted toward Western Canada, Central Canada, and the Maritimes. The Alberta International Medical Graduate Program accounts for 4 - 5 entrants per year. AIMG applicants come from throughout the world. In the years ahead, we anticipate a larger applicant pool from Canadians that have undertaken medical school outside of the country (so-called CSAs 'Canadians Studying Abroad'). Re-entry from primary care physicians already practicing in Alberta includes 1 individual per year. The Program does not offer training to 'VISA' students (those outside Canada who pay for training with the intention of returning home). The Department of Medicine has several accredited subspecialty programs that include approximately 65 residents. In addition to training internal medicine and subspecialty residents, the department provides considerable training to nearly all other departments within the faculty as well as visiting elective residents.

Clinical Care is the strength of our residency training programs. Residents are an integral and valuable part of the patient care experience at all Calgary acute care sites, Richmond Road Diagnostic and Treatment Centre; and at our distributed learning sites in Lethbridge, Grande Prairie, and Yellowknife. The 24/7 nature of resident training significantly increases access to care. Particularly noteworthy for 2011-12 is placement of Senior Medical Residents at the Rockyview General Hospital Sites 365 nights per year. This has been very well received by the Emergency Department and Medical Staff as well as junior learners at this site.

Patient safety remains a top priority. Decreasing the risks associated with procedures in Internal Medicine has been facilitated by training and evaluation using 'patient simulators'. Our Program has taken leadership in the area of resident assessment using objective criteria in a structured setting (Procedural OSCEs). We are fortunate to have recruited Dr. Irene Ma from the University of British Columbia who is leading this initiative. The addition of ultrasonography to the toolkit of the procedural internist has enhanced the element of safety and effectiveness. The Program has contracted with SAIT (Southern Alberta Institute of Technology) with a view to improve our understanding and skills with this technology. The Program now owns 5 high quality ultrasound machines that were purchased from a Canadian vendor.

Simulation based training is another Program priority. Dr. Ghazwan Altabbaa is leading high fidelity simulation training out of our Rockyview site. In the last two years, the Program has invested over \$300,000 in capital equipment for simulation based training. These include SimMan and Harvey (the former piqued the interest during a recent Royal visit). Simulation based training exposes residents to situations that may be infrequently encountered and highly stressful but in a safe environment.

The Program is active at all acute care sites and looks forward to participating at the South Health Campus. An in-patient medical teaching unit is expected for the Fall of 2013. The Program's association with the Ward of the 21st Century at the Foothills Medical Centre has been rewarding. W21C has enjoyed a significant national and international interest.

Resident Well-being initiatives include successful elimination of long duty hours for the Senior Medical Resident Role, and the development of an innovative and high quality Mentorship Program that is set to launch in July 2012. The Program had anticipated the need to address the problem of long duty hours two years ago. We had successfully executed and analyzed a pilot program of night call within the last academic year and have been in a position to share our

findings and success with other Programs locally and nationally. We look forward to introducing this at the Junior Resident level and have already completed a pilot program.

Research activity remains strong within the residency Program. The 24th Annual Internal Medicine Resident Research Day was held on April 24, 2012. Dr. Chaim Bell from the University of Toronto was our keynote speaker and guest judge. Dr. Bell is an international leader in quality assurance, health outcomes research, and is an outstanding medical educator. Eleven presentations were awarded best in class with several going on to compete at the Professors of Medicine / Canadian Society of Internal Medicine Resident Research competitions. Last year, Dr. Ali Walzak (PGY-2) won 3rd place at the national level for her presentation related to procedural training. Dr. Jayna Holroyd-Leduc and Dr. Sophia Ahmed (Assistant Program Directors - Research) are congratulated for producing another high quality research event.

Excellence in Medical Education was acknowledged at our Annual Fall Award dinner held November 2011.

Clerkship Faculty Teaching Awards: Ghazwan Altabbaa, Marcy Mintz, Luc Berthiaume

Clerkship Resident Teaching Awards: Philippe Couillard, David Ward, Sarah Chapelsky

Resident Teaching Awards: Scot Dowden (Ectopic), Louis Girard (Rookie), Gil Kaplan (Research), Kristin Fraser (Work Life Balance), Alex Leung (Silver Finger), Mike Fisher (Silver Tongue), Andre Ferland (Repeat Offender), and Maria Bacchus (Golden Bull).

Among the major initiatives for 2012 include operation of our newly developed Mentorship Program, Junior Night Call intended to eliminate long duty hours at this level of training, preparation for activity at the South Health Campus, acquisition of additional simulation equipment with our recently announced successful bid for funding, completion of an internal review, and Calgary hosting of the Canadian Association of Program Administrators and Directors Annual Meeting for the first time in the history of this organization.

The Program is appreciative of the tremendous support received by preceptors throughout the Faculty of Medicine, the Post-Graduate Medical Education Office, the Undergraduate Medical Education Office, and the many talented and dedicated administrators whom without which our Program could not function.

Jeffrey P Schaefer MSc MD FRCPC FACP is the incumbent Program Director. He brings a record of excellence in teaching and medical administration to the program. Drs. Ghazwan Altabbaa, Jennifer Bugar, and Marcy Mintz are the incumbent Associate Program Directors. Drs. Jayna-Holroyd Leduc and Sophia Ahmed are incumbent Assistant Program Directors - Research. Dr. Jennifer Williams is the incumbent Assistant Program Director - Curriculum. Dr. Irene Ma is the Assistant Program Director - Procedural Training. Dr. Altabbaa leads simulation training at Rockyview General Hospital, Dr. Irene Ma leads simulation training at Foothills Medical Centre and Dr. Mike Fisher leads simulation training at the Peter Lougheed Centre. Ms. Jennifer Glow, Ms. Charlene Brass, Ms. Tana McPhee, and Ms. Sherry Schultz administer the IMRP in cooperation with other programs and sites.

Rotation in Health of Vulnerable Populations (HVP) - Annual Report April 1, 2011 to March 31, 2012

The Health of Special Populations rotation started in July 2010 as an elective experience within the Internal Medicine Residency Program curriculum. In 2011 the name was changed to “Health of Vulnerable Populations” (HVP) to better describe the focus. A more complete description of the rotation is available as the “Terms of Reference” or “Objectives” of the rotation presented in Royal College of Physicians and Surgeons format. The HVP rotation is predominantly an elective longitudinal rotation of four weeks duration which can be taken in any of the three core years of Residency. In addition HVP offers a supplemental horizontal elective experience and a more substantial project which can be taken during personal academic time such as on Academic Half Day, a research elective block, and/or during weekly horizontal academic time with permission of the primary rotation. The primary objective of the HVP rotation is to focus on the health of peoples who encounter challenges in accessing health care in the traditional Canadian Medical Model. For the purposes of this rotation the following peoples are emphasized: (1) Aboriginal (Indigenous) First Nations peoples, (2) Refugees from other countries, (3) Recent immigrants from developing countries with inadequate health care resources, (4) The homeless (predominately urban but also in smaller communities), (5) Persons living in poverty.

The experiences planned for the rotation are attendance at structured clinics supervised by a member of the Department of Medicine, directed reading on this topic, and conducting a mini-project on the subject of HVP. Opportunities for clinics included the following:

Diabetes at the Stoney Health Centre (SHC) (Dr. Rorstad). The SHC is located in Morley, AB, on the Stoney Reservation, about 50 km west of Calgary

General Internal Medicine at SHC (Dr. Pin Li)

Hepatitis clinic at the Calgary Urban Project Society (CUPS) clinic (Drs. McPhail and Dahlke).

Calgary Zone tuberculosis clinic, Sunridge (Drs. Cowie, Fisher, Jarand and colleagues)

Alexandra Community Health Clinic (Dr. Bassyouni)

Elbow River Healing Lodge in the Sheldon Chumir Health Centre

Southern Alberta Clinic for patients with HIV (Drs. Parkins, Janvier, Meatherall and Gilmour).

The academic year July 2011 to June 2012 was the second year the HVP rotation was offered. During year two, eleven core (R1 to R3) Internal Medicine residents took the four week rotation. In addition, two specialty residents in Endocrinology and Metabolism attended the diabetes clinics held at the SHC when no core Internal Medicine resident was available to attend. The HVP rotation lends itself particularly well to having residents learn the RCPSC competencies as applied to underprivileged populations: Medical expert, communicator, collaborator, manager, health advocate, scholar, and professional, especially conduct and attitudes toward disadvantaged peoples.

The mini-project during the HVP rotation is a special opportunity for self-directed learning and preparation of a short teaching document which will benefit future residents in taking the rotation. Examples of mini-projects from the second year of the rotation (2011-2012) are:

Dr. Stacey Hall: History of tuberculosis in aboriginal people.

Dr. Zahra Goodarzi: There is more than just central triage. The availability of services in the Calgary Health Region for diverse populations.

Dr. Kate Skolnik: Optimizing tuberculosis treatment in Canadian First Nations.

Dr. Linas Kumeliauskas: Challenges for the recognition, diagnosis and treatment of dementia in the Canadian aboriginal population.

Dr. Caitlin Sinclair: Diabetes prevention and control in aboriginal populations.

Dr. Meghan Leitch: Diabetes in aboriginal peoples.

Dr. Andreea Ionescu: Tuberculosis in newcomers. Facts and data.

These mini-projects lend themselves to becoming longer term reviews or research projects during residency. In addition, the rotation plans to enter these mini-projects on the Residency Program website for the education of residents and other readers interested in the health of vulnerable populations.

Finally, the Health of Vulnerable Populations rotation should be regarded as a work in progress. A major challenge for the coming years is recruiting more clinical experiences during the four week block. Barriers include workforce shortage of internists in some areas. The numerous organizations which provide care for vulnerable populations present

challenges of jurisdiction and organization. Discussions of opportunities are ongoing with the organizations which provide care to vulnerable populations.

Calgary Urban Project Society (CUPS) – Annual Report April 1, 2011 to March 31, 2012

EXPECTED OUTCOMES

To improve access to specialist care for marginalized patients by addressing a gap in services to this population and to provide “hands on” advice and education for CUPS clinicians.

VISITS TO DATE

Dr. Liam Martin (Rheumatology): 2 visits with 8 patients seen. There were nil “no shows” for this physician.

Dr. Lynne Robertson (Dermatology): 5 visits with 18 patients seen. There were 5 “no shows” for this physician.

Dr. Eliana Castillo, (Internal Medicine for high risk Obstetrics): 7 visits with 30 patients seen. There were 10 “no shows” for this clinician.

DISCUSSION

The addition of various specialists to CUPS Health and Education Centre has been extremely valuable.

Firstly, patients have been seen in a very **timely manner**. For people who live their lives on the street or who are marginalized, wait lists of any length generally mean that the patient becomes frustrated and distracted by other activities of life and we then note that many appointments are simply forgotten about.

Secondly, CUPS Health Centre is known to the downtown homeless and poor. About 130 new patients are seen every month and about one third of these patients engage and require some sort of referral. The Centre is a **comfortable, non threatening place** to visit and patients keep their appointments because the location is convenient for them. Having specialists come to CUPS allows our patients to come to our site, and again this improves the no show rate and overall ability to treat and care for patients.

CUPS patients are very **complex**, most have a number of concurrent diagnosis’ that include mental health and addiction issues. The clinicians at CUPS have commented on the importance of onsite collaboration with the visiting specialists. This has improved patient care as some follow up appointments, problem solving and introduction of other CUPS services (eg, mental health) can be completed the same day as the visit: that is, there is no waiting time for reports to return with implementation after the receipt of the report. The visiting specialists have taken time to contact referring clinicians; this establishes a certain collegiality which allows for easier access for new problems that require solving.

Learning through discussion is also benefiting clinicians as some unusual problems have presented themselves and the staff have been able to expedite solutions relatively quickly.

In the summer of 2011, a decision was made to discontinue dermatologist services at CUPS Health Centre. This was due to the insufficient numbers of patient appointments at the facility. Patients requiring a consultation with a dermatologist are currently referred to Dr. Robertson, where they are seen at her clinic. We have not enquired how high her “no show” rate for CUPS’ patients is. Having had Dr. Robertson previously provide services at CUPS Health Centre has forged a comfortable working relationship for the CUPS clinicians with her and it makes it easier for staff to connect with her clinic and approach her with specific concerns. Despite the decision to discontinue dermatology services at the CUPS facility, the experience of having Dr. Robertson onsite was extremely valuable and in 2012, the merits of initiating on site dermatology services at a lower than monthly frequency will be discussed with Dr. Robertson.

We are extremely pleased with the operation of the visiting specialist program and hope that when CUPS relocates to its new site in August of 2012 that we will be able to discuss the option of other specialty physicians providing their services at the CUPS facility.

We would like to thank all the specialists who are taking the time to provide their services at CUPS Health Centre and we look forward to continue working with all of them.

Internal Medicine Clerkship – Annual Report April 1, 2011 to March 31, 2012

Class Size Summary:

CLERKSHIP SUMMARY	Class of 2012	Class of 2013 (in progress)	Class of 2014
Total # students with Calgary Clerkship	159 Block 1: 42 Block 2: 40 Block 3: 39 Block 4: 38	171 Block 1: 40 Block 2: 38 Block 3: 39 Block 4: 54	181 Block 1: 41 Block 2: 40 Block 3: 41 Block 4: 59
Students completing rural clerkship (RICC)*	17 (rolled into Blocks 3 and 4)	17 (rolled into Block 4)	18 (rolled into Block 4)
Total graduated May/Nov**	180 (planned)	171 (planned)	181 (planned)
Time away for National Interview period (CaRMS)	Jan 30 - Feb 12, 2012 ***there will be NO clerks available during this time	Jan 28 – Feb 10, 2013 ***there will be NO clerks available during this time	Feb 3-Feb 16, 2014 ***there will be NO clerks available during this time
Christmas Holiday	Dec 18, 2011 – Jan 1, 2012	Dec 17, 2012 – Jan 1, 2013	Dec 23, 2013-Jan 5, 2014
Additional information	Clerkship ENDS April 2012	Clerkship Begins April 2012	Mandatory clerkship starts April 15, 2012

**RICC students complete the majority of their clerkship in the rural setting but return in block 4 to do MTU and selective rotations*

***predicted graduation class, LOA etc and remediation may alter final number*

The Internal Medicine Clerkship is 10 weeks long. The Medical Teaching Units (MTU) at all three sites consistently take students for their mandatory four-week rotations. Four to eight students are allocated to the MTU at each site, per 4 week block, and are distributed across two to three teams. The remaining 6 weeks the students rotate through some of the subspecialties of the Department of Medicine, Critical Care, Cardiology, or Neurology electives.

The Internal Medicine Clerkship functions well due to the dedicated work of the Clerkship Director (Dr. Fiona Dunne), Evaluations Coordinator (Dr. Vicky Parkins), and five educational assistants: Drs. Alex Aspinall, Paul MacEachern, Michaela Jordan, Jennifer Williams, and Susan Huan. We also have a larger group of dedicated clinician/teachers who participate in providing didactic sessions and bedside teaching sessions. There is a heavy emphasis on education. In addition to a twice weekly didactic curriculum covering common topics in Internal Medicine, we provide six 2-hour small group bedside teaching sessions for each clerk rotating through.

Section of Dermatology – Annual Report April 1, 2011 to March 31, 2012

The Section of Dermatology consisted of five full-time ARP members and twenty-one community-based dermatologists during the reporting period. Twenty-three members of the Section of Dermatology currently hold a University of Calgary academic appointment through the Department of Medicine.

CLINICAL

1. Dr. Régine Mydlarski ran specialty clinics in immunobullous disease and immunodermatology. These are tertiary referral clinics with complex patients receiving referrals from other Dermatologists, Rheumatologists and other allied specialists in Calgary, Western Canada, Central Canada, and parts of the United States. She continued to provide dermatologic assessment and treatment of high risk patients in her dermatology solid organ transplant clinic in conjunction with the Southern Alberta Transplant Program
2. Dr. Laurie Parsons ran three subspecialty patch tests clinic per week with referrals from Dermatologists throughout Calgary. She also participated in three multi-disciplinary wound care clinics and one general dermatology clinic per week. She continued to be active in Telehealth, providing wound care Telehealth sessions.
3. Dr. Richard Haber ran two general dermatology clinics per week. He also conducted a pediatric dermatology clinic at the Alberta Children's Hospital (ACH) once weekly and ran Telehealth Dermatology consultation clinics to the Siksika first nation, Claresholm and High Level, Alberta, each clinic running once a month
4. Dr. Habib Kurwa ran a MOHS micrographically controlled Surgical Clinic to treat complex skin malignancies at the Richmond Road Diagnostic and Treatment Centre. He currently does four MOHS surgical clinics per week in addition to two surgical consultation clinics per week
5. Dr. Lynne Robertson ran six medical dermatology clinics per week as well as running an out-reach dermatology clinic to the Alex once a month

RESEARCH

1. Dr. Mydlarski continued to conduct dermatologic basic science research. Her areas of expertise are autoimmune bullous diseases, connective tissue diseases and cutaneous skin cancer. The total funding she received from all sources was \$194,000.
2. Dr. Kurwa was involved in dermatologic basic science research in the area of cutaneous skin cancer. His total funding was \$36,000.
3. During the reporting period the Section published 21 peer-reviewed publications, 26 non-peer reviewed publications and 6 abstracts.

EDUCATION

1. Invited Lectures/Presentations:

The Section of Dermatology was very strong in medical education.

- a. The Section continued to run a very highly rated dermatology elective program for Internal Medicine residents with a resident in every block. They also supervised elective undergraduate medical students, clerks, family medicine residents and other medical residents (including medical genetics and pediatrics).
- b. The Section sponsored the Sixth Annual Day in Dermatology CME on October 15, 2011 and this event was attended by over 70 family physicians and approximately 20 final year family practice residents.
- c. Drs. Haber, Kurwa, Mydlarski, Parsons, Remington, Robertson, Woolner, and Zip lectured to the Undergraduate Medical Students in MDCN-360 (Course II). Dr. Parsons also lectured on "Common Pediatric Lesions" to University of Calgary Undergraduate Medical Students in Course VI on Nov 14, 2012.
- d. Dr. Derek Woolner presented Medical Grand Rounds on June 14, 2011 on "The Automatic and The Analytic: Approaching Bedside Diagnosis of Purpura".
- e. Dr. Michal Kalisiak presented Medical Grand Rounds on Nov 8, 2011 on "Vitamin D and the Skin".
- f. Dr. Andrei Metelitsa presented Medical Grand Rounds on Feb 14, 2012 on "Skin Cancer: Emerging Trends and Treatment Approaches".
- g. Dr. Robertson presented Obstetrics and Gynecology Grand Rounds in Calgary on "Vulvar Disease-A Dermatologist's Perspective" in May 2011.

- h. Dr. Haber was an invited speaker on “Update on Imiquimod and 5-Fluorouracil” at the 36th Family Practice Review and Update Course, Calgary, Alberta Nov. 24, 2011
- i. Dr. Haber was an invited speaker on “Cutaneous Reactions to Psychiatric Drugs” at the Update in Medicine for Psychiatrists, Banff, Alberta Sept 24, 2011
- j. Dr. Haber was a visiting professor and lecturer for the Kuwaiti Dermatologic Association in Kuwait City, Kuwait in April 2011.
- k. Dr. Mydlarski was an invited speaker for the Montreal Dermatology Society on Feb 16, 2012 and for La Societe de Dermatologie de Quebec on Feb 17, 2012.
- l. Dr. Parsons presented on the Complications of the Diabetic Foot in Regina, Saskatchewan at a Family Practice CME on March 19, 2011 and Winnipeg, Manitoba in May 2011.
- m. Dr. Parsons presented on “Name that Lesion” at a Family Practice Spring Conference CME in Calgary, Alberta on May 19, 2011.
- n. Dr. Parsons participated in the DRIVE program, a national level preparation course for final year dermatology residents throughout Canada in preparation for their Royal College fellowship examinations in February 2012.
- o. Dr. Robertson lectured at the Family Medicine Annual Spring Conference on Pot Pourri of Dermatology Cases in May 2011.
- p. Dr. Robertson lectured at the Current Obstetrical Management Course in Calgary on Management of Dermatoses of Pregnancy in May 2011.
- q. Dr. Kurwa was an invited speaker on Advances in Melanoma at the Calgary Therapeutics Course on March 15, 2012.
- r. Dr. Mydlarski presented 3 oral presentations and Dr. Haber presented 2 poster presentations at the 86th Canadian Dermatology Association Annual Meeting in Edmonton, Alberta in June 2011. Dr. Robertson lectured as a plenary speaker on Pyodermitis and Pyostomatitis Vegetans at the 86th Canadian Dermatology Association Annual Meeting in Edmonton, Alberta in June 2011.

2. Graduate Education:

- a. Dr. Régine Mydlarski was the module coordinator for IMM-3, Autoimmunity and Immunodeficiency (MDSC 639.03).
- b. One graduate student and one post doctoral student were trained in the Transitional Dermatology Lab under the supervision of Dr. Regine Mydlarski during the reporting period.

3. Public Service:

- a. Dr. Haber lectured on “Practical Skin Care for Calgarians” to 100 Encana employees on May 17, 2011.
- b. Drs. Haber, Parsons, Robertson, Kalisiak and Poelman participated in a public skin cancer screening clinic at the Eau Claire Centre in Calgary in June 10, 2011 as part of the Canadian Dermatology Association 23rd National Sun Awareness Week. Over 150 patients were screened for skin cancer.

ADMINISTRATION

1. Dr. Haber became the Chair of the Dermatology Specialty Committee of the Royal College of Physicians and Surgeons in July 2011. Dr. Haber is also the Prairie Representative on the Canadian Dermatology Association Executive Committee. He continued as the Medical Telehealth Advisor for the DOM. He served on the Medical Services Executive Council and completed his 6 year term on the ARP Management Committee in Sept 2011. He organized the Section of Dermatology Patient Viewing Rounds and chaired the accompanying Sectional Business Meetings.
2. Dr. Laurie Parsons continued in her respective roles as the Medical Lead – Wound Care for Calgary, Coordinator of the Undergraduate Dermatology Teaching for MDCN-360, and Organizer of the Section of Dermatology Journal Club. In addition, she was a member of the EMIS User Working Group, Wound Advisory Committee and Best Practice Committee of the Department of Medicine. Nationally, she was the Chair of the National Dermatology Undergraduate Education Working Group, an appointment of the Canadian Professors of Dermatology, Canadian Dermatology Association. Dr. Parsons assumed the position of dermatology representative on the ARP Management Committee in Sept 2011. Dr. Parsons continued as the Chair of the Selection Committee for the University of Calgary Dermatology Residency Program.
3. Dr. Régine Mydlarski continued as the Program Director of the Dermatology Residency Program at the University of Calgary. She was the Medical Co-Director of the Medical Advisory Council of the Canadian Pemphigus and Pemphigoid Foundation. She was a member of the Advisory Board of the Skin Malignancy Working Group in Transplantation. Internationally, Dr. Mydlarski was a Medical Advisor for the Medical Advisory Council of the

International Pemphigus and Pemphigoid Foundation. She continued to be the Director of Immunodermatology for the Section of Dermatology and was the Director of Transplant Dermatology for the Southern Alberta Transplant Program.

4. Dr. Lynne Robertson continued as the Chair of Evaluations for the University of Calgary Dermatology Residency Program. She was also the President of the Alberta Society for Dermatologists in 2011 and 2012.
5. Dr. Habib Kurwa continued as the Surgical Chair for the University of Calgary Dermatology Residency Program. He also assumed the position of Section of Dermatology representative to the QA/QI committee of the Department of Medicine at the University of Calgary

CHALLENGES AND FUTURE DIRECTION

1. The full-time ARP members of the Section of Dermatology relocated to their new offices at the Richmond Road Diagnostic and Treatment Centre on July 1, 2011. Having a centralized and dedicated space for the full-time members of the Section has been a tremendous asset. However, space issues for expansion of dermatology services there, remains a major challenge. We currently operate out of only 4 examination rooms for 4 dermatologists because of housekeeping fiscal concerns. Fortunately, 2 more examination rooms are scheduled to open as of April 2012. (These are now operational).
2. The Section participated in our third CaRMS interviews in January 2012 and matched three new residents to our Program to begin July 1, 2012. This will increase our total number of residents to nine for the year 2012-2013.
3. The phototherapy equipment at Richmond Road Diagnostic and Treatment Centre is not being used, again because of lack of necessary housekeeping funding. This has deprived the public from an important and necessary therapeutic treatment and this situation needs to be remedied on an urgent basis. Efforts to get funding for the Phototherapy Centre at RRDTC continue to be pursued.
4. The Section of Dermatology urgently needs to recruit a full-time pediatric dermatologist for the Alberta Children's Hospital as a mandatory 3 month rotation is a requirement for our dermatology residents under the Royal College Specialty Training Requirements. Dr. Haber has been in talks with the Head of Pediatrics, Dr. James Kellner regarding this urgency. Dr. Francois Belanger approved a GFT position at ACH for a pediatric dermatologist at the University of Calgary in Jan 2012. We are hoping to have a full Search & Selection Committee operational as of Sept 2012 with plans to have the full time pediatric dermatologist start to practice at ACH by July 1, 2013.

Section of Endocrinology and Metabolism - Annual Report April 1, 2011 to March 31, 2012

The Section of Endocrinology presently consists of 19 faculty members who maintain offices in Richmond Road Diagnostic and Treatment Centre, Health Sciences Centre FMC and in the Associate Clinic Gulf Canada Square. The majority of the clinical work is conducted in the Endocrine Clinics at RRDTTC, in proximity to the Diabetes, Hypertension and Cholesterol Centre and the Osteoporosis Centre. The Section includes 5 Full/Clinical Professors, 6 Clinical/Associate Professors, 7 Clinical/Assistant Professors and 1 Clinical Scholar.

CLINICAL

- a) As a whole, clinical care comprised 52% of the Sectional time which approximates the work of 8.6 full time clinicians.
- b) The Section of endocrinology continues to provide both inpatient and outpatient consultative and chronic care in all areas of the specialty. In the past year, the Endocrinology Central Access and Triage received just under 6200 outpatient referrals, of which 83% were accepted and booked into a clinic appointment. This represents a 15% increase over last year and a 29% increase over 2009-2010. Of all urgent referrals, 78% were seen within the one week target range. Of all routine referrals, 93% were seen within the target frame of 26 weeks. These figures are all as good as or better than previous years and demonstrate the Section's concerted efforts to meet the community demand for endocrine services.
- c) The Section maintains and supervises the regional endocrinology testing unit under Dr. Bernard Corenblum where specialized metabolic testing is performed. The majority of such tests are done for endocrinology patients but the testing unit also supports some work by Nephrology and General Medicine. During the past fiscal year, the unit performed 300 specialized endocrine test protocols and provided over 250 additional patients with parenteral outpatient endocrine therapies.
- d) The Endocrinology Section maintains primary responsibility for the Diabetes, Hypertension and Cholesterol Centre (DHCC) under the direction of Dr. Julie McKeen. In the past year, the DHCC received over 5000 new patient referrals (separate from Central Access and Triage) and conducted over 21000 one-on-one patient care visits through the MDs and allied health workers. In addition, there were almost 7000 other patient visits with MD/RN to care for Diabetes in Pregnancy, under the direction of Dr. Lois Donovan.
- e) The Section provided clinical services in a wide diversity of settings. In addition to clinics for diabetes and hypertension, the Section staffs clinics for Diabetes in Pregnancy, General Endocrinology, Osteoporosis and Metabolic Bone Disease, Thyroid Cancer (TBCC), Neuroendocrine Tumor (TBCC), Solid Organ Transplant, Stem Cell Transplant and an Outreach Clinic on the Stoney Reserve run by Dr. Otto Rorstad.

RESEARCH

- a) As a whole, the Section spends 24% of its time in research pursuits, with protected research time equivalent to 4.0 full time researchers.
- b) The Section produced 53 peer reviewed publications, 2 non-peer reviewed publications, 31 peer-reviewed abstracts and 3 book chapters. The research efforts of Drs. Sigal and Hanley are particularly acknowledged for their Section-leading productivity as together they accounted for over 50% of all publications.
- c) Section members delivered 56 local academic presentations, 12 academic presentations at provincial meetings, 12 academic presentations at a national level and 9 invited addresses at international meetings.
- d) A total of 16 new projects were awarded research funding, joining the 35 other funded studies that were ongoing during the year.
- e) Dr. Lois Donovan has received the prestigious invitation to advise the US National Preventive Services Task Force on management of gestational diabetes.

EDUCATION

- a) As a whole, educational pursuits comprise just over 10% of the protected time of Section members, which is the equivalent of 1.8 full time teachers.
- b) The Section has trained 4 new endocrinologists in the past year: two of the trainees (Drs. Helmle and Saad) will be transitioning to probable positions at the South Health Campus in 2013 following their maternity leaves, one

trainee (Dr. McIlhargey) is leaving to take an academic post at Monash University in Melbourne, Australia and the fourth trainee (Dr. Gutierrez) will join two incoming trainees for the next year. The endocrinology fellowship program continued to be run by Dr. Chris Symonds who has been recognized for his excellent leadership in being appointed to the Chair of the National Specialty Committee for Endocrinology at the Royal College.

- c) Undergraduate medical education continues to be a major focus of the endocrine Section. As a whole, the Section provided almost 1450 hours of direct, didactic teaching to the medical school and resident academic half day programs. Dr. Hanan Bassyouni has assumed co-chair of the Endocrinology-Nephrology course. Section members received 15 different teaching awards in the past year, particularly Dr. Bassyouni who was recognized for teaching in multiple branches of medical education.
- d) Bedside teaching in the outpatient clinics was provided with 880 clinics in which a clerk, resident or fellow worked alongside a faculty member, in addition to the regular inpatient service.
- e) Over 63% of Section members directly supervised at least one student project in the past year, ranging from medical student projects to PhD theses.
- f) Dr. Sonia Butalia successfully defended her MSc under the mentorship of Dr. Doreen Rabi.
- g) Dr. Vicky Parkins continued her service as the Medicine Clerkship Evaluation Coordinator.

ADMINISTRATION

- a) As a whole, the Section members spend 13% of their time in various administration activities, roughly approximating the work of 2.3 full time administrators.
- b) Dr. Alun Edwards completed a seven year term as Section Head/Zone Chief, Endocrinology and has accepted the role of Senior Medical Director, AHS Strategic Clinical Network for Diabetes, Nutrition and Obesity in which he will oversee the province-wide strategies for clinical care and research work in this field. The Section has been greatly appreciative of Dr. Edwards' superb leadership in the past years.
- c) Dr. Gregory Kline has accepted the role of Interim Section Head in Dr. Edwards' place and a search for the new permanent chief is ongoing.
- d) Dr. Peter Grundy continued in his role as Chair of the ARP Management Committee for the Dept. of Medicine and has recently been chosen as the departmental representative for the ongoing Provincial ARP negotiation team.
- e) Dr. David Lau is the president of Obesity Canada
- f) Dr. Julie McKeen is the Medical Director of the Diabetes, Hypertension and Cholesterol Centre
- g) Dr. David Hanley is the Medical Director of the Calgary Osteoporosis and Metabolic Bone Centre
- h) Multiple members sit on national and international committees in metabolic bone disease, diabetes care and obesity.

FUTURE CHALLENGES

- a) **Clinical care in endocrinology and diabetes.** The Section received over 6000 requests for outpatient consultation in the past year which represents a 30% increase over the prior two years. Clinical outpatient service represents 52% of the whole Sectional activity which in turn approximates the output of eight full time clinicians. Unless there is a significant increase in clinical care providers, it is unlikely that the Section will be able to absorb an additional annual increase in referral requests. Wait list management will probably start to become a more critical issue as waiting times begin to rise.
- b) **South Health Campus** opening may pose a challenge for provision of inpatient endocrine consultation. The endocrine Section currently offers citywide coverage with a single call schedule. A roundtrip from the RRDC home base to each city hospital will be almost 100km which will make in-person, daily, hospital consultations nearly impossible for a single on-call physician. The Section will therefore need to switch to a split-schedule parallel call system in order to cover all hospitals adequately. In the absence of new clinical recruits, this represents a doubling of call days per year for each member.
- c) **Geographical disparities in outpatient endocrine/diabetes coverage.** Data from the Diabetes, Nutrition and Obesity SCN indicates that Northeast Calgary in particular requires an urgent concentration of services directed towards even basic diabetes and metabolic management. Patients from this region do not frequently access the diabetes services located at RRDC in NW/SW Calgary. There is a critical need for University based academic and teaching endocrinologists to move into NE Calgary and recruitment to this post should be a major Sectional priority.

- d) **Projected retirements:** 32% of the Sectional membership is approaching a time of potential retirement in the next 2 to 5 years. Dr. Charlotte Jones will leave the Section this year to take a new position in Kelowna, BC. Several of the senior members have been highly productive researchers and teachers. There is an urgent need to recruit new physicians to continue their work, especially in the research field. GFT-ready young endocrinologists are in very short supply and thus the Section will need to make a concerted effort to support any quality trainee with research potential.

Section of Gastroenterology – Annual Report April 1, 2011 to March 31, 2012

CLINICAL

Clinical demand for GI services has remained high, with GI Central Triage receiving between 1000 and 1200 referrals per month, and Hepatology central triage receiving roughly 200 referrals per month. Keeping track of referral numbers and wait times has been facilitated by the successful implementation of the Cerner scheduler in the UCMC clinic. Despite this high demand for GI services, this was a very successful year with the establishment of initiatives to improve patient access and endoscopy utilization. The successful flexible sigmoidoscopy clinic continues in the UCMC area - further improving patient access to investigations. Under the physician leadership of Dr. Kerri Novak, a number of streamlined guidelines for central triage have been introduced to further reduce wait times, and additional guidelines are being developed. Confocal endomicroscopy has been established with the promise of placing Calgary at the cutting edge of endoscopic practice. In addition, Endopix and iScan have been established to post-process endoscopy images to histology level resolution. Endoscopic Mucosal Resection (EMR) and Radio Frequency Ablation (RFA) techniques have been established for the treatment of Barretts' esophagus. These innovative, minimally invasive endoscopic techniques offer an effective, safe and substantially less morbid alternative to major surgery (esophagectomy) for patients with early esophageal cancer and/or significant dysplasia within a Barrett's segment.

The RGH remains one of the busiest hospitals in Canada, with an average of 275 ED visits daily, 20% of whom require admission. As a result of this increasing patient demand the RGH has been expanding and currently has a 644 medical and surgical bed capacity. The Gastroenterology team at the RGH comprises of 10 gastroenterologists providing strong clinical service supporting outpatient and inpatient GI care. The gastroenterologists at the RGH receive an estimated 10,000 referrals per year and performed a total of 12,400 endoscopic procedures last year.

The gastroenterology group at the PLC, which comprises of 10 gastroenterologists, continues to be a very active and diverse group consisting of a combination of both fee for service and ARP funded physicians. The PLC is Southern Alberta's only therapeutic endoscopy center, performing all adult ERCP and endoscopic procedures which require fluoroscopy in southern Alberta and southeastern BC. Plans are currently in place at the PLC to establish a biliary EUS service, as well as Spyglass technology for direct visualization of the biliary tree, to better facilitate management of patients with biliary tract disease.

The Forzani and McPhail Colon Cancer Screening Centre (CCSC) has taken a lead role locally and nationally to improve the quality of colonoscopy and provide better detection of early cancers and polyps. A comprehensive quality assurance program is in place within the CCSC based on the Global Rating Scale (GRS). Sectional members have taken on leadership roles in the Canadian Association of Gastroenterology Quality Assurance Initiative (Dr. Dube) and recently this excellence has contributed directly to the appointment of Dr. Dube as the AHS Medical Lead for the Alberta Province-wide Colon Cancer Screening Program.

Innovations in Clinical Care:

1. **Dyspepsia/GERD Nurse Navigator program:** this program has been developed and initiated to address long wait times for patients with these types of referrals. This novel program includes the implementation of evidence based clinical care pathways, nurse navigator (nurse clinician) oversight with dedicated specialist physician back-up, development of streamlined pathway access referral forms, shared care and an integrated partnership with the Northwest Calgary PCN, and includes a full array of QA benchmarks and measures.
2. **Establishment of a (direct to procedure) DTP Working Group (including input from Dr. Sachin Pendharkar, Pulmonary; expert in Systems Operations and linked with the Haskayne School of Business):** this group has been developing novel processes for patients who have been triaged to require a GI procedure as soon as possible to facilitate diagnosis and to access endoscopy in a timely fashion. This initiative will also include the formation of a DTP Nurse Navigator who will oversee the DTP process, and facilitate the most appropriate follow-up of patients who go through the DTP stream of care. Ultimately, the vision is that this DTP Nurse navigator will run DTP follow-up clinics with appropriate physician oversight. Specific QA benchmarks have been included to assess DTP pathway effectiveness and referring physician and patient satisfaction. Benchmarks to access to care have been established.

3. Development of urgent referral dedicated clinics and endoscopy lists to facilitate more rapid access of these patients to specialist care.
4. Thin scope endoscopy (TSE) clinics: TSE allows for un-sedated upper endoscopy to be performed in the clinic setting. By utilizing the clinic setting for these upper endoscopies (e.g. screening for esophageal varices, screening dyspeptics) we can perform up to 8 endoscopies per half day clinic – endoscopies that would have typically required sedation in an acute care GI endoscopy room in the FMC, recovery time, and endoscopy nursing support. Patient outcomes and satisfaction, as well as economic benefits are being captured prospectively.
5. GI Clinic and Endoscopy Utilization: Although overall our utilization of clinics and endoscopy slots is very good, it could be better. It is critical for GI to maximize utilization of this limited resource. To address this issue we have implemented city-wide endoscopy patient slot templates, and at the FMC have implemented GI clinic patient templates to optimize patient throughput. In addition, we are hiring a Physician Booking Optimization clerk within UCMC to ensure all available endoscopy slots and clinic slots are filled appropriately and will be hiring a FFS gastroenterologist within the UCMC to further help optimize clinic and endoscopy utilization. At the PLC endoscopy slot allotment is handled by the Site Chief, resulting in better optimization and utilization of endoscopy resources. In addition, a Sunday endoscopy schedule is in place at the PLC for on call weekend procedures, resulting in a significant reduction in nursing overtime and associated costs.
6. Establishment of the Calgary GI Motility Centre to be located at the SHC. This will be a centre of excellence in the study and treatment of upper and lower GI motility disorders, and will be co-led by Dr. Chris Andrews (FMC) and Dr. Martin Storr (SHC).
7. Establishment of a High Risk Malnutrition Clinic. The initial steps have been taken to develop an integrated malnutrition clinic to be placed within UCMC. This clinic will be led by Dr. Maitreyi Raman and will involve a dedicated nutritionist. The clinic will initially target malnourished patients waiting on the liver transplant list, and malnourished IBD patients being discharged from hospital.
8. Establishment of a multidisciplinary non-alcoholic fatty liver disease (NAFLD)/diabetes clinic. The plans for this clinic are well under way and include leadership roles for Dr. Ron Sigal (Endocrinology) and Dr. Saumya Jayakumar (Hepatology) and will be situated at the Richmond Road Diagnostic and Treatment Centre. Initially this clinic will target patients with non-alcoholic steatohepatitis (NASH) who are diabetic and who show evidence of liver fibrosis. Clinics will also involve the diabetic support team and will have direct links to the Living Well Program for targeted patient centered dietary and exercise programs.
9. Establishment of the Home Nutrition Support Program under the direction of Drs. Maitreyi Raman, Tara Chalmers-Nixon and Melanie Stapleton, and the new IV/MG (intravenous magnesium support) program which has allowed patients to avoid going to the hospital to receive intravenous magnesium infusions.
10. Development of a GI Section website. A webmaster was hired by the Section and tasked with the development and activation of a Sectional website. The website will integrate clinical, research and educational information and updates and will be an access point and resource for Section members, non-GI Section clinicians and patients.

RESEARCH

Research within the Section remains strong in the areas of basic science, clinically focused studies, and clinical trials. Inflammatory bowel disease (IBD), liver disease research (including viral hepatitis), GI inflammation, colorectal cancer screening, and gastrointestinal motility remain the core research areas of excellence within the Section. Both the IBD and Hepatology programs continue to have very strong international clinical trial involvement and remain two of the most active groups in the Department of Medicine. The University of Calgary Liver Unit (UCLU) is the premier liver unit in Canada, and the IBD Group is recognized nationally and internationally for excellence. Links between the IBD and Hepatology groups were further strengthened by the recruitment of Dr. Bertus Eksteen from Birmingham, UK, who is an internationally recognized clinician-scientist with a strong research record in primary sclerosing cholangitis; a lethal biliary tract disease closely associated with IBD. This link was further strengthened by the successful application for a

team grant funded through the Faculty of Medicine (FoM) Emerging Team grant competition (\$300,000 over 3 years). A similar FoM Team Grant was awarded to researchers within the CCSC.

The Section continues to have strong ties with basic scientists in the Gastrointestinal Research Group, Inflammation Research Network, Cancer Biology and Immunology. Many Section members have collaborative grants with basic scientists and are involved in Provincial and National Group Grants. The Shaffer Awards day, is one of the longest standing research days in the Faculty of Medicine and this year there were 26 presentations by trainees with 7 clinical GI Fellows presenting. This extensive collaboration and interaction with basic scientists and basic science programs will continue to enhance bench to bed side, translational research, within the Section as well as foster the development of GI clinician-scientists.

The GI Section was again very successful in securing both external peer-reviewed and industry sponsored funds. Total funds awarded to the Section include those to support peer reviewed basic science and clinically focused research, as well as funds obtained to support clinical trial research.

Research Milestones

a) **Funding:** Total funds received by the Section last year include:

- Peer Reviewed Grants: \$3.5M
- Clinical Trial Support: \$885,000

b) **Publications:** Members of the Section had a total of 125 Peer Reviewed publications last year from research arising from a diverse array of scholarly endeavors including basic science, clinical research and education research.

Innovations in Research

1. The Section made a number of strategic decisions to allocate contiguous space near the GI clinic, and within GI office space on the 6th floor of the TRW, for the facilitation of translational clinical research:
 - i. *The Clinical Integrative Research Space (CIRS)* comprises of two adjacent rooms in close proximity to the Gastrointestinal Ambulatory Clinic within UCMC. The CIRS will be fully developed in the summer of 2012 and will support multidisciplinary research including: epidemiological and clinical research; population health, health services & outcomes research, gene-environment interaction studies, biomarker studies, translational studies, and biobanking. The CIRS will facilitate patient recruitment, consenting, phenotyping, genotyping, envirotyping, serotyping, and microtyping. Researchers will be able to use the CIRS to collect comprehensive phenotypic data through patient interviews, medical chart review, and electronic medical records. All data extracted in the CIRS will be stored in the Research Data Haven supported by a Canadian Foundation for Innovation Leaders of Opportunity (\$175,391) and Alberta Advanced Education and Technology Small Equipment Grant Program (\$175,391) (grant recipients Drs. Gil Kaplan, Chad Saunders and Carla Coffin). The Research Data Haven is a Citrix-based server that creates a virtual research environment that is secure, accessible, and supportive of collaboration.
 - ii. *The GI Clinical Research Unit* has been fully established and currently houses research staff, data analysts, and trainees who are supervised by several members of the Section of Gastroenterology. The Clinical Research Unit is located in dedicated space on the 6th floor of the TRW building. This unit allows for seamless interactions between translational clinical researchers and research staff, and will directly support translational research projects within the Section.
2. **Creation of the GI Section Research Matrix.** This Matrix was developed by the GI Section Strategic Research Committee (consisting of Dr. Mark Swain - GI Section Chief, Dr. Paul Beck, Dr. Remo Panaccione, Dr. Derek McKay - Head GIRG, and Dr. Gil Kaplan). The Matrix was modified after obtaining Sectional feedback and was accepted by the GIEC for implementation. The purpose of this Matrix is to use it as a mentorship tool for advising individuals within the Section with regards to research expectations for their individual specified

dedicated research time within their ISA. The plan is for this matrix to be used for 6 monthly advisory meetings to advise and help guide Sectional members towards research excellence and accomplishment.

3. Establishment of the University of Calgary Liver Unit (UCLU) Biobank. Through support from the Metcalfe Foundation, and the Cal Wenzel Family Foundation Chair in Hepatology, the UCLU Biobank has been established and is now operational, housed within the GIRG footprint. The UCLU-Metcalfe BioBank will be linked with the IBD Consortium Biobank which has already been established within the GIRG.
4. Establishment of a dedicated PSC-IBD clinic in UCMC (the first in Canada; PSC Lead, Dr. Bertus Eksteen; IBD Lead, Dr. Gil Kaplan). Funds obtained through a successful FoM Team Grant allowed for the establishment of this joint clinic, with dedicated research assistant support, which will allow for excellence in the clinical care for these patients to be coupled with world class translational research to be performed.
5. Significant progress in the establishment of state-of-the-art IBD and Hepatology databases funded through a successful CFI grant awarded to Drs. Gil Kaplan, Carla Coffin and Chad Saunders. A BioBank Biosample Manager has been hired (funded 75% AI-HS IBD Consortium and 25% Cal Wenzel Family Foundation Chair in Hepatology) to oversee tissue and sample processing, storage and retrieval for the Biobank.
6. Hiring of a 0.5 FTE data analyst (0.25 funded through the GI Section and 0.25 through AHS) to facilitate extraction of AHS data to support excellence in patient care as well as to facilitate clinical based outcome and cost analysis research within the Section.

EDUCATION

The Section has again excelled in both internal and external awards that reflect the highest standards and commitment of our faculty to educational programs and service.

i. Faculty Awards:

- Dr. Sylvain Coderre was appointed as the DoM Educational Vice Chair.
- Dr. Paul Beck was awarded the prestigious 2012 AGA Institute Council Immunology, Microbiology, and IBD Section Research Mentor Award and received the University of Calgary Watanabe Award for overall Excellence.
- Dr. Gil Kaplan received the Internal Medicine Research Preceptor Award and was also named one of Avenue Magazine's Calgary Top 40 under 40.
- Dr. Marty Cole received the Terry Groves Award for Clinical Excellence at the RGH.
- Dr. Bertus Eksteen was awarded Rising Star status at the United European Gastroenterology Week based on his track record of international quality research.
- Dr. Eldon Shaffer was awarded the CAG Education Excellence Award.
- Dr. Eldon Shaffer was appointed as the DoM Mentorship Lead.
- Dr. Carla Coffin was awarded an AGA Research Foundation Research Scholar Award.
- Dr. Subrata Ghosh was elected to the Fellowship in the Canadian Academy of Health Sciences (CAHS).

ii. GI Section Rounds:

Sectional rounds had been in a slow decline for some time, with lagging attendance and interest. As a result a decision was made to rejuvenate the Friday morning rounds to include weekly rounds consisting of rotating pathology/radiology rounds, interesting case rounds, state-of-the-art lectures, and translational rounds. These reinvigorated rounds have been a tremendous success.

iii. CME:

Dr. Paul Belletrutti took on the lead role as Coordinator of the City Wide Continuing Medical Education Lecture Series. In November 2011, the combined IBD Update\Highlights in Hepatology meeting (organized by Drs. Shane Devlin and Kelly Burak) was held in Banff as part of a combined meeting linked with the Western IBD Meeting (organized by Dr. Shane Devlin).

Drs. Sam Lee, Kelly Burak and Rob Myers from the Liver Unit were invited to provide a 5 day Clinical Research Symposium, linked to a “How to Write a Scientific Paper” Lecture Series, at YouAn Hospital in Beijing, China in December, 2011.

iv. Postgraduate:

The GI Residency program in Calgary, led by Dr. Shane Devlin (Program Director), has established itself as the premier GI training program in Canada. This year’s graduating class had a successful celebration and awards dinner in June which included Drs. Edwin Cheng – Chief GI Resident, Ali Rezaie, Humberto Jijon and Laura Stinton. Our graduating residents and fellows have distinguished themselves in the following ways:

- Dr. Edwin Cheng: accepted to a 2 year Masters Certificate Program in Evidence-Based Teaching in the Health Professions for Fall 2012 semester at Johns Hopkins University School of Education (distance learning). Edwin will also be involved in patient clinical care delivery at the PLC during this time.
- Dr. Humberto Jijon – hired as Clinical Scholar within the GI Section and received the AI-HS Clinical Fellowship Award to pursue post-fellowship training at Harvard University in November, 2012.
- Dr. Ali Rezaie – hired as Clinical Scholar within the GI Section and received a two-year CIHR Fellowship award to conduct research in the “Pathophysiology and course of irritable bowel syndrome (IBS)-like symptoms in inactive inflammatory bowel disease (IBD): A longitudinal prospective study”. His supervisors are Dr. Ghosh and Dr. Kaplan within the IBD Consortium.
- Dr. Laura Stinton – Will start a one year Fellowship at the University of California, San Diego in January, 2013. This fellowship will include clinical Hepatology training as well as a 6 month research program at INOVA Corporation, a company doing leading edge biomarker of disease discovery.
- Dr. Puja Kumar completed her Therapeutic Endoscopy fellowship.
- Dr. Stephen Congly completed a Hepatology Fellowship and will be going to the Mayo clinic for further training in transplant Hepatology.
- Dr. Gordon Moran completed his IBD Fellowship and returned to the UK to finish his GI fellowship (projected completion date December 31, 2011).

The residents also selected the following faculty members for teaching excellence awards:

Overall Excellence in Teaching:	Dr. Paul Beck
Research Mentorship Excellence:	Dr. Rob Myers
Formal Teaching Excellence:	Dr. Paul Belletrutti
Clinical Teaching Excellence:	Dr. Kerri Novak
Endoscopy Teaching Excellence:	Dr. Rachid Mohammed
Excellence in Providing Feedback:	Dr. Shane Devlin

The GI trainees had an unprecedented number of 7 presentations at the Shaffer Awards held in early June. The participants included Drs. Ali Rezaie, Humberto Jijon, Edwin Cheng, Laura Stinton, Liisa Meddings, Yasmin Nasser and Gordon Moran. Clinical Winner – Yassmin Nasser and Clinical Runner up – Humberto Jijon.

The incoming new GI residents are Rajveer Hundal from McMaster University, Travis Murdoch from University of Toronto, Erin Ross and Mathew Sadler from University of Calgary.

Fellowship training positions have been awarded to the following:

IBD:	Marie-France Dubeau from Laval University, Quebec
Hepatology:	Angeli Chopra from University of Alberta
Therapeutic Endoscopy:	Paul James from University of Toronto Abdulqader Almessabi from Abu Dhabi, UAE (IMG)

PGME Awards:

- Dr. Paul James – AI-HS Clinical Fellowship Award. “Endoscopic Ultrasound in Alberta: Health Care Utilization and Outcomes from 2003 to 2011”.
- Dr. Meredith Borman – 2012 CAG/Aptalis Resident Research Training Award, “Low molecular weight heparin for the prevention of portal vein thrombosis in cirrhotic patients: an external validation study”.
- Dr. Matt Sadler – CAG/Takeda Resident Research Training Award, “The impact of medical and endoscopic advances on surgical outcomes for ischemic colitis.”

Innovations in Education

1. To facilitate faculty involvement in Sectional structured educational needs, a document outlining Sectional structured educational expectations was created by a Strategic Educational Committee (composed of Dr. Mark Swain, Section Chief GI, Dr. Sylvain Coderre, Lead UME, Dr. Shane Devlin, Lead PGME, Dr. Chris Andrews, ARP). This document was circulated to the Section and feedback incorporated into a final document, which was approved for implementation by the GIEC. This document formulated a process to recognize educational commitments within the Section and to create a framework to ensure equitable involvement in Sectional structured educational needs.
2. The Section is instituting a formal mentorship program for the Fellows and this will be led by Dr. Eldon Shaffer
3. Creation of a GI Sectional website to function in part as a portal for education of staff and patients.
4. Dr. Paul Beck is the Director of the highly successful Leaders in Medicine Program. This program has 70-80 students that are jointly pursuing an MD degree combined with either a PhD or MSc or MBA. The Leaders in Medicine Program is one of the largest, most active and innovative programs in Canada, and was highlighted as a strength in recent reviews of both the University of Calgary Medical School and the Faculty of Medicine Graduate Program.
5. The development of a second year GI Fellows Endoscopy Course has been spearheaded by Dr. Mani Kareemi and is scheduled for implementation in July 2012. This course will take place in the TRW Building's Teaching Facility and will be facilitated by Drs. Tara Chalmers-Nixon, Shane Devlin, Jonathan Love and Alaa Rostom.

Changes in Leadership positions for Section Members

- Dr. Mark Swain was appointed GI Section Chief in January 2012.
- Dr. Catherine Dube was appointed to a leadership role with Alberta Health Services as the Medical Lead – Alberta Colorectal Cancer Screening Program.

- Dr. Kerri Novak was appointed as the Gastroenterology Central Triage and Access Medical Lead.
- Dr. Steven Heitman was appointed as Director, Therapeutic Endoscopy Fellowship Program.
- Dr. Paul Belletrutti was appointed as Medical Lead GI Clinic, UCMC.
- Dr. Rob Myers was appointed as Acting Director, Liver Unit and remained as Lead, Viral Hepatitis Clinic.
- Dr. Jon Meddings was appointed as Dean, Faculty of Medicine starting July 2012.
- Dr. Ron Bridges was appointed as Senior Associate Dean, Faculty of Medicine, and continued in his role as Associate Dean Clinical Affairs.
- Dr. Alex Aspinall was appointed as Acting Director, Southern Alberta Liver Transplant Clinic and as GI Site Lead, SHC.

Sectional QA/QI Initiatives

1. **Advisory Acute GI Section QA/QI Lead:** The Section appointed Dr. Lynn Lambert as the advisory acute GI Sectional QA/QI Lead. Dr. Lambert recently moved from Birmingham, UK and is a member of the GIM group at the FMC; she brings with her more than 10 years of endoscopy experience in the UK with extensive experience developing and implementing QA/QI strategies and therefore understands many of the issues related to the delivery of GI care.
2. **Clinic Workflow Optimization:** A comprehensive evaluation of clinic workflow was undertaken, including a patient survey (356/50 47.5% response rate), and a clinic staff survey (71/180, 39% completed). The key areas targeted for change include delays in clinic, emphasis on work satisfaction and communication. In addition, clinic utilization by physicians and nurse practitioners was evaluated and strategies to improve utilization will include nurse clinician-led clinics. A survey of physicians and nurse clinicians (NC - primary role is to support physicians in managing outpatients, mostly by telephone) was also completed. Based on these results, the NC role will evolve into one with more direct patient care and education in clinic.
3. **Innovations to Improve Access to General Luminal GI:** Luminal GI receives on average 1100 referrals a month. The current wait for routine requests exceeds 18 months. Activities aimed at enhancing access, include a telephone consultation service accessible to all referring physicians (average 2-4 completed per week, with ongoing data collection). A 'Nurse Navigator', developed in collaboration with the Calgary NW Primary Care Network (PCN), is actively following patients with routine GI symptoms, who will then undergo a group medical consultation with GI medical oversight at the PCN. After this comprehensive assessment, recommendations will be made with ongoing support through their medical home in the PCN. A subpopulation of these patients will undergo novel, outpatient thin-scope endoscopy aimed to reduce costs and recovery time, but optimally investigate those requiring endoscopy. In addition, approximately 20% of GI referrals are directed to endoscopy without a clinic visit (Direct to Procedure/ DTP). We have collected 6 months of data: indication, endoscopy, histological and endoscopic outcome, and wait-times to evaluate workflow. Eighty-nine patients were called to evaluate DTP process and patient satisfaction. As a result of this data, clear follow up processes are being developed, including nurse-led follow up and specialty clinics (e.g. microscopic colitis), with appropriate physician oversight. Finally, the reporting process is will be standardized and improved.
4. **Endoscopy Utilization, Quality and Reporting:** Endoscopy units across the city have implemented a validated process (every 6 months) to optimize patient centered care within endoscopy, including systematic assessment of the process of consent, procedure safety and comfort, quality, appropriateness as well as the quality of the reporting process (GRS or Global Rating Scale). Patients who underwent endoscopy at the FMC were surveyed (377/ 1165, 32% response rate) and as a result, measures have been taken to improve access to translated

materials, quality of the endoscopy report for patients and clarity of follow up plans/ recommendations. Endoscopy utilization at the FMC has been evaluated, and a dedicated physician-scheduler will be used to optimize use. Other ongoing activities in endoscopy include evaluation of use of sedatives and reversal agents, revisions/ optimization of the EndoPro templates to include validated scores across indications, and transfer of data from the EndoPro database to Netcare.

QA/QI Goals and Directions for 2012/13:

1. The referral load in gastroenterology continues to exceed our capacity and wait-times are increasing: the average monthly referral intake from April 2011 was 800, and the average for 2012 is 1100/month. Thus, the key target for 2012/13 is to improve access. This will be achieved by better utilization of clinic slots through novel clinics, largely nurse-led. Maximizing endoscopy use will occur through hiring of a dedicated GI physician booking clerk, addition of a fee-for-service locum to fill open slots, and better use of outpatient endoscopy services, namely thin-scope endoscopy (TSE). Data will be prospectively collected regarding patient's satisfaction and clinical outcome in those having TSE. A retrospective study (completion 2013) to evaluate access in luminal GI will occur, with primary objectives including measurement of wait-times, clinical outcomes, validation of triage priority, as well as workflow and use of a single entry point for referral intake over the year 2011. There are a number of innovations underway to improve wait-times for urgent patients (GI fellows clinics, dedicated clinics, and routine referrals pathways) that will be evaluated prospectively in 2012/13. Wait-time targets will be established with specific actions to occur if wait-time thresholds are exceeded.
2. The nurse-navigator streams will be expanded in 2012/13, with inclusion of more referral indications; specifically irritable bowel syndrome (IBS). Clinical pathways for IBS are in development and inclusion of patients with IBS into nurse navigator streams are targeted for the fall, 2012. A nurse-led follow up clinic for patients post-endoscopy is in development which should be functional by early fall. Data will be collected on patient and referring physician satisfaction in this stream.
3. One key area identified in need of improvement is communication with referring physicians regarding patient follow up and interpretation and management of endoscopic/ histological findings. Quality of communication will be evaluated retrospectively to identify key areas for enhancement. In addition, EndoPro templating will be complete by 2013.
4. Sectional joint funding of a dedicated GI QA/QI nurse: Ronnie Webbink took on a role as the Sectional QA/QI nurse, a position jointly funded by Alberta Health Services and the GI Section. She will be looking into the process of developing novel strategies for GI waitlist management and endoscopy utilization (i.e. development and broad implementation of the EndoPro template for endoscopy procedures performed throughout the city) that tie into QA/QI initiatives within the Section and to enhance patient care.

ADMINISTRATION

FMC

Dr. Bertus Eksteen, an Associate Professor of Medicine, joined us as a clinician-scientist in March 2011 from the University of Birmingham (UK) where he was an MRC Clinician Scientist at the Centre for Liver Research. He received his Medical Degree from the University of Pretoria, SA followed by his PhD in Liver Immunology at the University of Birmingham. His recruitment was made possible through the Department of Medicine, the Section, and the Cal Wenzel Family Foundation Chair in Hepatology. His area of research interest lies in autoimmune liver disease, and more specifically, the liver disease primary sclerosing cholangitis.

Dr. Marietta Iacucci joined the Section in April 2011 as a Clinical Associate Professor. She received her Medical Degree and Gastroenterology training at La Sapienza School of Medicine at the University of Rome, and spent a further two years in the UK training in IBD. Following this, she completed her PhD at the University of Rome Tor Vergata. Her interest lies in novel endoscopic imaging, including confocal endomicroscopy and endoscopic image enhancement and

filter techniques (iSCAN). She has established a confocal microscopy program in Calgary, linked closely to the IBD group.

Dr. Nikila Ravindran was recruited as a Clinical Scholar in October 2010 and will continue in this role until October 2012. She received her medical degree at the University of Toronto in 2005.

Dr. Sauyma Jayakumar has been recruited to the Section and started in January 2012. She obtained her medical degree from the University of Manitoba and completed her specialty Gastroenterology and Hepatology training in Edmonton. She then undertook a one year fellowship with Dr. Steve Caldwell, a widely recognized expert in non-alcoholic fatty liver disease (NAFLD). She will establish a dedicated multidisciplinary NAFLD clinic in Calgary.

Dr. Sam Asfaha is a potential recruit. He completed his Gastroenterology Residency program at the University of Calgary in 2008 and received a Post-doctoral research fellowship to study stem cells & GI cancer at Columbia University, New York. He is a recipient of a CIHR Clinician Scientist Phase 1 award.

Dr. Humberto Jijon was hired as a Clinical Scholar within the GI Section and received an AI-HS Clinical Fellowship Award to pursue post-fellowship training at Harvard University in November, 2012

Dr. Ali Rezaie was hired as a Clinical Scholar within the GI Section and received a two-year CIHR Fellowship award to conduct research at the University of Calgary (1 year) and the Mayo Clinic (1 year).

PLC

Dr. Rachid Mohamed was recruited as an Assistant Clinical Professor. He completed his medical school and Internal Medicine training at the University of Alberta. He then completed his Gastroenterology Residency and a Fellowship in Therapeutic Endoscopy at the UofC before joining the Section in July 2011. His interests include advanced and novel endoscopic procedures.

RGH

Dr. Jennifer Bailey was recruited to the RGH and started in July 2012. She completed her medical degree and training at the University of Alberta, and her GI residency at the University of Calgary. She will be a strong addition to the clinical team at the RGH.

SHC

Dr. Milli Gupta completed her GI Residency at the University of Alberta and completed further training in GI motility and esophageal diseases at the Mayo Clinic. Her interests lie in gastrointestinal oncology, esophageal disease and motility.

Dr. Michael Curley completed his GI Residency at Dalhousie University in Halifax, NS. He practiced in Halifax for 4 years with a specific interest in esophageal disease, motility and non-acid dyspepsia/reflux disease. Michael was heavily involved in teaching programs within the GI Section in Halifax and plans to carry on with this passion for teaching in Calgary.

Dr. Michelle Buresi completed her PhD at the University of Calgary studying colonic secretion visceral hypersensitivity. She completed her GI Residency at the University of British Columbia and then undertook a one month advanced training program at UCLA in GI motility. Her specific interests include motility, irritable bowel syndrome, and health economics. She will also be the Lead, Small Bowel Capsule Program at the SHC.

Dr. Martin Storr is an accomplished gastroenterologist in the field of motility and is well known in Calgary. He will be returning in February 2013 to take on the role of SHC GI Motility Clinic Co-Lead.

Dr. Ali Rezaie completed his GI Residency at the University of Calgary and will be undertaking a one year fellowship position as a Clinical Scholar in Calgary in IBD, to be followed by a 6 month fellowship at the Mayo Clinic in motility. He will then take up his position at the SHC with a specific interest in IBD: IBS overlap motility syndromes.

Career Transitions:

Dr. Kelly Burak returned from a one year sabbatical on July 1, 2012 (spent 6 months in Calgary, and 6 months in Adelaide, Australia where he undertook further training in Medical Education). He will resume his role as Director of the University of Calgary Liver Unit and Southern Alberta Liver Transplant Clinic.

Section of General Internal Medicine - Annual Report April 1, 2011 to March 31, 2012

CLINICAL

In 2011-12, General Internal Medicine (GIM) provided the following clinical services to the AHS Calgary Zone:

1. 8 Medical Teaching Units and 1 General Medical Unit at three acute care hospital sites. These services are all 24/7 365 days per year. Based on AHS separation data, the clinical volume on these services increased from the previous year (2010/11) by 16%; this single year increase is similar in magnitude to the total cumulative increase over the prior five years (2005-2010). Volumes in part have been managed by a reduction in the ALOS by 2 days over the past six years, 1.1 days of this reduction occurring in the past year;
2. Five inpatient consultation services (most run 24/7/365d/yr), including an Obstetrical Medicine service – to surgical, hospitalist, neuroscience and psychiatry colleagues
3. Five daily streams of pre-operative surgical admission clinics (mostly Monday-Friday) at three sites, including a pre-admission central intake clinic for the low-risk orthopaedic arthroplasty stream with the McCaig MSK program at Foothills Medical Centre (FMC); off-site pre-operative consultation also occurs in the community (e.g., Gulf Canada clinic);
4. Outpatient clinics:
 - a. Difficult to tabulate the total activity given a sizeable private clinic activity, much of it based in the community, among the Section's membership;
 - b. The IMA associates involving GIM members at the Peter Lougheed Centre (PLC) run an Internal Medicine (IM) referral and follow up practice;
 - c. The membership leads and/or participates in the Chronic Complex Care clinics (PLC), Endocrine (DM) clinics at Richmond Road Diagnostic and Treatment Centre (RRDTC), Atrial Fibrillation clinics (FMC) and the Outpatient Anticoagulation program;
 - d. At RRDTC, between 75 (summer) and 100 GIM clinics/month and 200-280 new referrals/month; wait list times have been successfully reduced;
 - e. At the Rockyview General Hospital (RGH) site, approximately 125 GIM clinics were held in the UCMG area, a number that can grow (MD HR capacity met, but physical capacity not met)
 - f. WRT (d & e), Central Access and Triage data for the past five years show a 10.5% per year increase in the number of consultations requested and provided while maintaining a short time to urgent OP consultation of around one week. However in this past year, the wait times for routine consultation have begun to increase from approximately 6 weeks to 12-13 weeks in the first half of 2012, after having improved in previous years from around 9-11 weeks. This trend is likely to continue, given that increased inpatient pressures outlined above will necessitate shifting some proportion of the GIM workforce from outpatient to inpatient clinical services.
 - g. 286 Obstetrical Medicine clinics at the three acute care sites
 - h. Outreach clinics occur regularly (with expanding numbers due to an increased Sectional focus on vulnerable populations):
 - Within the city at the following centres, focusing on populations with health disparities: SAC (HIV/GIM), CUPs (ObMed related and GIM) and the Calgary refugee clinic
 - Outside of the city: Brooks, Canmore, Claresholm, Didsbury, Strathmore, Morley and now Tsuu T'ina (all GIM/CV risk)

Areas for necessary or possible growth and challenges in meeting these needs and opportunities:

1. Foremost, this will depend on available physician resources and the necessary support to make clinical services run efficiently
2. Necessary growth:
 - a. It is anticipated that as our population grows and ages, the pressures on our inpatient services (in absolute numbers and acuity) will continue to rise. This is illustrated in the AHS separation data: the greatest growth within the 16% increase in inpatients cited above occurred in those 50 years of age and older (EG. 26% increase in the number of octogenarians in the past year).

- b. These same pressures will add to outpatient referral requests and opportunities to offer preventative care and management services among complex patients
3. Opportunities for Growth:
 - a. Outpatient models of care that facilitate continuity of care following hospital discharge, management of complex patients and potential avoidance of admission or re-admission (currently a declared priority of the Section). This past year, the Section had hoped to add a Community Chronic Disease Management (CCDM) clinic at the RGH site. AHS budgetary and GIM HR realities prevented this. However, a second MTU follow up clinic has now been started to at least in part address the issue of capacity to discharge early with prompt follow up. The Foothills MC site is using RRDTC clinic capacity to arrange timely follow up of MTU and IP consultation patients with residual issues for the same purpose;
 - b. Consultative, leadership and participation in short-stay units (e.g., medical assessment, clinical decision or rapid assessment units) or innovative models such as a virtual hospital ward;
 - c. The GIM HR needs for the South Health Campus, scheduled to open within the next annual reporting cycle, is the ongoing subject of advanced planning and recruitment;
 - d. Discussion with leaders in aboriginal health services reveals an opportunity to provide consultative services, especially within the urban setting. A subgroup of the Section has been formed to create strategies for high yield clinical work with vulnerable populations with health disparities;
 - e. The indigent population of Calgary is sizeable and the ARP model of physician remuneration would permit provision of outpatient services to those who are complex and unwell (see d. immediately above); currently, three Section members and one fellow provide services at CUPS and the refugee clinic. Conversations to strategize with Community Health Sciences, AHS and others, including Dr. Rorstad on behalf of DOM, are ongoing.
4. Challenges:
 - a. Our current clinical work force is at its capacity and is in need of augmentation at all three existing sites within the next year, given retirements and career transitions. More than one third of the Section is older than age 50 years of age. Some workforce planning data (CIHI) suggests that career transitions at this age often involve reductions in on-call participation. This will prove to be a challenge when such acute care needs are increasing while the willing and available work force is decreasing.
 - b. The ongoing uncertainty regarding the condition and availability of FTE (full time employment) within the anticipated provincial AARP has significantly increased. This uncertainty about our ability to recruit and under what circumstances might exist in the forthcoming year; if this is the case, expansion under FFS (fee for service) models may be necessary.
 - c. The most feasible and sustainable model for physician staffing the SHC remains unclear. The recent transitions of SHC medical leadership, delayed decision-making and fragmented communications have proved challenging. The Section has developed a number of alternative models and planning remains ongoing in active discussion with both SHC medical leadership and with other departments including critical care and family medicine.

RESEARCH

All GFT members had multiple publications and carried grant funding:

Metrics (with some missing data points) are as follows:

Peer-Reviewed Manuscripts	77
Non Peer-Reviewed Manuscripts	13
Book Chapters	3
Scientific/Technical Reports, Abstracts, Presentations	99
Invited Presentations	82
Funded Research	\$5,075,789

Research Chairs held (3):

- N Campbell: CIHR Canadian Chair Hypertension prevention and control
- W Ghali: (a) CIHR Tier II CRC Health Services Research finished this past year; (b) John A Buchanan Chair in General Internal Medicine
- Both of our research chairs continue to be extremely productive in their work; supporting them remains a constant Sectional focus.

Sectional Research progress and opportunities:

- Research productivity within some of the growing areas of Sectional strengths: e.g., health services research (ongoing work of Ghali, Campbell, Leung and others), obstetrical medicine (a database to capture baseline demographics for one of the largest and most cohesive ObMed program – Hawkins, Castillo, Sam, Gibson), physician wellness and workloads (Lemaire, recent CIHR grant recipient), medical education research (Ma, Bacchus, Altabba and colleagues), and cardiovascular clinical research (Herman, Hamilton, Campbell and others)
- Working with and engaging the research resources associated with W21C
- Using recruitment to foster the research profile of the Section (Leung, Buchanan Chair position in 2013, Clinical Scholars)

EDUCATION

Estimated Teaching Hours*

Outside of clinical settings:	Hours	Comments
UME, PGME, CME combined	4043	Based only on STAR report for ARP members (thus, underestimates participation of non-ARP members)
Supervision of Trainees of mixed levels in clinical settings:		
UME, PGME combined	13,550	Crude estimate: Assumes ~20% teaching time in teaching services
Supervision/mentoring	3,057	More easily estimated for ARP members based on reporting system

*Requires some [conservative] modeling assumptions, given that 43% of Section works in a private practice model, but contributes significantly to delivery of the clinical education mandate at all levels

The Internal Medicine Residency Training Program:

With the expanded University of Calgary Medical School and Clerkship (170 UME students per year) and Internal Medicine (IM) Residency Programs (31 incoming residents this year) together with a healthy intake of well-trained foreign graduates (4-5 per year) through the Alberta International Medical Graduate Program, we participated in the continuing expansion of the IM Residency Program to RGH. The leadership of the IM residency program currently lies with Jeffrey Schaefer (Program Director) and three Associate PDs, all four being GIM Section members.

THE GIM MTUs serve as a critical venue for the instruction of not just department of internal medicine postgraduate trainees, but also residents from other programs. As noted above, this year the number of R1's has increased substantially and the number of MTU blocks may increase from five to six. In addition, family medicine especially, but also psychiatry and surgery will be adding more MTU time for their trainees. The MTUs have been a setting for innovation: for example, after the successful introduction and evaluation of the senior resident night float model of nocturnal on-call coverage (a subject of a number of Sectional publications and presentations), a junior night float model has now been piloted successfully and introduction is anticipated in the forthcoming year. Additionally, the formal study of the role of the preceptor is the topic of successful CIHR and RCPSC grant applications (Lemaire et al). Finally, the MTUs continue to serve as the setting for evaluation of new technology through the W21C innovation program.

The Section of GIM has been very involved and active in the increasing focus of medical education delivered through simulation techniques. Members have been involved as leaders, developers, adopters and evaluators of simulation methods in both UME and PGME. Development and delivery of simulation-based cases is particularly notable at both the RGH and the FMC sites.

GIM R4 Fellowship and Clinical Scholars Programs:

In 2011/12, the Section had 6 GIM PGY4, 2 Clinical Scholars and 1 International. These were:

1. Dr. Ranjani Aiyar (India)
2. Dr. Alejandra Boscan (U of C)
3. Dr. J Paul Davis (U of C)
4. Dr. Gabriel Fabreau (U of C)

5. Dr. Horacio Groshaus (U of C)
6. Dr. Evan Minty (U of C)
7. Dr. Karen Tang (U of A)
8. Dr. Alexander Leung (U of A) Clinical Scholar
9. Dr. Simona Burs (U of C) Clinical Scholar

Starting in 2012, the Section has 4 GIM PGY4 and 1 PGY5 and 4 Clinical Scholars. These are:

1. Dr. Alejandra Boscan (U of C) up to July 29/2012
2. Dr. Jack Cruikshank (U of C)
3. Dr. Andreea Ionescu (U of C)
4. Dr. Jasjeet Rai
5. Dr. Karen Tang (U of A) R5, MSc in CHS
6. Dr. Alexander Leung (U of A) Clinical Scholar
7. Dr. Simona Burs (U of C) Clinical Scholar
8. Dr. Evan Minty (U of C) Clinical Scholar
9. Dr. Gabriel Fabreau (U of C) Clinical Scholar

Regarding the GIM Clinical Scholar Program, Dr. Burs continues to work at RGH as she completes her Masters Degree in Clinical Epidemiology at the U of C (Expected completion December 2011). Dr. Leung is at Harvard Medical School in Boston, Massachusetts (Patient Safety, PharmacoEpidemiology; Expected completion June 2013). Dr. Fabreau will also start at Harvard, studying vulnerable populations and population health; estimated completion: June 2014). Dr. Minty's clinical scholarship will involve studying Information and advanced Technology at Stanford and working with UofC's Community Health Sciences/W21C; expected completion: June 2014).

Clinical Assistant (CA) Program

The U of C Department of Medicine CA program, while serving as a departmental resource, is mostly managed by the Section of GIM. The CA program has a mixed mandate: (i) to provide a skilled physician assistant resource that helps with coverage of service requirements among various clinical Sections within DOM but also outside of DOM (e.g., neurology); This forthcoming year, this mandate will take on an increased importance as recruitment of five additional clinical assistants will aid in the staffing of the internal medicine inpatient beds at the South Health Campus; (ii) to provide opportunities for international medical graduates to advance their careers into the Canadian health care system (mostly into a residency program, usually through AIMG program); and (iii) depending on the outcome of (ii), to provide well-trained physicians who may be able to serve in underserved areas. Subsequent to this mixed mandate, a high rate of turn-over among the CAs is expected and if it reflects successful career advancement, it is to be celebrated, even if it comes at the occasional cost of instability of the CA workforce.

Last year, we had four CAs successfully transitioned to the AIMG Program: Drs. Zainab Shireen, Peter Efe Idahosa, Alejandra Ugarte-Torres, Roolan Tabassum

Our current Clinical Assistants are the following individuals:

1. Yakob Berhane
2. Gerardo Cuadros Romero
3. Ina Cusnir
4. Shahid Khan
5. Uzma Naheed
6. Palli Shetty
7. Sadaf Siddique
8. Andrey Terry

LEADERSHIP and ADMINISTRATION

A partial list of leadership roles that members have taken on would include positions in the following spheres:

1. International (e.g., Chair Pan-American Health Organization Salt reduction committee, Chair, World Health Organization Quality and Safety TAG for ICD-11, Associate Editor, Open Medicine)
2. National (e.g., Chair, RCPSC IM Executive Committee, Integrated three national HT societies in single entity (HT Canada), CSIM Chair, Globalization committee, Common Drug Review),

3. Provincial (e.g., AH&W Expert committee on Drug evaluation and therapeutics, AHS medical lead on Chronic Disease Management)
4. Regional (Western Canada): Members of the GIM Section, under the leadership of Robert Herman, organize and Chair the annual Rocky Mountain/ACP Internal Medicine Conference, a large and long running annual CPD Internal Medicine conference in Western Canada
5. University (e.g., Scientific Director, CIPPH; both co-directors W21C*; Vice Chair, Health Promotion, Libin CV Institute), Internal Medicine Clerkship Director
6. Zonal (e.g., PLC and FMC medical directors, SHC departmental physician lead; development and evaluation of a discharge summary located on the in-patient electronic medical record; systematic review for AHS of Medical Assessment units)
7. Departmental (e.g., Vice Chair, Strategic planning; Vice Chair, Physician Wellness; IM RTP director).

*Of note, the W21C co-directors and other GIM members of the W21C leadership team were very involved in hosting the Duke and Duchess of Cambridge during their visit to Calgary during the early part of this reporting year.

Recruitment during this period included:

Name	Area of Interest	Primary Site
Lynn A Lambert (Birmingham, United Kingdom)	Health Services delivery, acute care medicine	FMC
Douglas R Hamilton (UofC/NASA/CSA)	W21C and U of C Biomedical Engineering Department, Clinical/Chronic Complex Disease Management Clinics	PLC

Honors and awards

ARP MERIT AWARDS:

Dr. C. Maria Bacchus
Dr. Paul Gibson
Dr. Irene Ma

RECOGNITION AWARD:

Dr Bob Herman (for his role as a Departmental Leader and RGH Site Lead)

National:

- Canadian Academy of Health Sciences – Dr. Norm Campbell

University:

- 2010 Clerkship Awards – Dr. Paul LeBlanc

Departmental:

- 2011 Golden Bull Award – Dr. C. Maria Bacchus

RGH Teaching Awards

- 2011 Star Educators for RGH – Dr. Ghazwan Altabbaa
- 2011 PGY Teaching Awards – Dr. Oliver Haw For Chin
- 2011 PGY Teaching Awards – Dr. Michele Burns
- 2011 PGY Teaching Awards – Dr. Anna Purdy
- 2011 PGY Teaching Awards – Dr. Ghazwan Altabbaa

DOM Residency Training Program Awards:

- Golden Bull Award 2011 – Dr. C. Maria Bacchus
- Silver Finger, IM Residency Program Teaching Award, 2011 – Dr. Alexander Leung
- Silver Tongue Award – Dr. Mike Fisher

DOM Clerkship Awards:

- Clerkship Letter of Excellence, 2011-2012 – Dr. Jeffrey Schaefer
- Clerkship Letter of Excellence, 2011-2012 – Dr. Marcy Mintz
- Gold Star Award, 2011-2012 – Dr. Aleem Bharwani
- Gold Star Award, 2011-2012 – Dr. J. Paul Davis
- Clerkship Teaching Award – Dr. Ghazwan Altabbaa

Faculty Development:

- Dr. David Sam completed his Masters in Clinical Epidemiology and Public Health.
- Dr. Ghazwan Altabbaa successfully defended a Masters Thesis in Clinical Epidemiology at U of C.
- Dr. Irene Ma is enrolled in a PhD in Medical Education at the UofC beginning September 2010.
- Dr. Fiona Dunne is enrolled in a Masters of Education graduate degree program at the UofC and hope to complete in 2012.

CHALLENGES AND FUTURE DIRECTION

1. 2011/2012 has been a year of relative stability for the Section of GIM in Calgary.
2. During the forthcoming year, the Section will need to continue to plan carefully for GIM physician needs at SHC as well as the existing three acute care sites. In addition to the initial daytime ambulatory and consultative services, it is expected that GIM 24/7 inpatient services will be required in approximately 7 months from the time of this report.
3. The continued expansion of clinical services at all sites is anticipated, given inevitable growth and aging of our population.
4. Given these two factors (SHC and continued growth in clinical service needs at all sites) as well as ongoing career transitions (retirements, departures), the Section welcomes the recently initiated AHS physician workforce planning initiative.
5. The continuing uncertainty regarding the success and nature of a provincial AARP. The planning for changes as outlined above will continue despite continuing uncertainty around the ARP negotiations. One must hope that this does not impede efforts to selectively recruit when necessary and to retain and develop the current cohort of generalist physicians.
6. The Section's contributions to the Faculty's education mission at all levels will continue and we aspire to make further research efforts as a result of developments such as a greater alliance with the W21C, the growth of the Maternal Disorders of Pregnancy program and the maturation of the Physician Wellness Initiative
7. The development of a two year fellowship program is ongoing with full Sectional participation.
8. Preparedness and participation in ongoing AHS transitions such as clarifying where GIM fits into the clinical networks concept requires ongoing engagement
9. The summer of 2012 will see five expected recruits:

Name	Area of Interest	Site
Dr. Alejandra Boscan (U of C)		RGH/SHC
Dr. J Paul Davis (U of C)		PLC/SHC
Dr. Gabriel Fabreau (U of C)	Clinical Scholar	PLC
Dr. Horacio Groshaus (U of C)		RGH/SHC
Dr. Evan Minty (U of C)	Clinical Scholar	PLC

Section of Geriatric Medicine – Annual Report

April 1, 2011 to March 31, 2012

The Section of Geriatric Medicine consists of 10 members. 6 are full time in the ARP and members of the Section and 4 are part time members. While the Section has 10 members, the full time equivalent in our Section is 8.55. Three of our members have GFT appointments while the others have Major Clinical appointments with the University of Calgary.

CLINICAL

The clinical activities of the Section of Geriatric Medicine are closely intertwined with those of the Seniors Services, SubAcute Care and Transition Services, Calgary Health Zone.

Clinical activities that are the responsibility of the Section of Geriatric Medicine include Consultation Services at all the Acute Care sites and Seniors Health Clinic. The Section members also support programs of Seniors Health including Day Hospital, GARP unit and provide support to Geriatric Mental Health.

We have been at the forefront in the Department for a number of years in developing interdisciplinary and transdisciplinary approaches to service delivery. Our working relationships with the other disciplines in the Seniors Health Program are both collegial and effective.

During this fiscal year there have been challenges with one member not meeting their ISA requirement for clinical work and their eventual departure from the Section and the ARP. The loss of this individual posed a significant threat to the ability to cover services, in particular the Geriatric Consultation Service. Members of the Section should be commended for their coverage. We were also successful in hiring a Nurse Practitioner in the spring of 2011 to assist with consultation coverage.

Ambulatory Services:

- **Seniors Health Clinics:** There are two clinic sites for Seniors Health Clinic, Rockyview Seniors Health Clinic and Bridgeland Seniors Health Clinic. Both have a multidisciplinary team and functions in a transdisciplinary model. Currently 9 Geriatricians and 4 care of the elderly physicians run 26 half day clinics/week between the two sites with a total of 2315 visits in 2011. In the first 2 months of 2012 there were 413 visits.

The Bridgeland site also includes the Falls Prevention Clinic. This is also the site of the Calgary Fall Prevention Clinic.

The number of clinics fell at Bridgeland due to maternity leave of one of our physicians, and two physicians not practicing in the clinic any longer. We have recruited a new family physician with Care of the Elderly training.

- **Tele-consultation:** Geriatric Medicine continues their active tele-consultation program that supports six rural communities (Banff, Canmore, Cardston, Didsbury, Drumheller, and Strathmore). Also, the Fall Prevention Program is building linkages with remote communities (Canmore). There appears to be a decrease in the utilization of these clinics which makes for inefficient use of Geriatrician time.
- **Support for PCN teams:** In 2011 two pilots were started with Geriatricians providing consultative and educational support to PCN teams. Dr. Fruetel has been meeting with the West Central PCN Geriatric Assessment Team every other week for case conferencing, educational support and consultation starting September 2011. Dr. Sivakumar had started meetings with the Alex Seniors Clinic every other week in December of 2011 but this was stopped with his departure. With the departure, both pilots were stopped due to manpower issues. Dr. Pearce has resumed support of the Alex Seniors Clinic in May 2012, and Dr. Fruetel has resumed support of the West Central PCN team in March 2012.

In 2011 the Seniors Health Clinic started a series of projects looking at increasing access to the clinic. There are several working groups looking at a number of identified issues.

Hospital Consultation: The Section offers in-patient consultation services at the three adult hospitals in Calgary. For this reporting period there were about 1,648 consultation requests which is an increase from the previous period. With the departure of one of our members there was a significant threat to the viability of the acute consultation service at one site. In March 2012 we were successful in hiring a Nurse Practitioner and have developed a new model for Geriatric consult service at the PLC site. This model has helped us sustain our consultation service and will be evaluated.

In September 2011 Dr. Pearce started providing support to the Transcatheter Aortic Valve Implantation (TAVI) program. This program is in its infancy and there will be ongoing evaluations of our involvement in this program, particularly in the pre-TAVI assessment of the frail elderly and post procedure followup.

Other Clinical Activities: Section members provide case conferencing and clinical support to the following programs:

- Fanning Day Hospital
- Glenmore Day Hospital
- Geriatric Assessment and Rehabilitation Program (GARP)
- One Line Triage
- Geriatric Psychiatry Unit

Future Clinical Considerations: Our program has been approached to provide clinical consultation and support to the following programs:

- Home Care Teams – With the Ministerial Directives, Home Care with Destination Home will be developing a Seniors Home Care team and have requested Geriatrician Support.
- Orthopaedic Surgery
- Long Term Care consultation
- Foothills Medical Centre PCN has requested geriatrician support to model support provided to other PCN.
- SHC in the future

These requests are appropriate and will be the basis for increased recruitment

RESEARCH

i) **Scholarly Productivity:** In the year of the report, the Section has produced:

- 17 peer reviewed publications and 5 peer reviewed abstracts with a further 4 in press.
- 2 non peer reviewed publications and 1 abstract

ii) **Major Funding:** Sum of Successful grants allocated to Members is 11,397,320

iii) **Research Focus of Sectional Members:**

- Knowledge Translation and Quality Improvement in Care of the Elderly
- Health Services – Telehealth, Dementia Care, Community Care, Models of Geriatric Care and Clinical Informatics
- Dr. Hogan is a Co-principle investigator for the Canadian Longitudinal Study of Aging. Calgary will contribute 3,000 individuals aged 45 to 85 to this national research effort. Participants will undergo comprehensive triennial evaluations for up to twenty-one years. In 2012 the local research team was hired with the first Calgary participants enrolled. During 2011-12 Dr. Hogan had peer-reviewed publications on frailty, quality of life in Alzheimer's disease, neuropsychiatric changes in older persons subsequent to invasive procedures for coronary artery disease, cerebrovascular reserve as an explanatory mechanism for age-associated cognitive changes, and national physician resource planning in geriatrics

iv) **Leadership in Research**

- Dr. Hogan is the Chair of the C5R Research Committee, and Associate Editor, Current Gerontology and Geriatrics Research and also the Brenda Strafford Chair in Geriatrics, U of C. He is a member of the Steering Committee for the Canadian Initiative on Frailty and Aging. He is also the Editor of the Canadian Journal of Geriatrics
- Dr. Holroyd-Leduc is on the Appraisal Report of Resident Research Grant Application, Physician Services Incorporated Foundation as well a Member, Knowledge Translation & Exchange Grants Committee, CIHR

- Dr. Schmaltz is an External Reviewer for the Heart and Stroke Foundation of Canada
- Dr. Silvius is a member of the CIHR Knowledge to Action Grant Review Committee

QUALITY IMPROVEMENT

Dr. J Holroyd Leduc is the Department of Medicine lead for Quality Improvement. Under her leadership the following projects have been undertaken.

1. **AHS Calgary Zone Elder Friendly Hospital Initiative.** This includes the development and implementation of three evidence-informed key clinical practice strategies within Calgary-area hospitals. It is hoped that this will be implemented at all sites by the fall of 2012.
2. **Provincial Hip Fracture Clinical Care Pathway, AHS Bone and Joint Strategic Clinical Network Trauma Working Group.** Dr. Holroyd Leduc is a member of the working group that is developing, implementing and evaluating an evidence-informed provincial clinical care pathway in an effort to decrease care gaps and provide standardized care to hip fracture patients in Alberta.
3. **Resident-driven Project Targeted at Decreasing ED-LOS for Department of Medicine Patients.** Dr. Holroyd Leduc is the faculty lead on a project supported by AHS Calgary Zone Medical Affairs aimed at working with Internal Medicine Residents to decrease the amount of time it takes to admit a patient from the emergency department.
4. **Targeting Discharge Resources for Department of Medicine Inpatients.** Dr. Holroyd Leduc is the QI Lead on a project supported by AHS Calgary Zone Medical exploring the impact of structured discharge planning on occupancy rates and patient throughput without negatively impacting quality of care.
5. **The Hospital Elder Life Program (HELP)** was instituted at the Foothills Medical Centre in November 2011. Evaluation of the program in April 2012 has shown a reduction in LOS of 2 days for patients enrolled in HELP and the reduction in delirium rates.
6. **A QI initiative to reduce the use of physical restraints among older hospitalized patients.** This is a joint project between the Section of Geriatric Medicine and the PLC Hospitalist group. This project will occur in fall of 2012

EDUCATION

The Section is active in Education across all levels of medical education, but also in Multidisciplinary Education. The Section has recorded a total of 1,568 hours to teaching at various levels.

Undergraduate	<ul style="list-style-type: none"> • All Section members are expected to teach in Course V but many members teach in other courses such as Physical Examination, Physicianship and Communication courses. • 2 members are Master Teachers and as a result have taught in a wide variety of courses to a total of almost 549 hours of UGE small group teaching. • Members combined to supervise 6 medical students in Course 440 • Dr. Burbach is co-chair of Course V UGE (Neurology, Aging and Special Senses) • Section members supervised 35 Clerkship rotations ranging from 2-4 weeks. This includes electives of out of town students. • Participation in OSCE • Participation in CaRMs interviews • Members participate in the faculty advisor program
Postgraduate	<ul style="list-style-type: none"> • All members participate in teaching and supervision of residents on rotation in Geriatric Medicine. • 39 Residents did a clinical rotation in Geriatric Medicine, from Internal Medicine, Family Medicine, PMR and Neurology. Each had a 4 week rotation in Geriatrics • Geriatrics participates in Noon Teaching Rounds and Academic Half day of various PGME programs estimated at 80 of formal teaching. • Supervision of Resident Research Projects • 2 Members are Members of the RCPSC Internal Medicine Examination Committee • Dr. Burbach sits on the PMR Residency Program Committee • Drs. Pearce and Fruetel sit on the Care of the Elderly Residency Program Committee

	for Family Medicine <ul style="list-style-type: none"> • Participation in PGY 1-3 OSCE
Graduate	<ul style="list-style-type: none"> • 1- student was supervised by Section members
CME	<ul style="list-style-type: none"> • Dr. Heidi Schmaltz is the Sectional CME lead and has been integral in the planning of the 1st annual geriatric update for rural/urban primary care to be held in September 2012 • 17 presentations locally, provincially and nationally and 24 workshops or poster presentations • Dr Hogan Founded Dementia Clinical-Neuroradiology Case Rounds with Drs. Smith Chris Molnar and John Lysack
Other	<ul style="list-style-type: none"> • Dr. Holroyd Leduc assisted in the development of a Patient Safety Certificate Course. This involved developing teaching modules related to QI and Knowledge Translation for this new CME course • Dr. Holroyd Leduc has published a book she co-edited, an EBM Geriatric Medicine Book • Dr. Burback is the Chair of the Canadian Geriatrics Society Education Committee

ADMINISTRATION

Members of the Section provide the following leadership roles:

Dr. Fruetel: Head:

- Section of Geriatric Medicine
- Medical Director of Seniors, Subacute and Transition Services
- Medical Leader, Integrated Seniors Health.
- Member of the Canadian Geriatric Society Executive Committee
- Member, RCPSC Internal Medicine Examination Board

Dr. Holroyd Leduc:

- Clinical Informatics Physician Lead, DOM / AHS-Calgary Clinical Informatics
- QI Lead, Department of Medicine
- Alberta Clinical Council
- Program Director, Geriatric Medicine Residency Program
- Co-Chair DOM Resident Research Committee
- Member, Geriatric Task Force, Society of General Internal Medicine
- Member, Distinguished Professor of Geriatrics Subcommittee (2011 Annual Meeting), Society of General Internal Medicine
- Member, RCPSC Internal Medicine Examination Board
- Working Member, AHS Bone and Joint Clinical Network Trauma Working Group

Dr. Silvius:

- Senior Medical Director, Seniors Health, Alberta Health Services
- Senior VP Pharmacy, AHS

Dr Burback:

- Chair of the Canadian Geriatrics Education committee
- Co-chair of Course V – Neurosciences, Aging and the Senses, UME.
- Member of the PMR Residency Training Committee

Dr. Cohen:

- Sectional Representative, ARP Management Committee

Dr Schmaltz:

- CME Lead for the Section of Geriatric Medicine

Dr Hogan:

- Brenda Strafford Chair in Geriatric Medicine.
- In April of 2011 Dr. Hogan was appointed as the founding Director for the Brenda Strafford Foundation Centre on Aging. Centre related activities over the last year have included developing an organizational

framework, hosting an interdisciplinary Student Aging Research Symposium, supporting an international invitational meeting on the assessment of older drivers that was held here in Calgary, and being a co-applicant on three collaborative research grant proposals.

- Member, Hotchkiss Brain Institute, Hotchkiss Brain Institute
- Advisory Committee for the Brenda Strafford Foundation Chair in Alzheimer Research, Faculty of Medicine, University of Calgary
- Advisory Committee of the Brenda Strafford Centre for Excellence in Gerontological Nursing, Faculty of Nursing, University of Calgary
- Member, Reducing Falls and Injury from Falls Faculty, Canadian Patient Safety Institute
- Co-Chair, Physician Resource Work Group, Canadian Geriatrics Society
- Co-Chair, Canadian Coalition for Seniors' Mental Health - Update Guidelines on Delirium, Canadian Coalition for Seniors' Mental Health
- Member, Board of Directors, Alberta Medical Foundation

AWARDS AND HONORS

Members of the Section have been recognized for their contributions, including:

Dr. David Hogan received the CME&PD award (University of Calgary). University of Calgary, Faculty of Medicine

Dr. Jayna Holroyd Leduc received the University of Calgary DOM Quality Improvement and Patient Safety Award. University of Calgary

4 Section members received Associate Dean's Letters for Teaching Excellence in the UGE curriculum, and 2 members received Letters of Excellence for more than one course for a total of 8 for the Section

CHALLENGES AND FUTURE DIRECTION

Challenges:

- The ability of the Section to manage its current work load is precarious. Currently we are meeting needs, but are anticipating gaps in coverage due to retirement, sabbatical leaves and parental leaves. In 2011, we have had reductions in our clinical FTE with Dr. Hogan taking on the role of Director of the Brenda Strafford Centre on Aging, Dr. Holroyd Leduc taking on a leadership role in the Department of Medicine Quality Improvement Lead, and the loss of Dr. Sivakumar. This results in a 1.0 FTE decline as of August 2011
- Increasing demands for Geriatric Medicine input in certain clinical populations is stretching the resources of the Section. Requests for more formal clinical relationships such as with Orthopedic Surgery, Home Care, Primary Care Network and Alex Seniors Clinic are worthy activities but have had to be put on hold
- The ability to recruit, is somewhat hampered by the limited number of residents training in Geriatric Medicine across the country. Calgary has not had a resident train in Geriatric Medicine in years. The ARP is attractive, but it is imperative that positions are set aside for Geriatrics and protected while we recruit individuals. The current practice of needing to put a name to a position to secure that position is a threat to our ability to recruit.
- Ability to measure outcomes in Seniors Health. Change in process requires information, such as numbers of patients seen and wait times. Measuring these outcomes require infrastructure support. This is something that Seniors Health is working on

Future Directions and Challenges:

1. Leadership. Many members have significant FTE devoted to leadership in the Department, University and Zone. While this is a credit to their skills, this has resulted in a reduction in clinical FTE.
2. Recruitment has to be a priority but there are challenges with the number of trainees in the country and the ARP recruitment that is focusing on South Health Campus recruitment. Our plan is to recruit through our Internal Medicine training program and have been granted 4 positions in the next PGY4 CaRMs match for Geriatric Medicine. If we fill this, we will require support from the ARP to hire these individuals who will have completed their training in June of 2015. Geriatrics workforce planning includes:
 - Presence at South Health Campus

- Introduction of night and weekend call. This is going to be trialed at FMC, but if successful will require 4-5 geriatricians per site.
 - Support of ministerial directives which is a priority for the region. With Destination Home, there will be a Geriatric Team developed by Home care that will require geriatrician support.
 - Support of FMC PCN. Other PCN to date do not have Seniors Teams.
 - Maximizing Seniors Health Clinic. Current wait time for access to the Seniors Health Clinic is 4-5 months which we do not feel is optimal. There is capacity at Bridgeland for additional clinics. The long term plan is to develop a third Seniors Health Clinic at South Health Campus.
3. Seniors Strategic Clinical Network has great potential. 4 members (Drs. Hogan, Fruetel, Holroyd Leduc and Silvius) are members of the core committee.

Section of Hematology and Hematologic Malignancies - Annual Report April 1, 2011 to March 31, 2012

CLINICAL

1. New Clinics, Initiatives and Innovations

- a. Continued development of the Rare Blood and Bleeding Disorders Comprehensive Care Program, under the leadership of Dr. Man-Chiu Poon by incorporating hemoglobinopathy patients (Thalassemia, Sickle Cell). Drs Dawn Goodyear (Calgary) and Natalia Rydz (Kingston) recruited in second half of 2012.
- b. Restructured TBCC Hematology Clinics to disease specific days to facilitate patient care, physician coverage, clinical trial activity, and education programs – Tuesday-Leukemia, Wednesday-Myeloma, Thursday/Friday-Lymphoma.
- c. Expanded and reorganized APN role in Hematology and BMT clinics

2. Key Partnerships

- a. Provincial Hematology Tumor Group (TBCC, CCI, Associate Cancer Centre, Hematopathology in Calgary and Edmonton)
- b. World Federation of Hemophilia Country Program for China (Man-Chiu Poon)
- c. Monthly Hematology Clinics in Medicine Hat
- d. BMT Clinics every 2 weeks in Edmonton
- e. International Health Program Project, Laos (Chris Brown)
- f. Pediatric hematology: Hematology Training Programs and Hemophilia Programs

RESEARCH

1. Scholarly Productivity

- a. Peer Reviewed Publications/Articles - Total 61 published, 22 in Press; Abstracts - Total 40
- b. Non Peer Reviewed Articles – Total 9
- c. Book Chapters – Total 5, with 3 in press

2. Major Funding (PI only) –Total Approx. \$4,549,600

New: \$1,886,000

Sources: Alberta Cancer Foundation, Alberta Cancer Research Institute, Association of Hemophilia Clinic Directors of Canada, Bayer, Baxter, Celgene, Calgary Health Trust Hematology Research and Education Fund, Canadian Institute of Health Research, Hoffman la Roche, Multiple Myeloma Research Foundation, Pfizer, Southern Alberta Myeloma Patient Society, Novartis, Thalassemia Foundation of Canada, University of Calgary, Private/Corporate Donations

Ongoing: \$2,663,600

Sources: Alberta Heritage Foundation, Alberta Cancer Board, Alberta Cancer Foundation, Alberta Cancer Research Institute, Alberta Innovates Health Solutions, Bayer, Calgary Laboratory Services, NCI/NIH, Canadian Institute of Health Research, Canada Foundation for Innovation Canadian Hemophilia Society, Dept of Medicine Research Development Fund, Section of Hematology Research and Education Fund, GSK, Genzyme, Hoffman la Roche, NCIC, National Cancer Institute (USA), PDL/Otsuka, Pfizer, Sanofi Aventis Canada Inc., Terry Fox Research Institute, Private Donations.

3. Research Focus of Sectional Members

Malignant Hematology:

- Clinical Trials (novel monoclonal antibodies, lenalidomide, NCIC-CTG cooperative group and industry) for Multiple Myeloma (N Bahlis, P. Duggan), Lymphoma (D Stewart, C Owen) Leukemia/MDS (L Savoie and M Geddes).

- Translational: Provincial Hematology Tumor Bank (with Alberta Cancer Research Institute Biorepository, D Stewart), Predictive Biomarkers and Molecular Biology of Lymphoma & Myeloma (D Stewart, N Bahlis). Role of Cereblon in myeloma cells and sensitivity to IMiDs (N Bahlis and J Slaby)

Blood and Marrow Transplantation:

- Busulfan pharmacokinetics, adjusted dose therapy, TBI, ATG (J Russell)
- PET/CT-guided high dose therapy/ASCT for aggressive lymphoma (D Stewart)
- SCT outcomes for indolent and aggressive lymphomas (D Stewart).
- Blood vs Marrow Stem Cell Source for Unrelated Allogeneic SCT (L Savoie)
- Allergy, Immunology and Infection following Allogeneic SCT (J Storek)
- Autologous SCT for autoimmune disorders (J Storek)

Hemostasis/Hemophilia (MC Poon, D Goodyear):

- Clotting activity heterogeneity in severe hemophilia A
- Canadian dose escalation prophylaxis study
- Risk of ischemic heart disease in hemophilia patients and carriers
- Treatment of Glanzmann's thrombasthenia: prospective observational registry
- International immune tolerance for eradication of inhibitors in hemophilia A
- Etiology of decreased bone mass density in hemophilia patients

Thrombosis:

- Thrombosis Clinical Research Unit (R Hull).
 - i. PIOPED III (Prospective Investigation of PE disease) using MRI. (R Hull)
 - ii. Thromboprophylaxis in acutely ill patients (EXCLAIM Study). (R Hull)
- Thrombophilia screening practices in the community (MC Poon)

Medical Education:

- Undergraduate: teaching methods, curriculum design, EBM (D Jenkins)

Leadership in Research:

- Canada Research Chair in Immunology. J Storek
- Chief Editor, Clinical and Applied Thrombosis and Hemostasis. (R Hull).
- Editorial Boards: Blood (N Bahlis), Oncology (D Stewart)

EDUCATION

Teaching Hours (Approximate)

	<u>Approximate. Number of Hours</u>
Undergraduate	MDCN 350, 440, 540, 320: 350 hrs
Postgraduate	MDSC 731.02 MDSC 678, & Resident Seminars, Journal Club: 60 hrs Hematology Educational Rounds: 40 hrs
CME	National/International: 20 hrs Local: 26 hrs
Thesis Supervision	1 PDF, 2PhD, 2 MSc

1. Awards:

- International Total 3
 Recipient of the ACHIEVE Program Clinical Placement, Brussels, Belgium 2011-2012 (D Goodyear), Bayer International Clinical Training Award 2010-2012 (D Goodyear), Bayer

International Clinical Training Award 2012-2014 (A Lee) Principal Investigator/Supervisor for all - MC Poon

- National Total 1
Canadian Association of Medical Education Merit Award, CAME, 2011 – K Valentine
- Local (including provincial) Total 1
Outstanding Mentorship Award, University of Calgary Medical School, 2011 – D Jenkins

2. Educational Leadership:

- International: Invited CME (MC Poon and R Hull), CME International Health Program (C Brown)
- National: Chair, RCPSC Hematology Examination Board (L Savoie) and Member, RCPSC Internal Medicine (L Savoie) and Hematology Exam Boards (K Valentine)
- Local: (including provincial) Director Hematology Residency Program (M Geddes), Director Blood Course (L Savoie), Director Undergraduate Medical Education Student Affairs (D Jenkins), Director Lymphoma Fellowship Program (P Duggan), Director BMT Fellowship Program (M Shafey).

ADMINISTRATION

1. Leadership:

- Local (including provincial) Total 18
- National Total 1
- International Total 1

2. Strategic Planning:

- Recruitment of new Hematology staff members – None for 2011-2012. Planned for 2012- 2013: Dr. Dawn Goodyear July 2012, Dr. Ted Thael to ARP for SHC September 2012, Dr. Natalia Rydz Dec 2012, Dr. Lesley Street Jan 2013
- Plans for staffing of SHC ongoing
- Initial meeting held for consolidation of Calgary hematology inpatient services to FMC. Working group formed and second meeting of larger group scheduled for October 2012.

3. Fundraising for reporting period: Source and dollar value (approximate)

- Corporate/Patient Donations \$1,119,000
- Industry Donations \$660,000
- Used for Research and Education Purposes

CHALLENGES AND FUTURE DIRECTION

1. Challenges

- Alberta Health Services ongoing restructuring in face of limited resources: lack of bed capacity, functional planning for hematology at the SHC, EMR, Patient Flow, Clinic and Office capacity.
- Operation of high acuity tertiary Hematology Services at 2 hospitals non-sustainable. Need to consolidate to one site to ensure appropriate frequency of staff call, optimize patient care and flow, ensure equal access to novel therapies on clinical research trials and facilitate education programs.
- New ARP and Recruitment: limited available funded positions, office and clinic space, secretarial support.
- Program development for benign Hematology: Inadequate clinic space and allied health staffing for Rare Blood and Bleeding Disorders Program. Need to create Thrombosis Program (CPGs, Research).
- Research: Support for Translational Research (protected time, database infrastructure, tumor bank). Limited Clinical Research infrastructure in Calgary hospitals.
- Increased teaching responsibilities for increasing numbers of medical students and residents.

2. Future Directions - Goals for the coming year include:

- Consolidate high acuity tertiary Hematology Services from 2 sites (PLC and FMC) to one site (FMC).
- Recruit 4 new hematologists (2 for benign hematology/Rare Blood Bleeding Disorders Program), 1 for PLC site, and 1 for myeloma program at FMC/TBCC.
- Work with Calgary Zone and Cancer Care, AHS, to coordinate cancer treatments
- Expanding Adult Rare Blood and Bleeding Disorders Clinic to include hemoglobinopathies, and further develop the Benign Hematology Program.
- Increase research productivity, including competitive peer-review grants for translational research, establishing hematology tumor bank, and establishing clinical trials for benign hematology studies at FMC.
- Foster mentorship program for diverse needs of young Section members and fellows

Section of Infectious Diseases – Annual Report April 1, 2011 to March 31, 2012

The Adult Infectious Diseases Section has members who have a primary appointment in the Department of Medicine (DOM) as well as members who have primary appointments in other areas (Alberta Health Services Executive, Microbiology Laboratories and Intensive Care) and a secondary DOM appointment.

CLINICAL

Infectious Diseases Section provides inpatient care in all adult hospitals in Calgary and outpatient care in a variety of specialized settings as outlined below. Almost all inpatient consults are completed within 24 hours of when they are requested. The patient workload has continued to increase by 5%-10% per year. A variety of changes and improvements in the Infectious Diseases clinics were achieved this year. The Section ran 1,632 outpatient clinics and oversaw the outpatient treatment of 50,526 patients.

Clinic	Access	Innovations	Case Load (previous year in parentheses)
Home Parental Therapy (HPTP)	FMC HPTP moved to more appropriate clinic space.	Review mandate of HPTP. Alignment of written mandate with clinical practice.	647 clinics 17, 285 clinic visits (15,900) >6,350 (5,000) new patient visits new patients seen within 24 hours
Southern Alberta (HIV) Clinic (SAC)	Continued use of teleconferencing, nurse assessment clinics, research in domestic violence in HIV positive patients	Continued research in domestic violence and neurocognitive issues in HIV positive patients	225 clinics 5235 patient visits 163 (150) new patients 1349 active SAC patients
STD Clinic	Hired new STI physician New funding for contract tracing	New clinical instructor for coordinating staff orientation	161 clinics 26,418 (22,892) patient visits 7,043 (7185) new patients
Cystic Fibrosis Clinic	Increased number of clinics run (2 primary physicians and a nurse practitioner)	Reassessment and QI of Infection Control practices Computerization of records	143 clinics 894 (595) clinic visits 150 (143) total patients
Transplant Clinics	As needed consultation Realignment of FMC ID service to allow Hematology/Oncology better access to ID consults	Joint review of treatment of fungal infections in neutropenic patients	40 (20) consults
General ID Clinics	Two ID staff now work with fellows, increased number of clinics	Rotations of ID Trainees through clinic re-organized	70 (60) clinics 456 patients seen 297 new patients
Tropical Diseases Clinic	Clinic started in this fiscal year	Provides immigrants, refugees and return travelers with access to expert in tropical diseases	24 clinics 31 patients
Hepatitis C Treatment (CUPS and SAC)	Hepatologist coming to SAC re co-infected patients	Paper published	
MRSA Decolonization Clinic			40 clinics 290 patients

Other Programs which the Infectious Diseases Section is a major player includes:

Infection Prevention and Control (IPC). Highlights of this program include

- Development of province wide standardized tables of care for infectious diseases and conditions.
- Hand hygiene review (12,000 reviews). Calgary zone based hand hygiene initiatives developed.
- Calgary Zone Medical Device Reprocessing Review (55 reviews) 50% less issues identified compared to review 3 years ago
- Development of province wide IPC surveillance system including “comparison” database for real time access to information about antibiotic resistance organisms, *C. difficile* infections and CVC blood stream infections
- Presentation of 4 abstracts at CHICA
- Continued participation in the Canadian Nosocomial Surveillance System

Calgary Zone Antimicrobial Committee (formerly CHRAUC [Calgary Health Region Antibiotic Utilization Committee]). Highlights of this program include:

- Reviewed and updated Emergency Room order sets that address the management and treatment of infectious diseases
- Evaluation of meningitis protocol developed by C-ZAC for use in the Emergency Room.
- Development of a protocol to manage and treat invasive fungal infections in neutropenic patients
- Paper presented re the metrics of antibiotic consumption at ACH

Calgary Zone Clinical Informatics

- The current Medical Director for the CHR Clinical Informatics team is an ID Section member. This work is done in a separate Alberta Health Services contract and is not directly related to the ID Section.

RESEARCH

The Section is active in research at several levels from bench to bedside. Section members spent 356 hours working as editors on journal boards, as editors for journals and reviewing grant applications.

Reported Section research activities include (date of information Calendar year):

44 Papers in peer-reviewed journals

18 Papers in non-peer reviewed journals

26 Abstracts

Presenting as invited speakers at scientific meetings: 26 local, 13 provincial/national and 13 international scientific meetings

Major Funding

Section members currently hold over \$1.7 million in research grants for the 2011 fiscal year from agencies ranging from CIHR and PHAC to local sources.

Research focus of members:

Dr. D. Church	Medical microbiology, new technology development, HIV
Dr. J. Conly	MRSA biology/epidemiology, infection control, medical innovation
Dr. J. Gill	HIV/AIDS, economic analysis
Dr. D. Gregson	Medical microbiology, new technology development
Dr. J. Janvier	HIV in Aboriginal communities
Dr. A. Johnson	Transplant-related infections
Dr. K. Laupland	Population based infectious diseases epidemiology, leader of multi-national collaborative on blood stream infections
Dr. M. Louie	Medical microbiology, <i>E. coli</i> O157, environmental antibiotic resistance
Dr. T. Louie	<i>C. difficile</i> , MRSA decolonization, infection control
Dr. M. Mah	Hand hygiene, social marketing
Dr. D. Megran	Determinants of physician well being

Dr. M. Parkins	Cystic Fibrosis
Dr. A. Patullo	Clinical informatics, clinical decision support
Dr. D. Pillai	Malaria, <i>C. difficile</i> , sepsis
Dr. H. Rabin	Cystic fibrosis, major collaboration project with Department of Microbiology
Dr. R. Read	Sexually transmitted infections, antibiotic resistance in agriculture

EDUCATION

The Section is committed to providing education to all levels including undergraduate studies (medical and other faculties), postgraduate medical training and academic scholarship (Masters and PhD level students). The Section also provides lectures/information sessions as part of Continuing Medical Education for Family Physicians and physicians from other Sections within DOM and in Departments beyond the DOM.

Type of Education	Number of hours for Section
Undergraduate (Faculty of Medicine)	80 hours formal teaching medical students MDCN 504/514.17 (bedside clerkship teaching 352 days U of C, 195 days non U of C service 547 days or 4376 hours 1094 teaching hours (0.25% of service hours) 96 hours supervising student projects
Postgraduate	81 hours of formal teaching GIM/Family Practice Residents 868 days or 6944 hours service 1736 teaching hours (0.25% of service hours) ID Residents 263 days or 2104 hours service 526 teaching hours (0.25% of service hours) 45 hours supervising resident projects
Graduate	6 hours of formal teaching 204 hours supervising Master and PhD candidates
CME	51 hours

Teaching Activities

ID Resident Teaching Program. The adult infectious diseases training program has continued to revise the education content of the program. All members of the Section are actively involved in the ID training program. In the fiscal year of 2011, the training program is fully accredited by the Royal College of Physicians and Surgeons of Canada.

Educational Leadership

Dr. Ron Read is an active member of the Undergraduate Medical Education Committee of UME. Dr. Bonnie Meatherall (Course 1) and Dr. Michael Parkins (Course 3) are the Infectious Diseases leads for these undergraduate courses.

New Initiatives and Innovations

STD Education direct-to-teens via www.Nexopia.com
See clinical table

ADMINISTRATION

Members of the Infectious Disease (ID) Section are involved in Medical Administration of a large number of programs. Among people with primary DOM appointments, administration work accounts for 13.7% of the FTEs (1.7 FTEs). Section members are the medical director for a) the Southern Alberta Clinic, b) the Sexually Transmitted Infections Clinic, c) the Home Parenteral Treatment Program, d) the Adult Cystic Fibrous Clinic and e) Infection, Prevention and

Control (IPC) program. Other section members are the medical IPC site officers who work at each adult acute care site in Calgary.

Dr. John Conly

- Co-Director, Calvin, Phoebe and Joan Snyder Institute for Chronic Diseases (Snyder Institute), and Chair of Snyder Institute Finance Committee
- Chair, Infectious Diseases Research Group, University of Calgary and Health Region
- Director, Centre for Antimicrobial Resistance, University of Calgary and Health Region
- Member, Board of Directors, Canadian Foundation for Infectious Diseases
- Medical Site Officer Infection Prevention and Control FMC
- Co Chair of the Antimicrobial Stewardship Committee
- Member, Technical Consultative Group, GIPC Network, WHO – Geneva, Switzerland.
- Member of Cochrane Collaboration

Dr. John Gill

- Medical Director, Southern Alberta HIV Clinic (SAC)
- Director, University of Calgary Retrovirology Laboratory

Dr. Donna Holton

- Section Chief
- Medical Director, Home Parenteral Therapy Program (HPTP)

Dr. Andrew Johnson

- Program Director for the Adult Infectious Diseases Residency Training Program

Dr. Joseph Kim

- Medical Site officer, Infection Prevention and Control Program

Dr. Tom Louie

- Infection Prevention and Control Program (IPC) Program Director and PLC Medical Site Officer

Dr. Andy Pattullo

- Medical Director, Advance Technology Clinical Informatics

Dr. Ron Read

- Medical Director, Calgary Sexually Transmitted Infection Clinic

Dr. Harvey Rabin

- Medical Director, Adult Cystic Fibrosis Clinic

Section members with secondary DOM appointments are also involved in administration.

Dr. Dan Gregson (dual trained)

- Section Chief, Medical Microbiology, Calgary Laboratory Services

Dr. Marie Louie (dual trained)

- Acting Medical Director, Provincial Laboratory, Alberta Health Services

Dr. David Megran

- Zone Clinical Department Head Administration

Awards and Recognition

- Dr. John Conly: Dr. John M. Emil Mentorship Award in Infectious Diseases. Canadian Foundation for Infectious Diseases, the Dr John Conly Innovation Award, Department of Medicine, and U of C.: Nominee for the 2012 American Professors of Medicine Robert H. Williams, MD Distinguished Chair of Medicine Award: American Professors of Medicine.

- Dr. Donna Holton: Bronze level Distinguished Service, U of C Undergraduate Medical Education
- Dr. Kevin Laupland: Dr. Lindsay Nicolle Award (AMMI)
- D. Mike Parkins: Bronze level Distinguished Service, U of C Undergraduate Medical Education

CHALLENGES AND FUTURE DIRECTION

The Infectious Diseases (ID) Section has experienced an increasing clinical workload because new organisms (HINI) continue to be identified and microbes continue to develop new and complex antimicrobial resistance patterns (MRSA, ESBL, AMPc). The population of Calgary continues to a) age, b) have limited access to primary care, and c) have increasing patient acuity scores that result in increased numbers of patients being more susceptible to acquiring infections.

The ID Section provides 24/7 coverage for all three adult acute care sites. In addition, the ID Section cares for patients in more than 1600 half-day outpatient clinics (HPTP, SAC, STI, CF clinics, General ID). The focus of these outpatient clinics is to prevent hospital admissions by providing timely outpatient care. The ID Section works with IPC and public health to try to prevent diseases transmission in both outpatient and inpatient settings. The Section in conjunction with the Pediatric Section of Infectious Diseases has set up an outpatient clinic for patients with tropical diseases.

In 2011-2012, the ID Section hired 1 new physician. Since 2010, IPC, the CF clinic and STI have more than one physician working in these specialized areas. As a result of the new hires over the last 3 years the number of FTEs within the Section and the workload that the Section performs is now balanced. The Section was able to split the ID inpatient service at the largest adult site into two services which has greatly improved patient care and educational experiences for trainees. In the next fiscal year, the Section will be looking to hire physicians to work in IPC, Tropical Diseases/HIV, and Population Based Studies. An ID consultation service (HPTP and inpatients) will have to be provided for the South Health Campus. Two of the adult HPTP clinics have now been moved to areas with increased space which has helped accommodate the influx of patients from the Emergency Department. The third clinic will move in next fiscal year.

The Section remains committed to having one of the best if not the best ID training program in the country and have been able to recruit high quality applicants each year (former chief medical residents). In 2011-2012, 3 fellows were in the training program.

The Section has increased transfer of care to nurses in several areas. The Section has two nurse practitioners (NP) who work the main acute care site in HPTP and on the inpatient service. One NP works half time in the CF clinic. Some aspects of patient care have been formally transferred to highly skilled nurses in SAC and STI clinics. The Section remains committed to using extensive telehealth conferencing to maximize potential connections with rural and urban physicians. We now use teleconferencing for patient care for stable HIV patients who live outside of Calgary (can only be done on alternate visits). We also use telehealth to share information when an ID Seminar has a high general interest. The Section will continue to create innovative programs to deliver ID specialty care in a variety of settings. These new service delivery models will have outcome analysis performed to ensure that the programs evolve as needs change.

Section of Nephrology - Annual Report April 1, 2011 to March 31, 2012

CLINICAL

Dimensions Of Quality	Clinic, Innovation, Initiative	Key Personnel / Leads	Outcome Measures (compared to pre- implementation.)
Access	Nephrology Central Referral Clinic	Braden Manns Davina Tai then Louis Girard – after Dr. Tai resignation Sept 2011	Decreased wait times from up to 14 months down to less than 4 months for routine referrals. Urgent patients recognized by standardized measures and seen in less than 1-3 weeks. Semi-urgent clinic (4-6 week wait) working well. Registered Nurse (RN) triaging 90% of referrals. Standardized letters to GP's on 15% of referrals
Access and Effectiveness	1) Kidney Disease Prevention clinic – Outreach to aboriginal population. Nurse practitioner managed protocol driven evidence-based clinical practice guideline for management of diabetes, hypertension, dyslipidemia implementation 2) Telehealth – Started 2010 - Nephrologists, dietitians, social workers and nurse educators now communicate with patients across southern Alberta via telehealth- Originating centres include Calgary, Lethbridge and Medicine Hat.	B.Hemmelgarn Matt James Ellen Novak NP All Nephrologists – paramedical staff	Interdisciplinary Chronic Disease Collaboration (ICDC) published for effectiveness and cost-effectiveness. In 2010 we opened a new aboriginal clinic in Standoff which has since been suspended in 2012 with resignation of GP at clinic. Nominated for AHS President's Award by Executive VP
Effectiveness and Safety	Glomerulonephritis Clinic – Clinical Nurse specialist adjunct to Physician Care of active immunosuppression patients	Manns, Girard, James, and Sandra Whelan RN All nephrologists and trainees now using	Standardize care with evidence based medical decisions. Improved safety using RN to help monitor side effects of immunosuppression including leukopenia, infections and other side effects. Freeing up of MD's time to deliver more urgent care assessments. Expanded to all nephrologists

1. Dr Chandra Thomas has developed a comprehensive program of Advanced Care Planning including partnering with Palliative Care. This consultative and intense management program initiates conversation with renal patients and supports them over days to years. It also has a strong component relating to End of Life decisions, palliative care and pain control. The Southern Alberta Renal Program has supported this initiative through the funding of 2.5 FTE clinical nurse specialist. We have partnering with NARP and developed a Pain Assessment and Management Tool to be used province-wide. 100% of Nephrology patients admitted to hospital have a Goal of Care documented.
2. CKD Exercise Program: Dr. Stefan Mustata and now a third exercise physiologist have developed a specific assessment and exercise program for patients with chronic stable kidney disease, kidney transplant or dialysis

patients. Many of the dialysis patients incorporate the bicycle exercise program that was developed over the past 3 years. The Section of Nephrology has allocated over \$20,000 for the purchase of stationary bicycle used on hemodialysis patients.

3. Community Kidney Kitchen: The Section of Nephrology is the sole financial supporter of this volunteer Dietician run program that teaches Kidney Failure patients how to grocery shop and cook diets that are friendly to kidney failure.

Key Partnerships – Provincial, National and International

1. Members of the Section of Nephrology including Drs. Manns, Hemmelgarn (coPI's) Quinn and Ravani received a \$5,000,000, 5 years team grant called the **Interdisciplinary Chronic Disease Collaboration (ICDC)** to investigate the effectiveness and cost-effectiveness of treatments for chronic diseases. They have already set up partnerships with other researchers in chronic disease and with health services administrators at Alberta Health and Wellness. The aim is health administrator directed, health services research relating to chronic diseases. In early 2012 Clinical Pathways have been developed and are now being reviewed for distribution. **Received the AHS President's Award for Innovation.** This is an exciting opportunity for researchers to engage health resource decision makers and give them the evidence they need to go forward with their decisions.
2. Dr. Hemmelgarn and Dr. Ahmed continue to work with First Nations elders and populations (Siksika, Tsuu T'ina, and Blood nations) to investigate the causes of chronic disease burden and implement treatments for these high-risk patients. Their previous work and presentations to the Aboriginal Health Council, University of Calgary Native Centre and the Elbow River healing Lodge has paid off with the opening of the new Outreach Clinic in Standoff for the Blood Nation of Southern Alberta
3. Dr. Hemmelgarn continues to also work on access and delivery of care to disadvantaged and marginalized populations such as aboriginal, elderly and the poor.
4. The addition of Dr. Pietro Ravani to the Section of Nephrology has allowed for the start of a relationship with Italian researchers with similar interests in epidemiology and Health Services research. We are in the process of getting Dr. Strippoli an Adjunct Professorship at U of Calgary. He has visited Calgary 4 times and 3 of our researchers have visited Bari, Italy.
5. Ongoing collaboration with researchers from Edmonton under the umbrella of the Alberta Kidney Disease Network (AKDN)
6. Drs. Hemmelgarn, MacRae and Scott-Douglas lead a Canada-wide Quality Assurance project that entails the Canadian Nephrology Knowledge Network (CAN-NNET) supported implementation of an evidence-based protocol to prevent dialysis catheter dysfunction and related bacteremia using thrombolytic prophylaxis therapy. It has \$450,000 in support for data collection and analysis

RESEARCH

- i. Scholarly Productivity
 - a) Peer Reviewed Publications / Articles
Section of Nephrology involved in the publication of over 90 different peer reviewed articles, over 65 as 1st, 2nd or senior authors. 30 more manuscripts in press and over 25 abstracts
 - b) Non-Peer Reviewed Articles
None in current reporting period
 - c) Book Chapters-none in current reporting period
 - d) Academic Reports or Reviews – 3 guidelines – Canadian Society of Nephrology and Canadian Hypertension Society, Kidney Diseases Improving Global Outcome (KDIGO) guidelines
 - e) Over 15 invited presentations
- ii Major Funding: Source and dollar value

Members of the Section of Nephrology have active funding of just over \$23 million dollars of which just over \$3,750,000 is payable in the current year of this annual report. The main funding agencies are AHFMR and CIHR with much smaller amounts attributable to the Kidney Foundation of Canada, CADTH and industry sponsors, Department of Medicine QA projects, ARP business cost program and private philanthropy.

iii Research Focus of Sectional Members (e.g. health services, immunology, genomics, medical education, etc.)

- (1) Health Services – Drs. Manns, Hemmelgarn, Ravani and now Dr. Quinn working through the ICDC and the AKDN with grants totally well over \$5 million
- (2) Medical Education – Dr. MacLaughlin and Dr. Chou continue to investigate and publish in the areas of pedagogy. Specifically in the areas of how medical students and trainees learn and the medical trainee evaluation process. Dr. MacLaughlin is particularly prolific in these areas as well as in the area of Simulation teaching.
- (3) Drs. MacRae, Ravani and Quinn investigate the areas of Hemodialysis adequacy and Vascular Access and cardiovascular disease
- (4) Drs. Hemmelgarn, Manns and Muruve through the AKDN and ICDC are investigating genomic factors that influence chronic kidney disease
- (5) Drs. Muruve, Wendy Wang and Tibbles continue to work on basic science areas that include gene therapies, immunologic responses especially inflammasomes, fibrosis and immune tolerance
- (6) Dr. Tibbles (PI) in combination with Drs. Hemmelgarn and Manns received just under \$3 million for a multi-centered trial looking at treating BK virus in transplantation. This is a major cause of graft loss. Recruitment to this trial continues in year of this report.
- (7) Dr. Ahmed continues strong translational research into the etiology of glomerular nephritis, sleep disorders, CKD in aboriginals, vascular access.
- (8) Dr. James receives CIHR clinical trial funding, investigating the prevention of acute renal failure in post operative AAA patients as well as the role of Zinc supplementation in dialysis patients.
- (9) The Section is heavily involved in investigator initiated and industry-sponsored clinical trials.

iv Leadership in Research (e.g. CRC or other Chairs , CIHR Review Committee, Editorial Boards, etc.)

Peer Review Activities

Grant Panels

- Tibbles, Lee Anne. 2007 - present. Biomedical Research Grants Committee. Kidney Foundation of Canada

Grant Review

- Ahmed, Sofia. 2010 Apr - present. Reviewer for the Kidney Research Scientist Core Education and National Training Program Post-Doctoral Fellowship Award Applications. Kidney Foundation of Canada
- Hemmelgarn, Brenda. 2010 Jan 1 - present. Biomedical Scientific Review Committee
Internal Reviewer for the Scientific Review Committee. Kidney Foundation of Canada
- Hemmelgarn, Brenda. 2010 Jan 1 - 2010 Dec 31. Peer Review Committee – Internal reviewer. CIHR Aboriginal Peoples' Health Committee
- Hemmelgarn, Brenda. 2010 Jan 1 - present. External reviewer. Heart and Stroke Foundation of Canada
- Muruve, Daniel. 2006 - 2012. Experimental Medicine. Canadian Institutes of Health Research
- Tibbles, Lee Anne. 2005 - present. External Reviewer. Nova Scotia Health Research Foundation

Journal Reviews

- Ahmed, Sofia. 2010. American Journal of Kidney Diseases
- MacRae, Jennifer. 2010 Jan - present. Nephrology dialysis and Transplantation
- Quinn, Robert. 2009 - present. Manuscript Review. American Journal of Kidney Disease, Peritoneal Dialysis, JASN, cJASN
- Tibbles, Lee Anne. 2008 - present. External Reviewer, American Journal of Transplantation. American Society of Transplantation, Nephrology Dialysis and Transplantation, Transplant International, JASN, American Journal of Pathology, American Journal of Physiology

Editorship

- Hemmelgarn, Brenda. 2010 Jan 1 - 2010 Dec 31. Editorial Board. American Journal of Kidney Disease
- Hemmelgarn, Brenda. 2010 Jan 1 - 2010 Dec 31. Editorial Board. Canadian Journal of Cardiology

- Muruve, Daniel. 2008 - 2011. Gene Therapy

Other

- Hemmelgarn, Brenda. 2011. Clinical Trainee Advisory Committee MD/PhD and Clinical Fellowship reviews. Alberta Innovates - Health Solutions
- Hemmelgarn, Brenda. 2011. CIHR Canada Graduate Scholarships PhD Awards Committee. CIHR
- Hemmelgarn, Brenda. 2011. CIHR Canada Graduate Scholarship Master's Awards Committee. CIHR
- Tibbles, Lee Anne. 2010 - present. Abstract Review The Transplantation Society (International).
- Tibbles, Lee Anne. 2010 - present. Abstract Review The Canadian Society of Transplantation.

Over 1000 hrs in peer review processes by Section

CAREER AWARDS, ENDOWED CHAIRS, OTHER FUNDING

- Ahmed, Sofia. 2009 Jul - 2014 Jun. New Investigator. Canadian Institutes for Health Research
- Dr. Muruve now holds a CRC Tier II chair The Roy and Vi Baay Chair in Kidney Disease Research is nearing completion of fund raising of \$8 million.
- Dr. Brenda Hemmelgarn was appointed as the inaugural holder Editorial Boards - Can J of Cardiology; and Dr Muruve – Gene Therapy
- Dr. Hemmelgarn – AHFMR Program Advisory Committee member, Canadian Organ Replacement Registry advisory committee member, Heart and Stroke Foundation External Grant Reviewer
- Dr. Manns – Chair of Canadian Society of Nephrology (CSN) Scientific Committee, Chair CSN Anemia Committee
- Dr. McLaughlin – Chair U of C Clerkship Committee
- Dr. Tibbles was the director of the 2010 World Transplant Congress Organizing Committee and Executive Member of the International Congress of the Transplantation Society as well as a Member of the Kidney Foundation of Canada Biomedical Research Grants Committee
- Dr. Muruve – Member of CIHR Experimental Research Grants Committee and Member of the American Society of Gene Therapy, Immunology of Gene Therapy Committee

EDUCATION

Teaching Hours

	Number of hours
Undergraduate	Over 1600
Postgraduate	Over 1000
Graduate	Over 2500
CME	Over 100
Thesis Supervision	Over 500

Awards / Recognition

- Ahmed, Sofia. Alberta Heritage Foundation for Medical Research Clinical Investigator Award. Alberta Heritage Foundation for Medical Research. \$700,000 - ongoing
- Hemmelgarn, Brenda. Alberta Heritage Foundation for Medical Research Population Health Investigator Award – 1 year extension
- Hemmelgarn, Brenda. Canadian Institutes of Health Research New Investigator Award
- Hemmelgarn, Brenda . Inaugural Chair. Roy and Vi Baay Chair in Kidney disease Research

- Manns, Braden. CIHR New Investigator. CIHR
- McLaughlin, Kevin. Gold Star teaching award for the Internal Medicine clerkship, 2011
- McLaughlin, Kevin. Letter of Excellence in teaching in Course 4 (Renal, Endocrine, and Obesity), 2011
- Muruve, Daniel. Scholar. Alberta Heritage Foundation for Medical Research
- Muruve, Daniel. Canada Research Chair, Tier II
- Quinn, Robert. CIHR Institute for Health Services & Policy Research Fellowship. Canadian Institutes of Health Research. \$110,000

New Initiatives / Innovations (e.g. Curriculum, courses, simulation, technology, etc.)

Hemmelgarn, Brenda. Innovation program - CKD outreach clinic. Set up a clinic at SikSika for patients at high risk of developing kidney disease. Trained a nurse practitioner to run this clinic. Supervise this clinic from a distance, weekly (by phone / pager if required). Meet weekly to biweekly to review patients.

ADMINISTRATION

Leadership:

- a) Local - Dr. Manns – Alberta Blue Cross special committee on Anemia in CKD
- b) National – Dr. Brenda Hemmelgarn - Chair of Hypertension Guidelines - Canadian Hypertension Society
- c) International – Brenda Hemmelgarn – Member of KDIGO CKD guidelines committee

Strategic Planning: Pharmacogenomics and Knowledge Translation.

CANN-NET – Canadian Society of Nephrology lead knowledge evaluation and translation as well as trials design to fill in knowledge gaps – Dr. Manns is National PI with CIHR funding of > \$1 million. Drs. Scott-Douglas, Hemmelgarn and Bass are extensively involved

Fundraising: Source and dollar value

Section of Nephrology with the help of the Kidney Foundation of Southern Alberta raised just over \$650,000 this past year during the Kidney March as part of the five year goal of \$8 million.

CHALLENGES AND FUTURE DIRECTION

Challenges

- 1) Space for Physician Offices and support staff.
- 2) Funding for implementation of Dialysis Measurement and Reporting (DMAR) pilot
- 3) Funding for expanding Home dialysis therapies
- 4) Continued expansion of and alignment with the Northern Alberta Renal Program
- 5) Cut in medical support staff numbers by AHS
- 6) Recruitment for South Campus Hospital

7) Severe budget limitation to the delivery of Renal Services across Alberta

Future Directions

- 1) Recruitment 3 new researchers in 2013-15
- 2) Expand evidence-based indications and research in Therapeutic Apheresis
- 3) Expansion of Basic Science research
- 4) Expanding Telehealth

Section of Respiratory Medicine – Annual Report April 1, 2011 to March 31, 2012

The Section of Respiratory Medicine is delighted to report on our accomplishments. We have had an exciting and productive year. While there have been a great many changes, and many successes, the Section is also facing a number of significant challenges, which we face with hope, optimism and determination.

The Section consists of 28 full members and 6 associate members based at three hospital sites and private clinics within Alberta Health Services/Calgary Zone. Eight members are University Geographic Full Time, while 20 are University Major Part Time or in Private Practice. The Section provides continuous consultative service and inpatient ward service at three acute care hospitals, while maintaining a very busy outpatient clinical service across the region. Additionally, members of the Section report all pulmonary function tests at the three hospital sites and provide TB services for the region. The Section also has an outstanding record of academic productivity, and provides important administrative functions within the Department.

Alberta Health Services

This has been a year of great change at AHS. Dr. Chris Eagle has assumed the position of CEO and already the changes are palpable. While funding remains quite constrained, AHS has become more interactive and is trying to respond to pressure areas. The Networks have evolved significantly and there are new initiatives with the goal of improving health care delivery. Dr. Tom Noseworthy has been appointed as the Scientific Officer of the Strategic Clinical Networks. The Respiratory Network continues to do excellent work in the area of Asthma, COPD and Sleep. The new hospital at South Health Campus (SHC) is nearing completion and control will soon be passed to AHS for implementation of health services. Dr. Charlene Fell is the new Section Site Chief at South Health Campus, and recruitment and planning are actively underway. On the three hospital sites, members of the Section continue to work closely with administration to deal with significant challenges in providing optimal inpatient and outpatient services. The Members continue to have great passion and dedication, and are focused on working together for a better 2012.

University of Calgary

It has been a time of great change at the University. The plan for dealing with termination of the Alberta Heritage Foundation is underway and this has had widespread consequences for recruitment. The challenge will be to continue to renew the faculty with young investigators, scientists and teachers. Dr. Tom Feasby will be completing his term as the Dean. Dean Feasby accomplished many things including implementation of the Health Research and Innovation and Teaching Research and Wellness buildings, successful promotion of the research institutes and development of Rural Medicine. However, he may be best known for his promotion and encouragement of Faculty Members' accomplishments. We will miss his transparent and unwavering support. The decanal search is underway and three candidates have provided extraordinarily different visions for the Faculty of Medicine. Finally, the University has initiated a call to action. Called "Eyes High" the goal is for the University of Calgary to be among the top 5 universities in Canada by 2016.

CLINICAL

The Interventional Pulmonary Medicine Service is one of only two such services in the country. Dr. Alain Tremblay is the leader of this program, and along with Drs. David Stather and Paul MacEachern, is using a variety of innovative tools and techniques including endobronchial ultrasound, permanent and removable stents, and indwelling pleural catheters. Helped by private donations, this program has been able to purchase the equipment necessary to perform this highly technical and ground-breaking service. The Service is also dedicated to training young respirologists. Dr. Alex Chee completed his training and Ashley Gillson began her fellowship in Interventional Pulmonary Medicine in July 2011.

The Calgary Asthma and COPD Program is nationally recognized for providing a cohesive service that links together family physicians' offices, hospitals, and emergency departments. Dr. Bob Cowie leads this team of dedicated health care providers, including physicians, respiratory therapists, kinesiologists and nurses. Under the direction of Dr. Richard Leigh, with the help of Dr. Warren Davidson, and with the assistance of Innovation Initiative Funding, a program for assessing sputum inflammation is now well established and rapidly being incorporated into the standard management of patients.

Members of the Section are also one of Canada's leaders in Sleep Medicine. Under the direction of Dr. Pat Hanly, The Sleep Centre has developed a unique and successful working relationship in the assessment and management of Sleep

Disordered Breathing within the Calgary Zone. This has improved patient access to diagnosis and treatment both for uncomplicated obstructive sleep apnea and more severe sleep disordered breathing, and has reduced waiting lists. This is the first time that this Public Private Partnership with home care companies has been employed in Canada. The fellowship program in Sleep Medicine continues to offer one position annually. Dr. Christine Chang (Psychiatry) completed her fellowship in July 2011.

The Section of Respiriology has also established a Pulmonary Hypertension Program. Dr. Doug Helmersen is the leader of this program and along with Dr. Sid Viner and Dr. Naushad Hirani, the Program provides day to day management as well as comprehensive diagnostic services including right heart catheterization and pharmacologic treatment. Aided by a private donation, Dr. Helmersen has purchased the equipment, including a dedicated fluoroscopic system that is required for right heart catheterization studies. Together, this group is providing a world-class service for patients that would have died only a few years ago.

RESEARCH

There have been no new innovation projects approved. The current projects continue to provide extremely valuable services to the Zone and the patients.

Dr. Pat Hanly, along with his team at the CHR/UofC Sleep Centre continue to benefit from the integration of an alternate care provider in the management of patients with sleep-disordered breathing. The objectives are to increase patient access to specialty services, improve patient outcomes and implement a quality assurance program for the administration of CPAP therapy. The program has been successful on all of these fronts.

Dr. Stephen Field is leading the Cough Clinic initiative. The CHR cough clinic is now well established and running smoothly. Over 1000 patients have been seen in the clinic, and it continues to serve its primary objective to shorten wait lists.

Dr. Richard Leigh continues to operate the induced sputum analysis for the assessment of asthma patients. A dedicated cytotechnologist performs sputum induction tests. These tests continue to demonstrate that the majority of asthma patients tested in the CHR have sputum eosinophilia, suggesting that therapy is suboptimal. In each case, results have led to reassessment of patient compliance, or to a change in management. This testing is an integral part of the evaluation and management of patients.

The Thoracic Oncology Program (TOP) operates under the guidance of Dr. Alain Tremblay, David Stather and Paul MacEachern. A full time Nurse Practitioner (NP) and Clerk are dedicated to the TOP, which has allowed us to increase the number of patients seen as part of the TOP program while maintaining a nearly non-existent waitlist, as well as to expand the reach to rural CHR and Southern Alberta by the inception of the TOP telehealth clinic.

We all hope that we will return to an interest in new innovative and enhanced patient care in 2012.

Academic Activity

The individual contribution of Members resulted in the publication of 114 papers, abstracts and book chapters. This is an increase of 4% over the previous year. More than 90 presentations were given, and Section Members received over \$1.8M in research support.

While it is not possible to mention each report, it is worth highlighting some of these publications, which demonstrate the breadth of academic activity in the Section.

- Dr. Julie Jarand published “Clinical and Microbiologic Outcomes in Patients Receiving Treatment for *Mycobacterium abscessus* Pulmonary Disease” in Clinical Infectious Diseases, which is an important contribution to our understanding of this extremely difficult infection.
- Dr. Pat Hanly published an important contribution entitled “Nocturnal hypoxia and loss of kidney function” in PLoS ONE. This paper is an important advance on the interaction between sleep apnea and kidney function.
- Dr. Chris Mody coauthored the American Thoracic Society guidelines for the management of fungal lung disease, which was published in the American Journal of Respiratory and Critical Care Medicine.

- Dr. Kris Fraser published “Simulation training improves diagnostic performance on a real patient with similar clinical findings” in Chest. This is an important contribution to the literature on simulation in medical education.
- Dr. Andrea Loewen published “Response of Genioglossus Muscle to Increasing Chemical Drive in Sleeping Obstructive Apnea Patients” in SLEEP
- Dr. Willis Tsai published “Excessive daytime sleepiness is associated with increased health care utilization among patients referred for assessment of OSA” in SLEEP
- Dr. Alain Tremblay published “Exercise Capacity, Lung Function and Quality of Life after Interventional Bronchoscopy” in the Journal of Thoracic Oncology

EDUCATION

The GlaxoSmithKline Advanced Fellowship Training Program continues to be highly successful. As the field of respirology advances, it has become clear that the only way we can meet our goals is to recruit faculty that possess highly specialized training in focused areas. It is to this end that the Advanced Fellowship was established. While there are outstanding opportunities to fund predominately research experiences (such as the Clinical Scholar Program in the Department of Medicine, which partners with the AHFMR or CIHR), the opportunities to support a balanced, advanced clinical and academic experience are not available. With the goal of providing the highest quality of respiratory care, innovation and research in Canada, and the ability to fund balanced clinical and research-training experience we hope to develop true clinical and academic excellence in many areas. The past participants of the program include:

Dr. Naushad Hirani	Pulmonary hypertension	University of Bologna
Dr. Charlene Fell	Interstitial lung disease	Univ. of Michigan (Funded by AHFMR)
Dr. Julie Jarand	Mycobacterial Diseases	University of Colorado and University of Cape Town
Dr. Paul MacEachern	Interventional Pulmonology	University of British Colombia and Thoraxklinik, Heidelberg, Germany
Dr. Tom Lim	Occupational Medicine	University of Toronto
Dr. Mike Roman	Exercise Physiology/Testing	San Diego
Dr. Erika Penz	Health Policy	York University, UK
Anticipated:		
Dr. Mitesh Thakrar	Lung Transplantation	Newcastle, UK
Dr. Kerri Johannson	Epidemiology of Air Pollution	University of Southern California

The Section has initiated the Academic Training and Renewal Program (ATRP), which is sponsored by Boehringer Ingelheim and Pfizer. The goal of the program is to provide funding for Major Clinical Faculty to pursue an area of academic or educational interest. Dr. Dina Fisher travelled to South Africa to pursue her academic activities in tuberculosis. Dr. Kris Fraser’s application to pursue medical simulation has been approved by the Respirology Executive Council.

Awards

While it is impossible to mention all of the awards received by Members of the Section, it is worth highlighting a few:

- Dr. Kris Fraser was awarded the Alfred Soffer Research Award from the American College of Chest Physicians for the top research presentation at Chest 2011 as well as the Work-Life Balance Award from the Department of Medicine.
- Dr. Karen Rimmer received the Dr. Howard McEwen Award for Clinical Excellence at the Peter Lougheed Centre
- Dr. Robert Cowie received the Dr. John Dawson Award for Clinical Excellence at the Foothills Medical Centre.
- Dr. Flemons received the College of Physicians and Surgeons Award for Meritorious Service.
- Dr. Fell published articles that were cited in the American Thoracic Society’s “Year in Review” for the second year running.
- Dr. Chris Mody was elected to Fellowship in the Canadian Academy of Health Sciences.

We have two endowed professorships within the Section, the GSK-CIHR Professorship in Inflammatory Lung Disease (Leigh) and the Jessie Bowden Lloyd Professorship in Immunology (Mody).

Recruitment

- Drs. Alex Chee, Mitesh Thakrar and Sachin Pendharkar have joined the Section as faculty members. We also welcome Dr. Erika Penz as a Clinical Scholar.
- Dr. Chee completed his training in interventional pulmonary medicine and then went to the Wellman Centre for PhotoMedicine in Boston to learn advanced imaging techniques including optical coherence tomography. He is leading the Sections initiative in human imaging in the multimillion dollar Canadian Foundation for Innovation grant. Dr. Chee will be joining the Section at the South Health Campus.
- Dr. Pendharkar completed an advanced fellowship in Systems Research at the Haskayne School of Business. He joins the Section with an interest in Systems and Operations Management as it applies to health care delivery, and has already begun to collaborate with AHS to develop models that optimize health care, which can then be tested and refined. Dr. Pendharkar will be joining the Section at Rockyview Hospital.
- Dr. Thakrar completed his clinical fellowship at the University of Calgary and went on to do additional training in lung transplantation at the University of Alberta. He will soon be leaving to go to Newcastle, UK to do an additional fellowship in lung transplantation. He joins the Section at the Peter Lougheed Centre.
- Dr. Penz joined the Section as a Clinical Scholar. Building on considerable experience in health policy before pursuing her clinical career, she has now gone to York University, UK to pursue advanced training in health policy. She will return in the summer and will continue her Clinical Scholarship under the mentorship of Dr. Braden Manns.

Retirement

Dr. Gordon Ford is now a Professor Emeritus. Dr. Ford made tremendous contributions to the Section in mentorship, teaching, in patient care excellence, administration, and research and academic spheres. He led important initiatives in pulmonary rehabilitation and COPD and he has set the direction for the Section in many ways. In recognition of his outstanding contributions to Medicine locally and internationally, Dr. Ford was nominated for Mastership in the American College of Physicians. Dr. Ford will continue to make contributions to the Section as Professor Emeritus, but we will miss his influence and guidance and the Section will never be the same.

CHALLENGES AND NEW DIRECTIONS

The Section has been increasing its activity at a rapid pace. Clinical activity increased by almost 12% in the last year and recruitment is necessary to sustain this level of service. We also need to increase the number of University Geographic Full Time members. Over the next 5 years, we hope to have 1/3 of our members with a GFT appointment. We will need to recruit 2 members to replace GFT retirements and an additional 2 GFT faculty to establish this ratio. Moreover, to replace other retirements and provide a critical mass of respirologists at 4 sites (including the new South Campus), a total of 8 respirologists will need to be recruited over the next 5 years. Additionally, the Section needs to pursue selective recruitment in areas of clinical need. These include airways disease, tuberculosis, pulmonary rehabilitation, non-invasive ventilation, cystic fibrosis and pulmonary infections, and occupational and environmental Medicine. This must all be done in an environment of “no new academic appointments”.

Provision of outpatient services continues to be a pressing problem. Clinic space at all three sites (FMC, RGH and PLC) is insufficient. More outpatient offices are needed. A system of central triage is in place, but there are many challenges. Despite these systems, clinic operations remain inefficient and much time is spent sub optimally.

In conjunction with the new central triage system, we urgently need a coordinated system of booking patients, tests, and appointments across the region. A pilot program has been introduced at the PLC, but for the most part, each individual respirologists' secretary is performing these tasks. The system is cumbersome, complex and has great potential for misadventure. A streamlined, coordinated central system would increase the efficiency of providing services, in addition to being required to respond to sudden or emergency changes in provision of services.

The development of Netcare (the provincial database for laboratory results, diagnostic imaging and pharmacy) has been a significant benefit to the Section. It would be of tremendous benefit to have province wide pulmonary function results available on Netcare. Moreover, the Department of Medicine is without an electronic medical record, and this results in inefficiencies. A new electronic medical record system for the Department of Medicine will need to be identified.

Provision of community services needs to be improved. While great progress has been made, we are still only touching a small fraction of the patients with chronic respiratory illness. Medical staff barely manages their present load. We are not in a position to provide the community rehabilitation, spirometry, patient diagnostic and educational programs that conform to guidelines established by the Canadian Thoracic Society and identified as a priority for the Section.

The Section of Respiriology looks forward to the future with enthusiasm. We anticipate that we will be able to continue to provide exemplary service and care, and improve upon the academic and investigative initiatives of the Section.

Section of Rheumatology – 2011 Annual Report April 1, 2011 to March 31, 2012

CLINICAL

Physician Manpower/Service Sites

The Section of Rheumatology provides an integrated musculoskeletal program of clinical care in an interprofessional manner with rheumatologists and allied health professional staff in Southern Alberta.

This past year we have experienced serious challenges in our ability to cope with the increasing patient referrals due to our limited manpower situation. This was compounded by the sudden loss of our colleague Dr. Vincent Choi in April, who had a large community practice. Overall, the Section of Rheumatology is facing a sustainability crisis as we work to provide service to an ever increasing patient population and now absorb Dr. Choi's 2000+ patients.

Our catchment area includes the southern half of Alberta to Red Deer and extends into southeastern British Columbia and southwestern Saskatchewan. The Section of Rheumatology currently delivers services through a multisite model. These sites include the University of Calgary Medical Clinic which is based at the Foothills Medical Centre (FMC) campus; the Rockyview General Hospital (RGH), the Peter Lougheed Centre (PLC), the Calgary Urban Projects medical clinic, the Sisika Nation Medical Centre, and 5 community-based private office practices. The Section also provides consultative services to all the hospitals in the Calgary zone on a 24 hour basis.

The Section of Rheumatology has 18 clinically active members, led by Dr. Dianne Mosher as Section Chief. Members are divided into four categories: 5 GFT's, 10 full time clinical members, 2 part-time clinical members and 1 clinical scholar. In addition, we have a part-time nurse practitioner (NP) who provides clinical service at the UCMC clinics two half days a week. New members to our clinical service include Dr. Claire Barber, our clinical scholar who joined us last fall and Drs. Glenn Hazelwood and Elzbieta Kaminska who will arrive in fall 2012.

The FMC site acts as the hub of our Section's clinical activities where 8 of our physicians provide over 30 half day clinics per week with the support of our interdisciplinary allied health team. With the addition of two part time clinical members to our service, the FMC site saw total of 18,500 patient visits in 2011. The FMC site also hosts our Section Biologics' Clinic where patients with severe inflammatory arthritis are managed and treated with biological agents by our specialized physician-nurse teams. This comprised a further 3 to 4 half-day clinics providing an additional 1500 clinic visits.

At the RGH site 2 full time rheumatologists provided 8.5 clinics per week with the support of 1.5 FTE nursing staff and had a volume of over 6500 patient visits in 2011. The PLC site is serviced by one rheumatologist who does two clinics a month.

New opportunity exists for us in the near future at both the South Health Campus and Richmond Road Diagnostic and Treatment Center for clinical space. Our move to these sites will depend on how we allocate existing physicians and will remain an option for new recruits to the Section. Continued collaboration at all these sites with Alberta Health Services to manage staff and space is a high priority for the Section.

Section Programs / Specialty Clinics

The Section's Central Triage Program acts as the point of entry for all referrals to the Rheumatology service. Once received, referrals are assessed and triaged by an experienced nurse clinician. This process has resulted in coordinated care across our catchment area and is a model that has been used for the management of referrals by other Sections within the Department of Medicine.

In 2011, we received approximately 5,300 new patient referrals to our Central Triage program, this equates to just over 100 per week. Central Triage is managed by our nurse clinician and 2 unit clerks. Since its inception in 2006, over 33,000 patients have been triaged and tracked in our centralized database system.

The central triage program's wait time goals continue to be challenged both by the increasing number of patient referrals and the demands on our physician workforce. In 2011, our wait time goals were as follows:

Early Inflammatory Arthritis clinic – 2.5 weeks, Urgent referrals – 1.5 weeks, semi-urgent referrals – in 4 weeks, moderate referrals – up to 10 weeks, moderate/routine referrals – up to 52 weeks and routine referrals - up to 2 years. The longer wait times for moderate and routine referrals exists due to increased volume and no change to physician manpower.

Our goal of shorter wait times across all referral categories has led to the formation of several sub-specialty clinics within our service model. These include the Early Inflammatory Arthritis Clinic, Ankylosing Spondylitis Clinic, Nurse Practitioner Clinic, the Urgent Assessment Clinic and the Young Adults with Rheumatic Disease Clinic (YARD).

The Nurse Practitioner clinic, led by Jim Rankin recorded another successful year at the FMC site. In this specialized clinic the NP's major role is as a care provider, coordinator and evaluator of the care plan of individuals, families and/or communities within the rheumatology area of practice. There are plans to expand this clinic in 2012/2013.

Our Ankylosing Spondylitis/Spondylarthropathy clinic started in January 2010 and continues to be led by Dr. Dianne Mosher. Dr. Olga Ziouzina from the community also participates and is supported by physiotherapy, social work and nursing expertise from our Section.

Our partnership with the pediatric rheumatologists at the Alberta Children's Hospital to transition care of adolescents to the adult health care system in the YARD continues to be a success. Drs. Nicole Johnson and Paivi Miettinen from pediatric rheumatology along with Drs. Anne-Marie Crawford and Dianne Mosher from the adult rheumatology side run the clinic. This clinic continues to draw attention from our rheumatology colleagues across Canada, as a model that promotes continuity of care by systematic transfer of care to adult rheumatology.

The Section continues to run its cornerstone Biologics Clinic and Pharmacovigilance Registry program at the FMC site. Led by Drs. Liam Martin and Susan Barr, the purpose of this clinic is to manage patients with inflammatory joint diseases who are being treated with biologic disease modifying agents. Currently we have over 1500 patients who are attending this clinic annually. The program is unique both nationally and internationally in that it collects clinical data respectively. This data continues to be significant to the rheumatologists from several perspectives providing our researchers with a rich source for studying various aspects of biologic therapies.

Dr. Marvin Fritzler is the founder and Director of Mitogen Advanced Diagnostics, a state of the art laboratory that focuses on both autoantibody diagnostic services for clinicians and researchers around the world. The primary focus of the laboratory is to transfer and adopt new autoantibody and other biomarkers that mirror the abnormal immune response in a number of diseases including systemic lupus erythematosus, scleroderma, Sjögren's syndrome, idiopathic ataxia and rheumatoid arthritis. Over the years, these studies have led to the development of new diagnostic assays and technologies for autoimmune diseases.

Dr. Steve Edworthy is leading the ongoing initiative in Information Systems for the Section. We are engaged in the information sharing framework happening at the provincial level to ensure that we are compliant with the HIA and other legislations. In addition, we are in the process of transitioning from the current EMIS and paper environment in our ambulatory care clinics to the new Cerner/Millennium and SCN data repository systems. We are working closely with our AHS counterparts on these changes to ensure a smooth transition.

RESEARCH

The Section of Rheumatology holds two chair positions in the Faculty of Medicine at the University of Calgary.

The Arthritis Society Research Chair is an endowed chair from the Arthritis Society started in 1989. Dr. Marvin Fritzler continues in this position in 2012, and has used this position to further research into the identification of novel auto antigens that are the targets of the immune response in a number of autoimmune diseases including systemic lupus erythematosus, scleroderma, Sjögren's syndrome, idiopathic ataxia and rheumatoid arthritis.

Dr. Fritzler was honored once again in 2011, being named the recipient of the 2011 CIHR-CMAJ Top Achievements in Health Research Awards for identifying novel autoantigens that resulted in new diagnostic testing and biomarkers for

autoimmune diseases. Virtually all of Dr. Fritzler's discoveries of novel autoantigens have been translated into new diagnostic assays or biomarkers that are in wide use in clinical diagnostic and research laboratories around the world.

The Arthur J.E. Child Chair in Clinical Epidemiology Research was established in 2005 and aimed at promoting interdisciplinary care and collaborative research across disciplines. This position was held by Dr. John Esdaile until April 2012. The new Chair position is expected to be named shortly in July 2012.

Dr. Aurore Fifi-Mah, one of our newest Section members with an interest in vasculitis has started the Southern Alberta Vasculitis Patient Registry. Working with all Section members, Dr. Fifi-Mah hopes to begin characterizing this patient population and use the registry as a springboard for other biomarker and outcome research projects.

Another area of focus is fostering a strong involvement of our Section researchers in the McCaig Institute for Bone and Joint Health in the areas of outcomes research and clinical trials. The McCaig Institute's clinicians and researchers come from diverse backgrounds such as engineering, health service delivery, medicine, kinesiology and science, and are able to investigate questions and find solutions to complex problems about arthritis and bone and joint injury. Our continued involvement with the McCaig Institute is central to our Section's research mandate.

The Section also has a long established Clinical Trials Program led by Dr. Liam Martin. These pharmaceutical sponsored clinical trials of novel anti-rheumatic therapies are conducted with the assistance of a dedicated research nursing staff. Much of the work is focused on biological drugs which have been developed to target the cytokine mediators, such as TNF, IL-1 and IL-6, involved in the inflammatory process.

EDUCATION

The undergraduate medical teaching program comprising of the Musculoskeletal and Skin course was led in the Fall of 2011 by Dr. Gary Morris. Dr. Morris coordinated and scheduled both the site based and community based Section members to teach the course content and small group sessions.

Dr. Chris Penney continues in his role coordinating the Section's CME and the Clinical Clerks programs. The clinical clerks continue to experience over 30 hours per week in the varied rheumatology clinics. Dr. Penney also continued to offer his weekly teaching session that is focused on the GALS screening examination. These are open to all trainees and allied health staff and are aimed at improving the examination of the musculoskeletal system in patients.

The Post Graduate Medical Education program is led by Dr. Susan Barr. Dr. Svetlana Stajkovic finished her fellowship in June 2012 and will challenge her rheumatology exams in October. Although we were not successful in attracting any new residents for 2012/2013, we will continue to search for new trainees to our specialty program.

Dr. Martin Atkinson, although retired from the Section, plays an active role in our undergraduate teaching program. This past year he was the recipient of two teaching awards from the Faculty of Medicine.

Dr. Marvin Fritzler applies his wealth of clinical and research experience in the areas of autoimmune disease and novel diagnostic technologies to teaching in both the University's undergraduate and graduate teaching programs. At the undergraduate level, Dr. Fritzler taught in the Department of Biological Sciences CMMB537 course which focuses on autoimmunity and laboratory investigations. At the graduate level, his teaching focuses on autoimmunity and lupus in the IMM7 block teaching. He is also actively involved in the McCaig Institute's research seminar series for graduate students and is actively engaged in mentoring young researchers and clinician scientists.

Dr. Cheryl Barnabe graduated with her Masters in Clinical Epidemiology in Community Health Sciences with a focus on Aboriginal Health issues and is now an Assistant Professor in the Department of Medicine.

Section wide activities include weekly Academic Rounds for all staff and trainees and are organized by Dr. Gary Morris. Our Allied Health Group organizes Rounds twice a month coordinated by Theresa Lupton our Central Triage nurse clinician.

INNOVATION

Ultrasound Imaging Technology

In this past year, several Section members have engaged in ongoing learning partnerships both in Canada and in the UK to explore the use of ultrasound in Rheumatology and specifically how to incorporate this new technology into our clinical settings. Dr. Martin has led collaboration with Dr. Phil Platt of Freeman Hospital and University of Newcastle, Newcastle-upon-Tyne that focuses on knowledge transfer of ultrasound technology and application of ultrasound imaging in musculoskeletal disease and how to perform ultrasound examination of the hand and knee. With this technology, physicians can “see” inside the joint in real time and find indications of active inflammation or fluid—indicators that are often hard to find by palpation or visual assessment alone, aiding in diagnosis and treatment. Dr. Platt will be coming in the fall of 2012 for an extended period to teach and mentor Section members.

High Resolution peripheral quantitative computed tomography (HR-pQCT)

Dr. Cheryl Barnabe is working with the SPECTRA collaboration to bring together investigators from Germany, Switzerland, France, the USA, Vancouver and ourselves to develop a network that would bring forward High Resolution peripheral quantitative computed tomography (HR-pQCT) as a novel application to study inflammatory and non-inflammatory peripheral arthritis conditions.

Dr. Barnabe organized and hosted the SPECTRA group here at the University of Calgary in November 2011 and new investigators will be joining the collaboration from the Netherlands, Toronto and Michigan. Next steps include embarking on a multi-site project to standardize the definition of erosion, and proceeding with an application for official recognition as a Special Interest Group with OMERACT, which will allow the group to gain the appropriate traction for proving the validity and applications of the technology.

Immune Mediated Inflammatory Disease (IMID)

The Sections of Gastroenterology and Rheumatology hosted a conference in the Spring of 2012 focusing on IMID. There are many joint interests and projects being explored between the two groups of physicians and researchers – focused on but not limited to IBD and ankylosing spondylitis. In addition to the research agenda, there are ongoing talks regarding joint clinics to share clinical expertise and better serve these patient populations.

Calgary Foothills Primary Care Network

Our partnership with the Foothills Primary Care Network continues to flourish in 2012. The MSK Clinic, run weekly in the community, and the telehealth sessions has been a great success and there are now talks of replicating the model to other PCN's in Calgary. Its goal is to develop and establish new pathways of care using a clinical nurse specialist model and physiotherapist screener to improve access, care and communication with our Primary Care colleagues – thereby increasing access to specialty care in a timely manner.

Alberta Bone and Joint Strategic Clinical Network

Drs. Sharon LeClerc and Dale Sholter from Edmonton are co-chairs of the Arthritis Working Group, under the Alberta Bone and Joint Strategic Clinical Network. The Section of Rheumatology's work with the ABJN and the ABJI is centered-around developing innovative, sustainable bone and joint health care models that are patient-centered, significantly improve access, and advance research and knowledge to ensure the care patients receive is effective.

Over the past year Drs. Dianne Mosher and Sharon LeClerc along with our nurse clinician Theresa Lupton have been working extensively on the Osteoarthritis systems modeling project with Dr. Deborah Marshall and now there are plans to start work on a Rheumatoid Arthritis System modeling project in the near future.

Developing a National Framework for Arthritis - Arthritis Alliance of Canada

Dr. Dianne Mosher was a lead author on the recently released policy paper entitled “The Impact of Arthritis in Canada: Today and over the next 30 years” released by the Arthritis Alliance of Canada. As President of AAC, she has led a group of Canadian investigators and expert advisors to develop this comprehensive document that outlines the human burden of arthritis and also suggest potential interventions and strategies of managing the illness. The report concludes by outlining proven and effective interventions and call for the development of a national framework for arthritis in Canada. The full report is available at www.arthritisalliance.ca

Health Outcomes Research in First Nations People

Dr. Cheryl Barnabe is developing a program in health outcomes research in First Nations people. Dr. Barnabe was the successful recipient of several research awards in this past year including a Canadian Institutes of Health Research (CIHR) award for her project on 'Arthritis in First Nations People in Alberta: Prevalence and Health Care Utilization'. She also received a Canadian Initiative for Outcomes in Rheumatology Care (CIORA) grant for 'Access and Utilization of Healthcare for Rheumatoid Arthritis in Aboriginal People in Alberta' and an Osteoarthritis Alberta Team Grant from Alberta Innovates-Health Solutions for her project 'Aboriginal Albertans' Perceptions of Health Service Delivery for Osteoarthritis and Total Joint Replacement'.

CHALLENGES AND FUTURE DIRECTIONS

Following up on our annual academic retreat, we are now working on developing a Five Year Strategic Plan and hope to have a draft in place by early fall 2012. The plan will address sustainability and provide for long-term growth of the program, identify recruitment strategies for attracting new physicians and Fellows to the Section, and outline the engagement plan for linking research silos across the Section and to other organizations including Alberta Health Services' Bone and Joint Strategic Clinical Network.

Delivering care to patients with complex chronic disease requires a team of dedicated health care providers and support staff. We are privileged to have such a group of professionals within the Department of Medicine. With the increasing number of patients with arthritis expected, it is prudent that we explore and continue to develop team based models of care. Recruitment and retention of both allied health care and support staff remains a priority.

The strength of our Section, as we move forward will be in the collaborations we build with our partners in clinical care and research groups as outlined above. Building on our innovative health care delivery models that we are known for, we will continue to look for ways to build capacity and work smartly in all our endeavors.

Academic Alternate Relationship Plan – Summary Report

Introduction

The Department of Medicine (DOM), University of Calgary, has had an Academic Alternative Relationship Plan (AARP) in place since 2004. The Plan was renewed successfully in 2008. Prior to the initiation of the AARP, the DOM was experiencing significant difficulties recruiting and retaining academic physicians. This was affecting the department's ability to fulfill its mission of providing clinical, education, research and administrative services within the Calgary Health Region and the Faculty of Medicine at the University of Calgary. In the first 4 years of the AARP, the department was very successful in attracting and retaining a wide range of sub-specialists, both major-clinical and full time academic. In addition, innovation funds that were provided as part of the AARP's initial funding were successfully used to launch a number of innovation projects facilitating new and more efficient ways of providing clinical care. The new funding model allowed us to meet the challenges posed by the expansion of the medical school and postgraduate education programs.

The renewal of the AARP in 2008 followed the independent evaluation of the initial contract by the firm Bearing Point. Despite the lack of ongoing innovation funding, the department has continued to focus on creative models of care. These key programs and innovations which would not have occurred without the AARP are discussed further in the report. Overall, the AARP members have been satisfied and believe that the program provides value to its stakeholders.

Membership

The Department of Medicine has continued to recruit new members to meet its clinical, educational, research and administration needs with the support of the AARP. As of March 2012, the AARP approved workforce plan was 209.95 FTE. This includes 30 members of the AARP who are cardiologists in the Department of Cardiac Sciences. The actual AARP members as of March 2012 were 217 members working 196.06 FTE.

The following tables list:

Our total AARP members from 2008 to 2012: This data has been separated by gender and university appointment. Over the four years, our membership has grown from 192 to 217. The gender distribution has gradually increased from 33% females in 2008/9 to 39% females in 2011/12.

Our total AARP recruitment and departures from 2008-2012: Our total recruitment has declined from 18 in 2008 to 3 in our last fiscal year due to non-expansion of the AARP. However our attrition has been consistent at 5-6 per year.

Table 1 - Department of Medicine AARP Members 2008-2012

		Male		Total Male	Female		Total Female	Total Head Count	Total FTE
		GFT	Clinical		GFT	Clinical			
2008-2009	Head Count	73	57	130	16	46	62	192	177.888
	FTE	72.05	51.438		16	38.4			
2009-2010	Head Count	75	59	134	19	51	70	204	188.385
	FTE	74.05	53.635		18.2	42.5			
2010-2011	Head Count	76	62	138	19	57	76	214	197.485
	FTE	74.51	57.265		18.6	47.11			
2011-2012	Head Count	75	58	133	21	63	84	217	196.06
	FTE	74.05	51.485		20.7	49.825			

Table 2 - AARP Recruitment and Attrition (Head Count) 2008-2012

	Recruitment				Total	Attrition				Total
	Male		Female			Male		Female		
	GFT	Clinical	GFT	Clinical		GFT	Clinical	GFT	Clinical	
2008-2009	5	6	2	5	18	0	3	1	1	5
2009-2010	3	3	2	9	17	1	2	0	3	6
2010-2011	2	3	0	7	12	3	0	0	2	5
2011-2012	1	1	0	1	3	1	3	0	1	5

Workload

a) Clinical – Shadow Billings

Our shadow billing has increased over the last 4 years. As of April 2009/10, we have also included third party and out of province billings. As well, since 2008 we have improved processes and education to document shadow billing. Overall this has had a positive impact and members have been capturing shadow billing more accurately.

Fiscal Year	Shadow Billings	AARP FTE	Average Billing / FTE
*April 1 2008 – March 31 2009	\$21,989,265.21	177.9	\$123,604.63
April 1 2009 – March 31 2010	\$30,929,966.57	188.4	\$164,171.79
April 1 2010 – March 31 2011	\$36,146,558.45	197.5	\$183,020.54
April 1 2011 – March 31 2012	\$39,952,628.45	196.06	\$198,677.08

* excludes 3rd party and out of province billing

b) Education

The AARP has improved our capacity to provide education to learners. Over the past four years, we have educated more trainees from our expanding undergraduate class and postgraduate training programs. The AARP has also allowed us to provide a committed Education Leadership team.

The increased program size has allowed us to dissolve two General Medical Units that were staffed entirely by the Clinical Assistant Program resulting in considerable savings.

During this reporting period, the AARP has facilitated the training of increased numbers of subspecialists who remain primarily in Alberta.

Academic Year	Trainees		
	Undergraduate (entering year)	Postgraduate	AIMG
2008/09	150	108	10
2009/10	180	104	10
2010/11	170	118	6
2011/12	178	138	4

The AARP has also been instrumental in educational innovations such as the development and implementation of a simulation-based curriculum for undergraduate and postgraduate learners as well as CPD opportunities for Faculty members.

c) Research

The AARP has been key in providing members with protected time to pursue research activities. Research productivity continues to improve on most measures of output and productivity.

Academic Year	Articles	Presentations	Research Funding (\$ million)
2008/09	662	574	54.4
2009/10	627	608	65.7
2010/11	719	610	61.2
2011/12	743	586	67.4

d) Administration

The AARP has supported physicians to assume leadership positions in AHS, the Faculty of Medicine and other national and international health care organizations relevant to the Department of Medicine.

Innovations and Sectional Activities

All of the Sections within the Department of Medicine have documented innovations, highlights and new programs during the term of the AARP contract, all of which would have been very unlikely to occur, or to be as successful, if the AARP had not been in place. These new or improved activities span all of the four pillars of physician activity.

- i. The Department of Cardiac Sciences attributes the existence and maintenance of several successful projects at least partially to the AARP. These include the Atrial Fibrillation Clinic, the expansion of the Congestive Heart Failure Clinic, the development of an Urgent Access and Central Triage system, and the piloting of key changes to the discharge planning and procedures process for electrophysiology patients, who are expected to significantly improve their care and health after leaving hospital. A new Section Chief for cardiology has been recruited from Ontario. His recruitment would not have occurred without the AARP.
- ii. The Section of Dermatology has been successful in initiating the first new Dermatology training program in Canada in 22 years. It will train 3 new dermatology trainees each year which will help to decrease the shortage of dermatologists in Alberta and elsewhere. The Section is also active in providing telemedicine services to Claresholm, Alberta and to outreach communities such as Siksika First Nation. The Section has recruited a new Mohs surgeon through the AARP. This technology represents the leading edge of skin cancer therapy. AARP Section members are active in collaborating with colleagues in pediatrics, nephrology and geriatric outreach clinics that would otherwise be difficult to provide in the fee for service system.
- iii. The Section of Endocrinology reports the development and maintenance of a very successful Central Access and Triage process, which has significantly improved access and wait times and ensured effective prioritization of endocrine patients. The Section also reports significant improvements in chronic disease management, especially with regard to diabetes. Multidisciplinary care and the effective use of non face to face and indirect patient care, including telehealth case conferences with allied health care workers. Work is now proceeding on non traditional linkages with PCN's which promise to be very efficient and innovative. The increased demands for undergraduate and postgraduate teaching that has resulted from expansion of the medical school class size and post graduate training programs have been successfully met largely because of the support provided to academic physicians by the AARP. The other accomplishment of the AARP for the Section of Endocrinology is the successful recruitment of an academic physician with an international research reputation in Diabetes.
- iv. Gastroenterology is a relatively large and academically active Section, which also has to meet very significant clinical demands. Work has progressed on a Central Access and Triage process, and AARP facilitated growth of the Hepatology and Inflammatory Bowel Disease Academic and Clinical Groups which led to significant gains in clinical care and access for these patients, as well as in education and published research in these areas. The AARP has also allowed for the development of a core of dedicated clinicians and academic educators who have responded to the challenges of increased medical school enrollment and a large GI postgraduate training program.
- v. The AARP has allowed General Internal Medicine to develop Urgent Assessment Clinics and the Chronic Complex Disease Management Clinic (CCDM). These clinics help offset acute Emergency Department referrals

and facilitate early discharge from hospital for select complex patients. The Clinical Assistants program is largely operated by GIM. This program successfully transitions International Medical Graduates to In-Patient clinical services in order to improve access. The AARP has allowed the engagement of internists at clinics that service disadvantaged and rural populations such as CUPS and First Nations. The section has also successfully developed the Obstetrical Medicine service, where four general internists collaboratively work with obstetricians in caring for women who have serious medical disorders during pregnancy. Like many other Sections, a Central Access and Triage system has allowed shortening of outpatient GIM referral wait lists as well as differentiation of those who must be seen urgently. The AARP has been pivotal to successfully recruiting key physicians to positions that have permitted these activities.

- vi. Besides the ability to successfully recruit, including a new Section Chief, the main focus and achievements of the Section of Geriatrics have been in the area of specialist linkages with PCN's, which have otherwise previously not occurred in the fee for service environment. AARP members of the Section routinely meet with PCN physicians, and allied health care providers, to review difficult cases together and to provide clinical teaching and knowledge which can then be applied by the primary care clinicians to similar patients they see subsequently, thereby improving wait lists and access to geriatric services and expertise.
- vii. The Section of Hematology has been able to recruit four academic and clinical physicians during this term of the AARP and at least two have received international training in their fields. In addition, the AARP Clinical Scholar program has allowed the Section to successfully create other fellowship training programs, such as the Hemostasis Fellowship, which have added important clinical and academic knowledge and skills in these areas. The Adult Rare Blood and Bleeding Disorders Program has grown and added important resources in the past three years. This clinic has had a significant positive impact on patients with these disorders and would not operate in its current format without the support of AARP funded physicians. The AARP has also facilitated the development of weekly Hematology Tumor Group and Bone Marrow Transplant Program meetings which involve discussion and review of complex cases and therapeutic planning.
- viii. The Section of Infectious Diseases operates several clinics, which would be challenging to operate under traditional funding models. These include the HPTP (outpatient intravenous antibiotic clinic) at Sheldon Chumir Urgent Care Centre; The Sexually Transmitted Infection Clinic, which has expanded its focus on Syphilis and is using alternative care practitioners working with AARP physicians; The HIV clinic which has added telemedicine services by AARP physicians to remote or rural locations; the Cystic Fibrosis Clinic which involves very time consuming and complex patients, and for which the AARP facilitated the recruitment of an infectious disease specialist with international training in this field.
- ix. The AARP has been instrumental in enabling the Section of Nephrology to create significant innovations in patient care delivery. The Glomerulonephritis (GN) and the Aboriginal Outreach (CKD prevention) Clinics are physician lead, nurse implemented clinics which have improved access to care and the quality of care for renal patients in Southern Alberta. Both these clinics were originally funded by innovation funds from the ARP. In addition, Advanced Care Planning/Palliative Care/Bereavement Programs were piloted and subsequently implemented across southern Alberta with plans to implement them province wide. The development, administration and implementation of this time-intensive program would not be possible using a Fee-for-Service compensation model. The Nephrology Central Referral System (NCRS) has resulted in dramatic improvements in the triaging, assessment and booking of patients. The AARP has been extremely beneficial in recruiting academic and clinical nephrologists. This may be best exemplified by the fact that all of the last eight recruits to the Section of Nephrology have mentioned that the AARP was a major factor in their decision to accept a position in Calgary.
- x. The Section of Respiriology also credits the AARP with allowing the development and enhancement of respiratory nurse practitioner and other allied health care worker training programs. AARP Section members have been active in designing and supervising clinics that are managed by alternative care providers, thereby increasing access for patients and increasing efficiency for the system overall. These clinics include the Cough Clinic and the Induced Sputum Clinic. A Sectional Central Access and Triage system has been put into place, and AARP members are also involved in multidisciplinary clinics, such as the Thoracic Oncology Clinic, which would less likely be successful without the support of the AARP.
- xi. The Section of Rheumatology reports that the AARP has allowed the Section to make major strides in developing their Central Access and Triage system, develop and operate several multispecialty clinics, including the Early Inflammatory Arthritis clinic and the Young Adults with Rheumatic Disease (YARD) clinic which also involve allied health care workers, and facilitated the training of rheumatology nurse practitioners who have gone on to do clinic work with AARP Section members.

1. Challenges

i. South Health Campus

The South Health Campus (SHC) is scheduled to open in the fall of 2012 in a phased approach. Ambulatory clinics will open first, followed by in-patient units in February 2013. The Department of Medicine will have a major clinical and scholarly presence at the site. Clinically, all its subspecialties will provide in-patient consults and ambulatory services. In addition, General Internal Medicine will have 20 in-patient beds. Education will be a major focus and medical residents will also rotate through the site. Each section will have a clinical research focus such as GI motility and care of special populations. Due to the unpredictable patient volumes at opening and the academic nature of our work, an AARP is the desired compensation model for our members.

All clinical services are net new growth and will require expansion of our faculty. Ideally, 41 faculty members are needed in the first year and 33 of these positions have been approved. Some will transfer from other AHS - Calgary Zone sites and their positions will need to be backfilled. Others will be new recruits from our recent graduates or other national/international centres. Recruiting 33 physicians in a short time frame is challenging and due to delays in SHC opening, some will need to work at other sites until opening. The funding for these 33 positions is separate from our present conditional grant and is only secured for 1 year. Challenges will be integrating the SHC ARP into our present conditional grant and obtaining sustained funding for these 33 positions and additional positions required to appropriately staff SHC.

ii. Transitioning to Provincial AARP

The major challenges include coordinating and merging the UofC DOM AARP principles and policies with those of the P-AARP proposal and the other current AARPs. In addition, integrating the expected data from the compensation benchmarking project may be a significant issue.

Department of Medicine – Recruitment and Departures for 2011

Recruitment – 22 New Recruits

Primary Section	Last Name	First Name	Start Date	ARP Member	University Appointment
Dermatology	Kalisiak	Michal	01-May-11	NO	Clinical Lecturer
Dermatology	Metelitsa	Andrei	01-Jul-11	NO	Clinical Assistant Professor
Dermatology	Poelman	Susan	01-Jul-11	NO	Clinical Lecturer
Gastroenterology	Abdo	Ayman Abdo	01-Oct-11	NO	Adjunct Associate Professor
Gastroenterology	Bailey	Jennifer	26-May-11	NO	Clinical Lecturer
Gastroenterology	Buresi	Michelle	22-Aug-11	YES	Clinical Assistant Professor
Gastroenterology	Iacucci	Marietta	01-Apr-11	YES	Clinical Associate Professor
Gastroenterology	Jayakumar	Saumya	01-Jan-12	YES	Clinical Assistant Professor
Gastroenterology	Kumar	Puja	03-Aug-11	NO	No University Appointment
Gastroenterology	Mohamed	Rachid	25-May-11	NO	Clinical Lecturer
General Internal Medicine	Hamilton	Douglas	03-Oct-11	YES	Clinical Associate Professor
General Internal Medicine	Lambert	Lynn	01-Sep-11	YES	Clinical Assistant Professor
Haematology	Peters	Anthea	01-Jul-11	NO	Clinical Scholar
Haematology	Street	Leslie	01-Jan-12	YES	Clinical Scholar
Infectious Diseases	Chu	Angel	01-Jul-11	YES	Clinical Assistant Professor
Nephrology	Wang	Xiangyu	01-Jul-11	YES	Clinical Assistant Professor
Respirology	Chee	Alex Chun-Min	01-Jan-12	YES	Clinical Assistant Professor
Respirology	Dang	Bao	26-May-11	NO	No University Appointment
Respirology	Penz	Erika	26-May-11	YES	Clinical Scholar
Respirology	Thakrar	Mitesh	01-Apr-11	YES	Clinical Assistant Professor
Rheumatology	Barber	Claire	01-Jul-11	YES	Clinical Associate Professor
Rheumatology	Esdaile	John	09-May-11	NO	Adjunct Professor

Departures - 6 Separations

Primary Section	Last Name	First Name	Departure Date	ARP Member	University Appointment
Gastroenterology	Hershfield	Noel	26-Mar-12	NO	Clinical Professor
Gastroenterology	Turbide	Christian	30-Jun-11	NO	Clinical Assistant Professor
General Internal Medicine	Nagi	Harpinder Singh	16-Feb-12	NO	No University Appointment
General Internal Medicine	Sivakumar	Chandrasekaran	31-Jul-11	YES	Clinical Assistant Professor
General Internal Medicine	Meshesha	Belayneh	30-Jun-11	NO	Clinical Scholar
Nephrology	Tai	Davina	31-Dec-11	YES	Clinical Assistant Professor

Department of Medicine – Statistics 2011

Table 1: Demographics

	GENDER Male		GENDER Female		AGE Average	
	Count	%	Count	%	Male	Female
DERMATOLOGY	18	69.2	8	30.8	55.2	49.3
ENDOCRINOLOGY	11	52.4	10	47.6	53.3	41.7
GASTROENTEROLOGY	39	67.2	19	32.8	48.0	39.6
GENERAL INTERNAL MEDICINE	45	65.2	24	34.8	52.4	46.7
GERIATRICS	8	61.5	5	38.5	55.5	44.8
HEMATOLOGY	9	50.0	9	50.0	62.3	40.1
INFECTIOUS DISEASES	15	71.4	6	28.6	50.3	48.7
NEPHROLOGY	18	64.3	10	35.7	50.4	44.8
RESPIROLOGY	28	77.8	8	22.2	50.9	42.1
RHEUMATOLOGY	8	40.0	12	60.0	62.3	48.5
TOTAL	199	64.2	111	35.8	52.3	44.6

Table 2: Workforce

	TOTAL MEMBERS	ARP Members	SUPPLE- MENTARY	TOTAL FTE	ARP FTE	RECRUITS	RESIGNEES
DERMATOLOGY	26	6		25.54	5.60	3	
ENDOCRINOLOGY	21	19	2	18.80	16.86		
GASTROENTEROLOGY	58	37	1	54.88	35.00	8	2
GENERAL INTERNAL MEDICINE	69	33	6	64.28	30.64	2	3
GERIATRICS	13	10	6	11.43	8.55		
HEMATOLOGY	18	10	1	13.58	7.60	2	1
INFECTIOUS DISEASES	21	15	1	17.86	13.80	1	
NEPHROLOGY	28	17	1	27.34	16.40	1	1
RESPIROLOGY	36	25	2	34.49	23.55	4	
RHEUMATOLOGY	20	17		19.10	16.10	2	
TOTAL	310	189	20	289.54	176.40	22	6

Note: Supplementary totals reflect DOM members cross-appointed into another DOM section only, not all supplementary appointments.

FTE values may not be exact, for missing values an approximate value was used (17 missing values).

Table 3: University Affiliation

	DERM	ENDO	GI	GIM	GERI	HEM	ID	NEPH	RESP	RHEUM	Total
Adj. Assistant Prof						1					1
Adj. Associate Prof		1	2	2							5
Adj. Prof						1				1	2
Assist. Prof	1	2	6	1			1	6	2	1	20
Assoc. Prof	1	1	7	4	2		4	5	2	1	27
Clinical Assist. Prof	9	5	16	31	5	5	7	8	16	5	107
Clinical Assoc. Prof	7	3	6	13	1	2	3	4	4	5	48
Clinical Lecturer	5	1	3	7	2					1	19
Clinical Prof			2	3	2				2	2	11
Clinical Scholar		1	2	2		3			1		9
Professor	1	6	9	4	1	3	5	3	4	4	40
Prof Emeritus						1			1		2
Research Assist. Prof			1			1		1			3
Research Prof									1		1
No University Appt.	2	1	4	2		1	1	1	3		15
Total	26	21	58	69	13	18	21	28	36	20	310

LIST OF AWARDEES / PROMOTIONS

CLINICAL AWARDS

Dr. Paul Beck	-	Gastroenterology	-	Outstanding Clinician Award
Dr. Willis Tsai	-	Respirology	-	Rockyview General Hospital Physician Recognition Award

RESEARCH AWARDS

Dr. Chris Mody	-	Respirology	-	Cystic Fibrosis Canada Research Grant
Dr. Marvin Fritzler	-	Rheumatology	-	CIHR-CMAJ Top Achievements in Health Research
Dr. Richard Leigh	-	Respirology	-	Thoracic Network of Alberta and NWT Award of Excellence
Dr. Paul Beck	-	Gastroenterology	-	AGA Research Mentor Award
Dr. Karmon Helmle	-	Endocrinology	-	Outstanding Abstract & Endo Presidential Poster Competition
Dr. Anthony Dechant	-	Endocrinology	-	Outstanding Abstract & Endo Presidential Poster Competition

Canadian Institute of Health Research Partnerships for Health System Improvement

Dr. Braden Manns	-	Nephrology
Dr. Brenda Hemmelgarn	-	Nephrology

NATIONAL HEALTH SCIENCES ACADEMY

Dr. Chris Mody	-	Respirology
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UNIVERSITY OF CALGARY FACULTY OF MEDICINE

Dr. Paul Beck	-	Gastroenterology	-	Watanabe Award for Overall Excellence
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CANADIAN FOUNDATION FOR INFECTIOUS DISEASES

Dr. John Conly	-	Infectious Diseases	-	Dr. John M. Embil Mentorship Award
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PROMOTIONS

Dr. Lynn Savoie	-	Hematology	-	Clinical Associate Professor
Dr. Peter Duggan	-	Hematology	-	Clinical Associate Professor
Dr. Paul Beck	-	Gastroenterology	-	Professor
Dr. Sylvain Coderre	-	Gastroenterology	-	Professor
Dr. Gil Kaplan	-	Gastroenterology	-	Associate Professor

Medical Access to Service - Annual Report April 1, 2011 to March 31, 2012

Medical Access to Service (MAS) has been steadily moving forward throughout the last year. Based on pressure from primary care physicians and the overall positive experience from the participating groups, more groups and areas beyond the Department of Medicine (DOM) have expressed interest in joining the Calgary Zone Central Access and Triage and adopting the associated Standards.

The Closed Loop Referral Program, a provincial initiative, was launched November 2011, incorporating many of the successes of the MAS concepts and practices into the provincial model.

Feedback from the different stakeholders within MAS has resulted in continued work on the following projects:

- Revision of the Central Access and Triage guide to include a total of 70 clinics/programs/Sections. As of June 2011, Alberta Children's Hospital - Infant Cranial Remodeling Program/ Head Shape Clinic, Neuromotor Program, Neuromuscular Program, Neuro Rehab Program, and Medical Genetic Service joined MAS. Revisions made to the following CAT teams: Women's Health, Calgary Headache Assessment and Management Program, Cardiac Navigation, Gastroenterology and Nephrology.
- Standards of Practice and Policies and Procedures for the Central Access and Triage are incorporated into programs and services joining MAS as well as developed in current CAT programs.
- Working with the DOM on providing improved feedback on referral demand, appointment supply and clinic utilization.
- Working with Sections and clinics to further clarify their referral requirements.
- Working with different Sections to develop IT strategies to reduce the rework that is associated with Central Access and Triage. General Nephrology and Diabetes Hypertension and Cholesterol Centre (DHCC) have been successful with developing a paper free system which allows for offsite electronic triage and chart retrieval. Gastroenterology is in the process of going through a paper free system with great interest from Hepatology, Calgary Headache Assessment and Management Program (CHAMP) and other CAT teams.
- Supporting the team implementing scheduling systems to include referral and waitlist management capabilities
- Participation with IT to help develop Cerner® Millennium as an Outpatient Database.
- Participation with Alberta Referral Directory (ARD).
- Participation with CAT teams and groups going to South Health Campus
- Involved in Gastroenterology pilot with Foothills PCN for Tele-Gastroenterology consults
- Participation in eReferrals with regards to vendor evaluation.
- Participation in AIW for Cancer Care CAT team
- Participation in Province-Wide Access to Referral & Triage for Cancer Care (preliminary meetings)

Priority Referral Scoring Tools

This remains on hold due to financial issues, at this time Rheumatology CAT is the only team utilizing this tool.

Access, Improvement, Measurement (AIM) Collaborative

Access Mental Health is participating in AIM Collaborative. With Access Mental Health participation it was able to decrease wait times, and streamline processes.

Rightfax®

All teams have been encouraged to utilize Rightfax® as a clerical solution to faxing any information directly from the computer as against time spent standing and faxing from a fax machine.

Alberta Children's Hospital

Many of the Pediatric specialty clinics are continuing to become interested in participating with MAS.

Standards for Central Access and Triage

1. Communication

- Participating clinic will provide faxed confirmation to referring physician that referral has been received within two working days (48 hours).
- Participating clinic will provide faxed letter of appointment details to referring physician within seven working days.
- Central fax number and central phone number will be available for physician referrals.
- Specialist will be available to triage staff for any questions/concerns (may be on a triage rotation or may be on call specialist depending on area).
- Clinics agree to the use of the standard referral form and have the ability to accept any type of referral (letter, EMR) as long as the required information is included.
- Both the patient and referring physician will be given information about the booked appointment by the CAT team.
- Web based Central Access and Triage manual is the most current information (eliminate paper manual), updated with wait times every six months
- Triage is to be done by the triage clinician, with assistance from the triage specialist whenever possible
- Triage teams have relief staff trained.

2. Triage Guidelines

- Participating areas will provide clear guidelines for referral requirements, additional tests required for the initial appointment should be requested by the individual specialist's staff.
- Participating areas provide estimated times for patient to be seen.
- Participating areas have a policy for declining referrals; joining CAT teams will develop policy.
- Participating areas will review and update (if required) their CAT team in the Medical Access to Service brochure.

3. Accountability

- Participating clinics will have a system (database) in place to track referrals (when received, where it was triaged to, etc.).
- For successful booking of patients – require initial appointment slots two - six months in advance to prevent backlogs.
- Clinic has a policy for MD clinic cancellations; joining CAT teams will develop policy.
- Referrals awaiting further information should be less than 10% of all referrals.

Telehealth Report April 1, 2011 to March 31, 2012

SECTIONS	CLINICIANS	UTILIZATION
Dermatology	<p>Dr. Richard Haber (General Dermatology)</p> <p>Dr. Laurie Parsons (Wound Care)</p>	<p>The following number of patients were assessed: Claresholm, AB – 31 High Level, AB– 24 Siksika, AB - 20</p> <p>Telehealth assessments: 84 Telehealth to the following sites: Brooks AB Canmore AB Cranbrook BC Crowsnest Pass AB High River AB Lethbridge AB Medicine Hat AB Red Deer AB</p>
Endocrinology	<p>Dr. Peter Grundy</p> <p>Dr. Vicky Parkins</p> <p>Dr. Norm Wong</p>	<p>Did telehealth clinics once monthly with the diabetic education nurse and dietician in Canmore AB. Four to five cases per month were discussed over 60-90 minutes per session. Three to four times per year there were live patient interviews concerning their diabetes mellitus.</p> <p>From April 2011 to Oct 2011, did weekly telehealth sessions regarding diabetes in pregnancy usually seeing 4-6 patients per week in a 2 hour session.</p> <p>One telehealth clinic per month assessing 5-10 patients per session.</p>
Gastroenterology	Sectional members	<p>November 2011 was the start of a pilot project with the Calgary Foothills Primary Care Network. This project was a telephone consultation service to provide referring physicians with phone support regarding GI symptom management. 20 telephone consultations done in this reporting period.</p>
Geriatrics	<p>Dr. David Hogan</p> <p>Dr. Heidi Schamltz</p>	<p>Telehealth sessions to Canmore/Banff. During 10 sessions, 20 patients were assessed.</p> <p>Telehealth sessions to Didsbury and</p>

	Dr. James Silvius	<p>Strathmore AB. Two half-day sessions per month and usually 2-3 patients seen per session (2 new or 1 new and 1-2 followups).</p> <p>Monthly telehealth clinic to the following sites: Brooks, Claresholm, Drumheller, High River, Nanton, Okotoks and Vulcan AB. 21 new patients assessed and 28 followup assessments during the reporting period.</p>
Hematology	<p>Dr. Andrew Daly</p> <p>Dr. Russell Hull</p> <p>Dr. Farzana Sayani Dr. Karen Valentine</p> <p>Dr. Lynn Savoie</p> <p>Dr. Doug Stewart</p>	<p>Did one remote bone marrow transplant (BMT) consult and uses telehealth for sessions with Cross Cancer Institute medical staff in Edmonton for Tuesday BMT meeting</p> <p>Dr. Hull does thrombosis consultations via telehealth . Cities serviced by Dr. Hull's clinics include: Cranbrook BC Invermere BC Vancouver BC and Maple Creek SK</p> <p>As well the following Alberta cities serviced were: Banff AB Red Deer AB Rocky Mountain House AB, Taber AB, Strathmore AB Medicine Hat AB, Three Hills AB, Okotoks AB, Claresholm A High River AB Lethbridge AB.</p> <p>Dr. Sayani and Dr. Valentine used telehealth for education purposes such as the CanHeme teleconference on a quarterly basis</p> <p>Dr. Savoie used telehealth to do allogenic bone marrow transplant interviews. Six to eight interviews were done over the reporting period.</p> <p>Dr. Stewart did 5 telehealth BMT consults and 1 consult to Rainbow Lake, AB as a followup to discuss options for relapse post BMT.</p>

Infectious Diseases	Dr. Tajdin Jadavji Dr. Janet Gilmour Dr. John Gill Dr. Donna Holton Dr. Martin LaBrie Dr. Stephen O'Keefe Dr. Kelly Young	Southern Alberta Clinic (SAC) 56 patients seen during 63 telehealth appointments and 7 of the 56 required telehealth reassessment.
Nephrology	All nephrologists	Telehealth used for followup on chronic kidney disease patients and dialysis. No dedicated telehealth clinics and no initial consultations.
Respiratory Medicine	Dr. Paul MacEachern Dr. Karen Rimmer Dr. Alain Tremblay Dr. Mitesh Thakrar Nadine Strilchuk–Nurse Practitioner	Dr. MacEachern assessed 1-2 patients/month. Dr. Rimmer did an ALS community teaching session once yearly and occasional patient assessment and neuromuscular teaching session. Dr. Tremblay did new patient consults and followup of patients primarily with lung cancer. He saw 1-4 patients/month. Dr. Thakrar used telehealth for weekly multidisciplinary transplant rounds with the University of Alberta. Telehealth was also used by Nadine Strilchuk NP
Rheumatology	Dr. Liam Martin Dr. Sharon LeClerc	Rheumatology assessment clinics done to Pincher Creek, AB. Ten clinics total were done between these 2 clinicians assessing 6-10 patients per clinic during the reporting period.
<u>Additional Information:</u> In the absence of a DOM Clinical Facilitator, this information is based on names and numbers kindly supplied by Section heads of their respective Sections.		

Physician Wellness and Vitality – Annual Report April 1, 2011 to March 31, 2012

BACKGROUND

The portfolio of Vice Chair, Physician Wellness and Vitality was created within the Department of Medicine (DOM) in 2004 in order to identify and improve work-life balance issues for members of the Department and to promote physician wellness, in a scholarly fashion. The following document summarizes the activities during April 2011 to March 2012, in collaboration with Professor Jean Wallace from the Department of Sociology, University of Calgary.

RESEARCH AND KNOWLEDGE TRANSLATION

The Well Doc? Initiative was created as a vehicle to research and promote physician wellness issues. Well Doc? Module 1 explored the association between physician workplace nutrition and cognition. From this study, we reported on how physicians need to fuel their bodies in order to function well. Well Doc? Module 2, a randomized controlled trial, demonstrates how a portable biofeedback can serve as a stress management tool for physicians. The results of these studies have been disseminated through peer reviewed publications, knowledge exchange with health care leaders, stakeholders, and policymakers, workshops and lectures to medical students, residents, and staff physicians on a local, national, and international level. Well Doc? Module 3, is a study exploring the dimensions of the complex and demanding task of being a Medical Teaching Unit preceptor and its implications for effective health care delivery, medical education, and health care provider wellness. Once funded, we hope that the results of this study will inform us as to how we can better prepare clinicians for this role, support them, and evaluate their performance. Well Doc? Module 4, is a collaboration with Dr. Judy Boychuk-Duchscher (principal investigator) from the faculty of nursing. With this research project scheduled to begin in July 2012, we will be exploring the experience of professional role transition for newly licensed independently practicing physicians. Dr. Duchscher, who has previously studied this transition in the nursing profession, has used the knowledge gained in her research to develop support systems for nurses during this critical time period.

In related research, we assessed the impact of the introduction of new technology upon health care provider work experiences and attitudes. We have published two studies related to the implementation of a hands-free communication device on Unit 36. (de Grood J, Wallace JE, White DE, Gilmour JG, Lemaire JB - Evaluation of a hands-free communication device in an acute care setting. *Comput Inform Nurs*. 2012 - 30:148-156. Dunphy H, Juli BA, Finlay MA, Lemaire JB, MacNairn I, Wallace JE. Hands-free communication technology: a benefit for nursing. *JONA* 2011 - 41:365-8.) Other research initiatives include a study, in collaboration with Dr. Mamta Gautam from the University of Calgary, to explore what constitutes physician resilience. With funding from the University of Calgary Grants Review Committee, we have completed interviews with 30 physicians from across Alberta. A report outlining the preliminary findings has been disseminated to stakeholders and we have submitted 3 abstracts based on this research to an international Physician Health conference scheduled for this Fall.

During 2010-2011, the Internal Medicine chief residents and the W21C (Ward of the 21st Century) Wellness research team developed and executed a study of the impact of a new Senior Resident Rotation Bundle (SRRB). It is clear that 24 hour on call duty hours will be abolished in the near future and we need to understand the impact of alternative scheduling designed to cover the 24 hour needs of an acute care teaching hospital. The main study results have been summarized in a report disseminated to key stakeholders, and presented by the chief residents through posters and oral presentations at academic conferences locally, nationally, and internationally. The main manuscript is currently under review by "Medical Education" journal. Dr Jeffrey Schaefer, Internal Medicine Program Director, also used the study results as a resource to guide subsequent iterations of the SRRB.

EDUCATION AND INFORMATION EXCHANGE

Once again we have had the privilege of speaking at multiple venues, highlighting the 'Well Doc?' research and other wellness related studies. The audience ranged from medical students (e.g. Federation of Medical Women of Canada Lecture to Medical Students Feb 2012), post graduate medical trainees (e.g. Neurology Resident Retreat Nov 2011), to research forums (e.g. Health Solutions, RTNA Annual Conference Edmonton Oct 2011). Our Wellness team was also privileged to take part in the visit of the Royals, Prince William and Kate Middleton, when they toured W21C in July 2011.

We have been invited to speak to AHS colleagues, (e.g. South Health Campus Clinical Design Team Meeting, Alberta Health Services, “*How to Beget Physician Wellness at South Health Campus*”? May 2011), and University of Calgary colleagues, (e.g. Dean’s Luncheon hosting the Provost and Vice President of Research, University of Calgary “*Physician Wellness Research*” October 2011). We felt privileged to be invited to share our learnings nationally and internationally with presentations at the Society of General Internal Medicine International Symposium on the Physician Workforce in Phoenix Arizona in May 2011, the Osler Symposium for Physician Wellness in Albuquerque in May 2011, the RCPSC/Canadian Society of Internal Medicine Osler Lecture at the annual conference in Halifax in October 2011, and the Health of the Health Professionals conference in Auckland, New Zealand in November 2011. In addition, we were invited as distinguished lecturers to exchange knowledge with multiple stakeholders at Stanford University in January 2012 and McGill University in February 2012.

Dr. Lemaire has also been a member of the planning committee (Dr. Lloyd Sutherland Chair) charged with developing a series of workshops in order to help orientate new members to the Faculty of Medicine. The workshop entitled “*Integrating Work and Life to Enhance Career Vitality and Sustainability*” is a first attempt to deliver wellness mentoring. This workshop was one of four workshops offered to new faculty in September 2011, and again in March 2012. The feedback has been very positive.

ADMINISTRATION

We continue to advocate for and to represent physician wellness and vitality through many different avenues. As vice chair within the Department of Medicine, Dr. Jane Lemaire endeavors to advocate for physician wellness at the Medical Services Executive Meetings, and as a member of the ARP Management Committee (until Dec 31, 2011 when her term expired). Wellness is now officially a portfolio within the W21C Research and Innovation Centre where Drs. Wallace and Lemaire are Co-Leads, supported by the incredible W21C team, in particular Ms Jill de Grood and Ms Adriane Lewin whose contributions to the productivity of the team during 2011-2012 cannot be overstated. Dr. Lemaire is an ongoing member of the AMA Physician and Family Support Group Advisory Committee and was appointed Chair in March 2012. She is also a member of the International Alliance for Physician Health.

FINAL COMMENTS

We are grateful to all of the physicians, other health care providers and leaders in the health care systems who take the time to participate in and support our research endeavors. It is not so unusual now to overhear dialogue around physician wellness as it surfaces in the hallways, doctors’ lounge, on the wards, and in the clinics. This paradigm shift related to physician wellness is proof that the profession and the public are beginning to understand that well physicians are essential to the delivery of high quality patient care and to the sustainability of our health care provider workforce.

DOM Quality Improvement – Annual Report April 1, 2011 to March 31, 2012

DOM 2011 QI Focus Areas:

1) Examination and optimization of Clinic Flow.

- a) With the assistance of the DOM Data Analysts and the Section Heads and Sectional QI Leads, we evaluated the current outpatient data available from the Ambulatory Care Classification System (ACCS) dataset. This study revealed that the current list of DOM clinics was inaccurate or incomplete and that the data being collected was also incomplete. Tina Wang (DOM data analyst) therefore compiled an inventory of DOM Outpatient services, through collaboration with the Internal Medicine Residency program, the Sectional Heads, the DOM QI group and the ARP. We now have a more complete and accurate list of the ambulatory clinical services provided by DOM members. Moving forward, we are developing an ambulatory dashboard with Medical Operations in order to monitor important access and quality indicators. The DOM and Medical Operation data analysts will be working with ACCS, along with the involved clinics, to compile more accurate data for the dashboard.
- b) One barrier identified to optimizing clinic flow is the lack of an electronic scheduler within several clinics. An electronic ambulatory medical record would further help to optimize the DOM clinics. We have therefore linked with the AHS-Calgary IT group regarding plans to roll out the SCM Ambulatory EMR and associated electronic scheduler. The timelines for this roll out have not been finalized. However, there is now a process in place to help prioritize requests for the SCM Ambulatory EMR and electronic scheduler. The application process has been made available to the DOM QI group. Additionally, the AHS-Calgary IT group will be working with the DOM members currently using EMIS in order to help transition them to the SCM Ambulatory EMR.
- c) A committee is currently being formed involving Sectional QI Leads and other stakeholders to further explore issues around access. Dr. Sachin Pendharkar is also a member of the the AHS Acute Care Capacity Management Working Group/Provincial Access Team.

2) Hospital Elders Life Program (HELP).

The HELP program was launched on unit 46 at the Foothills Medical Center in the fall of 2011, and then on unit 32 in the spring of 2012. This is an evidence-informed cost-effective program that utilizes volunteer resources to reduce delirium rates and other adverse outcomes among hospitalized older medical patients. Scott Zimmer (DOM/Medical Operations data analyst) developed a database to track the local HELP outcomes.

By March 31, 2012, 52 patients had completed the HELP program on u46. Only three HELP patients (5.8%) became delirious while participating in the program. This is lower than the 12.2% delirium rate experienced by the 41 baseline patients. HELP participants who exited the program upon discharge from hospital, transfer to an Alternate Level of Care (ALC) unit, or because they became delirious, had a median hospital acute length of stay of 9.0 days (excluding time spent in ALC). By contrast, baseline patients had a median acute length of stay of 11.0 days. The HELP participant and baseline groups had similar median/average expected length of stay values based on the Canadian Institute of Health Information (CIHI) complexity grouping methodology. Looking specifically at patients who were in a home/lodge at program entry and who exited HELP upon hospital discharge/transfer to an ALC unit, approximately two-thirds of patients (68.0%) remained in a home/lodge at program exit. This is similar to the 66.7% of baseline patients who remained in a home/lodge.

	Delirium Rate % (N)	Median Hospital Acute LOS (Days)
HELP Participants	5.8% (3/52)	9.0
Baseline Patients	12.2% (5/41)	11.0

3) **Support Sectional QI Initiatives.**

- a) Each section has appointed a Sectional QI Lead. We have established DOM QI rounds 3/year (Winter; Spring; Fall). They involve a brief DOM QI update, followed by 1-2 presentations from Sectional QI Leads or relevant outside speakers.

Section	QI Lead
Dermatology	Dr. Habib Kurwa
Endocrinology	Dr. Sonia Butalia
Gastroenterology	
General Internal Medicine	Dr. Aleem Bharwani
Geriatrics	Dr. Jayna Holroyd-Leduc
Hematology	Dr. Karen Valentine
Infectious Diseases	Dr. Donna Holton
Nephrology	Dr. Rob Quinn
Respirology	Dr. Sachin Pendharkar
Rheumatology	Dr. Susan Barr

- b) The first DOM QI funding competition was held in the spring of 2012. Two projects were funded:

Investigators	Title	Funds
Sofia Ahmed, Ryan Lenz, Alex Chin, Robert Quinn	"Observation of a High Sensitivity Troponin Assay in Asymptomatic Peritoneal Dialysis Patients"	\$15,000.00
Echo Enns, Jayna Holroyd-Leduc, Vivian Ewa, Rishma Rhemtulla, Karen Fruetel	"A Quality Improvement Initiative to Reduce the Use of Physical Restraints among Older Hospitalized Patients"	\$3900.00

Other DOM QI Updates:

4) **Establishment of DOM Inpatient Data Report.**

Tina Wang and Scott Zimmer (DOM/Medical Operations data analysts) have compiled Inpatient Indicator reports for each of the sections (fiscal years of 2007 through 2011) using data obtained from Health Records. These indicators include (where relevant): monthly inpatient discharges, average length of stay (LOS), readmission rates, mortality, and consultation volumes. On a move forward basis, reports will be generated semi-annually. It is anticipated that these reports will help to guide DOM and sectional QI initiatives and workforce planning. Additionally, a report of the top 5 DOM Inpatient CMGs has been compiled for the fiscal years of 2007 through 2011 for the following sections: Gastroenterology, General Internal Medicine, Haematology, Nephrology and Respirology.

In response to concerns identified in Health Quality Council of Alberta (HQCA) report and based on data generated from this report, the DOM will be conducting a QI project aimed at improving discharge planning in an effort to decrease hospital LOS. This project has received funding support from Medical Affairs and aligns with the AHS Acute Care Capacity Management Working Group/Provincial Access Team initiative.

5) **Medicine/DOM Data Dashboard.**

The DOM and Medicine Operations developed a QI indicators dashboard. The dashboard currently focuses mostly on inpatient indicators but will be expanded to include outpatient indicators as well.

Sectional Updates:

Section of Dermatology

The Section of Dermatology has several quality improvement initiatives underway. These initiatives include the following:

- 1) **Electronic Medical Record System.** Some members are currently using EMIS as their EMR to maximize patient flow as they were asked to adopt this system 4 years ago. We have been working to develop a process to transition to the SCM Ambulatory EMR. Developing an effective EMR has a major impact on patient access and if we are able to transition to an adequately supported system that can be adopted by the section, this will improve patient care and flow.
- 2) **Dermatology Rounds.** Dermatology Patient Rounds were started at the Richmond Road Diagnostic & Treatment Centre (RRDTC) in Sept 2010 in an effort to bring together sectional members to discuss challenging cases. This includes faculty and trainees from all levels. We review 7-10 cases in 1 hour followed by a discussion of each case to determine the next best plan of investigation or treatment. Decision making by consensus involving the different collective experiences of the section has proved to be invaluable.

Section of Endocrinology and Metabolism

The Section of Endocrinology and Metabolism has several quality improvement initiatives underway. These initiatives include the following:

- 1) **Diabetes Educational Program for Family Physicians and their Allied Healthcare Providers.** Recognizing that diabetes is a very important, prevalent and complex disease and with the goal to optimize diabetes care, the Section of Endocrinology has been partnering with various Primary Care Network (PCNs) within the Calgary Zone. We have been developing and presenting a Diabetes Educational Program for Family Physicians and their allied health care providers, encouraging an interdisciplinary team approach to diabetes care. A Diabetes Telephone Consultation Service has been made available to two PCNs within the Calgary Zone and we plan to expand this to provide a broader Endocrinology Telephone Consultation Service in the near future. Targeting specifically allied healthcare providers, we have given them access to our extensive online learning modules (Blackboard), which cover multiple topics including diabetes, weight management, lipids, hypertension and vascular risk reduction. We have also shared the patient educational material used at the Diabetes, Hypertension, and Cholesterol, Centre (DHCC) so that patients within the Calgary Zone are receiving consistent messaging. New this upcoming fall (September, 2012), we are also introducing a set of Diabetes Workshops, which will run twice yearly. Basic and Intermediate level Workshops are being offered to allied healthcare providers within the Calgary Zone.
- 2) **Diabetes Educational Program for the Diabetes Educators within our Specialty Care Program at the Diabetes Hypertension Cholesterol Centre (DHCC).** In order to ensure that the diabetes educators within the DHCC are up-to-date and providing care to patients in an evidence-based fashion, we have been providing a multifaceted Educational Curriculum, which includes monthly half-day educational sessions, access to the online learning modules (Blackboard) as described above and new this upcoming fall, 2012, we are also introducing a set of Diabetes Workshops, which will run twice yearly. Basic and Intermediate Level Workshops are being offered to new diabetes educators within the DHCC program. Specifically for the diabetes educators within our DHCC specialty program, there will be an Advanced Diabetes Workshop offered as well.
- 3) **Thyroid Tumour Board Rounds.** Thyroid Tumour Board Rounds were started in January 2011 in an effort to bring together not only sectional members that have an interest in thyroid cancer but also to allow direct formal

and informal collaboration with interested colleagues from surgery, pathology, radiation oncology and medical oncology. This includes faculty and trainees from all levels. We review 2-3 cases in 1 hour and produce a written Tumour Board Rounds summary for each patient succinctly documenting what was discussed and ultimately decided as the next best plan of investigation or treatment. Decision making by consensus involving the different perspectives has proved to be invaluable.

- 4) **The Basal Bolus Insulin Project.** The Basal Bolus Insulin Project aims to provide a logical, evidence-informed alternative to sliding scale insulin use in hospital. Initially, the protocol was developed and released using a web-based tool and accompanying pocket cards, and now an electronic order set has now been developed to facilitate ease of use. The electronic order set has been made available at all three adult acute care sites (FMC, RGH, PLC). Quantitative and qualitative analysis regarding user uptake and utilization, as well as the impact on care team workflow are underway. This project received funding support from a DOM research development grant.
- 5) **Adrenal Vein Sampling.** Adrenal vein sampling (AVS) success rates locally were 40%. An ongoing multidisciplinary team has worked over the past few years to improve technical accuracy, collection and handling accuracy, and reporting standardization. Present AVS success rates are 97% and Calgary has been invited to join an international group looking at AVS utilization worldwide. The AVIS study has now published their quality improvement results (Rossi et al., 2012). An application has been submitted to the Conjoint Health Research Ethics Board (CHREB) to allow the creation of an AVIS extension database that will permit ongoing quality improvement research in adrenal vein sampling/aldosteronism for the next decade.
- 6) **Central Access and Triage.** Along with many other sections, Central Access and Triage was initiated in our section. Over the last several months, our program continues to grow receiving over 600 referrals per month. Our median wait time for urgent referrals is less than one week and routine referrals are consistently seen within three months, often in less than eight weeks. We continue to re-evaluate our program to ensure key objectives are attained and further strengthened.

Section of Gastroenterology and Hepatology

The Section of Gastroenterology and Hepatology have several quality improvement initiatives underway:

- 1) **Advisory Acute GI Section QA/QI Lead.** The Section appointed Dr. Lynn Lambert as the advisory acute GI Sectional QA/QI Lead. Dr. Lambert recently moved from Birmingham, UK and is a member of the GIM group at the FMC; she brings with her more than 10 years of endoscopy experience in the UK with extensive experience developing and implementing QA/QI strategies and therefore understands many of the issues related to the delivery of GI care.
- 2) **Clinic Workflow Optimization.** A comprehensive evaluation of clinic workflow was undertaken, including a patient survey (356/50 47.5% response rate), and a clinic staff survey (71/180, 39% completed). The key areas targeted for change include delays in clinic, emphasis on work satisfaction and communication. In addition, clinic utilization by physicians and nurse practitioners was evaluated and strategies to improve utilization will include nurse clinician-led clinics. A survey of physicians and nurse clinicians (NC – primary role is to support physicians in managing outpatients, mostly by telephone) was also completed. Based on these results, the NC role will evolve into one with more direct patient care and education in clinic.
- 3) **Innovations to Improve Access to General Luminal GI.** Luminal GI receives on average 1100 referrals a month. The current wait for routine requests exceeds 18 months. Activities aimed at enhancing access, include a telephone consultation service accessible to all referring physicians (average 2-4 completed per week, with ongoing data collection). A 'Nurse Navigator', developed in collaboration with the Calgary NW Primary Care Network (PCN), is actively following patients with routine GI symptoms, who will then undergo a group medical consultation with GI medical oversight at the PCN. After this comprehensive assessment, recommendations will be made with ongoing support through their medical home in the PCN. A subpopulation of these patients will undergo novel, outpatient thinscope endoscopy aimed to reduce costs and recovery time, but optimally investigate those requiring endoscopy. In addition, approximately 20% of GI referrals are directed to endoscopy without a clinic visit (Direct to Procedure/ DTP). We have collected 6 months of data: indication, endoscopy, histologic and endoscopic outcome, and wait-times to evaluate workflow. Eighty-nine patients were

called to evaluate DTP process and patient satisfaction. As a result of this data, clear follow up processes are being developed, including nurse-led follow up and specialty clinics (e.g. microscopic colitis), with appropriate physician oversight. Finally, the reporting process will be standardized and improved.

- 4) **Endoscopy Utilization, Quality and Reporting.** Endoscopy units across the city have implemented a validated process (every 6 months) to optimize patient centered care within endoscopy, including systematic assessment of the process of consent, procedure safety and comfort, quality, appropriateness as well as the quality of the reporting process (GRS or Global Rating Scale). Patients who underwent endoscopy at the FMC were surveyed (377/ 1165, 32% response rate) and as a result, measures have been taken to improve access to translated materials, quality of the endoscopy report for patients and clarity of follow up plans/ recommendations. Endoscopy utilization at the FMC has been evaluated, and a dedicated physician-scheduler will be used to optimize use. Other ongoing activities in endoscopy include evaluation of use of sedatives and reversal agents, revisions/ optimization of the EndoPro templates to include validated scores across indications, and transfer of data from the EndoPro database to Netcare.

Section of General Internal Medicine

Below is an update of a few of the Section of GIM quality improvement initiatives currently underway:

- 1) **Job Jar.** The Quality Job Jar is a web based platform to crowd source quality improvement within the large Section of General Internal Medicine. This web platform will be matched by an administrative framework which will (a) receive timely inputs (ideas, suggestions or concerns) from section members, (b) support a process for distributing and evaluating the inputs through the most responsible administrator, and (c) create a forum to develop and disseminate meaningful outputs (solutions or opportunities for care enhancement). In sum, the Job Jar is a web tool to enhance the process of quality improvement and is currently in the prototype development phase. For questions, contact Dr. Aleem Bharwani, Dr. Kelly Zarnke or Dr. Bill Ghali.
- 2) **The Amiodarone Care Pathway.** This pathway has been collecting data on how patients are managed on amiodarone in the community. Later this year, a guideline will be made available to community physicians to aid in better management of patients receiving amiodarone. For questions, contact Dr. Tim Pollak.
- 3) **Nifedipine formulation comparison.** There are two brands of tablets of nifedipine available and being interchanged without notification by pharmacies. Since they use different technologies to deliver nifedipine, Dr Pollak is verifying that blood pressure management is not affected by interchanges using 24-hour blood pressure measurements. For questions, contact Dr. Tim Pollak.
- 4) **PLC QI Rounds.** The Peter Loughheed internal medicine group has had a monthly quality improvement meeting since the start of 2010. There are two components to the meetings. (1) Physicians select and present topics of relevance to local practise. (2) Discussion of difficult clinical cases to guide future practise changes. For questions, contact Dr Michaela Jordan.
- 5) **Individual activities:** Section members are participating on an ad hoc basis to provide support, feedback and recommendations to the FMC QI committee.

Section of Geriatric Medicine

Below is an update of a few of the Section of Geriatrics quality improvement initiatives currently underway:

- 1) **Older Patient Electronic Order Set.** An electronic evidence-informed nurse-initiated geriatric order set was developed for SCM by a multi-disciplinary team, incorporating the current best evidence aimed at addressing delirium, falls, continence promotion, and optimal nutrition and hydration. The order set was recently evaluated on six medicine inpatient units. There was a trend towards a reduction in falls associated with order set use. Although there has been modest uptake of the order set since it was launched on SCM, interviews with front-line nurses and nurse managers/educators revealed that the order set is not being regularly ordered in part due to the high workload on these busy medical units. These findings reinforce the need for the implementation of HELP. The order set is currently being used by the geriatric consult service, where it is being targeted towards patients at highest risk for adverse hospital outcomes. The results of this QI initiative have been published within a peer reviewed journal.

- 2) **Evidence-informed Self-management Web portal for Older Adults with Chronic Disease.** Section members are collaborating with colleagues at the University of Toronto on the development and evaluation of a Web portal that contains evidence-informed self-management tools for older adults with chronic diseases. Grant funds have been obtained to conduct usability and pilot testing on the Web portal, including a grant from the W21C/Brenda Strafford Foundation Gerotechnology Grant Competition. The ultimate aim is to conduct a pragmatic RCT to evaluate the portal.
- 3) **The Older Patient Working Group.** The section is involved in this multidisciplinary working group, whose purpose is to engage health care providers in planning, implementing, evaluating and disseminating quality and safety enhancements in an effort to improve the quality of health care services provided to older hospitalized medical patients within Calgary hospitals. Currently this group is involved with developing an Elder Friendly Hospital Initiative for the Calgary Zone, in response to concerns identified in HQCA report and at the request of executives within Seniors Health.
- 4) **HELP.** The section has been involved with the launch of the HELP program (further information outlined above).

Section of Hematology and Hematologic Malignancies

This has been a busy year of QI activities as we prepared for our FACT re-accreditation May 11, 2012:

- 1) **FACT reaccreditation.** Clinicians worked closely with Hematology/BMT physicians and updated/revised clinical guidelines for the treatment of malignant hematology and BMT patients. In addition, through our established Quality Management System, current Policies/Procedures and SOPs were newly developed and/or revised to concur with current practise in order to meet accreditation standards. Our Share Point document management system is in the process of being updated to the 2010 version, allowing us to ensure we are following the stringent requirements necessary to renew our accreditation. Our auditing process has been improved with more efficient data collection and follow-up regarding such entities as engraftment and adverse events, with a comprehensive quarterly dashboard report to identify trends and necessary follow-up required. We also initiated a Patient Satisfaction Survey for the BMT population in partnership with U57 and BMT outpatient clinic, using IPAD technology to collect and analyze data regarding one of our quality indicators measuring patient satisfaction.

Section of Infectious Diseases

Below is an update of a few of the Section of Infectious diseases quality improvement initiatives:

- 1) **The standard order sets found in SCM to assist emergency room physicians to facilitate the care of patients with common infectious diseases was reviewed.** The Order Sets were updated to reflect current ID practice. The order sets were simplified and resigned to create logical paths of investigation and treatment. The success of these changes will be assessed in 2012.
- 2) **QI review of the treatment patients receive in HPTP.** HPTP is an ideal environment to assess both QI and research questions with respect to outpatient treatment of infectious diseases. Since the volume of patients seen each day in HPTP is big, the only reasonable approach to reviewing treatment is through electronic records. HPTP is not currently scheduled to have access to electronic records in 2012. The section is trying to negotiate access to full electronic records in 2012.

Section of Nephrology

Below is an update of a few of the Section of Nephrology quality improvement initiatives:

- 1) **PreCLOT QA project.** This project is still in the planning stages. It will examine the use of tPA locking solution for catheter dysfunction in hemodialysis.
- 2) **BK Viremia in Transplant.** This project was initiated in 2006 to assess the quality outcomes of the change in management of BK viremia in transplant patients.
- 3) **The ALTRA transplant program.** This program is currently reviewing, updating and improving our protocols for induction immunosuppression, treatment of acute cell mediated and antibody mediated rejection, transplant tourism, and living donor assessment.
- 4) **Erythrocyte Stimulating Agent QA/QI project.** This project plans to evaluate the effect of reducing max dose erythrocyte stimulating agent to half dose on hemoglobin control in dialysis patients.
- 5) **QA/QI project to evaluate the effect of intradialytic exercise on hemodialysis patients.**

Section of Respiriology

The Section of Respiriology has a number of QI activities underway. Faculty leaders for each initiative are provided:

- 1) **Operations of pulmonary function lab.** There are operational issues at each site that impact access to timely testing for respirology clinic patients, such that some patients must undergo testing at non-AHS facilities while the lab sites have unfilled testing slots. Given this discrepancy, we are beginning to explore the demand, capacity and operations of the PF lab sites, with the goal of improving access to testing through better capacity/demand matching. This work has begun with revision of the data collection systems in the PF laboratory sites and respirology clinics. (Drs. Davidson, Helmersen, Pendharkar)
- 2) **Capacity planning for pulmonary function at SHC.** Although the number of pulmonary function rooms has been established for the SHC respiratory clinic, the orientation of testing schedules and related clinics has not been decided. By simulating the SHC pulmonary function lab, using testing and clinic data for each of the physicians moving to SHC, we will determine the weekly schedule that will maximize the number of clinic patients that can undergo same-day testing. (Drs. Davidson, Fell, Pendharkar)
- 3) **Alternate care provider clinics.** These are underway in a number of areas, including nurse-led care in the chronic cough clinic (Dr. Field) and respiratory therapy clinics for patients using positive airway pressure therapy for sleep-disordered breathing (Drs. Hanly, Pendharkar). The cough clinic has published their outcome data in CHEST, and work is underway to study the effectiveness of follow-up at the “CPAP clinic”.
- 4) **Improving efficiency and access to pulmonary clinics.** The AIM model for outpatient clinic efficiency is being tested in the PLC respiratory clinic (Dr. Helmersen), in conjunction with the AHS QI team.
- 5) **Chronic ventilation program.** For patients on chronic ventilation (e.g. neuromuscular disease, spinal cord injury), quality indicators are reviewed annually.

PATIENT FLOW - DOM Inpatient Data

The following tables and graphs present a brief summary of inpatient data for the Department of Medicine (DOM). This information was taken from the Health Record and was grouped according to the patient's Most Responsible Physician. For cross-appointed physicians, their discharged inpatients were counted to one Section instead of splitting into two Sections. Since physicians' medical service code affects Sectional inpatient counts. Sectional inpatient counts might be varied due to the changes of physician's medical service.

There were 9164 inpatients discharged by DOM physicians during fiscal year 2011-12. Compared to previous year 2010-11, the total inpatient discharge increased around 15%.

Inpatient Discharge Summary		
Section	2010-11	2011-12
Dermatology	-	-
Endocrinology	62	48
Geriatric Medicine	-	-
Gastroenterology	952	912
General Internal Medicine	4112	4920
Hematology	831	1052
Infectious Diseases*	46	41
Nephrology	700	876
Respirology	1242	1315
Rheumatology	-	-
Total	7945	9164
Yearly Changes (+/-)	0.8%	15.3%

The calculation of average Acute Length of Stay of patients discharged by DOM physicians were based on the following five Sections as shown in the table. Compared to previous fiscal year 2010-11, the average Acute Length of Stay of DOM decreased around 8% in fiscal year of 2011-12.

Average Acute Length of Stay (Days)		
Section	2010-11	2011-12
Dermatology	-	-
Endocrinology	-	-
Geriatric Medicine	-	-
Gastroenterology	5.5	4.9
General Internal Medicine	9.9	8.7
Hematology	19	15.8
Infectious Diseases*	-	-
Nephrology	12.1	12.3
Respirology	8	8.3
Rheumatology	-	-
Average	10.9	10.0

Department of Medicine physicians also provided more than 15,000 consults for inpatients during fiscal year 2011-12

Inpatient Consults Provided by DOM		
Section	2010-11	2011-12
Dermatology	154	182
Endocrinology	535	585
Geriatric Medicine	1148	1028
Gastroenterology	3366	3470
General Internal Medicine	3957	3894
Hematology	695	645
Infectious Diseases*	2384	2426
Nephrology	841	891
Respirology	1757	1848
Rheumatology	395	369
Total	15232	15338

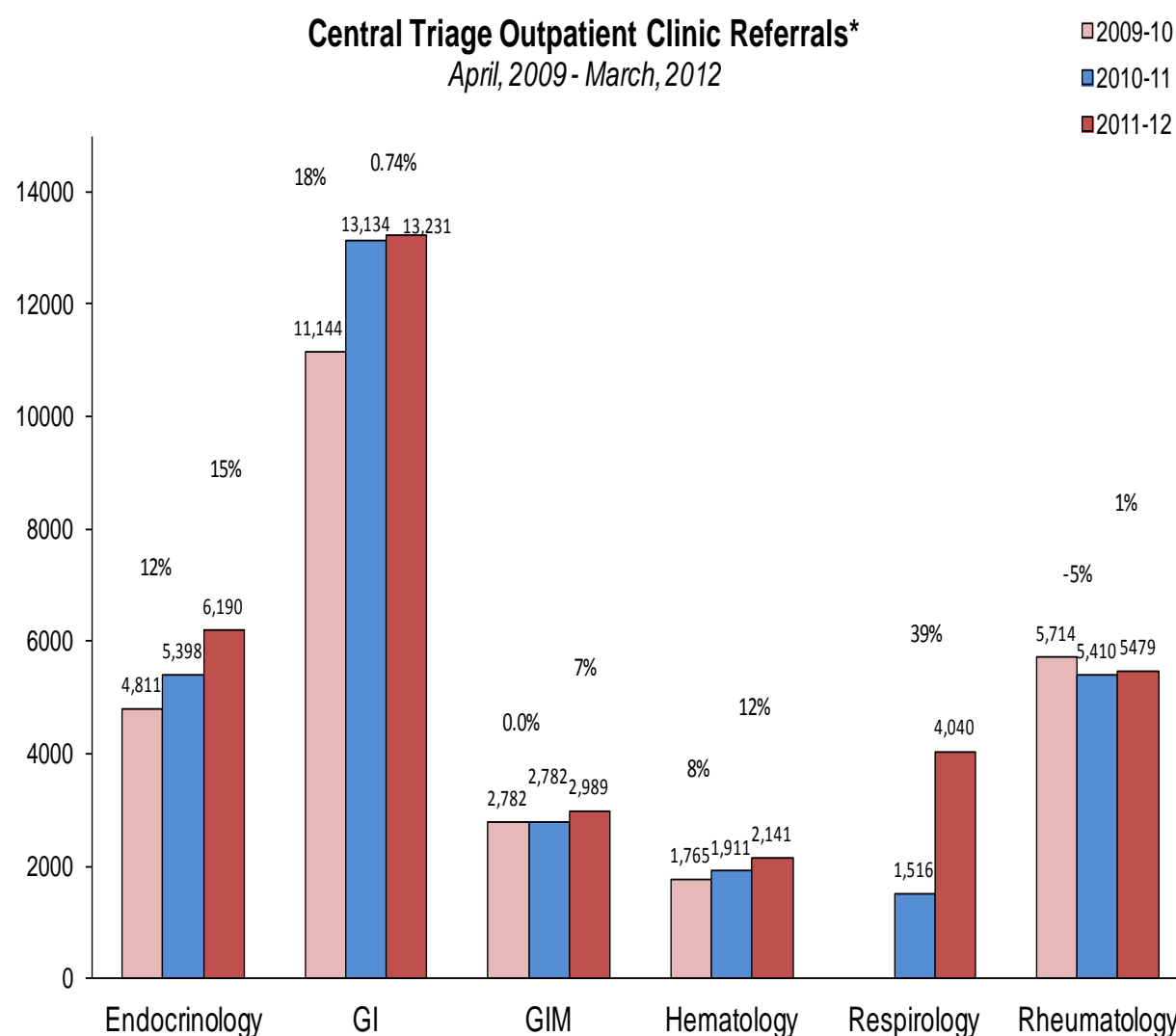
CMG (Case Mix Groups) is a methodology designed to aggregate acute care information for inpatients with similar clinical and resource-utilization characteristics. The following table listed top two CMGs of fiscal year 2010-11 and 2011-12 for the five Sections of the Department of Medicine.

Division	Top 1 CMG		TOP 2 CMG	
	2010-11	2011-12	2010-11	2011-12
GI	Inflammatory Bowel Disease		GI Hemorrhage	
	19.30%	21.90%	11.30%	7.80%
GIM	Diabetes		COPD	Other/Unspecified Septicemia
	5.80%	5.20%	4.80%	4.20%
Nephrology	Renal Failure		Kidney Disease	
	9.50%	7.30%	4.70%	6.40%
Hematology	BMT	Chemotherapy Neoplasm	Lymphoma	BMT
	16.60%	21.90%	9.10%	12.50%
Respirology	COPD		Other Lung Disease	
	21.10%	8.00%	8.70%	6.40%

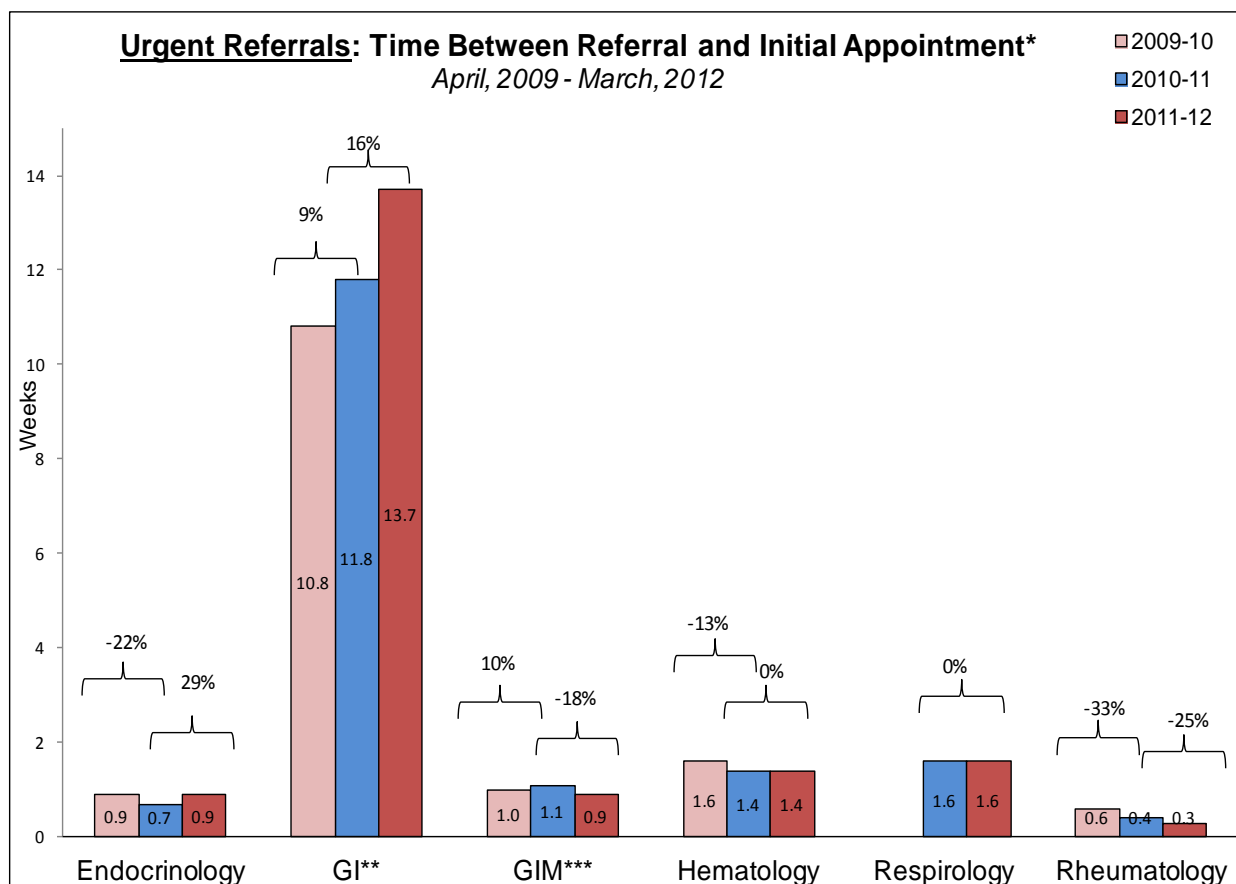
* Each discharged inpatient was assigned a CMG. An occurrence rate of CMG was calculated by using a number of discharged inpatients grouped by the same type of CMG divided by total discharged inpatients within a fiscal year. Sectional assignment of CMG was also affected by if its physicians were the Most Responsible Physicians for the discharged inpatients used in the calculation.

DOM Outpatient Data

Information on DOM outpatient clinic referrals was provided by Central Access & Triage and GI Central Triage. It should be noted that information was not available for all Sections or for physicians who do not participate in the Central Triage process. Respiriology data is only included from Dec. 2010 onward (when all sites participated in Central Triage). Gastroenterology (GI) data does not include screening colonoscopies performed at the Colon Cancer Screening Centre



Median wait times of GI for urgent referrals in 2011-12 increased 16% compared to what was reported in 2010-11. Median wait time of GIM and Rheumatology for urgent referrals in 2011-12 decreased by 18% and 25% separately compared to the results of 2010-11. Median wait times of Endocrinology for urgent referrals in 2011-12 increased 29% compared to previous year 2010-11.



* The median wait time is presented, except for GI where only the average wait time was available. Due to outliers, the average wait time will typically be longer than the median wait time.

** IBD and DTP cases are not included in GI wait times.

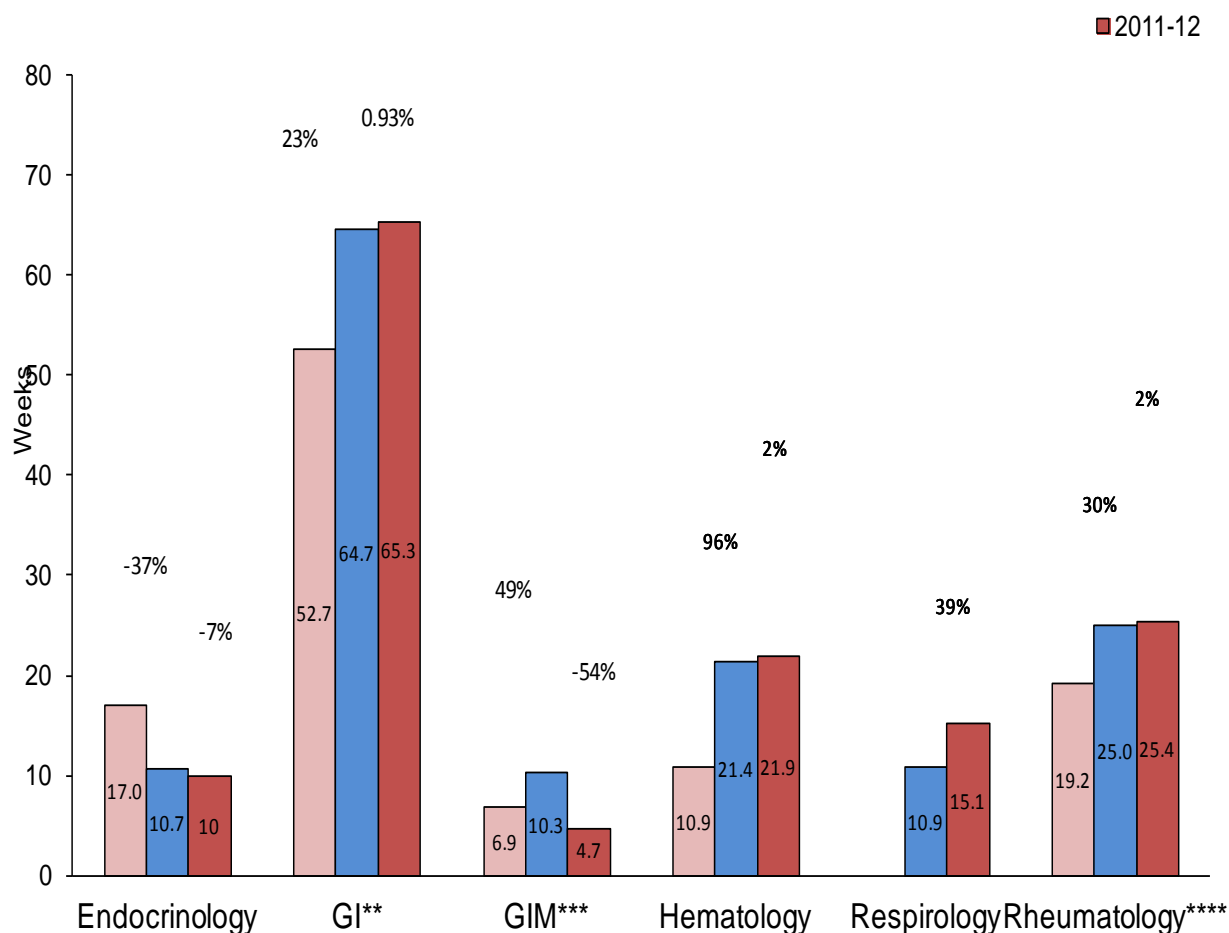
*** GIM updated their triage categories in Oct. 2009.

The median wait time for routine referrals increased for majorities of the Sections except for GIM and Endocrinology, which has dropped by 54% and 7% separately compared to previous fiscal year 2010-11.

□

Routine Referrals: Time Between Referral and Initial Appointment*

April, 2009 - March, 2012



* The median wait time is presented, except for GI where only the average wait time was available. Due to outliers, the average wait time will typically be longer than the median wait time. GI also reports wait times separately for moderate and routine referrals.

** IBD and DTP cases are not included in GI wait times.

*** GIM updated their triage categories in Oct. 2009.

**** Rheumatology routine referral wait times include Mod-Routine referrals.

Peer Reviewed Journal Articles Published/Accepted in 2011

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
Ahmed,Sofia	Increased urinary protein excretion in the 'normal' range is associated with increased renin angiotensin system activity.	Nicholl DD, Hemmelgarn BR, Turin TC, Macrae JM, Muruve DA, Sola DY, Ahmed SB	2011	Yes	Journal Article
	Declining kidney function increases the prevalence of sleep apnea and nocturnal hypoxia.	Nicholl DD, Ahmed SB, Loewen A, Hemmelgarn BR, Sola DY, Beecroft J, Turin TC, Hanly PJ.	2011	Yes	Journal Article
	Losartan abolishes oxidative stress induced by intermittent hypoxia in humans.	Pialoux V, Foster GE, Ahmed SB, Beaudin AE, Hanly PJ, Poulin MJ	2011	Yes	Journal Article
	Nocturnal hypoxia and loss of kidney function.	Ahmed SB, Ronksley PE, Hemmelgarn BR, Tsai W, Tonelli M, BJ Manns, SW Klarenbach, Chin R, Clement F, Hanly PJ	2011	Yes	Journal Article
	Impact of Gender on the Cardiac Autonomic Response to Angiotensin II in Healthy Humans.	Mann MC, Exner DV, Hemmelgarn BR, Turin TC, Sola DY, Ahmed SB.	2011	Yes	Journal Article
Andrews,Christopher	Comparative gastric motility study of Enterra Therapy and neural gastric electrical stimulation in an acute canine model.	Arriagada A, Jurkov AS, Neshev E, Muench G, Montchev MP, Andrews CN.	2011	Yes	Journal Article
	The pathophysiology of chronic constipation	Andrews CN, Storr M.	2011	Yes	Journal Article
	Cytokines and irritable bowel syndrome: where do we stand?	BashashatiM, Rezaei N, Andrews CN, Chen CQ, Daryani NE, Sharkey KA, Storr MA	2011	Yes	Journal Article
	Self-stabilizing colonic capsule endoscopy: pilot study of acute canine models.	Filip D, Yadid-Pecht O, Andrews CN, Mintchev MP.	2011	Yes	Journal Article
	Mesalazine (5-aminosalicylic acid) alters faecal bacterial profiles, but not mucosal proteolytic activity in diarrhea-predominant irritable bowel syndrome.	Andrews CN, Griffiths TA, Kaufman J, Vergnolle N, Surette MG, Rioux KP.	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Gastrointestinal symptoms in Parkinson disease: clinical aspects and management.	Salat-Foix D, Andrews CN, Meddings J, Suchowersky O.	2011	Yes	Journal Article
	Percutaneous endoscopically assisted transenteric full-thickness gastric biopsy: initial experience in humans.	Andrews CN, Mintchev P, Neshev E, Fraser HF, Storr M, Bathe OF, Urbanski SJ.	2011	Yes	Journal Article
Aspinall,Alexander					
	Gender, renal function, and outcomes on the liver transplant waiting list: assessment of revised MELD including estimated glomerular filtration rate	Myers RP, Shaheen AA, Aspinall AI, Quinn RR, Burak KW	2011	Yes	Journal Article
	Gender, renal function, and outcomes on the liver transplant waiting list: Assessment of revised MELD including estimated glomerular filtration rate	Myers RP, Shaheen AA, Aspinall AI, Quinn RR, Burak KW	2011	Yes	Journal Article
Bacchus,Catherine					
	The Alberta experience: a lever for Health Care, Open Medicine	Bichel A, Bacchus M, Meddings J, Conly J,	2011	Yes	Journal Article
	Modification of an OSCE Format to enhance patient continuity in a high-stakes clinical performance examination	Marr S, Bacchus CM, Cuncic C, Hatala R	2011	Yes	Journal Article
	Who is teaching and supervising our junior residents' central venous catheterizations?	Ma I, Teteris E, Roberts J, Bacchus CM	2011	Yes	Journal Article
Bahlis,Nizar					
	Alkaline phosphatase variation during carfilzomib treatment is associated with best response in multiple myeloma patients.	Zangari M, Aujay M, Zhan F, Hetherington KL, Berno T, Vij R, Jagannath S, Siegel D, Keith Stewart A, Wang L, Orlowski RZ, Belch A, Jakubowiak A, Somlo G, Trudel S, Bahlis N, Lonial S, Singhal S, Kukreti V, Tricot G.	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Bortezomib-induced "BRCAness" sensitizes multiple myeloma cells to PARP inhibitors.	Neri P, Ren L, Gratton K, Stebner E, Johnson J, Klimowicz A, Duggan P, Tassone P, Mansoor A, Stewart DA, Lonial S, Boise LH, Bahlis NJ.	2011	Yes	Journal Article
	Integrin $\beta 7$ -mediated regulation of multiple myeloma cell adhesion, migration, and invasion	Paola Neri, Li Ren, Abdel Kareem Azab, Matthew Brentnall, Kathy Gratton, Alexander C. Klimowicz, Charles Lin, Peter Duggan, Pierfrancesco Tassone, Adnan Mansoor, Douglas A. Stewart, Lawrence H. Boise, Irene M. Ghobrial, and Nizar J. Bahlis	2011	Yes	Journal Article
	Expression, adverse prognostic significance and therapeutic small molecule inhibition of Polo-like kinase 1 in multiple myeloma.	Evans RP, Dueck G, Sidhu R, Ghosh S, Toman I, Loree J, Bahlis N, Klimowicz AC, Fung J, Jung M, Lai R, Pilarski LM, Belch AR, Reiman T	2011	Yes	Journal Article
	A prospective phase II study of RICE re-induction, then high-dose fludarabine and busulfan, followed by autologous or allogeneic blood stem cell transplantation for indolent b-cell lymphoma.	Stewart DA, Duan Q, Carlson L, Russell JA, Bahlis NJ, Duggan P, Hasegawa W, Voralia M.	2011	Yes	Journal Article
	A unique three-dimensional SCID-polymeric scaffold (SCID-synth-hu) model for in vivo expansion of human primary multiple myeloma cells.	Calimeri T, Battista E, Conforti F, Neri P, Di Martino MT, Rossi M, Foresta U, Piro E, Ferrara F, Amorosi A, Bahlis N, Anderson KC, Munshi N, Tagliaferri P, Causa F, Tassone P.	2011	Yes	Journal Article
	Expression and prognostic significance of Oct2 and Bob1 in multiple myeloma: implications for targeted therapeutics.	Toman I, Loree J, Klimowicz AC, Bahlis N, Lai R, Belch A, Pilarski L, Reiman T.	2011	Yes	Journal Article
	Targeting of adhesion molecules as therapeutic strategy in multiple myeloma.	Paola Neri, Nizar Bahlis.	2011	Yes	Journal Article
	Development and validation of a test dose strategy for once-daily i.v. busulfan: importance of fixed infusion rate dosing.	Kangarloo SB, Naveed F, Ng ES, Chaudhry MA, Wu J, Bahlis NJ, Brown CB, Daly A, Duggan P, Geddes M, Quinlan D, Savoie ML, Shafey M, Stewart DA, Storek J, Yang M, Zacarias N, Yue P, Magliocco AM, Russell JA.	2011	Yes	Journal Article

Barnabe, Cheryl

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Infliximab Therapy Efficacy and Persistence at a Canadian Academic Centre Despite a Change in Access Procedure.	Barnabe C, Barr SG, Martin L.	2011	Yes	Journal Article
	Comparison of Radiographic Scoring Methods in a Cohort of RA Patients Treated with Anti-TNF Therapy.	Barnabe C, Hazlewood G, Barr SG, Martin L.	2011	Yes	Journal Article
	Increased Prevalence of Systemic Lupus Erythematosus and Systemic Sclerosis in Alberta's First Nations Population.	Barnabe C, Joseph L, Belisle P, Labrecque J, Edworthy S, Barr SG, Fritzler M, Svenson LW, Hemmelgarn B, Bernatsky S.	2011	Yes	Journal Article
	Systematic Review and Meta-Analysis: Anti-Tumor Necrosis Factor Alpha Therapy and Cardiovascular Events in Rheumatoid Arthritis.	Barnabe C, Martin BJ, Ghali W.	2011	Yes	Journal Article
	Sex Differences in Pain Scores and Localization in Inflammatory Arthritis: A Systematic Review and Meta-Analysis.	Barnabe C, Bessette L, Flanagan C, LeClerc S, Steiman A, Kalache F, Kung T, Pope J, Haraoui B, Hochman J, Mosher D, Thorne C, Bykerk V.	2011	Yes	Journal Article
	Canadian Pregnancy Outcomes in Rheumatoid Arthritis and Systemic Lupus Erythematosus.	Barnabe C, Faris P, Quan H.	2011	Yes	Journal Article
Baylis, Barry	The efficacy of computer-enabled discharge communication interventions: a systematic review.	Motamedi SM, Posadas-Calleja J, Straus S, Bates DW, Lorenzetti DL, Baylis B, Gilmour J, Kimpton S, Ghali WA.	2011	Yes	Journal Article
Beck, Paul	Helicobacter pylori activates calpain via toll-like receptor 2 to disrupt adherens junctions in human gastric epithelial cells.	O'Connor P, Lapointe T, Jackson S, Beck PL, Jones N, and Buret A.	2011	Yes	Journal Article
	A Case Report and Review of Imaging Findings of Multiple Incidental Splenic Lesions as the Initial Presentation of Sarcoidosis.	Raber EL, Haba J, Beck PL.	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	The NLRP3 inflammasome plays key role in the regulation of intestinal homeostasis.	Simon A. Hirota, Jeffrey Ng, Alan Lueng, Maitham, Khajjah, Ken Parhar, Yan Li, Victor Lam, Mireille S. Potentier, Kelvin Ng, Misha Bawa, Donna-Marie McCafferty, Kevin P. Rioux, Subrata Ghosh, Ramnik J. Xavier, Sean P. Colgan, Jurg Tschopp, Daniel Muruve, Justin A. MacDonald & Paul L. Beck.	2011	Yes	Journal Article
	NK-cell enteropathy: a benign NK-cell lymphoproliferative disease mimicking intestinal lymphoma: clinico-pathological features and follow-up in a unique case series.	Adnan Mansoor, Stefania Pittaluga, Paul L. Beck, Wyndham H. Wilson, Judith Ferry, Elaine S. Jaffe.	2011	Yes	Journal Article
	Postoperative Complications and Mortality Following Colectomy for Ulcerative Colitis	de Silva S, Ma C, Proulx MC, Crespin M, Kaplan BS, Hubbard J, Prusinkiewicz M, Fong A, Panaccione R, Ghosh S, Beck PL, Maclean A, Buie D, Kaplan GG.	2011	Yes	Journal Article
	Invasive potential of gut mucosa-derived Fusobacterium nucleatum positively correlates with IBD status of the host	Strauss J, Kaplan G, Paul Beck, Rioux K, Panaccione R, DeVinney R, Lynch T, and Allen-Vercoe E	2011	Yes	Journal Article
	Chronic Inflammatory Diseases and Cardiovascular Risk: A Systematic Review.	Idan Roifman, Paul L. Beck, Todd J. Anderson, Mark J. Eisenberg, Jacques Genest.	2011	Yes	Journal Article
	The association of coeliac disease and microscopic colitis: a large population-based study.	Stewart M, Andrews CN, Urbanski S, Beck PL, Storr M.	2011	Yes	Journal Article
	Differential effects of salvinorin A on endotoxin-induced hypermotility and neurogenic ion transport in mouse ileum.	Jakub Fichna, Michael Dickey, Simon A. Hirota, Danya Traboulsi, Justin A. MacDonald, Anna Janecka, Paul L. Beck, Jordan K. Zjawiony, Wallace K. MacNaughton, Martin A. Storr.	2011	Yes	Journal Article
Belletrutti,Paul	Recurrent pancreatitis caused by a solid pseudopapillary tumor of the pancreas	Belletrutti PJ, Allen PJ, Kurtz RC, DiMaio CJ	2011	Yes	Journal Article
Bridges,Ronald					

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Canadian Digestive Health Foundation Public Impact Series 5: Pancreatitis in Canada Incidence, Prevalence, and Direct and Indirect Economic Impact.	Fedorak RN., Bridges R., Teshima CW.,	2011	Yes	Journal Article
	Indicators of safety compromise in gastrointestinal endoscopy	Borgaonkar M.R., Hookey L., Hollingworth R., Kuipers E.J., Forster A., Armstrong D., Barkun A., Bridges R., Carter R., de Gara C., Dube C., Enns R., MacIntosh D., Forget S., Leontiadis G., Meddings J., Cotton P., Valori R., on behalf of the Canadian Association of Gastroenterology Safety and Quality Indicators in Endoscopy Consensus Group.	2011	Yes	Journal Article
	Development and implementation of a comprehensive quality assurance program at a community endoscopy facility.	Hilsden RJ., Rostom A., Dube C., Pontifex D., McGregor SE., Bridges RJ.	2011	Yes	Journal Article
	Canadian Association of Gastroenterology consensus guidelines on safety and quality indicators in endoscopy.	Armstrong D., Barkun A., Bridges R., Carter R., de Gara C., Dube C., Enns R., Hollingworth R., MacIntosh D., Borgaonkar M., Forget S., Leontiadis G., Meddings J., Cotton P., Kuipers E., Balori R., on behalf of the Canadian Association of Gastroenterology Safety and Quality Indicators in Endoscopy Consensus Group.	2011	Yes	Journal Article
	Looking Forward: The Canadian Association of Gastroenterology Strategic Plan.	Bridges R., Morgan D., Sinclair P., Sadowski D.	2011	Yes	Journal Article
	Canadian Digestive Health Foundation Public Impact Series 3: Irritable bowel syndrome in Canada. Incidence, prevalence, and direct and indirect economic impact.	Fedorak RN., Vanner S., Paterson W., Bridges R.	2011	Yes	Journal Article
Burak,Kelly	Prognosis in the early stages of hepatocellular carcinoma: Predicting outcomes and properly selecting patients for curative options	Burak KW	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Maintenance Therapy With Peginterferon Alfa-2b Does Not Prevent Hepatocellular Carcinoma in Cirrhotic Patients With Chronic Hepatitis C	Bruix J, Poynard T, Colombo M, Schiff ER, Burak KW,, Heathcote EJ, Berg T, et al.	2011	Yes	Journal Article
	Hepatitis B awareness and education: A failing grade	Burak KW, Coffin CS, Myers RP	2011	Yes	Journal Article
	Phenytoin Induced Reduction in Sirolimus Levels	Bates D, Burak KW, Coffin CS, Ying T, Enns EM	2011	Yes	Journal Article
	Multidisciplinary Canadian consensus recommendation for the management and treatment of hepatocellular carcinoma	Sherman M, Burak K, Maroun J, Metrakos P, Knox J, Myers R, Guindi M, Porter G, Kachura J, Rasuli P, Gill S, Ghali P, Chaudhury P, Siddiqui J, Valenti D, Weiss A, Wong R	2011	Yes	Journal Article
	Use of Hepatitis B Immune Globulin Prophylaxis for Prevention of Acute Hepatitis B Virus (HBV) Infection and HBV Recurrence after Liver Transplantation	Congly SE, Burak KW, Coffin CS	2011	Yes	Journal Article
	Is surgical resection still the treatment of choice for early hepatocellular carcinoma?	Burak KW, Bathe OF	2011	Yes	Journal Article
Butalia,Sonia	Aspirin effect on the incidence of major adverse cardiovascular events in patients with diabetes mellitus: a systematic review and meta-analysis	Butalia S, Leung AA, Ghali WA, Rabi DM	2011	Yes	Journal Article
Campbell,Norman	Perception of uncontrolled blood pressure and behaviours to improve blood pressure: Findings from the 2009 survey on living with chronic disease in Canada.	Gee M, Campbell NRC, Banceja CM, Robitaille C, Bieneka A, Joffres MR, Walker RI, Kaczorowski J, Dai S.	2011	Yes	Journal Article
	Interested in developing a national programme to reduce dietary salt?	Campbell NRC, Neal BC, MacGregor GA	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	The Canadian Hypertension Education Program (CHEP) 2011 guidelines for pharmacists	Houle SKD, Tsuyuki RT, Campbell NRC	2011	Yes	Journal Article
	The 2011 Canadian Hypertension Education Program (CHEP) recommendations for the management of hypertension: Blood pressure measurement, diagnosis, assessment of risk and therapy.	Rabi DM, Daskalopoulou SS, Padwal RS, Khan NA, Grover S, Hackam DG, Myers MG, McKay DW, Quinn RR, Hemmelgarn BR, Cloutier L, Bolli P, Hill MD, Wilson T, Penner B, Burgess E, Lamarre-Cliche M, McLean D, Schiffrin EL, Honos G, Mann K, Tremblay G, Milot A, Chockalingam A, Rabkin SW, Dawes M, Touyz RM, Burns KD, Ruzicka M, Campbell NRC, Vallée M, Prasad GVR, Lebel M, Campbell TS, Lindsay P, Herman RJ, Larochelle P, Feldman RD, Arnold JMO, Moe GW, Howlett JG, Trudeau L, Bacon SL, Petrella RJ, Lewanczuk R, Stone JA, Drouin D, Boulanger J-M, Sharma M, Hamet P, Fodor J, Dresser GK, Carruthers SG, Pylypchuk G, Gilbert RE, Leiter LA, Jones C, Ogilvie RI, Woo V, McFarlane PA, Hegele RA, Poirier L, Tobe SW for the Canadian Hypertension Education Program	2011	Yes	Journal Article
	Canadian Hypertension Education Program: The science supporting new 2011 CHEP recommendations with an emphasis on health advocacy and knowledge translation	Campbell NRC, Poirier L, Tremblay G, Lindsay P, Reid D, Tobe SW on behalf of the Canadian Hypertension Education Program	2011	Yes	Journal Article
	Hypertension, the need for combining public health and clinical approaches	Campbell NRC, Strang R, Young E	2011	Yes	Journal Article
	Contemporary Efforts To Reduce Sodium Intake in Canada: What, Why, and When?	Van Vliet BN, Campbell NRC	2011	Yes	Journal Article
	Unnecessary controversy regarding dietary sodium. A lot about a little	Campbell N, Cappuccio FP, Tobe SW	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Me, active in health policy? Why?	Campbell N, Govig B, Echenberg D. On behalf of the CSIM Health Promotion Committee.	2011	Yes	Journal Article
	Home Blood Pressure Monitoring Plays a Key Role in Hypertension Management - Implications for Pharmacists.	Houle S, Campbell NRC, Tsuyuki RT	2011	Yes	Journal Article
	Do Recommendations for the Management of Hypertension Improve Cardiovascular Outcome? The Canadian Experience,"	Bolli P, Campbell NRC	2011	Yes	Journal Article
	Hypertension in People with Type 2 Diabetes: An Update on Pharmacological Management	Campbell NRC, Gilbert RE, Leiter LA, Larochelle P, Tobe S, Chockalingam A, Ward R, Morris D, Tsuyuki RT, Harris S	2011	Yes	Journal Article
	America's cardiovascular disease prevention through population based salt reduction	Legetic B, Campbell N	2011	Yes	Journal Article
	New evidence relating to the health impact of reducing salt intake Statement from an 'ad hoc' Scientific Review Subcommittee of the PAHO/WHO Regional Expert Group on Cardiovascular Disease Prevention through Dietary Salt Reduction	Norm Campbell, Ricardo Correa-Rotter, Bruce Neal, Francesco Cappuccio	2011	Yes	Journal Article
	Estimating the Benefits of Patient and Physician Adherence to Cardiovascular Prevention Guidelines: The MyHealthCheckUp Survey	Grover S, Coupal L, Kouache M, Lowensteyn I, Marchand S, Norman Campbell	2011	Yes	Journal Article
	Tackling Health Literacy: Adaptation of Public Hypertension Educational Materials for an Indo-Asian Population in Canada.	Jones CA, Mawani S, King KM, Allu SO, Mohan S, Campbell NRC.	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Improving hypertension management through pharmacist prescribing. The Rural Alberta Clinical Trial in Optimizing Hypertension (Rural RxACTION): Trial Design and Methods	Charrois TL, McAlister FA, Cooney D, Lewanczuk R, Kolber M, Campbell NRC, Rosenthal M, Houle SKD, Tsuyuki RT	2011	Yes	Journal Article
	Ethnicity and Sex Impact Diabetes Incidence and Outcomes	Khan NA, Wang H, Anand S, Jin Y, Campbell NRC, Pilote L, Quan H	2011	Yes	Journal Article
	Canadian Initiatives to Prevent Hypertension by Reducing Dietary Sodium	Campbell NRC, Willis KJ, L'Abbe M, Strang R, Young E	2011	Yes	Journal Article
	Cardiovascular outcomes in Framingham participants with diabetes: The importance of blood pressure	Chen G, McAlister FA, Walker RL, Hemmelgarn BR, Campbell NRC	2011	Yes	Journal Article
	Changes in hypertension awareness, treatment, and control rates in Canada over the past two decades	McAlister FA, Wilkins K, Joffres, M, Leenen, FF, Fodor JG, Baclic O, Gee, M, Tremblay, MS, Walker R, Johansen H, Robitaille C, Campbell NRC	2011	Yes	Journal Article
	Sodium consumption, an individual's choice?	Campbell N, Johnson JA, Campbell T	2011	Yes	Journal Article
	Health professional advice to Canadian adults with hypertension	Walker RL, Nichol ME, Campbell NRC (senior author), Bancej C, Nolan R, Kaczorowski J, Joffres M, Gwadry-Sridhar F	2011	Yes	Journal Article
Card,Robert	Age at first joint bleed and bleeding severity in boys with severe hemophilia A: Canadian Primary Prophylaxis Study	Hang MX, Blanchette VS, Pullenayegum E, McLimont M, Feldman BM, et al. (including Card RT)	2011	Yes	Journal Article
	Hemophilia management in transfusion medicine	Poon M-C, Card RT	2011	Yes	Journal Article
Castillo,Eliana	Management of Group B Streptococcal Bacteriuria in Pregnancy - SOGC Clinical Practice Guideline	Allen V, Yudin M, Bouchard C, Boucher M, Caddy S, Castillo E, Money D, Murphy K, Ogilvie G, Paquet C, van Schalkwyk J	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Toxoplasmosis in Pregnancy: Prevention, Screening and Treatment - SOGC Clinical Practice Guideline	Paquet C, Yudin M, Bouchard S, Boucher M, Caddy S, Castillo E, Money D, Murphy K, Ogilvie G, Paquet C, van Schalkwyk J	2011	Yes	Journal Article
	Antibiotic Prophylaxis in Gynaecologic Procedures - SOGC Clinical Practice Guideline	Van eyk N, van Schalkwyk J, Yudin M, Boucher M, Castillo E, Cormier B, Gruslin A, Money D, Murphy K, Ogilvie G, Paquet C	2011	Yes	Journal Article
Coderre,Sylvain	Ego identity status of medical students in clerkship.	Beran TN, Hecker K, Coderre S, Wright B, Woloschuk W, McLaughlin K.	2011	Yes	Journal Article
	What factors affect students' evaluation of a course?	Woloschuk W, Coderre S, Wright B, McLaughlin K.	2011	Yes	Journal Article
	Comparison of student performance on internally prepared clerkship examinations and NBME subject	Veale P, Woloschuk W, Coderre S, McLaughlin K, Wright B.	2011	Yes	Journal Article
Coffin,Carla	Phenytoin-Induced Reduction in Sirolimus Levels (Case Report).	Bates D, Burak KW, Coffin CS, Ying T, Enns E-M	2011	Yes	Journal Article
	Hepatitis B Quasispecies in Hepatic and Extrahepatic Viral Reservoirs in Liver Transplant Recipients on Prophylactic Therapy	Coffin, C.S., Mulrooney-Cousins, P.M., van Marle, G., Roberts, J.P., Michalak, T.I., Terrault, N.	2011	Yes	Journal Article
	Hepatitis B awareness and education: A failing grade." (Editorial).	Burak KW, Coffin CS, Myers RP	2011	Yes	Journal Article
	Review: Liver diseases associated with Anti-Tumour Necrosis Factor use for Inflammatory Bowel Disease.	Coffin CS, Fraser HF, Panaccione R, Ghosh S	2011	Yes	Journal Article
	Use of Hepatitis B Immune Globulin Prophylaxis for Prevention of Acute Hepatitis B Virus (HBV) Infection and HBV Recurrence after Liver Transplantation.	Congley S, Burak KW, Coffin CS	2011	Yes	Journal Article
Conly,John					

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	A call for action: the application of the international health regulations to the global threat of antimicrobial resistance.	Wernli D, Haustein T, Conly J, Carmeli Y, Kickbusch I, Harbarth S.	2011	Yes	Journal Article
	Academic Alternate Relationship Plan for internal medicine: a lever for health care transformation.	Bichel A, Bacchus M, Meddings J, Conly J.	2011	Yes	Journal Article
	Vancomycin or metronidazole for treatment of Clostridium difficile infection: clinical and economic analyses [Internet].	Perras C, Tsakonas E, Ndegwa S, Conly J, Valiquette L, Farrah K.	2011	Yes	Journal Article
	Physical Interventions to Interrupt or Reduce the Spread of Respiratory Viruses — Resource Use Implications: A Systematic Review.	Lee KM, Shukla VK, Clark M, Mierzwinski-Urban M, Pessoa-Silva CL, and Conly J.	2011	Yes	Journal Article
	Physical interventions to interrupt or reduce the spread of respiratory viruses	Jefferson T, Del Mar CB, Dooley L, Ferroni E, Al-Ansary LA, Bawazeer GA, van Driel ML, Nair S, Jones MA, Thorning S, Conly JM.	2011	Yes	Journal Article
	Aerosol-Generating Procedures and Risk of Transmission of Acute Respiratory Infections: A Systematic Review	Tran K, Cimon K, Severn M, Pessoa-Silva CL, Conly J.	2011	Yes	Journal Article
Cook,Donald	Type III Dyslipidemia CRE: bcr.02.2011.3895 "Case Series of Type III Hyperlipoproteinemia in Children" Case Reports	Fung, Michelle; Hill, John; Cook, Donald; Frohlich, Jiri	2011	Yes	Journal Article
	Liberal or Restrictive Transfusion in High-Risk Patients after Hip Surgery	Carson JL, Terrin ML, Noveck H, Sanders DW, Chaitman BR, Rhoads GR, Nemo G, Dragert K, Beaupre L, Hildebrand K, Macaulay W, Lewis C, Cook DR, Dobbin G, Zakriya KJ, Apple F, Horney RA, Magaziner J	2011	Yes	Journal Article

Cowie,Robert

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Canadian prediction equations of spirometric lung function for Caucasian adults 20 to 90 years of age.	Tan W, Bourbeau J, Hernandez P, Chapman KR, Cowie RL, Fitzgerald JM, Aaron S, Marciniuk DD, Maltais F, O'Donnell DE, Goldstein R, Sin D, Chan-Yeung M, Manfreda J, et al.	2011	Yes	Journal Article
	Can age and gender explain the variation in COPD rates across large urban cities: a population study in Canada	Tan W, Bourbeau J, Fitzgerald JM, Cowie RL, Chapman KR, Hernandez P, Sin D. .	2011	Yes	Journal Article
Davidson, Warren	Chronic Respiratory Conditions: Assessing Risk for Physical Activity Clearance and Prescription.	Burr JF, Davidson WJ, Shephard RJ, Eves ND.	2011	Yes	Journal Article
	CPAP increases exercise tolerance in obese subjects with obstructive sleep apnea.	Pendharkar SR, Tsai WH, Eves ND, Ford GT, Davidson WJ	2011	Yes	Journal Article
	Evidence-Based Risk Assessment and Recommendations for Physical Activity Clearance: Respiratory Disease.	Eves N, Davidson W	2011	Yes	Journal Article
	Helium-Hyperoxia: Alleviating Respiratory Limitation to Improve the Benefits of Pulmonary	Perry SE, Koelwyn GJ, Wong LE, Davidson WJ, Eves ND	2011	Yes	Journal Article
Dube, Catherine	Development and implementation of a comprehensive quality assurance program at a community endoscopy facility.	Hilsden RJ, Rostom A, Dubé C, Pontifex D, McGregor SE, Bridges RJ.	2011	Yes	Journal Article
	Point-of-care, peer-comparator colonoscopy practice audit: The Canadian Association of gastroenterology Quality Program – Endoscopy	Armstrong D, Hollingworth R, Macintosh D, Chen Y, Daniles S, Gittens S, Bridges R, Sinclair P, Dubé C	2011	Yes	Journal Article
	A literature review of quality in lower gastrointestinal endoscopy from the patient perspective.	Sewitch MJ, Gong S, Dube C, Barkun A, Hilsden R, Armstrong D.	2011	Yes	Journal Article
Duggan, Peter					

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Integrin {beta}7-mediated regulation of multiple myeloma cell adhesion, migration, and invasion.	Neri P, Ren L, Azab AK, Brentnall M, Gratton K, Klimowicz AC, Lin C, Duggan P, Tassone P, Mansoor A, Stewart DA, Boise LH, Ghobrial IM, Bahlis NJ.	2011	Yes	Journal Article
	High Epstein-Barr virus-specific T cell counts are associated with near-zero likelihood of leukemia relapse after hematopoietic cell transplantation	Hoegh-Petersen M, Sy S, Ugarte-Torres A, Williamson TS, Eliasziw M, Mansoor A, Liu Y, Liu S, Podgorny P, Khan F, Duggan PR, Stewart DA, Russell JA, Storek J.	2011	Yes	Journal Article
	autologous stem cell transplantation for relapsed or refractory follicular lymphoma: positive impact of recent rituximab exposure and low risk flipi score.	Peters AC, Duan Q, Russell JA, Duggan P, Owen C, Stewart DA.	2011	Yes	Journal Article
	A Prospective Phase II Study of RICE Re-Induction, Then High-Dose Fludarabine and Busulfan, Followed by Autologous or Allogeneic Blood Stem Cell Transplantation for Indolent B-Cell Lymphoma.	Stewart DA, Duan Q, Carlson L, Russell JA, Bahlis NJ, Duggan P, Hasegawa W, Voralia M	2011	Yes	Journal Article
	High incidence of post transplant lymphoproliferative disorder after antithymocyte globulin-based conditioning and ineffective prediction by day 28 EBV-specific T lymphocyte counts.	Hoegh-Petersen M, Goodyear D, Geddes MN, Liu S, Ugarte-Torres A, Liu Y, Walker JT, Fonseca K, Daly A, Duggan P, Stewart D, Russell JA, Storek J	2011	Yes	Journal Article
	Development and validation of a test dose strategy for once daily iv busulfan: importance of fixed infusion rate dosing.	Kangarloo SB, Naveed F, Ng ES, Chaudhry MA, Wu J, Bahlis NJ, Brown CB, Daly A, Duggan P, Geddes M, Quinlan D, Savoie ML, Shafey M, Stewart DA, Storek J, Yang M, Zacarias N, Yue P, Magliocco AM, Russell JA.	2011	Yes	Journal Article
	Influence of comorbidities on transplant outcomes in patients aged 50 years or more after myeloablative conditioning incorporating fludarabine, BU and ATG.	El Kourashy S, Williamson T, Chaudhry MA, Savoie ML, Turner AR, Larratt L, Storek J, Bahlis NJ, Brown CB, Yang M, Quinlan D, Geddes M, Zacarias N, Daly A, Duggan P, Stewart DA, Russell JA	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Thiotepa, busulfan, cyclophosphamide, and autologous stem cell transplantation for primary cns lymphoma	Alimohamed N, Daly A, Owen C, Duggan P, Stewart DA.	2011	Yes	Journal Article
	Double high-dose therapy with dose-intensive cyclophosphamide, etoposide, cisplatin (DICEP) followed by high-dose melphalan and autologous stem cell transplantation for relapsed/refractory hodgkin lymphoma.	Shafey M, Duan Q, Russell J, Duggan P, Balogh A, Stewart DA.	2011	Yes	Journal Article
	Bortezomib induced BRCAness sensitizes multiple myeloma cells to PARP inhibitors.	Neri P, Ren L, Gratton K, Stebner E, Johnson J, Klimowicz A, Duggan P, Tassone P, Mansoor A, Stewart DA, Lonial S, Boise LH, Bahlis NJ.	2011	Yes	Journal Article
Edworthy,Steven	Electronic Medical Referral System: a Forum-Based Approach	Ian Reinhart, Khaled Dawoud, Omair Shafiq, Reda Alhadj, and Jon Rokne, Steven Edworthy	2011	Yes	Journal Article
	Historical perspectives on the discovery and elucidation of autoantibodies to centromere proteins (CENP) and the emerging importance of antibodies to CENP-F	Fritzler MJ, Rattner JB, Luft LM, Edworthy SM, Casiano CA, Peebles C, Mahler M	2011	Yes	Journal Article
	The prevalence of systemic lupus in Alberta: A population-based assessment	Barnabe C, Joseph L, Edworthy, S, Belisle P, Svenson L, Labrecque J, Hemmelgarn B, Barr SG, Bernatsky S	2011	Yes	Journal Article
Eksteen,Johannes	Clonal Analysis Reveals Uniformity In The Molecular Profile And Lineage Potential Of CCR9+ and CCR9- Thymus Settling Progenitors.	Desanti GE, Jenkinson WE, Parnell SM, Boudil A, Gautreau-Rolland L, Eksteen B, Ezine S, Lane PJL, Jenkinson EJ, Anderson G.	2011	Yes	Journal Article

Esdaile,John

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Frequency of bone marrow edema in knee osteoarthritis and association with pain severity: results from a population-based study.	Ip S, Sayre EC, Guermazi A, Nicolaou S, Wong H, Thorne A, Singer J, Kopec JA, Esdaile JM, Cibere J.	2011	Yes	Journal Article
	Natural history of cartilage defects and osteoarthritis progression on magnetic resonance imaging in a population-based cohort with knee pain.	Cibere J, Sayre EC, Guermazi A, Nicolaou S, Kopec JA, Esdaile JM, Thorne A, Singer J, Wong H.	2011	Yes	Journal Article
	Risk of cerebrovascular disease associated with the use of glucocorticoids in patients with incident rheumatoid arthritis. A population-based study.	Aviña-Zubieta JA, Choi HK, Abrahamowicz A, Rahman M, Sylvestre MP, Esdaile JM, Lacaille D.	2011	Yes	Journal Article
	Quality of non-pharmacological care for people with osteoarthritis in the community.	Li LC, Sayre EC, Kopec J, Esdaile JM, Bar S, Cibere J.	2011	Yes	Journal Article
	The association of magnetic resonance imaging (MRI)-detected structural pathology of the knee with crepitus in a population-based cohort with knee pain: the MoDEKO study.	Crema MD, Guermazi A, Sayre EC, Roemer FW, Wong H, Thorne A, Singer J, Esdaile JM, Marra MD, Kopec JA, Nicolaou S, Cibere J.	2011	Yes	Journal Article
	Influence of lifetime hip joint force on the risk of self-reported hip osteoarthritis: a community-based cohort study.	Ratzlaff C, Steininger G, Doerfling P, Koehoorn M, Cibere J, Liang M, Wilson D, Esdaile J, Kopec J.	2011	Yes	Journal Article
Ferraz,Jose	Hydrogen sulfide: an endogenous mediator of resolution of inflammation and injury	Wallace JL, Ferraz JG, Muscara MN	2011	Yes	Journal Article
	Role of the lymphatic system in the pathogenesis of Crohn's disease	Von der Weid PY, Rehal S, Ferraz JGP	2011	Yes	Journal Article
Field,Stephen	Cytologic Assessment of Endobronchial Ultrasound-Guided Transbronchial Needle Aspirates in Sarcoidosis.	Chee A, M. Khalil K, Stather DR, MacEachern P, Field SK, Tremblay A.	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Roflumilast, a novel phosphodiesterase 4 inhibitor, for COPD patients with a history of exacerbations	Field SK	2011	Yes	Journal Article
Fifi-Mah,Aurore	A fulminant neurologic presentation of systemic lupus erythematosus	Sankalp Virendrakumar BHAVSAR, Chris M WHITE, Aurore FIFI-MAH	2011	Yes	Journal Article
Flemons,Ward	What is the value and impact of quality and safety teams? A scoping review.	DE White, SE Straus, HT Stelfox, JM Holroyd-Leduc, CM Bell, K Jackson, JM Norris, WW Flemons, ME Moffatt, AJ Forster	2011	Yes	Journal Article
	Excessive daytime sleepiness is associated with increased health care utilization among patients referred for assessment of OSA	PE Ronksley, BR Hemmelgarn, SJ Heitman, WW Flemons, WA Ghali, B Manns, P Faris, WH Tsai	2011	Yes	Journal Article
Ford,Gordon	Managing Dyspnea in Patients with Advanced COPD: A Canadia Thoracic Society Clinical Practice Guideline	The Canadian Thoracic Society COPD Committee Dyspnea Expert Working Group: Marciniuk DD, Goodridge D, Hernandez P, Rocker G, Balter M, Bailey P, Ford G, Bourbeau J, O'Donnell DE, Aaron SD, Maltais F, Kennedy V, Oliver TK, Brown C	2011	Yes	Journal Article
Fraser,Kristin	Does training learners on simulators benefit real patients?	Teteris E, Fraser K, Wright B, McLaughlin K	2011	Yes	Journal Article
	Simulation training improves diagnostic performance on a real patient with similar clinical findings.	Fraser K, Wright B, Girard L, Tworek J, Paget M, Welikovich L, McLaughlin K	2011	Yes	Journal Article
Fritzler,Marvin	Decreased Catalytic Function with Altered Sumoylation of DNA Topoisomerase I in Scleroderma Fibroblasts	Zhou XD, Lin W., Tan FK, Assassi S, Fritzler MJ, Guo XJ, Xia Y, Arnett FC.	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Measuring pain in systemic sclerosis: comparison of the short-form McGill Pain Questionnaire versus a single-item measure of pain.	El-Baalbaki G, Lober J, Hudson M, Baron M, Thombs BD, Fritzler MJ; Canadian Scleroderma Research Group.	2011	Yes	Journal Article
	Performance evaluation of a novel chemiluminescence analyzer for the detection of anti-GBM antibodies in an international multi-center study design	Mahler M, Radice A, Sinico X, Damoiseaux J, Seaman A, Buckmelter K, Vizjak A, Buchner C, Fritzler MJ.	2011	Yes	Journal Article
	Divergent GW182 functional domains in the regulation of translational repression.	Yao B, Li S, Lian SL, Abadal GX, Han F, Fritzler MJ, Chan EKL.	2011	Yes	Journal Article
	Repression of GW/P body components and the RNAi microprocessor impacts primary ciliogenesis in human astrocytes.	Moser JJ, Fritzler MJ, Rattner JB.	2011	Yes	Journal Article
	Intra-Golgi Formation of IgM-Glycosaminoglycan Complexes Promotes Ig Deposition.	Khan SR, Cox JV, Nishimoto SK, Chen Q, Fritzler MJ, Hendershot LH, Weigert M, Radic M.	2011	Yes	Journal Article
	Mapping of Ago2-GW182 Functional Interactions.	Yao B, Li S, Lian SL, Fritzler MJ, Chan EK.	2011	Yes	Journal Article
	Anti-Fibrillarin Antibody in African American patients with Systemic Sclerosis: Immunogenetics, Clinical Features, and Survival Analysis.	Sharif R, Fritzler MJ, Mayes MD, Gonzalez EB, McNearney TA, Draeger H, Baron M, Furst D, Khanna D, Molitor JA, Pope J, Schiopu E, Seibold J, Silver R, Simms R, Zhou X, Perry M, Rojo C, Charles J, Del Junco D, Agarwall SK, Reveille JD, Assassi I S, Arnett FC.	2011	Yes	Journal Article
	Anti-centromere antibodies in a large cohort of systemic sclerosis patients: Comparison between immunofluorescence, CENP-A and CENP-B ELISA.	Mahler M, You D, Baron M, Taillefer SS, Hudson M, Canadian Scleroderma Research Group (CSRG), Fritzler MJ.	2011	Yes	Journal Article
	Observational data to study medication outcomes in systemic sclerosis.	Hudson M, Baron M, Fritzler MJ; Canadian Scleroderma Research Group (CSRG), Steele R.	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Modeling smoking in systemic sclerosis: A comparison of different statistical approaches.	Hudson M, Lo E, Baron M, M. Fritzler, Steele R, Fritzler M, Canadian Scleroderma Research Group.	2011	Yes	Journal Article
	Acquired infantile abducens palsy associated with anti-GM2 antibodies.	Smyth KA, Hill V, Fritzler MJ, Kirton A.	2011	Yes	Journal Article
Geddes,Michelle					
	High incidence of post transplant lymphoproliferative disorder after antithymocyte globulin-based conditioning and ineffective prediction by day 28 EBV-specific T lymphocyte counts	Hoegh-Petersen M, Goodyear D, Geddes MN, Liu S, Ugarte-Torres A, Liu Y, Walker JT, Fonseca K, Daly A, Duggan P, Stewart D, Russell JA, Storek J.	2011	Yes	Journal Article
	Influence of comorbidities on transplant outcomes in patients aged 50 years or more after myeloablative conditioning incorporating fludarabine, BU and ATG	El Kourashy S, Williamson T, Chaudhry MA, Savoie ML, Turner AR, Larratt L, Storek J, Bahlis NJ, Brown CB, Yang M, Quinlan D, Geddes M, Zacarias N, Daly A, Duggan P, Stewart DA, Russell JA	2011	Yes	Journal Article
Ghali,William					
	Effect of alcohol consumption on biological markers associated with risk of coronary heart disease: systematic review and meta-analysis of interventional studies.	Brien SE, Ronksley PE, Turner BJ, Mukamal KJ, Ghali WA.	2011	Yes	Journal Article
	Liberal or restrictive transfusion in high-risk patients after hip surgery.	Carson JL, Terrin ML, Noveck H, Sanders DW, Chaitman BR, Rhoads GG, Nemo G, Dragert K, Beaupre L, Hildebrand K, Macaulay W, Lewis C, Cook DR, Dobbin G, Zakriya KJ, Apple FS, Horney RA, Magaziner J; FOCUS Investigators.	2011	Yes	Journal Article
	Appreciating the medical literature: five notable articles in general internal medicine from 2009 and 2010.	Leung AA, Ghali WA.	2011	Yes	Journal Article
	Involving clinical librarians at the point of care: results of a controlled intervention.	Aitken EM, Powelson SE, Reaume RD, Ghali WA.	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Temporal associations of early patient transfers and mortality with the implementation of a regional myocardial infarction care model.	Patel AB, Quan H, Faris P, Knudtson ML, Trabelsi M, Li B, Ghali WA.	2011	Yes	Journal Article
	Outcomes associated with bilateral internal thoracic artery grafting: the importance of age.	Kieser TM, Lewin AM, Graham MM, Martin BJ, Galbraith PD, Rabi DM, Norris CM, Faris PD, Knudtson ML, Ghali WA; APPROACH Investigators.	2011	Yes	Journal Article
	ICD-10 adaptation of 15 Agency for Healthcare Research and Quality patient safety indicators].	Januel JM, Couris CM, Luthi JC, Halfon P, Trombert-Pavot B, Quan H, Drosler S, Sundararajan V, Pradat E, Touzet S, Wen E, Shephard J, Webster G, Romano PS, So L, Moskal L, Tournay-Lewis L, Sundaresan L, Kelley E, Klazinga N, Ghali WA, Colin C, Burnand B; International Methodology Consortium for Coded Health Information (IMECCHI).	2011	Yes	Journal Article
	Aspirin effect on the incidence of major adverse cardiovascular events in patients with diabetes mellitus: a systematic review and meta-analysis.	Butalia S, Leung AA, Ghali WA, Rabi DM.	2011	Yes	Journal Article
	Outcomes of after-hours versus regular working hours primary percutaneous coronary intervention for acute myocardial infarction	Graham MM, Ghali WA, Southern DA, Trabelsi M, Knudtson ML; APPROACH Investigators.	2011	Yes	Journal Article
	Association of alcohol consumption with selected cardiovascular disease outcomes: a systematic review and meta-analysis.	Ronksley PE, Brien SE, Turner BJ, Mukamal KJ, Ghali WA.	2011	Yes	Journal Article
	Associations between acute kidney injury and cardiovascular and renal outcomes after coronary angiography.	James MT, Ghali WA, Knudtson ML, Ravani P, Tonelli M, Faris P, Pannu N, Manns BJ, Klarenbach SW, Hemmelgarn BR; Alberta Provincial Project for Outcome Assessment in Coronary Heart Disease (APPROACH) Investigators.	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	The efficacy of computer-enabled discharge communication interventions: a systematic review.	Motamedi SM, Posadas-Calleja J, Straus S, Bates DW, Lorenzetti DL, Baylis B, Gilmour J, Kimpton S, Ghali WA.	2011	Yes	Journal Article
	Excessive daytime sleepiness is associated with increased health care utilization among patients referred for assessment of OSA.	Ronksley PE, Hemmelgarn BR, Heitman SJ, Flemons WW, Ghali WA, Manns B, Faris P, Tsai WH.	2011	Yes	Journal Article
	A multi-region assessment of population rates of cardiac catheterization and yield of high-risk coronary artery disease.	Clement FM, Manns BJ, Brownell B, Faris PD, Graham MM, Humphries K, Love M, Knudtson ML, Ghali WA; APPROACH Investigators	2011	Yes	Journal Article
	Economic evaluation of increasing population rates of cardiac catheterization.	Clement FM, Ghali WA, Rinfret S, Manns BJ; APPROACH Investigators.	2011	Yes	Journal Article
	A prospective observational study of physician handoff for intensive-care-unit-to-ward patient transfers.	Li P, Stelfox HT, Ghali WA.	2011	Yes	Journal Article
	Outcomes of cardiac resynchronization therapy in patients with versus those without atrial fibrillation: a systematic review and meta-analysis.	Wilton SB, Leung AA, Ghali WA, Faris P, Exner DV.	2011	Yes	Journal Article
	Aspirin effect on the incidence of major adverse cardiovascular events in patients with diabetes mellitus: a systematic review and meta-analysis.	Butalia S, Leung AA, Ghali WA, Rabi DM.	2011	Yes	Journal Article
	Trends in wait times for cardiac revascularization.	Southern DA, Izadnegahdar M, Humphries KH, Gao M, Wang F, Knudtson ML, Graham MM, Ghali WA.	2011	Yes	Journal Article
	The association between neighbourhoods and adverse birth outcomes: a systematic review and meta-analysis of multi-level studies.	Metcalfe A, Lail P, Ghali WA, Sauve RS.	2011	Yes	Journal Article
	Effectiveness of interventions targeting frequent users of emergency departments: a systematic review.	Althaus F, Paroz S, Hugli O, Ghali WA, Daeppen JB, Peytremann-Bridevaux I, Bodenmann P.	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	The clinical profile and outcomes associated with coronary collaterals in patients with coronary artery disease.	McMurtry MS, Lewin AM, Knudtson ML, Ghali WA, Galbraith PD, Schulte F, Norris CM, Graham MM.	2011	Yes	Journal Article
	Use of simulation-based education to improve outcomes of central venous catheterization: a systematic review and meta-analysis.	Ma IW, Brindle ME, Ronksley PE, Lorenzetti DL, Sauve RS, Ghali WA.	2011	Yes	Journal Article
	Improved accuracy of co-morbidity coding over time after the introduction of ICD-10 administrative data.	Januel JM, Luthi JC, Quan H, Borst F, Taffé P, Ghali WA, Burnand B.	2011	Yes	Journal Article
	Venous thromboembolism prophylaxis in patients undergoing cranial neurosurgery: a systematic review and meta-analysis.	Hamilton MG, Yee WH, Hull RD, Ghali WA.	2011	Yes	Journal Article
Ghosh,Subrata	Postoperative complications and mortality following colectomy for ulcerative colitis	De Silva S, Ma C, Proulx MC, Crespin M, Kaplan BS, Hubbard J, Prusinkiewicz M, Fong A, Panaccione R, Ghosh S, Beck PL, Maclean A, Buie D, Kaplan GG	2011	Yes	Journal Article
	Challenges associated with identifying the environmental determinants of the inflammatory bowel diseases	Molodecky NA, Panaccione R, Ghosh S, Barkema HW, Kaplan GG	2011	Yes	Journal Article
	Liver diseases associated with anti-tumor necrosis factor-alpha (TNF-a) use for inflammatory bowel disease	Coffin CS, Fraser HF, Panaccione R, Ghosh S	2011	Yes	Journal Article
	An evaluation of the use of serum 7-alpha-hydroxycholestenone as a diagnostic test of bile acid malabsorption causing watery diarrhea	Brydon WG, Culbert P, Kingstone K, Jarvie A, Iacucci M, Tenhage M, Ghosh S	2011	Yes	Journal Article
	Liver Diseases Associated with Anti-Tumour Necrosis Factor alpha use for inflammatory bowel disease	Coffin C, Fraser H, Panaccione R, Ghosh S	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	The mucosal addressin cell adhesion molecule (MAdCam) Antibody PF-00547, 659 in ulcerative colitis: a randomized study	Vermiere S, Ghosh S, Panes J, Dahlerup J, Luegering A, Sirotiakova J, Strauch U, Burgess G, Spanton J, Martin S, Niezychowski W	2011	Yes	Journal Article
	Challenges associated with identifying the environmental determinants of the Inflammatory Bowel Diseases	Molodecky NA, Panaccione R, Ghosh S, Barkema HW, Kaplan G	2011	Yes	Journal Article
	NLRP3 Inflammasome plays a key role in the regulation of Intestinal homeostasis	Hirota SA, Ng J, Leung A, Khajah M, Parhar K, Li Y, Lam V, Potentier MS, Ng K, Bawa M, McCafferty DM, Rioux KP, Ghosh S, Xavier RJ, Colgan SP, Tschopp J, Muruve D, MacDonald JA, Beck PL	2011	Yes	Journal Article
	Recommendations for the treatment of Crohn's disease with tumour necrosis factor antagonists: An expert consensus report	Feagan BG, Lemann M, Befrits R, Connell W, D'Haens G, Ghosh S, Michetti P, Ochsenkuhn T, Panaccione R, Schreiber S, Silverberg M, Sorrentino D, Van Der Woude CJ, Vermiere S, Rutgeerts P	2011	Yes	Journal Article
	Effect of adalimumab on clinical laboratory parameters in patients with Crohn's disease : results from the CHARM trial (ePub)	Rubin DT, Ghosh S, Bensimon AG, Yu AP, Wu EQ, Pollack PF, Mulani P, Chao J	2011	Yes	Journal Article
	Postoperative complications following colectomy for ulcerative colitis : a population based study	DeSilva S, Ma C, Proulx MC, Crespin M, Kaplan BS, Hubbard J, Prusinkiewicz M, Fong A, Panaccione R, Ghosh S, Beck PL, MacLean A, Buie D, Kaplan GG	2011	Yes	Journal Article
	Vitamin D and Gastrointestinal diseases: Inflammatory Bowel Disease and Colorectal Cancer	Raman M, Milestone A, Hart A, Walters JW, Ghosh S	2011	Yes	Journal Article
	An evaluation of the use of serum 7-alpha hydroxycholestenone as a diagnostic test of bile acid malabsorption causing watery diarrhea	Brydon W, Culbert P, Kingstone K, Jarvie A, Iacucci M, Tenhage M, Ghosh S	2011	Yes	Journal Article
	Effect of adalimumab on clinical laboratory parameters i patients with Crohn's disease: results from the CHARM trial	Rubin DT, Mulani P, Chao J, Pollack PF, Bensimon AG, Yu AP, Ghosh S	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	The Mucosal Addressin Cell Adhesion Molecule (MAdCAM) Antibody PF-00547, 659 in ulcerative colitis: a randomized study	Vermiere S, Ghosh S, Panes J, Dahlerup J, Luegering A, Sirotiakova J, Strauch U, Burgess G, Spanton J, Martin S, Niezychowski W	2011	Yes	Journal Article
	New insights into gastrointestinal and hepatic granulomatous disorders	Almadi MA, Aljebreen AM, Sanai F, Marcus V, Almeghaiseeb ES, Ghosh S	2011	Yes	Journal Article
	Increasing incidence and prevalence of the inflammatory bowel diseases with time, based on systematic review	Molodecky NA, Soon IS, Rabi DM, Ghali WA, Ferris M, Chernoff G, Benchimol EI, Panaccione R, Ghosh S, Barkema HW, Kaplan GG	2011	Yes	Journal Article
	NLRP3 inflammasome plays a key role in the regulation of intestinal homeostasis	Hirota SA, Ng J, Leung A, Khajah M, Parhar K, Li Y, Lam V, Potentier MS, Ng K, Bawa M, McCafferty DM, Rioux KP, Ghosh S, Xavier RJ, Colgan SP, Tschopp J, Muruve D, MacDonald JA, Beck PL	2011	Yes	Journal Article
	Antibodies to mutated citrullinated vimentin and anti-cyclic citrullinated peptide antibodies in inflammatory bowel disease and related arthritis	Al-Jarallah K, Shehab D, Al-Attayah R, Al-Azmi W, Al-Fadli A, Zafar Haider M, Panaccione R, Ghosh S	2011	Yes	Journal Article
	Looking beyond symptom relief: evolution of mucosal healing in inflammatory bowel disease	Iacucci M, Ghosh S,	2011	Yes	Journal Article
	New insights into gastrointestinal and hepatic granulomatous disorders	Almadi MA, Aljebreen AM, Sanai F, Marcus V, AlMeghaiseeb ES, Ghosh S	2011	Yes	Journal Article
	Optimizing clinical use of mesalazine (5-aminosalicylic acid) in inflammatory bowel disease	Williams C, Panaccione R, Ghosh S, Rioux K	2011	Yes	Journal Article
Gill, Michael	Impact of current antiretroviral therapies on NeuroAIDS.	211. Vivithanaporn P, Gill MJ, Power C.	2011	Yes	Journal Article
	Timing of HAART initiation and clinical outcomes in human immunodeficiency virus type 1 seroconverters.	218. CASCADE Collaboration.	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	The persisting burden of invasive pneumococcal disease in HIV patients: an observational cohort study.	219.Siemieniuk RA, Gregson DB, Gill MJ.	2011	Yes	Journal Article
	Risk factors for tuberculosis after highly active antiretroviral therapy initiation in the United States and Canada. Implications for tuberculosis screening strategies.	209.Sterling TR, Lau B, Zhang J, Freeman AM, Bosch RJ, Brooks JT, Deeks SG, French A, Gange S, Gebo KA, Gill MJ, Horberg MA, Jacobson LP, Kirk GD, Kitahata MM, Klein MB, Martin JN, Rodriguez B, Silverberg MJ, Willig JH, Eron JJ, Goedert JJ, Hogg RS, Justice AC, McKaig RG, Napravnik S, Thorne J, Moore RD, for the North American AIDS Cohort Collaboration on research and design (NA-ACCORD) of IeDEA.	2011	Yes	Journal Article
	The Hepatitis C epidemic among HIV-Positive men who have sex with men: incidence estimates from 1990 to 2007.	212.van der Helm JJ, Prins M, del Amo J, Bucher HC, Chene G, Dorrucchi M, Gill MJ, Hamouda O, Sannes M, Porter K, Geskus RB on behalf of the CASCADE collaboration.	2011	Yes	Journal Article
	Missing data in the estimation of the prevalence of accumulated HIV drug resistance in antiretroviral-treated patients in North America.	208.Abraham AG, Lau B, Deeks SG, Moore Rd, Zhang J, Eron JJ, Harrigan R, Gill MJ, Kitahata MM, Klein MB, Napravnik S, Rachlis AR, Rodriguez B, Rourke SB, Benson CA, Bosch RJ, Collier AC, Gebo KA, Goedert JJ, Hogg R, Horberg MA, Jacobson LP, Justice AC, Kirk GD, Martin JN, McKaig RG, Silverberg MJ, Sterling TR, Thorne J, Willig J, and Gange SJ for the North American AIDS Cohort Collaboration on Research and Design (NA-ACCORD) of IeDEA.	2011	Yes	Journal Article
	Survival outcomes and effect of early versus deferred cART among HIV-infected patients diagnosed at the time of an AIDS-defining event: a cohort analysis.	217.Miro JM, Manzardo C, Mussini C, Johnson M, d'Arminio Monforte, A, Antinori A, Gill MJ, Sighinolfi L, Uberti-Foppa C, Borghi V, Sabin C, and Late Presenters Investigators.	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Comparison of healthcare costs between local and immigrant HIV populations living in Southern Alberta, Canada.	214.Krentz HB, Gill MJ.	2011	Yes	Journal Article
	Comparative effectiveness of initial antiretroviral therapy regimens: ACTG 5095 and 5142 Clinical Trials relative to ART-CC Cohort Study.	215.Mugavero MJ, May M, Ribaud HJ, Gulick RM, Riddler SA, Haubrich R, Napravnik S, Abgrall S, Phillips A, Harris R, Gill MJ, de Wolf F, Hogg R, Gunthard HF, Chene G, D'Arminio Monforte A, Guest JL, Smith C, Murillas J, Berenguer J, Wyen C, Domingo P, Kitahata MM, Sterne JA, Saag MS, on behalf of the AIDS Clinical Trial Group DACS 241 team AIDS Clinical Trial Group Study 5095 team AIDS Clinical Trial Group Study 5142 and the Antiretroviral Cohort Collaboration.	2011	Yes	Journal Article
	HIV-1 viral diversity and its implications for viral load testing. Review of current platforms.	213.Luft LM, Gill MJ, Church D,	2011	Yes	Journal Article
	Adverse health effects for individuals who move between HIV care centres.	207. Krentz HB, Worthington H, Gill MJ.	2011	Yes	Journal Article
	HIV-1 viral load multi-assay comparison of the RealTime HIV-1, COBAS TaqMan 48 v 1.0, Easy Q v1.2 and versant v3.0 assays in a Cohort of Canadian Patients with Diverse HIV Subtype Infections.	203. Church D, Gregson D, Lloyd T, Klein M, Beckthold B, Laupland K, Gill MJ.	2011	Yes	Journal Article
	Increasing HIV subtype diversity in Canadian born patients living in southern Alberta, Canada.	206. Luft LM, Beckthold B, Gill MJ.	2011	Yes	Journal Article
	The coding causes of death in HIV (CoDe) Project, Initial results and evaluation of methodology.	205. Kowalska JD, Friis-Moller N, Kirk O, Bannister W, Mocroft AM, Sabin C, Reiss P, Gill MJ, Lewden C, Phillips A, d'Arminio Monforte A, Law M, Sterne J, De Wit S, Lundgren JD.	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Inflammation and epithelial cell injury in AIDS enteropathy: involvement of endoplasmic reticulum stress.	210.Maingat F, Halloran B, Acharjee S, van Marle G, Arrieta C, Church D, Gill MJ, Uwiera R, Cohen E, Meddings J, Madsen K, Power C.	2011	Yes	Journal Article
	Dynamics of cognitive change in HIV-infected individuals commencing three different initial antiretroviral regimens: a randomized controlled study.	216.Winston A, Puls R, Kerr SJ, Duncombe Ch, Li PCK, Gill MJ, Taylor-Robinson SD, Emery S, Cooper DA, for the Altair Study Group.	2011	Yes	Journal Article
	The changing demographics of women living with HIV/AIDS in Southern Alberta from 1982-2006.	204. Hwang L, Raffa J, Gill MJ.	2011	Yes	Journal Article
	Granulomatous Pneumocystis jirovecii pneumonia association with immune reconstituted HIV.	220.Sabur NF, Kelly MM, Gill MJ, Ainslie MD. Granulomatous Pneumocystis jirovecii pneumonia association with immune reconstituted HIV. Can Respir J.2011 18(6) e86- e88	2011	Yes	Journal Article
Gilmour,Janet	Does the shift work? A pre/post study to assess the impact of a new senior resident rotation bundle on senior residents' wellness, quality of health care delivery and medical education experience. College of Physicians and Surgeons of Canada, R. (2011).	Fabreau G, Elliot M, Minty E, Khanna S, Bharwani A, Wallace J, de Grood A, Lewin G, Brown G, Gilmour J, Lemaire J	2011	Yes	Journal Article
	The Efficacy of computer-enabled discharge communication interventions: a systematic review	Motamedi SM, Posadas-Calleja J, Straus S, Bates DW, Lorenzetti DL, Baylis B, Gilmour J, Kimpton S, Ghali WA	2011	Yes	Journal Article
Haber,Richard	Idiopathic sporadic onychomadesis; a case report and review of the literature.	Hardin J, Haber RM	2011	Yes	Journal Article
	Tinea corporis gladiatorum presenting as a majocchi granuloma	Kurian A, Haber RM	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Ulerythema ophryogenes: a rarely reported cutaneous manifestation of Noonan syndrome: case report and review of the literature.	Li K,Thomas MA, Haber RM.	2011	Yes	Journal Article
	Acute generalized exanthematous pustulosis (AGEP) simulating toxic epidermal necrolysis (TEN); case report and review of the literature	Peermohmamed, S, Haber RM	2011	Yes	Journal Article
	Methotrexate-induced cutaneous ulcers in a non-psoriatic patient:case report and review of the literature	Kurian A, Haber RM	2011	Yes	Journal Article
	Pachyonychia Congenita with Laryngeal Obstruction	Drummond D, Haber RM	2011	Yes	Journal Article
Hamilton,Douglas					
	Optic Disc Edema, Globe Flattening, Choroidal Folds, and Hyperopic Shifts Observed in Astronauts after Long-duration Space Flight	Mader TH, Gibson CR, Pass AF, Kramer LA, Lee AG, Fogarty J, Tarver WJ, Dervay JP, Hamilton DR, Sargsyan A, Phillips JL, Tran D, Lipsky W, Choi J, Stern C, Kuyumjian R, Polk JD.	2011	Yes	Journal Article
	On-orbit prospective echocardiography on International Space Station crew	Hamilton DR, Sargsyan AE, Martin DS, Garcia KM, Melton SL, Feiveson A, Dulchavsky SA	2011	Yes	Journal Article
	Sonography for determining the optic nerve sheath diameter with increasing intracranial pressure in a porcine model	Hamilton DR, Sargsyan AE, Melton SL, Garcia KM, Oddo B, Kwon DS, Feiveson AH, Dulchavsky SA	2011	Yes	Journal Article
	The relationship between left and right pericardial pressures in humans: an intraoperative study	Hamilton DR, Sas R, Semlacher RA, Kieser Prieur TM, Tyberg JV	2011	Yes	Journal Article
	Optic disc edema, globe flattening, choroidal folds, and hyperopic shifts observed in astronauts after long-duration space flight.	Mader TH, Gibson CR, Pass AF, Kramer LA, Lee AG, Fogarty J, Tarver WJ, Dervay JP, Hamilton DR, Sargsyan A, Phillips JL, Tran D, Lipsky W, Choi J, Stern C, Kuyumjian R, Polk JD.	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Cardiac and Vascular Responses to Thigh Cuffs and Respiratory Maneuvers on Crewmembers of the International Space Station	Hamilton DR, Sargsyan AE, Garcia K, Ebert DJ, Whitson PA, Feiveson AH, Alferova IV, Dulchavsky SA, Matveev VP, Bogomolov VV, Duncan JM.	2011	Yes	Journal Article
Hanley,David	Official Positions for FRAX® clinical regarding international differences from Joint Official Positions Development Conference of the International Society for Clinical Densitometry and International Osteoporosis Foundation on FRAX®.	Cauley JA, El-Hajj Fuleihan G, Arabi A, Fujiwara S, Ragi-Eis S, Calderon A, Chionh SB, Chen Z, Curtis JR, Danielson ME, Hanley DA, Kroger H, Kung AW, Lesnyak O, Nieves J, Pluskiewicz W, El Rassi R, Silverman S, Schott AM, Rizzoli R, Luckey M; FRAX(®) Position Conference Members.	2011	Yes	Journal Article
	Peak bone mass from longitudinal data: implications for the prevalence, pathophysiology, and diagnosis of osteoporosis.	Berger C, Goltzman D, Langsetmo L, Joseph L, Jackson S, Kreiger N, Tenenhouse A, Davison KS, Josse RG, Prior JC, Hanley DA; CaMos Research Group.	2011	Yes	Journal Article
	Nurse case-manager vs multifaceted intervention to improve quality of osteoporosis care after wrist fracture: randomized controlled pilot study.	Majumdar SR, Johnson JA, Bellerose D, McAlister FA, Russell AS, Hanley DA, Garg S, Lier DA, Maksymowych WP, Morrish DW, Rowe BH	2011	Yes	Journal Article
	Changes in trabecular and cortical bone microarchitecture at peripheral sites associated with 18 months of teriparatide therapy in postmenopausal women with osteoporosis.	Macdonald HM, Nishiyama KK, Hanley DA, Boyd SK	2011	Yes	Journal Article
	Oral bisphosphonates are associated with reduced mortality after hip fracture.	Beaupre LA, Morrish DW, Hanley DA, Maksymowych WP, Bell NR, Juby AG, Majumdar SR.	2011	Yes	Journal Article
	Dietary patterns and incident low-trauma fractures in postmenopausal women and men aged ≥ 50 y: a population-based cohort study.	Langsetmo L, Hanley DA, Prior JC, Barr SI, Anastassiades T, Towheed T, Goltzman D, Morin S, Poliquin S, Kreiger N; CaMos Research Group.	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Fracture prediction and calibration of a Canadian FRAX® tool: a population-based report from CaMos.	Fraser LA, Langsetmo L, Berger C, Ioannidis G, Goltzman D, Adachi JD, Papaioannou A, Josse R, Kovacs CS, Olszynski WP, Towheed T, Hanley DA, Kaiser SM, Prior J, Jamal S, Kreiger N, Brown JP, Johansson H, Oden A, McCloskey E, Kanis JA, Leslie WD; CaMos Research Group.	2011	Yes	Journal Article
	Independent external validation of nomograms for predicting risk of low-trauma fracture and hip fracture.	Langsetmo L, Nguyen TV, Nguyen ND, Kovacs CS, Prior JC, Center JR, Morin S, Josse RG, Adachi JD, Hanley DA, Eisman JA; the Canadian Multicentre Osteoporosis Study Research Group..	2011	Yes	Journal Article
	Construction of a FRAX(®) model for the assessment of fracture probability in Canada and implications for treatment.	Leslie WD, Lix LM, Langsetmo L, Berger C, Goltzman D, Hanley DA, Adachi JD, Johansson H, Oden A, McCloskey E, Kanis JA.	2011	Yes	Journal Article
	Evaluation, Treatment, and Prevention of Vitamin D Deficiency: an Endocrine Society Clinical Practice Guideline.	Holick MF, Binkley NC, Bischoff-Ferrari HA, Gordon CM, Hanley DA, Heaney RP, Murad MH, Weaver CM.	2011	Yes	Journal Article
	Vitamin D Status and Response to Daily 400 IU Vitamin D3 and Weekly Alendronate 70 mg in Men and Women with Osteoporosis.	Karaplis AC, Chouha F, Djandji M, Sampalis JS, Hanley DA.	2011	Yes	Journal Article
	Causal assessment of dietary acid load and bone disease: A systematic review and meta-analysis applying Hill's epidemiologic criteria for causality.	Fenton TR, Tough SC, Lyon AW, Eliasziw M, Hanley DA.	2011	Yes	Journal Article
	A randomized controlled trial of vitamin D dosing strategies after acute hip fracture: no advantage of loading doses over daily supplementation.	Papaioannou A, Kennedy CC, Giangregorio L, Ioannidis G, Pritchard J, Hanley DA, Farrauto L, DeBeer J, Adachi JD.	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Scientific Advisory Council of Osteoporosis Canada. Osteoporosis Canada 2010 guidelines for the assessment of fracture risk.	Lentle B, Cheung AM, Hanley DA, Leslie WD, Lyons D, Papaioannou A, Atkinson S, Brown JP, Feldman S, Hodsman AB, Jamal AS, Josse RG, Kaiser SM, Kvern B, Morin S, Siminoski K;	2011	Yes	Journal Article
Hanly,Patrick					
	Genioglossus activity available via non-arousal mechanisms vs that required for opening the airway in obstructive apnea patients	Younes M, Loewen A, Ostrowski M, Laprarie J, Maturino F, Hanly P.	2011	Yes	Journal Article
	Sleep disorders over the full range of chronic kidney disease.	Pierratos A, Hanly PJ	2011	Yes	Journal Article
	Effects of intermittent hypoxia on Epo, soluble Epo receptor and ventilation in humans.	Brugniaux J, Pialoux V, Foster G, Duggan C, Eliasziw M, Hanly P, Ahmed S, Poulin M	2011	Yes	Journal Article
	Nocturnal hypoxia and loss of kidney function.	Ahmed SB, Ronskley PE, Hemmelgarn BR, Tsai WW, Manns BJ, Tonelli M, Klarenbach SW, Chin R, Clement FM, Hanly PJ.	2011	Yes	Journal Article
	Response of genioglossus muscle to increasing chemical drive in sleeping obstructive sleep apnea patients	Loewen A, Ostrowski M, Laprarie J, Maturino F, Hanly P, Younes M.	2011	Yes	Journal Article
	Losartan abolishes oxidative stress induced by intermittent hypoxia in humans.	Pialoux V, Foster G, Ahmed S, Beaudin A, Hanly P, Poulin M.	2011	Yes	Journal Article
	Declining kidney function increases prevalence of sleep apnea and nocturnal hypoxia	Nicholl D, Ahmed S, Loewen A, Hemmelgarn B, Sola D, Beecroft J, Tourin T, Hanly	2011	Yes	Journal Article
	Clinical presentation of obstructive sleep apnea in patients with chronic kidney disease.	Nicholl D, Ahmed S, Loewen A, Hemmelgarn B, Sola D, Beecroft J, Turin T, Hanly P.	2011	Yes	Journal Article
Heitman,Steven					
	Primary pancreatic lymphoma: A rare cause of massive upper gastrointestinal hemorrhage.	Dupre M, Dixon E, Heitman SJ	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Excessive daytime sleepiness is associated with increased health care utilization.	Ronksley PE, Hemmelgarn BR, Heitman SJ, Flemons WW, Ghali WA, Manns B, Farris P, Tsai WH.	2011	Yes	Journal Article
	Fecal occult blood testing while waiting for screening colonoscopy in average-risk individuals: Durable option or short-term solution?	Heitman SJ	2011	Yes	Journal Article
Helmensen,Douglas					
	A Randomized Placebo-Controlled Trial of Varnicline for smoking cessation allowing flexible quit dates	Rennard S, Hughes J, Cinciripini P et al.	2011	Yes	Journal Article
Hemmelgarn,Brenda					
	Canadian provincial trends in antihypertensive drug prescriptions between 1996 and 2006.	Walker R, Chen G, Campbell N, McAlister FA, Quan H, Tu K, Khan N, Hemmelgarn BR	2011	Yes	Journal Article
	Evaluation of an electronic warfarin nomogram for anticoagulation of hemodialysis patients.	Thomson BKA, MacRae JM, Barnieh L, Zhang J, MacKay E, Manning MA, Hemmelgarn BR.	2011	Yes	Journal Article
	Building knowledge about health services utilization by refugees.	Kiss V, Pim C, Hemmelgarn BR, Quan H.	2011	Yes	Journal Article
	Increased prevalence of systemic lupus erythematosus and systemic sclerosis in Alberta's First Nations population.	Barnabe C, Joseph L, Belisle P, Labrecque J, Edworthy S, Barr S, Fritzler M, Svenson L, Hemmelgarn BR, Bernatsky S.	2011	Yes	Journal Article
	Comparison of concurrent complications of CKD by two risk categorization systems.	Inker LA, Tonelli M, Hemmelgarn BR, Levitan EB, Muntner P.	2011	Yes	Journal Article
	Association between glomerular filtration rate, proteinuria and adverse outcomes among White, Chinese and South Asian individuals in Canada.	Conley J, Tonelli M, Quan H, Manns BJ, Palacious-Derflinger L, Bresee LC, Khan N, Hemmelgarn BR.	2011	Yes	Journal Article
	Recent epidemiologic trends of diabetes among adult Status Aboriginal Population of Alberta.	Oster R, Johnson J, Hemmelgarn BR, King M, Balko S, Svenson L, Crowshoe L, Toth E	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Lower estimated GFR and higher albuminuria are associated with adverse kidney outcomes in both general and high risk population. A collaborative meta-analysis of general and high-risk population cohorts.	Gansevoort RT, Matsushita K, can der Velde et al.	2011	Yes	Journal Article
	Nocturnal hypoxia and loss of kidney function	Ahmed SB, Ronksley PE, Hemmelgarn BR, Tsai WH, Manns BJ, Tonelli M, Klarenbach SW, Clement FM, Hanly PJ	2011	Yes	Journal Article
	Barriers to living kidney donation identified by eligible candidates with end-stage renal disease.	Barnieh L, McLaughlin K, Manns B, Klarenbach S, Yilmaz S, Hemmelgarn BR.	2011	Yes	Journal Article
	The 2011 Canadian Hypertension Education Program recommendations for the management of hypertension: blood pressure measurement, diagnosis, assessment of risk, and therapy.	Rabi DM, Daskalopoulou SS, Padwal RS, Khan NA, Grover SA, Hackman DG, Myers MG, McKay DW, Quinn RR, Hemmelgarn BR et al.	2011	Yes	Journal Article
	Association between glycemic control and adverse outcomes in people with diabetes and chronic kidney disease: population-based cohort study.	Shurraw S Hemmelgarn BR, Lin M, Majumdar SR, Klarenbach S, Manns B, Bello A, James M, Turin TC, Tonelli M.	2011	Yes	Journal Article
	Excessive daytime sleepiness is associated with increased health care utilization among patients referred for assessment of OSA	Ronksley P, Hemmelgarn BR, Ghali W, Heitman S, Flemons W, Faris P, Manns BJ, Tsai W	2011	Yes	Journal Article
	Morphometric and biological characterization of biofilm in tunneled hemodialysis catheters	Jones SM, Ravani P, Hemmelgarn BR, Muruve D, MacRae JM	2011	Yes	Journal Article
	Lower estimated glomerular filtration rate and higher albuminuria are associated with all-cause and cardiovascular mortality. A collaborative meta-analysis of high-risk population cohorts.	Van der Velde M, Matsushita K, Coresh J, Hemmelgarn BR, Manley T.	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	A novel technique to optimize facility locations of new nephrology services for remote areas.	Ayyalasomayajula B, Wiebe N, Hemmelgarn BR, Bello A, Manns B, Klarenbach S, Tonelli M.	2011	Yes	Journal Article
	Impact of eGFR reporting on patients, clinicians and health-care systems: A systematic review	Kagoma YK, Weir M, Iansacichus AV, Hemmelgarn BR, Akbari A, Patel UD, Garg AX, Jain AK	2011	Yes	Journal Article
	Quality of care and mortality in chronic kidney disease patients living in remote areas	Rucker D, Hemmelgarn BR, Lin M, Manns B, Klarenbach S, Ayyalasomayajula B, James M, Bello Am, Gordon D, Jindal K, Tonelli M	2011	Yes	Journal Article
	Cardiovascular outcomes in Framingham participants with diabetes: The importance of blood pressure	Chen G, McAlister FA, Walker RL, Hemmelgarn BR, Campbell NRC	2011	Yes	Journal Article
	Prevention of dialysis catheter malfunction with recombinant tissue plasminogen activator	Hemmelgarn BR, Moist LM, Lok CE, Tonelli M, Manns BJ, Holden RM, LeBlanc M, Faris P, Barre P, Zhang J, Scott-Douglas N	2011	Yes	Journal Article
	A validation study of the Canadian Organ Replacement Register	Moist LM, Richards HA, Miskulin D, Lok CE, Yeates K, Garg AX, Trpeski L, Chapman A, Amuah J, Hemmelgarn BR	2011	Yes	Journal Article
	Using proteinuria and estimated glomerular filtration rate to classify risk in people with chronic kidney disease	Tonelli M, Munter P, Lloyd A, Manns BJ, James MT, Klarenbach S, Quinn RR, Wiebe N, Hemmelgarn BR	2011	Yes	Journal Article
	The safety of combination therapy with angiotensin converting enzyme inhibitors and angiotensin receptor blockers in elderly individuals: population based longitudinal analysis	McAlister F, Zhang J, Tonelli M, Klarenbach S, Manns BJ, Hemmelgarn BR	2011	Yes	Journal Article
	The effect of nocturnal and conventional hemodialysis on markers of nutritional status: Results from a randomized trial	Schorr M, Manns BJ, Culleton B, Walsh M, Klarenbach S, Tonelli M, Sauve L, Chin R, Barnieh L, Hemmelgarn BR	2011	Yes	Journal Article
	Associations between acute kidney injury, cardiovascular and renal outcomes after coronary angiography	James MT, Ghali WA, Knudtson ML, Ravani P, Tonelli M, Faris P, Pannu N, Manns BJ, Klarenbach SW, Hemmelgarn BR	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Impact of estimated glomerular filtration rate reporting on nephrology referrals: a review of the literature	Jain A, Hemmelgarn BR	2011	Yes	Journal Article
	Motivational interviewing to improve weight loss in overweight and/or obese patients: a systematic review and meta-analysis of randomized controlled trials.	Armstrong MJ, Mottershead T, Ronksley PE, Sigal RJ, Campbell T, Hemmelgarn BR	2011	Yes	Journal Article
	Modification of outcomes after acute kidney injury by the presence of CKD	Pannu N, James M, Hemmelgarn BR, Dong J, Tonelli M, Klarenbach S	2011	Yes	Journal Article
	Evaluation of an education intervention to increase the pursuit of living kidney donation: a randomized controlled trial	Barnieh L, McLaughlin K, Manns BJ, Klarenbach S, Yilmaz S, Taub K, Hemmelgarn BR	2011	Yes	Journal Article
	Association between estimated glomerular filtration rate, proteinuria and adverse cardiovascular outcomes.	Bello AK, Hemmelgarn BR, Lloyd A, James MT, Manns BJ, Klarenbach S, Tonelli M,	2011	Yes	Journal Article
	Propensity score methods and their application in nephrology research	Barnieh L, James MT, Zhnag J, Hemmelgarn BR	2011	Yes	Journal Article
	Graft failure and adaptation period to adult health care centers in pediatric renal transplant patients	Samuel S, Nettel-Aguirre A, Hemmelgarn BR, Tonelli M, Soo A, Clark C, Alexander RT, Foster BJ	2011	Yes	Journal Article
	Survival in pediatric dialysis and transplant patients	Samuel S, Tonelli M, Foster B, Alexander RT, Nettel-Aguirre A, Soo A, Hemmelgarn BR	2011	Yes	Journal Article
	A description of the costs of living and standard criteria deceased donor kidney transplantation	Barnieh L, Manns BJ, Klarenbach S, McLaughlin K, Yilmaz S, Hemmelgarn BR	2011	Yes	Journal Article
	Validation of a case definition to define chronic dialysis using outpatient administrative data	Clement FM, James MT, Chin R, Klarenbach SW, Manns BJ, Quinn RR, Ravani P, Tonelli M, Hemmelgarn BR	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Design and implementation of the Canadian Kidney disease Cohort Study (CKDCS): A prospective observational study of incident hemodialysis patients	Bello AK, Thadhani R, Hemmelgarn BR, Klarenbach S, Gill J, Chan C, Zimmerman D, Holmes D, Cembrowski G, Opengorth D, Sibrian R, Karkhaneh M, Tiv S, Wiebe N, Tonelli M	2011	Yes	Journal Article
	Higher estimated glomerular filtration rates may be associated with increased risk of adverse outcomes, especially with concomitant proteinuria.	Tonelli M, Klarenbach SW, Lloyd A, James Mt, Bello A, Manns BJ, Hemmelgarn BR	2011	Yes	Journal Article
Herman,Robert	The 2011 Canadian Hypertension Education Program (CHEP) recommendations for the management of hypertension: Blood pressure measurement, diagnosis, assessment of risk and therapy.	Rabi DM, Daskalopoulou SS, Padwal RS, Khan NA, Grover S, Hackam DG, Myers MG, McKay DW, Quinn RR, Hemmelgarn BR, Cloutier L, Bolli P, Hill MD, Wilson T, Penner B, Burgess E, Lamarre-Cliche M, McLean D, Schiffrin EL, Honos G, Mann K, Tremblay G, Milot A, Chockalingam A, Rabkin SW, Dawes M, Touyz RM, Burns KD, Ruzicka M, Campbell NRC, Vallée M, Prasad GVR, Lebel M, Campbell TS, Lindsay P, Herman RJ, Larochelle P, Feldman RD, Arnold JMO, Moe GW, Howlett JG, Trudeau L, Bacon SL, Petrella RJ, Lewanczuk R, Stone JA, Drouin D, Boulanger J-M, Sharma M, Hamet P, Fodor J, Dresser GK, Carruthers SG, Pylypchuk G, Gilbert RE, Leiter LA, Jones C, Ogilvie RI, Woo V, McFarlane PA, Hegele RA, Poirier L, Tobe SW, for the Canadian Hypertension Education Program.	2011	Yes	Journal Article
Hilsden,Robert	Canadian patient perceptions of indicators of quality and safety in colonoscopy.	Sewitch M, Dube C, Hilsden R, Barkun A, Armstrong D.	2011	Yes	Journal Article
	Canadian patient perceptions of indicators of quality and safety in colonoscopy.	Sewitch M, Dube C, Hilsden R, Barkun A, Armstrong D.	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Use of Complementary and Alternative Medicine by Patients with Inflammatory Bowel Disease	Hilsden RJ, M Verhoef, H Rasmussen, A Porcino, JCC DeBruyn	2011	Yes	Journal Article
	A literature review of quality in lower gastrointestinal endoscopy from the patient perspective	Sewitch MJ, Gong S, Dube C, Barkun A, Hilsden R, Armstrong D.	2011	Yes	Journal Article
	Seeking the ultimate bowel preparation for colonoscopy: is the end in sight?	Hilsden RJ.	2011	Yes	Journal Article
	A qualitative evaluation of strategies to increase colorectal cancer screening uptake	Tinmouth J, Ritvo P, McGregor SE, Claus D, Pasut G, Myers RE, Guglietti C, Paszat LF, Hilsden RJ, Rabeneck L	2011	Yes	Journal Article
	Quantifying the benefit of screening colonoscopy (Editorial)	Hilsden RJ	2011	Yes	Journal Article
	Reactions to a targeted intervention to increase fecal occult blood testing among average-risk adults waiting for screening colonoscopy.	McGregor SE, Ritvo P, Tinmouth J, Kornblum A, Myers R, Hilsden RJ, Paszat LF, Rabeneck L.	2011	Yes	Journal Article
	Immunogenicity and safety of influenza vaccination in children with inflammatory bowel disease	deBruyn JC, Hilsden R, Fonseca K, Russell ML, Kaplan GG, Vanderkooi O, Wrobel I.	2011	Yes	Journal Article
	Use of complementary and alternative medicine by patients with inflammatory bowel disease	Hilsden RJ, Verhoef M, Rasmussen H, Porcino A, DeBruyn JCC	2011	Yes	Journal Article
Hogan,David	Developing Guidelines on the Assessment and Treatment of Delirium in Older Adults at the End-of-Life	Brajtman S, Wright D, Hogan D, Allard P, Bruto V, Burne D, Gage L, Gagnon PR, Sadowski CA, Helsdingen S, Wilson K	2011	Yes	Journal Article
	Predictors of Patient Self-Ratings of Quality of Life in Alzheimer's Disease: Cross-Sectional Results from the Canadian Alzheimer's Disease Quality of Life (CADQOL) Study	Naglie G, Hogan DB, Krahn M, Beattie BL, Black S, MacKnight C, Patterson C, Borrie M, Freedman M, Bergman H, Byszewski A, Streiner D, Irvine J, Ritvo P, Comrie J, Kowgier M, Tomlinson G	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Papers that Might Change Your Practice - Review of the Introduction of a New Screening Tool for the Identification of Cognitively Impaired Medically At-risk Drivers	Hogan DB, Bedard M	2011	Yes	Journal Article
	Operationalizing Frailty Among Older Residents of Assisted Living Facilities	Freiheit EA, Hogan DB, Strain LA, Schmaltz HN, Patten SB, Eliasziw M, Maxwell CJ	2011	Yes	Journal Article
	The Practice of Geriatrics - Specialized Geriatric Programs and Home Visits	Hogan DB	2011	Yes	Journal Article
	Response Letter to Dr. Kim and Ms. Choi	Freiheit EA, Hogan DB, Eliasziw M, Maxwell CJ	2011	Yes	Journal Article
	Predictors of Family Caregiver Ratings of Patient Quality of Life in Alzheimer's Disease: Cross-Sectional Results from the Canadian Alzheimer's Disease Quality of Life (CADQOL) Study	Naglie G, Hogan DB, Krahn M, Beattie BL, Black S, MacKnight C, Patterson C, Borrie M, Freedman M, Bergman H, Byszewski A, Streiner D, Irvine J, Ritvo P, Comrie J, Kowgier M, Tomlinson G	2011	Yes	Journal Article
	What's Behind a Name - The Kaufman Prize of the Canadian Geriatrics Society	Hogan DB	2011	Yes	Journal Article
Holroyd-Leduc, Jayna					
	Translation of evidence into a self-management tool for use by women with urinary incontinence	Holroyd-Leduc JM, Straus SE, Thrope K, Davis DA, Schmaltz HN, Tannenbaum C.	2011	Yes	Journal Article
	Unintentional weight loss in older adults	Stajkovic S, Aitken EM, Holroyd-Leduc J	2011	Yes	Journal Article
	The impact of the electronic medical record on structure, process and outcomes within primary care: a systematic review of the evidence.	Holroyd-Leduc JM, Lorenzetti D, Straus SE, Sykes L, Quan H	2011	Yes	Journal Article
	What is the value and impact of quality and safety teams? A scoping review.	White DE, Straus SE, Stelfox HT, Holroyd-Leduc JM, et al	2011	Yes	Journal Article
Hull, Russell					
	Outpatient Management of Oral Anticoagulation.	Valentine KA, Hull RD.	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Signal Quality of Single Dose Gadobenate Dimeglumine Pulmonary MRA Examinations Exceeds Quality of MRA Performed with Double Dose Gadopentetae Dimeglumine.	Woodard PK, Chenevert TL, Sostman HD, Jablonski KA, Stein PD, Goodman LR, Londy FJ, Narra V, Hales CA, Hull RD, Tapson VF, Weg JG.	2011	Yes	Journal Article
	Chenevert TL. Comparison of 1.5 and 3.0 Tesla for contrast-Enhanced Pulmonary Magnetic Resonance Angiography. Clin Appl Thromb Hemost. 2012. (In press)	Londy FJ, Lowe S, Stein PD, Weg JG, Eisner RL, Leeper KV, Woodard PK, Sostman HD, Jablonski KA, Fowler SE, Hales CA, Goodman LR, Hull RD, Gottschalk A. Naidich DP,	2011	Yes	Journal Article
	Disorders of the pulmonary circulation.	Pineo GF, Hull RD.	2011	Yes	Journal Article
	Increasing Use of Vena Cava Filters for Prevention of Pulmonary Embolism.	Stein PD, Matta F, Hull RD.	2011	Yes	Journal Article
	Prophylaxis of Venous Thromboembolism: Low Molecular Weight Heparin Compared to the Selective Anticoagulants Rivaroxaban, Dabigatran and Fondaparinux.	Welzel D, Hull RD, Fareed J.	2011	Yes	Journal Article
	Long-term Low-Molecular-Weight Heparin and the Post-Thrombotic Syndrome. A Systematic Review.	Hull RD, Liang J, Townshend G.	2011	Yes	Journal Article
	Treatment of Lower Extremity Deep Vein Thrombosis.	Lip GY, Hull RD.	2011	Yes	Journal Article
	Controversies in Diagnosis of Pulmonary Embolism.	Stein PD, Sostman HD, Dalen JE, Bailey DL, Bajc M, Goldhaber SZ, Goodman LR, Gottschalk A, Hull RD, Matta F, Pistolesi M, Tapson VF, Weg JG Wells PS, Woodard PK.	2011	Yes	Journal Article
	Diagnosis and Management of Isolated Subsegmental Pulmonary Embolism: Review and Assessment of the Options.	Stein PD, Goddman LR, Hull RD, Dalen JE, Matta F.	2011	Yes	Journal Article
	Low-Molecular-Weight Heparin for Venous Thromboembolic Disease.	Raskob GE, Hull RD.	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Correcting Excess Anticoagulation after Warfarin.	Valentine KA, Hull RD.	2011	Yes	Journal Article
	Factors in the Technical Quality of Gadolinium Enhanced Magnetic Resonance Angiography for Pulmonary Embolism in PIONEER III.	Sostman HD, Jablonski KA, Woodard PK, Stein PD, Naidich DP, Chenevert TL, Weg JG Hales CA, Hull RD, Goodman LR, Tapson VF.	2011	Yes	Journal Article
	Therapeutic Use of Warfarin.	Valentine KA, Hull RD.	2011	Yes	Journal Article
	Essay for the CIHR/CMAJ award: the role of Low-Molecular-Weight Heparin Therapy Venous Thromboembolism.	Hull RD.	2011	Yes	Journal Article
	Venous Thromboembolism Prophylaxis in Patients Undergoing Cranial Neurosurgery: A Systematic Review and Meta-analysis.	Hamilton MG, Yee WH, Hull RD, Ghali WA.	2011	Yes	Journal Article
	Contaminants in Heparin. Editorial.	Hull RD, Walenga J.	2011	Yes	Journal Article
	Anticoagulation in Acute Pulmonary Embolism.	Valentine KA, Hull RD.	2011	Yes	Journal Article
	Extended-duration Rivaroxaban Thromboprophylaxis in Acutely Ill Medical Patients: MAGELLAN Study Protocol.	Cohen AT, Spiro TE, Buller HR, Haskell L, Hu D, Hull RD, Mebazaa A, Merli G, Schellong S, Spyropoulos A, Tapson V.	2011	Yes	Journal Article
Iacucci,Marietta	Beyond symptom relief: evolution of mucosal healing. Therapeutic Advances in Gastroenterology 2011;4:129-143	Iacucci M, Ghosh S	2011	Yes	Journal Article
	. An evaluation of the use of serum 7 α -hydroxycholestenone as a diagnostic test of bile acid malabsorption causing watery diarrheaCan J Gastroenterol. 2011;25:319-23.	WG Brydon, P Culbert, K Kingstone, A Jarvie, M. Iacucci, M Tenhage, S Ghosh	2011	Yes	Journal Article

James,Matthew

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Using proteinuria and estimated glomerular filtration rate in combination to classify risk in patients with chronic kidney disease.	Tonelli M, Muntner P, Lloyd A, Manns BJ, James MT, Klarenbach S, Quinn RR, Wiebe N, Hemmelgarn BR.	2011	Yes	Journal Article
	An administrative data coding approach to identify chronic dialysis.	Clement F, James MT, Chin R, Klarenbach S, Quinn RR, Ravani P, Manns BJ, Tonelli M, Hemmelgarn BR.	2011	Yes	Journal Article
	Outcomes of acute kidney injury in hospitalized patients with chronic kidney disease: a population-based study.	Pannu N, James MT, Hemmelgarn BR, Tonelli M, Dong J, Klarenbach SW.	2011	Yes	Journal Article
	Associations between acute kidney injury and cardiovascular and renal outcomes following coronary angiography.	James MT, Ghali WA, Knudtson M, Ravani P, Tonelli M, Faris P, Pannu N, Klarenbach SW, Manns BJ, Hemmelgarn BR.	2011	Yes	Journal Article
	Association between estimated glomerular filtration rate, proteinuria and adverse cardiovascular outcomes: a longitudinal population-based study.	Bello A, Hemmelgarn BR, Lloyd A, James MT, Manns BJ, Klarenbach SW, Tonelli M.	2011	Yes	Journal Article
	Association between higher levels of estimated glomerular filtration rate and adverse outcomes.	Tonelli M, Klarenbach SW, Lloyd A, James MT, Bello A, Manns BJ, Hemmelgarn BR.	2011	Yes	Journal Article
	Use of propensity scores in nephrology research.	Barnieh L, James MT, Zhang J, Hemmelgarn BR.	2011	Yes	Journal Article
	Association between glycemic control and adverse outcomes in people with diabetes and chronic kidney disease.	Shurraw S, Hemmelgarn B, Lin M, Majumdar S, Klarenbach S, Manns B, Bello A, James M, Chowdhury T, Tonelli M.	2011	Yes	Journal Article
	Validating a case definition for chronic kidney disease using administrative data.	Ronksley PE, Tonelli M, Quan H, Manns BJ, James MT, Clement FM, Samuel S, Quinn RR, Ravani P, Brar S, Hemmelgarn BR.	2011	Yes	Journal Article
	Financial aspects of renal replacement therapy in acute kidney injury.	James MT, Tonelli M.	2011	Yes	Journal Article
	Quality of care and mortality in chronic kidney disease patients living in remote areas of Alberta, Canada.	Rucker D, Hemmelgarn BR, Lin M, Manns BJ, Klarenbach SW, Ayyalasomayajula B, James MT, Bello AM, Gordon D, Jindal K, Tonelli M.	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Clinical factors associated with initiation of renal replacement therapy in critically ill patients with Acute Kidney Injury. A prospective multi-centre observational study.	Bagshaw SM, Wald R, Barton J, Burns KE, Friedrich JE, House AA, James MT, Levin A, Moist L, Pannu N, Stollery DE, Walsh MW.	2011	Yes	Journal Article
Jarand,Julie	Clinical and Microbiologic Outcomes in Patients Receiving Treatment for Mycobacterium abscessus Pulmonary Disease	Jarand J, Levin A, Zhang L, Huitt G, Mitchell J, Daley CL.	2011	Yes	Journal Article
Jones,Charlotte	Tackling Health Literacy: adaptation of public hypertension educational materials for an Indo-Asian population in Canada.	Jones CA, Mawani S, King KM, Allu SO, Smith M, Mohan S, Campbell NR.	2011	Yes	Journal Article
	The relation between serum cholesterol and mammographic density as a risk factor for breast cancer.	Tamburrini AL, Woolcott CG, Boyd NF, Yaffe MJ, Terry T, Yasui Y, Jones CA, Patten SB, Courneya KS, Friedenreich CM	2011	Yes	Journal Article
	The 2011 Canadian Hypertension Education Program recommendations for the management of hypertension: blood pressure measurement, diagnosis, assessment of risk, and therapy	Rabi, DM et al	2011	Yes	Journal Article
	Changes in insulin resistance indicators, insulin-like growth factors, and adipokines in a year-long trial of aerobic exercise in postmenopausal women	Friedenreich CM, Neilson H, Woolcott C, McTiernan A, Wang Q, Ballard-Barbash R, Jones CA, Stanczyk F, Brant, Yasui y, Irwin m, Campbell K, McNeely M, Karvinen K, Courneya K.	2011	Yes	Journal Article
	Adiposity changes after a 1-year aerobic exercise intervention among postmenopausal women: a randomized controlled trial.	C M Friedenreich, C G Woolcott, A McTiernan, T Terry, R Brant, R Ballard-Barbash, M L Irwin, C A Jones, N F Boyd, M J Yaffe, K L Campbell, M L McNeely, K H Karvinen and K S Courneya	2011	Yes	Journal Article
Kaplan,Gilaad					

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Crohn's Disease in Humans and Johne's Disease in Cattle – Linked Diseases?	Barkema HW, Hendrick S, De Buck JM, Ghosh S, Kaplan GG, and Rioux K.	2011	Yes	Journal Article
	Increasing incidence and prevalence of the inflammatory bowel diseases with time, based on systematic review.	Molodecky NA, Soon IS, Rabi DM, Ghali WA, Ferris M, Chernoff G, Benchimol EI, Panaccione R, Ghosh S, Barkema HW, Kaplan GG.	2011	Yes	Journal Article
	Risk of comorbidities on postoperative outcomes in patients with inflammatory bowel disease.	Kaplan GG, Hubbard J, Panaccione R, Shahee AA, Quan H, Nguyen GC, Dixon E, Ghosh S, Myers RP.	2011	Yes	Journal Article
	The Incidence of Primary Sclerosing Cholangitis: A Systematic Review and Meta-Analysis.	Molodecky NA, Kareemi H, Parab R, Barkema HW, Quan H, Myers RP, and Kaplan GG.	2011	Yes	Journal Article
	Immunogenicity and Safety of Influenza Vaccination in Children with Inflammatory Bowel Disease.	deBruyn JC, Hilsden R, Fonseca K, Russell ML, Kaplan GG, Vanderkooi O, Wrobel I.	2011	Yes	Journal Article
	Invasive potential of gut mucosa-derived fusobacterium nucleatum positively correlates with IBD status of the host.	Strauss J, Kaplan GG, Beck PL, Rioux K, Panaccione R, Devinney R, Lynch T, Allen-Vercoe E.	2011	Yes	Journal Article
	Challenges associated with identifying the environmental determinants of the inflammatory bowel diseases.	Molodecky NA, Panaccione R, Ghosh S, Barkema HW, Kaplan GG.	2011	Yes	Journal Article
	Amebic liver abscess in the United States: A population-based study of incidence, temporal trends and mortality.	Congly SE, Shaheen AAM, Meddings L, Kaplan GG, Myers RP.	2011	Yes	Journal Article
	Predicting in-hospital mortality in patients undergoing complex gastrointestinal surgery: What is the optimal risk-adjustment methodology?	Grendar J, Shaheen AA, Myers RP, Parker R, Vollmer CM jr, Ball CG, Quan ML, Kaplan GG, Al-Manasra T, Dixon E.	2011	Yes	Journal Article
	Validity of Administrative Data for the Diagnosis of Primary Sclerosing Cholangitis (PSC): A Population-Based Study.	Molodecky NA, Myers RP, Barkema HW, Quan H, and Kaplan GG.	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Increasing incidence of Inflammatory Bowel Disease with Time and Among Regions, based on Systematic Review.	Molodecky N, Soon IS, Rabi D, Ghali W, Ferris M, Chernoff G, Benchimol E, Panaccione R, Ghosh S, Barkema H, Kaplan GG.	2011	Yes	Journal Article
	Postoperative complications and mortality following a colectomy for ulcerative colitis.	deSilva S, Ma C, Proulx M, Crespin M, Kaplan BS, Hubbard J, Prusinkiewicz M, Fong A, Panaccione R, Ghosh S, Beck PL, MacLean A, Buie D, Kaplan GG	2011	Yes	Journal Article
	Postoperative complications following colectomy for Ulcerative Colitis in children: A population-base study.	Soon I, Kaplan B, Proulx M, Wrobel I, deBruyn J, Kaplan GG.	2011	Yes	Journal Article
Kim,Joseph	A case of acute cholecystitis caused by methicillin-resistant Staphylococcus aureus in an immunocompromised patient	Kim J, Gregson DB, Church DL	2011	Yes	Journal Article
Kurwa,Habib	Dermatofibrosarcoma protuberans	Tan WP, Barlow RJ, Robson A, Kurwa HA, McKenna J, Mallipeddi R.	2011	Yes	Journal Article
	Diagnostic challenges of cutaneous draining sinus tracts of odontogenic origin: a case report.	Peermohamed S, Barber D, Kurwa H.	2011	Yes	Journal Article
Lau,David	A world with fewer people with diabetes and noncommunicable diseases	Lau DCW	2011	Yes	Journal Article
	Harmonization of guidelines for the prevention and treatment of cardiovascular disease: the C-CHANGE	Tobe SW, Stone JA, Brouwers M, Bhattacharya O, Walker KM, Dawes M, Genest J, Grover S, Gubitza G, Lau D, Pipe A, Selby P, Tremblay MS, Warburton DER, Ward R, Woo V, Leiter LA, Liu PP	2011	Yes	Journal Article
	Perivascular adipose tissue-derived relaxing factor: release by peptide agonists of proteinase-activated receptor-2 (PAR2) via PAR2 and non-PAR2 mechanisms	Li Y, Mihara K, Saifeddine M, Krawetz A, Lau DCW, Trigg CR, Hollenberg MB	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted	Year	IsPeerReviewed	Type
	Christmas, Santa Claus, Sugarplums and the Grinch	Lau DCW		2011	Yes	Journal Article
	The effects of a supplemental, theory-based physical activity counseling intervention for adults with type 2 diabetes	Plotnikoff R, Pickering MA, Glenn N, Doze SL, Reinhold-Matthews ML, McLeod LJ, Lau DCW, Fick GH, Flaman L		2011	Yes	Journal Article
	Reasons for failing to initiate weight management strategies in physician practices: The SOCCER study	Padwal RS, Damjanovic S, Schulze K, Lewanczuk RZ, Lau DCW, Sharma AM		2011	Yes	Journal Article
	Identification and Management of Cardiometabolic risk in Canada-a position paper by the Cardiometabolic Risk Working Group (Executive Summary)	Leiter, LA, Fitchett, DH, Gilbert, RE, Gupta, M, Mancini, GB, McFarlane, PA, Ross, R, Teoh, H, Verma, S, Anand, S, Camelon, K, Chow, CM, Cox, JL, Despres, JP, Genest, J, Harris, SB, Lau, DCW, et al.		2011	Yes	Journal Article
	Is surgery an option in the treatment of type 2 diabetes?	Lau DCW		2011	Yes	Journal Article
	Identification and Management of Cardiometabolic risk in Canada-a position paper by the Cardiometabolic Risk Working Group	Leiter, LA, Fitchett, DH, Gilbert, RE, Gupta, M, Mancini, GB, McFarlane, PA, Ross, R, Teoh, H, Verma, S, Anand, S, Camelon, K, Chow, CM, Cox, JL, Despres, JP, Genest, J, Harris, SB, Lau, DCW, et al.		2011	Yes	Journal Article
LeClercq, Sharon	Canadian Rheumatology Association Recommendations for Pharmacological Management of Rheumatoid Arthritis with Traditional and Biologic Disease-Modifying Antirheumatic drugs	Bykerk V, Akhavan P, Hazelwood GS, Scheir O, Dooley A, Haraout B, Khraishi M, LeClercq SA, Legere J, Mosher DP, Pencharz J, Pope JE, Thomson J, Thorne C, Zummer M, Bombardier C.		2011	Yes	Journal Article
Lee, Samuel	Management of hepatitis C virus genotype 4: Recommendations of An International Expert Panel.	Khattab MA, Ferenci P, Hadziyannis SJ, Colombo M, Manns MP, Almasio PL, Esteban R, Abdo AA, Harrison SA, Ibrahim N, Cacoub P, Eslam M, Lee SS.		2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	"Histological subclassification of cirrhosis using Laennec fibrosis scoring system correlates with clinical stage and grade of portal hypertension".	Kim MY, Cho MY, Baik SK, Park HJ, Jeon HK, Im CK, Won CS, Kim JW, Kim HS, Kwon SO, Eom MS, Cha SH, Kim YJ, Chang SJ, Lee SS.	2011	Yes	Journal Article
	Three-year efficacy and safety of tenofovir disoproxil fumarate treatment of chronic hepatitis B.	Heathcote EJ, Marcellin P, Buti M, Gane E, De Man RA, Krastev Z, Germanidis G, Lee SS, Flisiak R, Kaita K, Manns M, Kotzev I, Tchernev K, Buggisch P, Weilert F, Kuras OO, Shiffman ML, Trinh H, Gurel S, Snow-Lampart A, Borroto-Esoda K, Mondou E, Anderson J, Sorbel J, Rousseau F.	2011	Yes	Journal Article
	Canadian patients with chronic hepatitis B cannot access appropriate drug treatments: a call for change.	Sherman M, Lee SS.	2011	Yes	Journal Article
	Is pre-treatment liver biopsy necessary in all HCV genotypes?	Peltekan KM, Bain VG, Lee SS, Sherman M, Cooper CL, Yoshida EM, Marotta PJ, Krajden M, Balshaw R, Deschenes M.	2011	Yes	Journal Article
	"Longterm entecavir treatment induces reversal of advanced fibrosis or cirrhosis in patients with chronic hepatitis B".	Schiff E, Lee SS, Chao YC, Yoon SK, Bessone F, Wu SS, Kryczka W, Lurie Y, Gadano A, Kitis G, Beebe S, Xu D, Tang H, Iloeje U.	2011	Yes	Journal Article
	"Acute on chronic liver failure: the heart and systemic hemodynamics.	Liu H, Lee SS.	2011	Yes	Journal Article
	Role of cardiac myofilament proteins titin and collagen in the pathogenesis of diastolic dysfunction in cirrhotic rats.	Glenn TK, Honar H, Liu H, ter Keurs HEDJ, Lee SS	2011	Yes	Journal Article
	Prediction of cardiovascular complications after liver transplantation: 007 to the rescue.	Liu H, Lee SS. .	2011	Yes	Journal Article

Leigh,Richard

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	β2-adrenoceptor agonist-induced RGS2 expression is a genomic mechanism of bronchoprotection that is enhanced by glucocorticoids.	Holden NS, Bell MJ, Rider CF, King EM, Gaunta DD, Leigh R, Johnson M, Siderovski DP, Heximer SP, Gienbycz MA, Newton R.	2011	Yes	Journal Article
	Modulation of epithelial biology in rhinovirus infection: role in inflammatory airway diseases.	Leigh R, Proud D.	2011	Yes	Journal Article
	Corticosteroid-induced gene expression in allergen-challenged asthmatic subjects taking inhaled budesonide.	Kelly MM, King EM, Rider CF, Gwozd C, Holden NS, Eddleston J, Zuraw B, Leigh R, O'Byrne PM, Newton R.	2011	Yes	Journal Article
	Effects of a short course of inhaled corticosteroids in noneosinophilic asthmatic subjects.	Lemière C, Tremblay C, Fitzgerald M, Aaron SD, Leigh R, Boulet LP, Martin JD, Nair P, Olivenstein R, Chaboillez S.	2011	Yes	Journal Article
	Epithelial cells and airway diseases.	Proud D, Leigh R.	2011	Yes	Journal Article
Lemaire,Jane	Hands-free communication technology: a benefit for nursing.	Dunphy H, Juli BA, Finlay MA, Lemaire JB, MacNairn I, Wallace JE.	2011	Yes	Journal Article
	The effect of a biofeedback-based stress management tool on physician stress: a randomized controlled clinical trial.	Lemaire JB, Wallace JE, Lewin AM, de Grood J, Schaefer JP.	2011	Yes	Journal Article
	Food for thought: an exploratory study of how physicians experience poor workplace nutrition	Lemaire JB, Wallace JE, Dinsmore K, Roberts D	2011	Yes	Journal Article
Leung,Alexander	Aspirin effect on incidence of major adverse cardiovascular events in patients with diabetes mellitus: a systematic review and meta-analysis.	Butalia S*, Leung AA*, Ghali WA, Rabi DM. (*Note: first authorship shared between Butalia S and Leung AA.)	2011	Yes	Journal Article
	Appreciating the medical literature: five notable articles in general internal medicine from 2009 and 2010.	Leung AA, Ghali WA.	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Primary biliary cirrhosis.	Ma S, Ma PT, Leung AK, Leung AA.	2011	Yes	Journal Article
	Risk of thiazide-associated hyponatremia in patients newly treated for hypertension.	Leung AA, Wright A, Pazo V, Karson A, Bates DW.	2011	Yes	Journal Article
	A comparison of early versus late initiation of renal replacement therapy in critically ill patients with acute kidney injury: meta-	Karvellas CJ, Farhat MR, Sajjad I, Mogensen SS, Leung AA, Wald R, Bagshaw SM.	2011	Yes	Journal Article
	Outcomes of cardiac resynchronization therapy in patients with versus without atrial fibrillation: a systematic review and meta-analysis.	Wilton SB, Leung AA, Ghali WA, Faris P, Exner DV.	2011	Yes	Journal Article
	Internal medicine examinations: comparative experiences from three countries.	Leung AA.	2011	Yes	Journal Article
Lewkonina, Raymond					
	Patient Rights and Medical Education: Clinical Principles	R. Lewkonina	2011	Yes	Journal Article
Li, Pin					
	A Prospective Observational Study of Physician Handoff for Intensive Care Unit to Ward Patient Transfers	Li P; Stelfox HT; Ghali WA.	2011	Yes	Journal Article
Loewen, Andrea					
	Response of Genioglossus Muscle to Increasing Chemical Drive in Sleeping Obstructive Apnea Patients	Loewen AHS, Ostrowski M, Laprairie J, Maturino F, Hanly PJ, Younes M	2011	Yes	Journal Article
Ma, Irene					
	Use of simulation-based education to improved outcomes of central venous catheterization: a systematic review and meta-analysis.	Ma IWY, Brindle M, Ronksley P, Lorenzetti D, Sauve R, Ghali W	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Comparing the use of global rating scale with checklists for the assessment of central venous catheterization skills using simulation.	Ma IW, Zalunardo N, Pachev G, Beran T, Brown M, Hatala R, McLaughlin K.	2011	Yes	Journal Article
	Who is teaching and supervising our junior residents' central venous catheterizations?	Ma IWY, Teteris E, Roberts JM, Bacchus M	2011	Yes	Journal Article
MacEachern,Paul					
	Exercise Capacity, Lung Function and Quality of Life after Interventional Bronchoscopy.	P. Lee Oviatt, David R. Stather, Gaetane Michaud, Paul MacEachern, Alain Tremblay	2011	Yes	Journal Article
	Endobronchial Ultrasound Knowledge, Implementation, and Perceived Barriers Following Attendance at a Dedicated Hands-on Course.	Natasha Sabur, David Stather, Paul MacEachern, Alain Tremblay	2011	Yes	Journal Article
	Validation of an Endobronchial Ultrasound Simulator: Differentiating Operator Skill Level	David R. Stather, Paul MacEachern, Karen Rimmer, Christopher A. Hergott, Alain Tremblay	2011	Yes	Journal Article
	Assessment and Learning Curve Evaluation of Endobronchial Ultrasound Skills Following Simulation and Clinical Training	D.R. Stather, P. MacEachern, K. Rimmer, C. Hergott, A. Tremblay	2011	Yes	Journal Article
MacRae,Jennifer					
	Morphometric and Biological characterization of biofilm in tunneled hemodialysis	Jones S, Ravani, P, Hemmelgarn B, Muruve D and MacRae JM	2011	Yes	Journal Article
	Significant thrombocytopenia associated with the use of electron beam sterilized hemodialysis membranes	Kiaii M, Farrah M, Jung B, Levin A, Djurdjev O, MacRae JM	2011	Yes	Journal Article
	Evaluation of a warfarin anticoagulation nomogram in hemodialysis patients	Thomson BKA, MacRae JM, Zhang J, Mackay E, Barnien L, Hemmelgarn BR	2011	Yes	Journal Article
	Hemodialysis prescription education reduces intradialytic hypotension	Tai D, Conley J, Ravani P, Hemmelgarn B, MacRae J	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
Manns, Braden	Economic evaluation of increasing population rates of cardiac catheterization.	Clement FM, Ghali WA, Rinfret S, Manns BJ; the APPROACH Investigators.	2011	Yes	Journal Article
	Multiple Versus Single and Other Estimates of Baseline Proteinuria Status as Predictors of Adverse Outcomes in the General Population.	Bello A, Thompson S, Lloyd A, Hemmelgarn B, Klarenbach S, Manns BJ, Tonelli M; Alberta Kidney Disease Network.	2011	Yes	Journal Article
	Association between glycemic control and adverse outcomes in people with diabetes mellitus and chronic kidney disease a population-based cohort study.	. Shurraw S, Hemmelgarn B, Lin M, Majumdar SR, Klarenbach S, Manns BJ, Bello A, James M, Turin TC, Tonelli M; Alberta Kidney Disease Network.	2011	Yes	Journal Article
	Association Between GFR, Proteinuria, and Adverse Outcomes Among White, Chinese, and South Asian Individuals in Canada.	Conley J, Tonelli M, Quan H, Manns BJ, Palacios-Derflinger L, Bresee LC, Khan N, Hemmelgarn BR; Alberta Kidney Disease Network.	2011	Yes	Journal Article
	Early dialysis of no benefit to the patient or the health care system.	Manns BJ, Quinn RR.	2011	Yes	Journal Article
	A multi-region assessment of population rates of cardiac catheterization and yield of high-risk coronary artery disease.	Clement FM, Manns BJ, Brownell B, Faris PD, Graham MM, Humphries K, Love M, Knudtson ML, Ghali WA; the APPROACH Investigators.	2011	Yes	Journal Article
	Prevention of dialysis catheter malfunction with recombinant tissue plasminogen activator.	Hemmelgarn BR, Moist LM, Lok CE, Tonelli M, Manns BJ, Holden RM, LeBlanc M, Faris P, Barre P, Zhang J, Scott-Douglas N.	2011	Yes	Journal Article
	Validation of a case definition to define chronic dialysis using outpatient administrative data.	Clement FM, James MT, Chin R, Klarenbach SW, Manns BJ, Quinn RR, Ravani P, Tonelli M, Hemmelgarn BR; Alberta Kidney Disease Network.	2011	Yes	Journal Article
	Evaluation of an education intervention to increase the pursuit of living kidney donation: a randomized controlled trial.	Barnieh L, McLaughlin K, Manns BJ, Klarenbach S, Yilmaz S, Taub K, Hemmelgarn BR; Alberta Kidney Disease Network.	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Supplementing creatinine-based estimates of risk in chronic kidney disease: is it time?	Tonelli M, Manns BJ.	2011	Yes	Journal Article
	Associations among estimated glomerular filtration rate, proteinuria, and adverse cardiovascular outcomes.	Bello AK, Hemmelgarn B, Lloyd A, James MT, Manns BJ, Klarenbach S, Tonelli M; Alberta Kidney Disease Network.	2011	Yes	Journal Article
	A Proposal for Improving Evidence Generation in	Mendelssohn DC, Manns BJ.	2011	Yes	Journal Article
	The safety of combining angiotensin-converting-enzyme inhibitors with angiotensin-receptor blockers in elderly patients: a population-based longitudinal analysis.	McAlister FA, Zhang J, Tonelli M, Klarenbach S, Manns BJ, Hemmelgarn BR; on behalf of the Alberta Kidney Disease Network.	2011	Yes	Journal Article
	Excessive daytime sleepiness is associated with increased health care utilization among patients referred for assessment of OSA.	Ronksley PE, Hemmelgarn BR, Heitman SJ, Flemons WW, Ghali WA, Manns BJ, Faris P, Tsai WH.	2011	Yes	Journal Article
	A description of the costs of living and standard criteria deceased donor kidney transplantation.	Barnieh L, Manns BJ, Klarenbach S, McLaughlin K, Yilmaz S, Hemmelgarn BR.	2011	Yes	Journal Article
	Using proteinuria and estimated glomerular filtration rate to classify risk in people with chronic kidney disease.	Tonelli M, Muntner P, Lloyd A, Manns B, James M, Klarenbach S, Quinn R, Wiebe N, Hemmelgarn B.	2011	Yes	Journal Article
	Enrolment in primary care networks: impact on outcomes and processes of care for patients with diabetes.	Manns BJ, Tonelli M, Zhang J, Campbell DJ, Sargious P, Ayyalasomayajula B, Clement F, Johnson JA, Laupacis A, Lewanczuk R, McBrien K, Hemmelgarn BR.	2011	Yes	Journal Article
	Validating a case definition for chronic kidney disease using administrative data.	Ronksley PE, Tonelli M, Quan H, Manns BJ, James MT, Clement FM, Samuel S, Quinn RR, Ravani P, Brar SS, Hemmelgarn BR; For the Alberta Kidney Disease Network.	2011	Yes	Journal Article
	A Novel Technique to Optimize Facility Locations of New Nephrology Services for Remote Areas.	Ayyalasomayajula B, Wiebe N, Hemmelgarn BR, Bello A, Manns B, Klarenbach S, Tonelli M.	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Quality of care and mortality are worse in chronic kidney disease patients living in remote areas.	Rucker D, Hemmelgarn BR, Lin M, Manns BJ, Klarenbach SW, Ayyalasomayajula B, James MT, Bello A, Gordon D, Jindal KK, Tonelli M.	2011	Yes	Journal Article
	Bariatric Surgery: A Systematic Review of the Clinical and Economic Evidence.	Padwal R, Klarenbach S, Wiebe N, Hazel M, Birch D, Karmali S, Sharma AM, Manns BJ, Tonelli M.	2011	Yes	Journal Article
	Higher estimated glomerular filtration rates may be associated with increased risk of adverse outcomes, especially with concomitant proteinuria.	Tonelli M, Klarenbach SW, Lloyd AM, James MT, Bello AK, Manns BJ, Hemmelgarn BR.	2011	Yes	Journal Article
	Bariatric surgery: a systematic review and network meta-analysis of randomized trials.	Padwal R, Klarenbach S, Wiebe N, Birch D, Karmali S, Manns BJ, Hazel M, Sharma AM, Tonelli M.	2011	Yes	Journal Article
	Efficacy of statins for primary prevention in people at low cardiovascular risk: a meta-analysis.	Tonelli M, Lloyd A, Clement F, Conly J, Husereau D, Hemmelgarn B, Klarenbach S, McAlister FA, Wiebe N, Manns BJ; Alberta Kidney Disease Network.	2011	Yes	Journal Article
	Cost-effectiveness of the use of low- and high-potency statins in people at low cardiovascular risk.	Conly J, Clement F, Tonelli M, Hemmelgarn B, Klarenbach S, Lloyd A, McAlister FA, Husereau D, Wiebe N, Au F, Manns BJ; Alberta Kidney Disease Network.	2011	Yes	Journal Article
	Nocturnal hypoxia and loss of kidney function.	Ahmed SB, Ronksley PE, Hemmelgarn BR, Tsai WH, Manns BJ, Tonelli M, Klarenbach SW, Chin R, Clement FM, Hanly PJ.	2011	Yes	Journal Article
	Association between acute kidney injury and cardiovascular and renal outcomes after coronary angiograph.	James MT, Ghali WA, Knudtson ML, Ravani P, Tonelli M, Faris P, Pannu N, Manns BJ, Klarenbach SW, Hemmelgarn BR.	2011	Yes	Journal Article
Martin,Liam	A Transmission Laser Speckle Imaging Technique for Measuring Deep Tissue Blood Flow: An Example Application In Finger Joints	Dunn J.F., Forrester K.R., Martin L., Tulip J., Bray R.C.	2011	Yes	Journal Article

McLaughlin,Kevin

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Podcasting in Medical Education: Can We Turn This Toy into an Effective Learning Tool?	Zanussi L, Paget M, Tworek J, McLaughlin K.	2011	Yes	Journal Article
	Both preparing to teach and teaching may have independent positive effects on learning outcomes of peer-teachers.	Gregory A, Walker I, McLaughlin K, Peets AD.	2011	Yes	Journal Article
	A comparison of performance evaluations of students on longitudinal integrated clerkships and rotation-based clerkships.	McLaughlin K, Bates J, Konkin J, Woloschuk W, Suddards CA, Regehr G.	2011	Yes	Journal Article
	A description of the costs of living and standard criteria deceased donor kidney transplantation.	Barnieh L, Manns BJ, Klarenbach S, McLaughlin K, Yilmaz S, Hemmelgarn BR.	2011	Yes	Journal Article
	Comparing the use of global rating scale with checklists for the assessment of central venous catheterization skills using simulation.	Ma IW, Zalunardo N, Pachev G, Beran T, Brown M, Hatala R, McLaughlin K.	2011	Yes	Journal Article
	Barriers to living kidney donation identified by eligible candidates with end-stage renal disease.	Barnieh L, McLaughlin K, Manns BJ, Klarenbach S, Yilmaz S, Hemmelgarn BR.	2011	Yes	Journal Article
	Ego identity status of medical students in clerkship.	Beran TN, Hecker K, Coderre S, Wright B, Woloschuk W, McLaughlin K.	2011	Yes	Journal Article
	Simulation training improves diagnostic performance on a real patient with similar clinical findings.	Fraser K, Wright B, Girard L, Tworek J, Paget M, Welikovich L, McLaughlin K.	2011	Yes	Journal Article
	What Factors Affect Students' Overall Ratings of a Course?	Woloschuk W, Coderre S, Wright B, McLaughlin K.	2011	Yes	Journal Article
	Evaluation of an education intervention to increase the pursuit of living kidney donation: a randomized controlled trial.	Barnieh L, McLaughlin K, Manns BJ, Klarenbach S, Yilmaz S, Taub K, Hemmelgarn BR.	2011	Yes	Journal Article
	Does Training Learners on Simulators Benefit Real Patients?	Teteris E, Fraser K, Wright B, McLaughlin K.	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Debiasing the hidden curriculum: academic equality among medical specialties.	Woloschuk W, Wright B, McLaughlin K.	2011	Yes	Journal Article
	Comparison of student performance on internally prepared clerkship examinations and NBME subject	Veale P, Woloschuk W, Coderre S, McLaughlin K, Wright B.	2011	Yes	Journal Article
Meatherall,Bonnie					
	Myobacterium senegalense tissue infection in a child after fish tank exposure.	Talavikar, R., Carson J. Meatherall, B., Frdsit, D., Dhstms, M., Dhsnfto, V., Tyrell G., Kuhn S.	2011	Yes	Journal Article
Meddings,Jonathan					
	Safety and quality indicators in endoscopy: Canadian Association of Gastroenterology-endorsed guidelines.	David Armstrong, C. Dube, A. Barkun, R. Bridges, C. J. de Gara, R. Enns, R. Hollingworth, D. MacIntosh, M. Borgaonkar, S. Forget, G. Leontiadis, J. Meddings, P. Cotton, E. Kulpers, R. Valori, P. Sinclair, S. Daniels, A. Becher, D. Morgan	2011	Yes	Journal Article
	Mind the gaps: Confocal endomicroscopy showed increased density of small bowel epithelial gaps in inflammatory bowel disease.	Liu Julia J, Madsen Karen L, Boulanger Pierre, Dieleman Levinus A, Meddings Jon, and Fedorak Richard N.	2011	Yes	Journal Article
	Inflammation and epithelial cell injury in AIDS enteropathy: involvement of endoplasmic reticulum stress.	Maingat F, Halloran B, Acharjee S, van Marle G, Church D, Gill JM, Uwiera R, Cohen E, Meddings, JB, Madsen K, Power C.	2011	Yes	Journal Article
	The spectrum of gastrointestinal symptoms in Parkinson's disease	Salat-Foix D, Andrews CN, Meddings J, Suchowersky O.	2011	Yes	Journal Article
Mody,Christopher					
	Membrane CD14, but not soluble CD14 is used by exoenzyme S from P. aeruginosa to signal pro-inflammatory cytokine production.	Berenger, B.M., Hamill, J., Stack, D., Montgomery E., Huston, S.M., Timm-McCann, M., Epelman, S., Mody, C.H.	2011	Yes	Journal Article
	Immunotherapy in Gliomas: Limitations and potential of natural killer (NK) cells therapy	Ogbomo, H.,Cinatl, J. Jr., Mody, C.H.,Forsyth, P.A.	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	An Official American Thoracic Society Statement: Treatment of Fungal Infections in Adult Pulmonary and Critical Care Patients	Limper AH, Knox KS, Sarosi GA, Ampel NM, Bennett JE, Catanzaro A, Davies SF, Dismukes WE, Hage CA, Marr KA, Mody CH, Perfect JR, Stevens DA	2011	Yes	Journal Article
	Management of fungal lung disease in the immunocompromised	Islam, A., Mody, C.H.	2011	Yes	Journal Article
Mosher,Dianne	Early management of newly diagnosed rheumatoid arthritis by Canadian rheumatologists: a National, Multi-centre, Retrospective cohort.	Tavares R, Pope JE, Tremblay JL, Thorne C, Bykerk VP, Lazovskis J, Blocka KL, Bell MJ, Lacaille D, Hitchon CA, Fitzgerald AA, Fidler WK, Bookman AA, Henderson JM, Mosher DP, Sholter DE, Khraishi M, Haraoui B, Chen H, Li X, Laupacis A, Boire G, Tomlinson G, Bombardier C.	2011	Yes	Journal Article
	Canadian Rheumatology Association Recommendations for Pharmacological Management of Rheumatoid Arthritis with Traditional and Biologic Disease-modifying Antirheumatic Drugs.	Byker VP, Akhavan P, Hazlewood GS, Schieir O, Dooley A, Haraoui B, Khraishi M, Le Clercq SA, Legare J, Mosher DP, Pencharz J, Pope JE, Thomson J, Thorne C, Zummer M, Bombardier C.	2011	Yes	Journal Article
	Relative Urgency for Referral From Primary Care to Rheumatologists: The Priority Referral Score	A Fitzgerald, C De Coster, S McMillan, R Naden, F Armstrong, A Barber, L Cuning, B Conner-Spady, G Hawker, D Lacaille, C Lane, D Mosher, J Rankin, D Sholter, T Noseworthy	2011	Yes	Journal Article
Muruve,Daniel	The inflammasomes in kidney disease	Anders HJ, Muruve DA	2011	Yes	Journal Article
	Plasmodium falciparum-induced CD36 clustering rapidly strengthens cytoadherence via p130CAS-mediated actin cytoskeletal rearrangement	Davis SP, Amrein M, Gillrie MR, Lee K, Muruve DA, Ho M	2011	Yes	Journal Article
	Neutrophil elastase acts as a biased agonist for proteinase-activated receptor-2 (PAR2)	Ramachandran R, Mihara K, Chung H, Renaux B, Lau CS, Muruve DA, DeFea KA, Bouvier M, Hollenberg MD	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Nucleotide-Binding Oligomerization Domain-Like Receptors and Inflammasomes in the Pathogenesis of Non-Microbial Inflammation and Diseases	Mason DR, Beck PL, Muruve DA	2011	Yes	Journal Article
	Increased urinary protein excretion in the 'normal range' is associated with increased renin angiotensin system activity	Nicholl DD, Hemmelgarn BR, Turin TC, Macrae JM, Muruve DA, Sola DY, Ahmed SB	2011	Yes	Journal Article
	Anti-GBM glomerulonephritis involves IL-1 but is dependent of NLRP3/ASC inflammasome-mediated activation of caspase - 1	Lichtnekert J, Kulkarni OP, Mulay SR, Rupanagudi KV, Ryu M, Allam R, Vielhauer V, Muruve D, Lindenmeyer MT, Cohen CD, Anders HJ	2011	Yes	Journal Article
	The p53 tumor suppressor is stabilized by inhibitor of growth (ING1) by blocking polyubiquitination	Thalappilly S, Feng X, Pastyryeva S, Suzuki K, Muruve D, Larocque D, Richard S, Truss M, von Deimling A, Riabowol K, Tallen G,	2011	Yes	Journal Article
	Alum interaction with dendritic cell membrane lipids is essential for its adjuvanticity	Flach TL, Ng G, Hari A, Desrosiers MD, Zhang P, Ward SM, Seamone ME, Vilaysane A, Mucsi AD, Fong Y, Prenner E, Ling CC, Tschopp J, Muruve DA, Amrein MW, Shi Y	2011	Yes	Journal Article
	Morphometric and biological characterization of biofilm in tunneled cuffed hemodialysis catheters	Jones SM, Hemmelgarn B, Muruve D, MacRae JM	2011	Yes	Journal Article
	The genome of self-complimentary AAV vectors increases TLR9-dependent innate immune responses in the liver	Martino AT, Suzuki M, Markusic DM, Zolotukhin I, Ryals RC, Moghimi B, Ertl HC, Muruve DA, Lee B, Herzog RW	2011	Yes	Journal Article
Myers,Robert	Amoebic liver abscess in the United States: A population-based study of incidence, temporal trends, and mortality	Congly S, Shaheen AA, Meddings L, Kaplan GG, Myers RP	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	The risk of comorbidities on postoperative outcomes in inflammatory bowel disease patients	Kaplan GG, Hubbard J, Panaccione R, Shaheen AA, Quan H, Nguyen GC, Dixon E, Ghosh S, Myers RP	2011	Yes	Journal Article
	Elective resection of colon cancer by high-volume surgeons is associated with decreased morbidity and mortality	Drolet S, Maclean AR, Myers RP, Shaheen AA, Dixon E, Buie WD	2011	Yes	Journal Article
	Biomarkers of liver fibrosis: What lies beneath the receiver operator characteristic curve?	Guha IN, Myers RP, Patel K, Talwalkar JA*	2011	Yes	Journal Article
	Outcomes of Chronic Hepatitis C Therapy in Patients Treated in Community Versus Academic Centres in Canada: Final Results of APPROACH (A Prospective study of Peginterferon alfa-2a and Ribavirin at Academic and Community Centres in Canada)	Myers RP, Cooper C, Sherman M, Lalonde R, Witt-Sullivan H, Elkashab M, Harris P, Balshaw R, Usaty C, Marotta PJ	2011	Yes	Journal Article
	Efficacy and safety of entecavir versus adefovir in chronic hepatitis B patients with hepatic decompensation: A randomized open-label study	Liaw YF, Raptopoulou-Gigi M, Cheinquer H, Sarin SK, Tanwandee T, Leung N, Peng CY, Myers RP, et al	2011	Yes	Journal Article
	The incidence of primary sclerosing cholangitis: A systematic review and meta-analysis	Molodecky N, Kareemi H, Parab R, Barkema HW, Quan H, Myers RP, Kaplan GG	2011	Yes	Journal Article
	Autoantibodies to GW bodies and other autoantigens in primary biliary cirrhosis	Stinton LM, Swain M, Myers RP, Shaheen AA, Fritzler MJ	2011	Yes	Journal Article
	Hepatitis B education: A failing grade (Editorial)	Burak KW, Coffin CS, Myers RP	2011	Yes	Journal Article
	Validity of administrative data for the diagnosis of primary sclerosing cholangitis (PSC): A population-based study	Molodecky N, Myers RP, Barkema HW, Quan H, Kaplan GG	2011	Yes	Journal Article
	Lessons learned from liver transplantation with the Canadian First Nations (Editorial)	Montano-Loza AJ, Myers RP, Mason AL	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Multidisciplinary Canadian consensus recommendations for the management and treatment of hepatocellular carcinoma	Sherman M, Burak K, Maroun J, Metrakos P, Knox JJ, Myers RP, Guindi M, Porter G, Kachura JR, Rasuli P, Gill S, Ghali P, Chaudhury P, Siddiqui J, Valenti D, Weiss A, Wong R	2011	Yes	Journal Article
Owen,Carolyn	Durable event-free survival following autologous stem cell transplant for relapsed or refractory follicular lymphoma: positive impact of recent rituximab exposure and low-risk Follicular Lymphoma International Prognostic Index score	Peters AC, Duan Q, Russell JA, Duggan P, Owen C, Stewart DA	2011	Yes	Journal Article
	Upfront Thiotepa, Busulfan, Cyclophosphamide and Autologous Stem Cell Transplantation for Primary CNS Lymphoma: A Single Centre Experience.	Alimohamed N, Daly A, Owen C, Duggan P, Stewart DA.	2011	Yes	Journal Article
Panaccione,Remo	invasive potential of gut mucosa derived fusobacterium nucleatum positively correlates with IBD Status of the host.	Strauss J, Kaplan GG, Beck PL, Rioux K, Panaccione R, Deviney R, Lynch T, Allen-Vercoe E.	2011	Yes	Journal Article
Parkins,Michael	Newer antibacterial agents and their potential role in cystic fibrosis pulmonary exacerbation management--authors' response.	Parkins M.D., Elborn J.S.	2011	Yes	Journal Article
	Population structure and characterization of viridans group streptococci (VGS) including Streptococcus pneumoniae isolated from adult patients with cystic fibrosis (CF).	Maeda Y., Elborn J.S., Parkins M.D., Reihill J., Goldsmith C.E., Coulter W.A., Mason C., Millar B.C., Dooley J.S., Lowery C.J., Ennis M., Rendall J.C., Moore J.E.	2011	Yes	Journal Article
Parkins,Vicky	Changing epidemiology and clinical issues arising in an ageing cystic fibrosis population.	Parkins MD, Parkins VM, Rendall JC, Elborn S.	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
Pendharkar,Sachin	Continuous Positive Airway Pressure (CPAP) Therapy Increases Exercise Tolerance in Obese Subjects with Obstructive Sleep Apnea	S.R. Pendharkar, W.H. Tsai, N. Eves, G.T. Ford, W. Davidson	2011	Yes	Journal Article
	Granulomatous Pneumocystis Jiroveci Pneumonia Associated with Immune Reconstituted HIV	Sabur NF, Kelly MM, Gill MJ, Ainslie M, Pendharkar SR	2011	Yes	Journal Article
Peters,Anthea	Event-free survival following autologous stem-cell transplantation for relapsed or refractory follicular lymphoma is commonly durable, and is associated with recent rituximab exposure and low risk FLPI score.	Peters AC, Duan Q, Russell JA, Duggan P, Owen C, Stewart DA	2011	Yes	Journal Article
Pineo,Graham	Disorders of the Pulmonary Circulation, Editorial	Pineo GF, Hull RD	2011	Yes	Journal Article
	Individual patient data meta-analysis of enoxaparin versus unfractionated heparin for venous thromboembolism prevention in medical patients	Laporte S, Liotier J, Bertolli L, Kleber FX, Pineo GF, Chapelle C, Moulin N, Mismetti P	2011	Yes	Journal Article
	Individual patient data meta-analysis of enoxaparin versus unfractionated heparin for venous thromboembolism prevention in medical patients	Laporte S, Liotier J, Bertolli L, Kleber FX, Pineo GF, Chapelle C, Moulin N, Mismetti, P	2011	Yes	Journal Article
	Prevention of venous thromboembolic disease in surgical patients; Prevention of venous thrombotic disease in medical patients	Pineo GF	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Economic impact of enoxaparin versus unfractionated heparin for venous thromboembolism prophylaxis in patients with acute ischaemic stroke: a hospital perspective of the PREVAIL Trial	Pineo GF, Lin J, Stern L, Subrahmanian T, Annemans L	2011	Yes	Journal Article
Pollak,Paul Timothy					
	Do patients being switched between differing nifedipine oral osmotic delivery systems require confirmation of blood pressure effects?	Pollak PT, Herman RJ, Zarnke KB.	2011	Yes	Journal Article
	A liquid chromatography-mass spectrometry method for nicotine and cotinine; utility in screening tobacco exposure in patients taking amiodarone.	Gabr RQ, Elsherbiny ME, Somayaji V, Pollak PT, Brocks DR.	2011	Yes	Journal Article
	Falling between the cracks: A case of Amiodarone toxicity.	Mackenzie CA, Syed J, Pollak PT, Koren G.	2011	Yes	Journal Article
	Canadian cardiovascular society atrial fibrillation guidelines 2010: etiology and initial investigations.	Healey JS, Parkash R, Pollak T, Tsang T, Dorian P.	2011	Yes	Journal Article
	Differences in nocturnal dipping recorded by ambulatory blood pressure monitoring in healthy subjects switched between differing nifedipine osmotic delivery formulations. Hypertension Canada. Oral Presentation. Proceedings of Hypertension Canada 2011	Pollak PT, Herman RJ, Zarnke KB.	2011	Yes	Journal Article
Poon,Man-Chiu					
	Age at first joint bleed and bleeding severity in boys with severe hemophilia A: Canadian Hemophilia Primary Prophylaxis Study.	Hang MX, Blanchette VS, Pullenayegum E, McLimont M, Feldman BM and the Canadian Primary Prophylaxis study Group (including Poon M-C).	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Low dose secondary prophylaxis reduces joint bleeding in severe and moderate hemophilia children: a pilot study in China.	Wu R, Luke K-H, Poon M-C, Wu X, Zhang N, Zhao L, Su Y, Zhang J.	2011	Yes	Journal Article
Powell,Colin	Factors related to functional independence in females with Parkinson's Disease	Roland KP, Jakobi JM, Powell C & Jones GR	2011	Yes	Journal Article
Quinn,Robert	Validation of a case definition to define chronic dialysis using outpatient administrative data	Clement FM, James MT, Chin R, Klarenbach SW, Manns BJ, Quinn RR, Ravani P, Tonelli M, Hemmelgarn BR	2011	Yes	Journal Article
	Gender, renal function, and outcomes on the liver transplant waiting list: assessment of revised MELD including estimated glomerular filtration rate.	Myers RP, Shaheen AA, Aspinall AI, Quinn RR, Burak KW.	2011	Yes	Journal Article
	Using proteinuria and estimated glomerular filtration rate to classify risk in patients with chronic kidney disease: a cohort study.	Tonelli M, Muntner P, Lloyd A, Manns B, James M, Klarenbach S, Quinn RR, Wiebe N, Hemmelgarn B	2011	Yes	Journal Article
	Validity of administrative database coding for kidney disease: a systematic review	Vlasschaert ME, Bejaimal SA, Hackam DG, Quinn R, Cuerden MS, Oliver MJ, Iansavichus A, Sultan N, Mills A, Garg AX	2011	Yes	Journal Article
	Choosing peritoneal dialysis reduces the risk of invasive access interventions	Oliver MJ, Verrelli M, Zacharias JM, Blake PG, Garg AX, Johnson JF, Pandeya S, Perl J, Kiss AJ, and Quinn RR	2011	Yes	Journal Article
	Early dialysis of no benefit to the patient or the health care system	Manns BJ & Quinn RR	2011	Yes	Journal Article
	The impact of treatment modality on infection-related hospitalization rates in peritoneal dialysis and hemodialysis patients.	Williams VR, Quinn R, Callery S, Kiss A, Oliver MJ.	2011	Yes	Journal Article
	Selection Bias Explains Apparent Differential Mortality between Dialysis Modalities	Quinn RR, Hux JE, Austin P, Oliver MJ, Tonelli M, Laupacis A	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Validating a Case Definition for Chronic Kidney Disease using Administrative Data	Ronksley PE, Tonelli M, Quan H, Manns BJ, James MT, Clement FM, Samuel S, Quinn RR, Ravani P, Brar SS, Hemmelgarn BR	2011	Yes	Journal Article
	Predicting the Risk of 1-Year Mortality in Incident Dialysis Patients: Accounting for Case-Mix Severity in Studies Using Administrative Data	Quinn RR, Laupacis A, Hux JE, Oliver MJ, Austin PC	2011	Yes	Journal Article
	Patient and physician predictors of peritoneal dialysis technique failure: a population based, retrospective cohort study.	Chidambaram M, Bargman JM, Quinn RR, Austin PC, Hux JE, Laupacis A.	2011	Yes	Journal Article
Rabi,Doreen Marie					
	Hypoglycemic agents in the management of type 2 diabetes mellitus.	Ho J, Leung AKC, Rabi, D.	2011	Yes	Journal Article
	Increasing incidence and prevalence of the inflammatory bowel diseases with time, based on systematic review.	Molodecky NA, Soon IS, Rabi DM, Ghali WA, Ferris M, Chernoff G, Benchimol EI, Panaccione R, Ghosh S, Barkema HW, Kaplan GG.	2011	Yes	Journal Article
	The 2011 Canadian Hypertension Education Program recommendations for the management of hypertension: blood pressure measurement, diagnosis, assessment of risk, and therapy.	Rabi DM, Daskalopoulou SS, Padwal RS, Khan NA, Grover SA, Hackam DG, Myers MG, McKay DW, Quinn RR, Hemmelgarn BR, Cloutier L, Bolli P, Hill MD, Wilson T, Penner B, Burgess E, Lamarre-Cliché M, McLean D, Schiffrin EL, Honos G, Mann K, Tremblay G, Milot A, Chockalingam A, Rabkin SW, Dawes M, Touyz RM, Burns KD, Ruzicka M, Campbell NR, Vallée M, Prasad GV, Lebel M, Campbell TS, Lindsay MP, Herman RJ, Larochelle P, Feldman RD, Arnold JM, Moe GW, Howlett JG, Trudeau L, Bacon SL, Petrella RJ, Lewanczuk R, Stone JA, Drouin D, Boulanger JM, Sharma M, Hamet P, Fodor G, Dresser GK, Carruthers SG, Pylypchuk G, Gilbert RE, Leiter LA, Jones C, Ogilvie RI, Woo V, McFarlane PA, Hegele RA, Poirier L, Tobe SW; Canadian Hypertension Education Program.	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Aspirin effect on the incidence of major adverse cardiovascular events in patients with diabetes mellitus: a systematic review and meta-analysis.	Butalia S, Leung AA, Ghali WA, Rabi DM.	2011	Yes	Journal Article
	Long-term effects of intensive glucose lowering on cardiovascular outcomes.	ACCORD Study Group, Gerstein HC, Miller ME, Genuth S, Ismail-Beigi F, Buse JB, Goff DC Jr, Probstfield JL, Cushman WC, Ginsberg HN, Bigger JT, Grimm RH Jr, Byington RP, Rosenberg YD, Friedewald WT.	2011	Yes	Journal Article
	Outcomes associated with bilateral internal thoracic artery grafting: the importance of age.	Kieser TM, Lewin AM, Graham MM, Martin BJ, Galbraith PD, Rabi DM, Norris CM, Faris PD, Knudtson ML, Ghali WA; APPROACH Investigators.	2011	Yes	Journal Article
Rabin,Harvey	The cultured microbiome of cystic fibrosis airways.	Sibley, CD, ME Grinwis, TR Field, CS Eshaghurshan, MM Faria, SE Dowd, MD Parkins, HR Rabin and MG Surette	2011	Yes	Journal Article
	Stenotrophomonas maltophilia in cystic fibrosis; Guilty or innocent.	Colin AA and Rabin HR	2011	Yes	Journal Article
Raman	The potential role of prebiotic fiber for treatment and management of nonalcoholic fatty liver disease and associated obesity and insulin resistance	Parnell JA, Raman M, Rioux KP, Reimer RA	2011	Yes	Journal Article
	Vitamin D and Gastrointestinal Diseases: Inflammatory Bowel Disease and Colorectal Cancer	Raman M, Milestone A, Walters J, Hart A, Ghosh S	2011	Yes	Journal Article
	Hyperglycemia in Hospitalized Patients Receiving Parenteral Nutrition is associated With Increased Morbidity and Mortality: A Review.	Kumar P, Crotty P, Raman M	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Adult-onset malignancy-associated Henoch Schonlein Purpura	Flynn A, du Prey B, Al Ardadi H, Raman M, Lemaire J	2011	Yes	Journal Article
	Prevalence and Mechanisms of Malnutrition in Patients with Advanced Liver Disease, and Nutrition Strategies	Cheung K, Lee SS, Raman M	2011	Yes	Journal Article
	Moving into medical practice in a new community: the transition experience	Lockyer J, Wycliffe-Jones K, Raman M, Sandhu A, Fidler H	2011	Yes	Journal Article
	Evaluation of Colonoscopy Skills: How Well are We Doing?	Mohamed R, Shaheen AA, Raman M	2011	Yes	Journal Article
Ravani,Pietro	Short-term effects of rituximab in children with steroid- and calcineurin-dependent nephrotic syndrome: a randomized controlled trial.	Ravani P, Magnasco A, Edefonti A, Murer L, Rossi R, Ghio L, Benetti E, Scozzola F, Pasini A, Dallera N, Sica F, Belingheri M, Scolari F, Ghiggeri GM.	2011	Yes	Journal Article
	Validation of a Case Definition to Define Chronic Dialysis Using Outpatient Administrative Data	Ronksley PE, Tonelli M, Quan H, Manns BJ, James MT, Clement FM, Samuel S, Quinn RR, Ravani P, Brar SS, Hemmelgarn BR, Alberta Kidney Disease Network	2011	Yes	Journal Article
	New insights into membranous glomerulonephritis: from bench to bedside.	Murtas C, Ravani P, Ghiggeri GM:	2011	Yes	Journal Article
	Genome-wide Association Study Identifies Susceptibility Loci for IgA Nephropathy	Gharavi AG, Kiryluk K, Choi M, Li Y, Hou P, Xie J, Sanna-Cherchi S, Men, CJ, Julian BA, Wyatt RJ, Novak J, He JC, Wang H, Lv J, Zhu L, Wang W, Wang Z, Yasuno K, Gunel M, Mane S, Umlauf S, Tikhonova I, Beerman I, Savoldi S, Magistroni R, Ghiggeri GM, Bodria M, Lugani F, Ravani P, Ponticelli C, Allegri L, Boscutti G, Frasca G, Amore A, Peruzzi L, Coppo R, Izzi C, Viola BF, Prati E, Salvadori M, Mignani R, Gesualdo L., Bertinetto F, Mesiano P, Amoroso A, Scolari F, Chen N, Zhang H, Lifton RP	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Validation of a Case Definition to Define Chronic Dialysis Using Outpatient Administrative Data	Clement FM, James MT, Chin R, Klarenbach SW, Manns BJ, Quinn RR, Ravani P, Tonelli M, Hemmelgarn BR, Alberta Kidney Disease Network	2011	Yes	Journal Article
	Direct characterization of target podocyte antigens and auto-antibodies in human membranous glomerulonephritis: Alfa-enolase and borderline antigens.	Bruschi M, Carnevali ML, Murtas C, Candiano G, Petretto A, Prunotto M, Gatti R, Argentiero L, Magistroni R, Garibotto G, Scolari F, Ravani P, Gesualdo L, Allegri L, Ghiggeri GM.	2011	Yes	Journal Article
	Effects of comorbid and demographic factors on dialysis modality choice and related patient survival in Europe	van de Luijngaarden MW, Noordzij M, Stel VS, Ravani P, Jarraya F, Collart F, Schon S, Leivestad T, Puttinger H, Wanner C, Jager KJ	2011	Yes	Journal Article
	Morphometric and Biological Characterization of Biofilm in Tunneled Hemodialysis Catheters	Jones SM, Ravani P, Hemmelgarn BR, Muruve D, MacRae JM	2011	Yes	Journal Article
	Associations Between Acute Kidney Injury and Cardiovascular and Renal Outcomes After Coronary Angiography. Circulation.	James MT, Ghali WA, Knudtson ML, Ravani P, Tonelli M, Faris P, Pannu N, Manns BJ, Klarenbach SW, Hemmelgarn BR	2011	Yes	Journal Article
	Short-term effects of Rituximab in children with steroid and calcineurin dependent nephrotic syndrome: a randomized controlled trial	Ravani P, Magnasco A, Edefonti A, Murer L, Rossi R, Ghio L, Benetti E, Scozzola F, Pasini A, Dalleria N, Sica F, Belingheri M, Scolari F and Ghiggeri GM	2011	Yes	Journal Article
	Cardiovascular and Noncardiovascular Mortality Among Men and Women Starting Dialysis	Carrero JJ, de Jager DJ, Verduijn M, Ravani P, De Meester J, Heaf JG, Finne P, Hoitsma AJ, Pascual J, Jarraya F, Reisaeter AV, Collart F, Dekker FW, Jager KJ.	2011	Yes	Journal Article
Read, Ron	Longitudinal characterization of antimicrobial resistance genes in feces shed from cattle fed different subtherapeutic antibiotics	TW Alexander, JL Yanke, T Reuter, E Topp, RR Read, BL Selinger, TA McAlister	2011	Yes	Journal Article
	Pregnancy and neonatal outcomes of women with reactive syphilis serology in Alberta, 2002 to 2006	SC Caddy, BE Lee, K Sutherland, JL Robinson, SS Plitt, R Read, AE Singh	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Genetic Characterization and Antimicrobial Susceptibility of <i>Mannheimia haemolytica</i> Isolated From the Nasopharynx of Feedlot Cattle	CL Klima, TW Alexander, RR Read, SP Gow, CW Booker, S Hannon, C Sheedy, TA McAllister, LB Sellinger	2011	Yes	Journal Article
Rioux, Kevin					
	Association of <i>Mycobacterium avium</i> subspecies paratuberculosis with Crohn's Disease in Pediatric Patients.	Lee A, Griffiths TA, Parab RS, King RK, Dubinsky MC, Urbanski SJ, Wrobel I, Rioux KP.	2011	Yes	Journal Article
	Optimizing clinical use of mesalazine (5-aminosalicylic acid) in inflammatory bowel disease.	Williams C, Panaccione R, Ghosh S, Rioux KP.	2011	Yes	Journal Article
	The potential role of prebiotic fibers in treatment of non-alcoholic fatty liver disease.	Parnel JA, Rioux KP, Raman M, Reimer RA.	2011	Yes	Journal Article
	Invasive potential of gut mucosa-derived <i>Fusobacterium nucleatum</i> positively correlates with IBD status of the host	Strauss J, Kaplan G, Rioux KP, Beck P, Panaccione R, Devinney R, Lynch T, Allen-Vercoe E.	2011	Yes	Journal Article
	Mesalamine (5-aminosalicylic acid) alters fecal bacterial profiles in diarrhea-predominant irritable bowel syndrome (IBS-D).	Andrews CN, Griffiths TA, Kaufman J, Parab RS, Cellars L, Chapman K, Vergnolle N, Surette MG, Rioux KP.	2011	Yes	Journal Article
Robertson, Lynne					
	"Basal Cell Carcinoma in Type 2 Segmental Darier's Disease"	Robertson L., Sauder M.B.	2011	Yes	Journal Article
Roman, Michael					
	Noninvasive Assessment Of Normality Of VD/VT In Clinical Cardiopulmonary Exercise Testing Utilizing Incremental Cycle Ergometry	Michael A. Roman, M.D., James D. Casaburi M.S., Janos Porszasz M.D., Ph.D. and Richard Casaburi, Ph.D., M.D	2011	Yes	Journal Article
Rostom, Alaa					

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Crohn's Disease Exacerbation Induced by <i>Edwardsiella tarda</i> Gastroenteritis.	Aryaa A, Rostom A, Dongc W-F, Flynn A.	2011	Yes	Journal Article
Sargious,Peter	How a hobby can shape cognition: visual word recognition in competitive Scrabble players.	Hargreaves IS, Pexman P, Zdrzilova L, Sargious P	2011	Yes	Journal Article
Savoie,Mary Lynn	Influence of comorbidities of transplant outcomes in patients aged 50 years or more after myeloablative conditioning incorporating fludarabine, BU and ATG,	El Kourashy S, Williamson, T, Chaudhry MA, Savoie ML, Turner AR, Larratt L, Storek K, Bahlis NJ, Brown CB, Yang M, Quinlan D, Geddes M, Zacarias N, Daly A, Duggan P, Stewart DA, Russell JA	2011	Yes	Journal Article
Schaefer,Jeffrey	Exploring physicians' expectations and actual experiences of using a portable biofeedback device to manage stress: a qualitative study.	de Grood J, Wallace JE, Schaefer JP, Lewin A, Lemaire JB	2011	Yes	Journal Article
	The effect of a biofeedback-based stress management tool on physician stress: a randomized controlled clinical trial.	Lemaire JB, Wallace JE, Lewin AM, de Grood J, Schaefer JP.	2011	Yes	Journal Article
Schmaltz,Heidi	Eye disease and mobility limitations in older adults	Popescu ML, Boisjoly H, Schmaltz H, Kergoat M-J, Rousseau J, Mogahdaszadeh S, Djafari F, and Freeman EE	2011	Yes	Journal Article
	Operationalizing frailty among older residents of assisted living facilities.	Freiheit E, Hogan D, Strain L, Schmaltz H, Patten S, Eliasziw M, Maxwell C.,	2011	Yes	Journal Article
	Translation of evidence into a self-management tool for use by women with urinary	Holroyd-Leduc JM, Straus S, Thorpe K, Davis DA, Schmaltz H, Tannenbaum C.	2011	Yes	Journal Article
Seow,Cynthia	Predictors of Response to Anti-TNF Therapy in Patients with Crohn's Disease.	Jones J, Kenyon C, Seow CH.	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
Shafey,Mona	Double high-dose therapy with dose-intensive cyclophosphamide, etoposide, cisplatin (DICEP) followed by high-dose melphalan and autologous stem cell transplantation for relapsed/refractory hodgkin lymphoma.	Shafey M, Duan Q, Russell J, Duggan P, Balogh A, Stewart DA.	2011	Yes	Journal Article
	Development and Validation of a Test Dose Strategy for Once-Daily i.v. Busulfan: Importance of Fixed Infusion Rate Dosing.	Kangarloo SB, Naveed F, Ng ES, Chaudhry MA, Wu J, Bahlis NJ, Brown CB, Daly A, Duggan P, Geddes M, Quinlan D, Savoie ML, Shafey M, Stewart DA, Storek J, Yang M, Zacarias N, Yue P, Magliocco AM, Russell JA.	2011	Yes	Journal Article
Shaffer,Eldon	Pneumatosis coli associated with pseudomembranous colitis in a patient following colonic surgery	Bailey J, Shaffer EA	2011	Yes	Journal Article
	The rising incidence of eosinophilic esophagitis is associated with increasing biopsy rates: a population based study.	Syed A, Andrews CN, Shaffer E, Urbanski SJ, Beck P, Storr M.	2011	Yes	Journal Article
Sigal,Ronald	Predictors of physical activity in adults with type 2 diabetes.	Plotnikoff RC, Trinh L, Courneya KS, Karunamuni N, Sigal RJ.	2011	Yes	Journal Article
	Age and androgen deprivation therapy on exercise outcomes in men with prostate cancer.	Alberga AS, Segal RJ, Reid RD, Scott CS, Sigal RJ, Khandwala F, Jaffey J, Wells GA, Kenny GP.	2011	Yes	Journal Article
	Comparison of strength development with resistance training and combined exercise training in type 2 diabetes.	Larose J, Sigal RJ, Khandwala F, Kenny GP on behalf of the DARE trial investigators.	2011	Yes	Journal Article
	A moderated mediation of motivation on physical activity in the context of the Physical Activity Counseling randomized control trial.	Fortier MS, Wiseman E, Sweet S, O'Sullivan T, Blanchard B, Sigal R, Hogg WE.	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Self-determination and exercise stage progression: Results from the Diabetes Aerobic and Resistance Exercise Trial.	Fortier, M.S., Sweet, S., Tulloch, H., Blanchard, C., Sigal, R., Kenny, G. & Reid, R.	2011	Yes	Journal Article
	Overweight and Obese Teenagers: Why is Adolescence a Critical Period?	Alberga A, Sigal RJ, Goldfield G, Prud'homme D, Kenny GP.	2011	Yes	Journal Article
	A Review of Resistance Exercise Training in Obese Adolescents.	Alberga AS, Sigal RJ, Kenny GP.	2011	Yes	Journal Article
	Motivational interviewing to improve weight loss in overweight and/or obese patients: a systematic review and meta-analysis of randomized controlled trials.	Armstrong MJ, Mottershead TA, Ronksley PE, Sigal RJ, Campbell TS, Hemmelgarn BR.	2011	Yes	Journal Article
	Heat health planning: the importance of social and community factors.	Yardley JE, Sigal RJ, Kenny GP.	2011	Yes	Journal Article
	Comparison of strength development with resistance training and combined exercise training in type 2 diabetes.	Larose J, Sigal RJ, Khandwala F, Kenny GP.	2011	Yes	Journal Article
	Facilitators, Barriers, and Changes in a Randomized Exercise Trial for Obese Youth: A Qualitative Inquiry.	Peeters C, Marchand H, Tulloch H, Sigal R, Goldfield GS, Hadjiyannakis S, Kenny G. Perceived	2011	Yes	Journal Article
	Video game playing is independently associated with blood pressure and lipids in overweight and obese adolescents.	Goldfield GS, Kenny GP, Hadjiyannakis S, Phillips P, Alberga AS, Saunders TJ, Tremblay MS, Malcolm J, Prud'homme D, Gougeon R, Sigal RJ.	2011	Yes	Journal Article
	Prescribing exercise for individuals with type 2 diabetes: recommendations and precautions.	Colberg SR, Sigal RJ.	2011	Yes	Journal Article
	Integrating a Physical Activity Counselor into the Primary Health Care Team.	Fortier MS, Hogg W, O'Sullivan TL, Blanchard C, Sigal RJ, Reid RD, Boulay P, Doucet E, Bisson E.	2011	Yes	Journal Article
	Associations between physical fitness and haemoglobin A1c in type 2 diabetes mellitus. Diabetologia.	Larose J, Sigal RJ, Khandwala F, Prud'homme D, Boulé NG, Kenny GP on behalf of the DARE trial investigators.	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
Silvius,James	Pathways to Diagnosis: Exploring the experiences of problem recognition and obtaining a dementia diagnosis among Anglo-Canadians	Leung K, Finlay J, Persaud M, Pimlott N, Cohen C, Koehn S, Dalziel W, Emerson V, Silvius J, Garcia L, Drummond N	2011	Yes	Journal Article
Sivakumar,Chandrasek	The ASPIRE approach for TIA risk stratification	SB Coutts, PN Sylaja, YB Choi, A Al Khatami, C.Sivakumar, TJ Jeerakathil, PN Sarma, MD Hill for the Calgary Stroke Program.	2011	Yes	Journal Article
Stather,David	Endobronchial Ultrasound Knowledge, Implementation, and Perceived Barriers After Attendance at a Dedicated Hands-on Course.	Sabur NF, Stather DR, MacEachern P, Chee A, Tremblay A.	2011	Yes	Journal Article
	Effect of Repeated Administration of Low- Dose Silver Nitrate for Pleurodesis in a Rabbit Model	Alain Tremblay, David R Stather, Margaret M Kelly	2011	Yes	Journal Article
	Validation and evaluation of an endobronchial ultrasound simulator.	Stather DR, MacEachern P, Rimmer K, Tremblay A.	2011	Yes	Journal Article
	Assessment and Learning Curve Evaluation of Endobronchial Ultrasound Skills Following Simulation and Clinical Training	Stather DR, MacEachern P, Rimmer K, Tremblay A.	2011	Yes	Journal Article
	Bronchoscopy simulation for flexible bronchoscopy and endobronchial ultrasound:	Stather DR, Lamb C, Tremblay A.	2011	Yes	Journal Article
	Exercise capacity, lung function, and quality of life after interventional bronchoscopy.	Oviat, Lee, Stather DR, Michaud G, MacEachern P, Tremblay A.	2011	Yes	Journal Article
Storek,Jan					

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Heritable GATA2 Mutations Associated with Familial Myelodysplastic Syndrome and Acute Myeloid Leukemia	Hahn CN, Chong CE, Carmichael CL, Wilkins EJ, Brautigam PJ, Li XC, Stankovic M, Lin M, Carmagnac A, Lee YK, Kok CH, Gagliardi L, Friend KL, Ekert PG, Butcher CM, Brown AL, Lewis ID, To LB, Timms AE, Storek J, Moore S, Altree M, Escher R, Bardy PG, Suthers GK, D'Andrea RJ, Horwitz MS, Scott HS	2011	Yes	Journal Article
	Allergen-specific B cell quantity is similar but allergen-specific T cell quantity is higher in allergic compared to nonallergic individuals	Khan FM, Ueno-Yamanouchi A, Serushago B, Bowen T, Lu C, Luider J, Storek J	2011	Yes	Journal Article
	High incidence of posttransplant lymphoproliferative disorder after antithymocyte globulin-based conditioning and ineffective prediction by day 28 Epstein-Barr virus-specific T lymphocyte count	Hoegh-Petersen M, Goodyear D, Geddes MN, Liu S, Ugarte-Torres A, Liu Y, Walker JT, Fonseca K, Daly A, Duggan P, Stewart D, Russell JA, Storek J	2011	Yes	Journal Article
	An International Comparison of Current Strategies to Prevent Herpesvirus and Fungal Infections in Hematopoietic Cell Transplant Recipients.	Pollack M, Heugel J, Xie H, Leisenring W, Storek J, Young JA, Kukreja M, Gress R, Tomblyn M, Boeckh M	2011	Yes	Journal Article
	Influence of comorbidities on transplant outcomes in patients aged 50 years or more after myeloablative conditioning incorporating fludarabine, busulfan and antithymocyte globulin.	Elkourashy S, Williamson T, Chaudhry A, Savoie L, Turner R, Larratt L, Storek J, Bahlis N, Brown CB, Yang M, Quinlan D, Geddes M, Zacarias N, Daly A, Duggan P, Stewart DA, Russell JA:	2011	Yes	Journal Article
	Donor serostatus impacts cytomegalovirus-specific immunity, cytomegaloviral disease incidence and survival in seropositive hematopoietic cell transplant recipients.	Ugarte-Torres A, Hoegh-Petersen M, Liu Y, Zhou F, Williamson TS, Quinlan D, Sy S, Roa L, Khan FM, Fonseca K, Russell JA, Storek J:	2011	Yes	Journal Article

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	The addition of 400 cGy total body irradiation to a regimen incorporating once-daily intravenous busulfan, fludarabine and Thymoglobulin reduces relapse without affecting nonrelapse mortality in acute myelogenous leukemia.	Russell JA, Irish W, Balogh A, Chaudhry A, Savoie ML, Turner AR, Larratt L, Storek J, Bahlis NJ, Brown CB, Quinlan D, Geddes M, Zacarias N, Daly A, Duggan P, Stewart DA:	2011	Yes	Journal Article
	Cytomegalovirus viral load and virus-specific immune reconstitution after peripheral blood stem cell versus bone marrow transplantation.	Guerrero A, Riddell SR, Storek J, Stevens-Ayers T, Storer B, Zaia JA, Forman S, Negrin RS, Chauncey T, Bensinger W, Boeckh M	2011	Yes	Journal Article
	Development and validation of a test dose strategy for once daily i.v. busulfan: Importance of fixed infusion rate dosing	Kangaroo SB, Naveed F, Ng ESM, Chaudhry MA, Wu J, Bahlis NJ, Brown CB, Daly A, Duggan P, Geddes M, Quinlan D, Savoie ML, Shavey M, Stewart DA, Storek J, Yang M, Zacarias N, Yue P, Magliocco MM, Russell JA	2011	Yes	Journal Article
Swain, Mark Gordon					
	Hepatitis C treatment complicated by rheumatoid arthritis.	Borman M, Swain M	2011	Yes	Journal Article
	Role of NKT cells in autoimmune liver disease.	Santodomingo-Garzon T, Swain M.	2011	Yes	Journal Article
	Autoantibodies to GW bodies and other autoantigens in primary biliary cirrhosis.	Stinton L, Swain M, Myers RP, Shaheen AA, Fritzler MJ.	2011	Yes	Journal Article
	Mouse Mammary Tumor Virus in Anti-Mitochondrial Antibody Producing Mouse Models.	Zhang G, Chen M, Graham D, Subsin B, McDougall C, Gilady S, Kneteman M, Law L, Swain M, Trauner M, Wrzesinski S, Flavell R, Wasilenko S, Mason A.	2011	Yes	Journal Article
	Liver brain inflammation axis.	D'Mello C, Swain M.	2011	Yes	Journal Article
	Chronic lymphocytic leukemia associated cholangiopathy.	Mann J, Urbanski S, Lategan J, Swain M.	2011	Yes	Journal Article

Taub, Kenneth

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Evaluation of an education intervention to increase the pursuit of living kidney donation: a randomized controlled trial	Barnieh L, McLaughlin K, Manns B, Klarenbach S, Yilmaz S, Taub K, Hemmelgarn B	2011	Yes	Journal Article
Tremblay,Alain	Simulation in Flexible Bronchoscopy and Endobronchial Ultrasound - A Review	Stather DS, Lamb CR, Tremblay A.	2011	Yes	Journal Article
	Validation of an endobronchial ultrasound simulator: differentiating operator skill level.	Stather D, MacEachern P, Hergot C, Rimmer K, Tremblay A.	2011	Yes	Journal Article
	Endobronchial Ultrasound Knowledge, Implementation, and Perceived Barriers Following Attendance at a Dedicated Hands-On Course.	Sabur N, Stather D, MacEachern P, Chee A, Tremblay A.	2011	Yes	Journal Article
	Effect of Repeated Administration of Low-Dose Silver Nitrate for Pleurodesis	Tremblay A, Stather D, Kelly MM.	2011	Yes	Journal Article
	Assessment of Endobronchial Ultrasound Skills Following Clinical versus Simulation Training and Evaluation of the Endobronchial Ultrasound Learning Curve	Stather D, MacEachern P, Rimmer K, Hergot C, Tremblay A.	2011	Yes	Journal Article
	Exercise Capacity, Lung Function and Quality of Life After Interventional Bronchoscopy	Oviatt L, D Stather, G Michaud, P MacEachern, A Tremblay	2011	Yes	Journal Article
	Pleural Controversy: Pleurodesis versus Indwelling Chest Catheters for Malignant Effusions	MacEachern, P. Tremblay, A	2011	Yes	Journal Article
	The Use of Tunneled Pleural Catheters in the Treatment of Pleural Effusions	Chee, AC. Tremblay A.	2011	Yes	Journal Article

Valentine,Karen

Name	Title	Authorship	Published/Accepted Year	IsPeerReviewed	Type
	Therapeutic use of heparin and low molecular weight heparin, UpToDate in Pulmonary and Critical Care Medicine 2011.	Valentine KA and Hull RD.	2011	Yes	Journal Article
	Anticoagulation in acute pulmonary embolism. UpToDate in Pulmonary and Critical Care Medicine 2011.	Valentine KA and Hull RD	2011	Yes	Journal Article
	Outpatient management of oral anticoagulation. UpToDate in Pulmonary and Critical Care Medicine, 2011.	Valentine KA and Hull RD.	2011	Yes	Journal Article
	Correcting excess anticoagulation after warfarin. UpToDate in Pulmonary and Critical Care Medicine, 2011.	Valentine KA and Hull RD.	2011	Yes	Journal Article
	Therapeutic use of Warfarin. UpToDate in Pulmonary and Critical Care Medicine, 2011.	Valentine KA and Hull RD	2011	Yes	Journal Article
Wong,Norman	24, 25-dihydroxycholecalciferol but not 25-hydroxycholecalciferol suppresses apolipoprotein A-I gene expression.	Wehmeier KR, Alamir AR, Sultan S, Haas MJ, Wong NC, Mooradian AD	2011	Yes	Journal Article
	Inhibition of Apolipoprotein A-I Gene Expression by Obesity-Associated Endocannabinoids	Haas MJ, Mazza AD, Wong NCW, Mooradian AD	2011	Yes	Journal Article
	Nicotinic acid induces apolipoprotein A-I gene expression in HepG2 and Caco-2 cell lines.	Haas MJ, Alamir AR, Sultan S, Chehade JM, Wong NCW, Mooradian AD	2011	Yes	Journal Article

Research Grant – 2011/12

Name	Prorated Amount	Title	Role	Reporting Year
Ahmed,Sofia	\$19,855.25	Progression and management of chronic kidney disease among First Nations People	Co-investigator	2011
	\$53,968.75	Access to and Quality of Cardiac Care for First Nations People	Co-investigator	2011
	\$97,297.30	Evaluation of the renin angiotensin system in Aboriginal People	Principal/Senior investigator	2011
Sum	\$171,121.30			
Andrews,Christopher	\$333.33	A randomized comparison of laparoscopic myotomy and pneumatic dilatation for achalasia	Principal/Senior investigator	2011
	\$41,666.67	GI motility patient management and research	Principal/Senior investigator	2011
Sum	\$42,000.00			
Aspinall,Alexander	\$3,950.61	A Multi-Center, open label trial to evaluate the long-term safety and tolerability of Rifaximin 550 mg BID in subjects with a history of Hepatic Encephalopathy (Protocol RFHE3002) [in progress]	Site-investigator	2011
	\$8,309.57	Randomized, placebo-controlled, multi-centre study to assess the efficacy and safety of eltrombopag in thrombocytopenic subjects with hepatitis C virus (HCV) infection who are otherwise eligible to initiate antiviral therapy (peginterferon alfa-2a plus ribavirin) – ENABLE 1 (Eltrombopag to iNitiate and maintain Antiviral treatment to Benefit subjects with hepatitis C related Liver disease. [in progress]	Site-investigator	2011
Sum	\$12,260.17			
Bacchus,Maria	\$8,571.43	Comprehensive Assessment of Procedural Skills in Internal Medicine	Co-investigator	2011

Name	Prorated Amount	Title	Role	Reporting Year
	\$37,250.00	Validating outcome measures for the high-stakes assessment of cardiac physical examination competence	Co-investigator	2011
Sum	\$45,821.43			
Bahlis, Nizar				
	\$2,459.02	CD28-mediated regulation of multiple myeloma cell proliferation and survival.	Co-investigator	2011
	\$25,000.00	miRNA as predictor of response to chemotherapy in diffuse large B cell lymphoma	Co-PI	2011
	\$28,800.00	Role of Integrin beta 7 in MM cells survival, migration and proliferation.	Principal/Senior investigator	2011
	\$28,965.52	Predicting benefit and improving outcomes of high dose therapy (HDT) and autologous stem cell transplantation (SCT) for Lymphoma (NHL) and Myeloma (MM) patients through tissue arrays based classifications and sensitive detection of minimal residual disease (MRD)	Co-PI	2011
	\$37,500.00	PARP1 as novel therapeutic target in multiple myeloma	Co-PI	2011
	\$56,000.00	Combination of PARP and Proteasome inhibitors in multiple myeloma	Principal/Senior investigator	2011
	\$82,191.78	Improving Health care access and sustainability with Microfluidic platforms	Co-investigator	2011
	\$134,400.00	Role of Integrin beta 7 in myeloma cells survival and proliferation	Principal/Senior investigator	2011
Sum	\$395,316.31			
Barnabe, Cheryl				
	\$1,134.62	Aboriginal Albertans' Perceptions of Health Service Delivery for Osteoarthritis and Total Joint Replacement.	Co-PI	2011
	\$2,319.81	"The Window of Opportunity": Seizing the Opportunity for Positive Lifestyle Modifications in Early Inflammatory Arthritis.	Principal/Senior investigator	2011
	\$2,786.33	Access and Utilization of Healthcare for Rheumatoid Arthritis in Aboriginal People in Alberta.	Co-PI	2011
	\$12,400.00	Arthritis in First Nations People in Alberta: Prevalence and Health Care Utilization.	Principal/Senior investigator	2011
	\$19,435.20	Detecting Inflammatory Arthritis in a First Nations Community	Principal/Senior investigator	2011

Name	Prorated Amount	Title	Role	Reporting Year
Sum	\$38,075.96			
Barr,Susan				
	\$11,250.00	An open label study of efficacy and safety in retreatment of rituximab (MabThera/Rituxan) in patients with active rheumatoid arthritis	Site-investigator	2011
	\$16,000.00	Rheumatoid Arthritis: Comparison of active therapies in patients with active disease despite methotrexate therapy	Site-investigator	2011
	\$23,369.80	Rheumatoid Arthritis: Comparison of active therapies in patients with active disease despite methotrexate therapy	Site-investigator	2011
Sum	\$50,619.80			
Baylis,Barry				
	\$10,666.67	W21C Pilot Project to Evaluate the SMART Camera System; The Bed Exit Alarm	Principal/Senior investigator	2011
	\$20,000.00	Section of GIM Billing QI Project	Principal/Senior investigator	2011
Sum	\$30,666.67			
Beck,Paul				
	\$8,333.33	Alberta Heritage Foundation for Medical Research, Interdisciplinary Team Grant. Etiology of Inflammatory Bowel Disease: Gene, Microbe & Environment Interactions.	Co-investigator	2011
	\$10,000.00	Calcineurin induced heart failure and the inflammasome.	Co-investigator	2011
	\$21,666.67	The role of the inflammasome in the pathogenesis of Clostridium difficile-associated disease	* Post Doc Award For S. Hirota	2011
	\$34,285.71	A multicenter national group grant.	Co-investigator	2011
	\$75,000.00	Crohn's and Colitis Foundation of Canada, Operating Grant. The NLRP3-inflammasome is a key regulator of intestinal homeostasis.	Co-PI	2011
	\$141,875.00	Innate Immune Responses in Clostridium Difficile Toxin-induced Intestinal Injury	* Clinical Senior Scholar	2011
	\$149,035.16	Hypoxia-inducible factor-1 (HIF-1) plays an innate protective role in Clostridium difficile-induced colitis	Co-investigator	2011
Sum	\$440,195.87			
Bharwani,Aleem				
	\$35,500.00	Tablet Computer use in Hospitals	Principal/Senior investigator	2011

Name	Prorated Amount	Title	Role	Reporting Year
Sum	\$35,500.00			
Bridges,Ronald				
	\$81,250.00	Optimizing Colorectal Cancer Screening	Co-investigator	2011
Sum	\$81,250.00			
Burak,Kelly				
	\$10,286.49	A Multi-Center, open label trial to evaluate the Long-Term Safety and Tolerability of Rifaximin 550 MG BID in subjects with a history of Hepatic Encephalopathy [in progress]	Site/Local PI	2011
Sum	\$10,286.49			
Campbell,Norman				
	\$11,518.00	Closing the care gap on hypertension in Indo-Asian people with diabetes.	Co-investigator	2011
	\$65,298.50	Population-level prevention and implications for socioeconomic inequities in health: dietary sodium as a case example. CIHR L McLaren PI, with N Campbell, J Emery, D Lorenssetti, L McIntyre and V Tarasuk as investigators- \$43674 in 2011 total grant \$261,194 2011-2014	Co-investigator	2011
	\$75,000.00	HSFC-CIHR Chair in Hypertension Prevention & Control	* Chair	2011
	\$90,000.00	CIHR Canada Chair in Hypertension Prevention & Control	* Chair	2011
	\$142,554.25	Assessment of hypertension occurrence, management and outcomes in Canada	* Team co-lead	2011
	\$1,000,000.00	Improving the Efficient and Equitable Care of Patients with Chronic Medical Conditions Interdisciplinary Chronic Disease Collaboration (ICDC)	Co-investigator	2011
Sum	\$1,384,370.75			
Card,Robert				
	\$200.00	Development of a Mentorship Program for Undergraduate Medical Students at the University of Calgary	Co-investigator	2011
	\$11,458.33	Multicentre Canadian Study of Prophylaxis in Older Adults with Severe Hemophilia	Co-investigator	2011
Sum	\$11,658.33			
Castillo,Eliana				

Name	Prorated Amount	Title	Role	Reporting Year
	\$1,469.64	Real-Time Clinical Audit for the Medical Disorders in Pregnancy Program-Clinical Database	Principal/Senior investigator	2011
	\$3,000.00	Emerging Team grants in Maternal Health: From Preconception to the Empty Nest Team: PREVENTION OF SEVERE MATERNAL MORBIDITY	Co-investigator	2011
Sum	\$4,469.64			
Coffin, Carla				
	\$2,727.27	University of Calgary Liver Unit Serum/Tissue Databank	Principal/Senior investigator	2011
	\$6,295.08	University of Calgary Liver Unit Hepatitis B Patient Databank	Principal/Senior investigator	2011
	\$6,295.08	Optimize clinical management of Hepatitis B Patient Registry	Principal/Senior investigator	2011
	\$20,000.00	Molecular Diagnostic Testing of Patients with Chronic Hepatitis B	Site/Local PI	2011
	\$24,000.00	Hepatitis C Virus (HCV) Quasispecies and Lymphtropism in Human Immunodeficiency Virus Type 1 (HIV-1) Coinfected Patients	Principal/Senior investigator	2011
	\$100,000.00	Molecular Characterization of HBV Reservoirs	Principal/Senior investigator	2011
	\$158,166.67	Leaders of Opportunity Fund and Alberta Advanced Education Technology: Translational Health Research Collobatorium	Co-PI	2011
Sum	\$317,484.10			
Conly, John				
	\$9,000.00	Antimicrobial Usage Project, CNISP - Canadian Nosocomial Infection Surveillance Program	Site/Local PI	2011
	\$15,750.00	Community-associated MRSA in Europe: multiresistance, virulence and patient risk profiles - a collaborative project	Co-investigator	2011
	\$20,000.00	Population based enhanced surveillance for MRSA in Canada	Co-PI	2011
	\$50,000.00	Clean Keys – Evaluation of a novel computer keyboard and its potential to reduce transmission of Nosocomial Microorganisms	Principal/Senior investigator	2011
	\$80,000.00	Alberta Sepsis Network Interdisciplinary Team Grant	Co-investigator	2011
	\$105,000.00	Evaluation of a patient safety monitoring device for the prevention of pressure ulcers	Co-investigator	2011

Name	Prorated Amount	Title	Role	Reporting Year
	\$721,340.80	Western Economic Diversification, the ATCO Group, Government of Alberta - AET. AHW, University of Calgary, Faculty of Medicine and Office of VPR Ward of the 21st Century Research and Innovation Centre	Co-investigator	2011
Sum	\$1,001,090.80			
Cowie,Robert				
	\$71,250.00	Canadian Chronic Obstructive Lung Disease Cohort Study	Site/Local PI	2011
Sum	\$71,250.00			
Donovan,Lois				
	\$41,131.40	Assessment of Consequences of Maternal Severe Hypoglycemia During Pregnancy in Women with Type 1 Diabetes on Offspring's Neuropsychological Functioning.	Co-investigator	2011
	\$64,023.27	Families Defeating Diabetes: Canadian Intervention for Family-centered Diabetes Prevention following Gestational Diabetes (GDM)	Site/Local PI	2011
	\$791,111.11	Metformin in Women with Type 2 Diabetes in Pregnancy Trial (MiTy)	Site/Local PI	2011
Sum	\$896,265.78			
Dube,Catherine				
	\$5,000,000.00		Co-investigator	2011
Sum	\$5,000,000.00			
Edwards,Alun				
	\$75,000.00	Practical Behavioural Modifications for Type 2 Diabetes Treatment: Physical Activity and Nutrition for Diabetes in Alberta (PANDA). UofA Faculty of Medicine and Dentistry and Capital Health New Emerging Research Teams Grant.	Co-investigator	2011
Sum	\$75,000.00			
Edworthy,Steven				
	\$4,000.00	Lymphoma Risk: A Consequence of Immune Suppression or Stimulation?	Site/Local PI	2011
	\$5,411.60	Lymphoma Risk: A Consequence of Immune Suppression or Stimulation?	Site/Local PI	2011

Name	Prorated Amount	Title	Role	Reporting Year
	\$11,500.00	Understanding Referrals from Primary Care to Rheumatology info: Every primary care physician has their own threshold for referring patients to specialist care. Much research has demonstrated that this threshold not only depends on the nature and complexity of the presenting health problem, but a myriad of other factors such as, confidence in treating the problem financial, time, and patient pressures, as well as patient demographics. This research is proposed to explore the rheumatology referral process from the perspective of primary care physicians and rheumatologists.	Site/Local PI	2011
	\$35,000.00	Understanding potential models of care to improve specialists and primary care linkage	Principal/Senior investigator	2011
	\$82,680.00	Lymphoma Risk: A Consequence of Immune Suppression or Stimulation?	Site/Local PI	2011
Sum	\$138,591.60			
Eksteen, J. Albertus				
	\$4,540.54	Inflammasome in Fatty Liver Disease	Principal/Senior investigator	2011
	\$4,800.00	Inflammasome in Fatty Liver Disease	Principal/Senior investigator	2011
	\$8,800.00	Mesenteric inflammation in obesity	Co-investigator	2011
	\$16,216.22	A Translational Approach to Understanding and Managing Primary Sclerosing Cholangitis	Co-investigator	2011
	\$19,672.13	Etiology of Inflammatory Bowel Disease: Gene, Microbe, and Environment Interactions	Co-investigator	2011
	\$25,000.00	The role of Glypican-6 in PSC	Principal/Senior investigator	2011
	\$25,000.00	CCR9 and CCL25 transgenic mice resource	Principal/Senior investigator	2011
	\$31,475.41	Regulatory T cell Immunotherapy in PSC	Principal/Senior investigator	2011
	\$40,000.00	Genetics of PSC	Co-investigator	2011
	\$65,217.39	Start-up funds for Dr. Eksteen	Principal/Senior investigator	2011
	\$340,000.00	Mucosal T cells in the pathogenesis of PSC	Principal/Senior investigator	2011
Sum	\$580,721.69			
Esdaile, John				
	\$10,000.00	Narrowing the gap in the treatment and study of lupus worldwide	Principal/Senior investigator	2011

Name	Prorated Amount	Title	Role	Reporting Year
	\$43,822.92	Arthritis in First Nations People in Alberta: Prevalence and HealthCare Utilization	Co-investigator	2011
	\$67,136.08	A randomized controlled trial evaluating the effectiveness of the Making It Work program at preventing work loss	Co-investigator	2011
	\$80,000.00	Development and pilot testing of a culturally relevant family-based self-management program for First Nations peoples	Co-investigator	2011
	\$106,666.67	Burden and co-morbidity of systemic autoimmune rheumatic diseases	Co-investigator	2011
	\$129,072.50	Vancouver Longitudinal Study of Early Knee Osteoarthritis	Co-investigator	2011
	\$149,763.00	Development and pilot testing of a culturally sensitive and family-based self-management program for Aboriginal peoples with arthritis	Co-investigator	2011
	\$257,142.86	CIHR Skin Research Training Centre	Co-investigator	2011
	\$415,060.33	CIHR team in Investigations of Mobility, Physical Activity, and Knowledge Translation in HIP pain (IMPAKT-HIP)	Principal/Senior investigator	2011
Sum	\$1,258,664.36			
Fell,Charlene				
	\$17,055.00	ARTEMIS-PH: : A Phase 3, Randomized, Double-Blind, Placebo-Controlled, Multi-Center, Parallel-Group Study to Evaluate the Efficacy and Safety of Ambrisentan in Subjects with Idiopathic Pulmonary Fibrosis and Pulmonary Hypertension. GS-US-300-0128	Site/Local PI	2011
	\$51,655.00	ARTEMIS-IPF: A Phase 3, Randomized, Double-Blind, Placebo-Controlled, Multi-Center, Parallel-Group, Event-Driven Study to Evaluate the Efficacy and Safety of Ambrisentan in Subjects with Early Idiopathic Pulmonary Fibrosis (IPF) GS-US-231-0101	Site/Local PI	2011
Sum	\$68,710.00			
Ferraz,Jose				
	\$101,562.50	Integration of Anti-Inflammatory Pathways in IBD	Co-PI	2011
Sum	\$101,562.50			
Field,Stephen				

Name	Prorated Amount	Title	Role	Reporting Year
	\$195.00	Compassionate effects of xolair on asthma patient outcomes	Site/Local PI	2011
	\$1,800.00	Comparison of etanercept and prednisone in acute exacerbations of COPD	Site/Local PI	2011
	\$3,951.22	Multi-centre randomized placebo-controlled trial of nocturnal oxygen therapy in COPD. The Canadian Nocturnal Oxygen Trial (CANOX)	Site/Local PI	2011
	\$12,009.40	Randomized placebo controlled study of BI 1744 in COPD	Site/Local PI	2011
	\$30,699.91	Novartis Invigorate indacaterol in COPD	Site/Local PI	2011
	\$32,448.45	BI 205.452 TioSpir comparison of respimat and handihaler delivery systems for tiotropium	Site/Local PI	2011
Sum	\$81,103.98			
Fisher,Dina		\$74.43 Protocol: AC-052-364 Endothelin antagonist trial in mildly symptomatic PAH patients. A randomized, double-blind, placebo-controlled, multicenter study to assess the efficacy, safety, and tolerability of bosentan in patients with mildly symptomatic pulmonary arterial hypertension. Sponsor: Actelion Pharmaceuticals Principal Investigator: Helmersen Sub-I's: Fell, Fisher, Hirani, Rimmer, Viner	Site-investigator	2011
	\$221.75	Protocol: Long-term extension, multi-centre, multi-national study to evaluate the efficacy and safety of oral BAY 63-2521 (1 mg, 1.5mg, 2 mg, or 2.5 mg tid) in patients with Chronic Thromboembolic Pulmonary Hypertension (CTEPH) Sub'I's: Fell, Fisher, Hirani, Jarand, Rimmer, Viner	Site-investigator	2011
	\$381.24	Protocol: Randomized, double-blind, placebo-controlled, multi-centre, multi-national study to evaluate the efficacy and safety of oral BAY 63-2521 (1 mg, 1.5mg, 2 mg, or 2.5 mg tid) in patients with symptomatic Pulmonary Arterial Hypertension (PAH) Principal Investigator: Helmersen Sub'I's: Fell, Fisher, Hirani, Jarand, Rimmer, Viner	Site-investigator	2011

Name	Prorated Amount	Title	Role	Reporting Year
	\$540.33	Protocol: ARTEMIS-PH: : A Phase 3, Randomized, Double-Blind, Placebo-Controlled, Multi-Center, Parallel-Group Study to Evaluate the Efficacy and Safety of Ambrisentan in Subjects with Idiopathic Pulmonary Fibrosis and Pulmonary Hypertension. GS-US-300-0128	Site-investigator	2011
	\$733.75	Protocol: A Phase 2, Randomized, Double-blind, Placebo-controlled, Multicenter, Dose-ranging Study of Cicletanine in Subjects with Pulmonary Arterial Hypertension	Site-investigator	2011
	\$843.75	Research Project Title: A Phase-3, Long-term, Open-Label, Multicenter Safety and Efficacy Study of Ambrisentan in Subjects with Pulmonary Hypertension	Site-investigator	2011
	\$1,866.67	Protocol: A 52-week treatment, randomized, double-blind, placebo-controlled, with open label tiotropium, parallel-group study to assess the efficacy, safety and tolerability of NVA237 in patients with chronic obstructive pulmonary disease	Site-investigator	2011
	\$1,978.80	Protocol: Study with Endothelin Receptor Antagonist in Pulmonary arterial Hypertension to Improve cliNical outcome. A Multicenter, Double-blind, Randomized, Placebo-controlled, Parallel group, Event driven, Phase III study to assess the effects of ACT-064992 on Morbidity and Mortality in patients with Symptomatic Pulmonary Arterial Hypertension Sponsor: Actelion Pharmaceuticals Principal Investigator: Hirani Sub-I's: Fell, Fisher, Helmersen, Rimmer, Viner	Site-investigator	2011
	\$2,595.67	Protocol: Randomized, double-blind, placebo-controlled, multi-centre, multi-national study to evaluate the efficacy and safety of oral BAY 63-2521 (1 mg, 1.5mg, 2 mg, or 2.5 mg tid) in patients with chronic thromboembolic pulmonary hypertension (CTEPH) Principal Investigator: Helmersen Sub'I's: Fell, Fisher, Hirani, Jarand, Rimmer, Viner	Site-investigator	2011
	\$2,637.00	A two-stage prospective observational cohort study in scleroderma patients to evaluate screening tests and he incidence of pulmonary arterial hypertension and pulmonary hypertension Sponsor: Actelion Pharmaceuticals	Site-investigator	2011

Name	Prorated Amount	Title	Role	Reporting Year
	\$3,653.14	Social work services in the treatment of patients with Tuberculosis	Principal/Senior investigator	2011
	\$5,092.17	Protocol: Title of Study: Phase IV, Prospective, Multi-National, Randomized, Double-Blind, Placebo-Controlled Study to Evaluate Smoking Cessation with Varenicline Tartrate Compared with Placebo in the Setting of Patient Self-Selected (Flexible) Quit Date	Site-investigator	2011
	\$22,170.00	Protocol: A 24-week randomized placebo-controlled, double-blind multi-center clinical trial evaluating the efficacy and safety of oral QTI571 as an add-on therapy in the treatment of severe pulmonary arterial hypertension: Imatinib in Pulmonary arterial hypertension, a Randomized, Efficacy Study (IMPRES)	Site-investigator	2011
	\$22,811.67	Protocol: ARTEMIS: A Phase 3, Randomized, Double-Blind, Placebo-Controlled, Multi-Center, Parallel-Group, Event-Driven Study to Evaluate the Efficacy and Safety of Ambrisentan in Subjects with Early Idiopathic Pulmonary Fibrosis (IPF) GS-US-231-0101 Sponsor: Gilead Sciences Inc. Principal Investigator: Fell Sub-I's: Fisher, Hirani, Rimmer, Helmersen	Site-investigator	2011
Sum Flemons, Ward	\$65,600.36			
	\$12,095.06	The value and impact of quality and safety teams: Do they make a difference?	Co-investigator	2011
	\$47,115.00	Deriving novel administrative data patient safety indicators for large-scale surveillance.	Co-investigator	2011
	\$148,958.33	Health Quality Council of Alberta contract with the Faculty of Medicine	* Grant Holder	2011
Sum Fritzler, Marvin	\$208,168.39			
	\$4,636.36	Autoimmunity and eye diseases	Principal/Senior investigator	2011
	\$112,500.00	Phase IV: Autoimmune System (GW Bodies) Research	Principal/Senior investigator	2011
Sum Geddes, Michelle	\$117,136.36			

Name	Prorated Amount	Title	Role	Reporting Year
	\$7,666.67	Myelodysplastic Syndromes (MDS) in Canada: A national prospective study of the epidemiology, quality of life and impact of co-morbidity on disease outcome	Site/Local PI	2011
	\$45,454.55	Myelodysplastic Syndromes (MDS) in Canada: A national prospective study of the epidemiology, quality of life and impact of co-morbidity on disease outcome	Co-investigator	2011
Sum	\$53,121.21			
Ghali, William				
	\$4,285.71	The quality and Safety Topic Advisory Group. Meeting Grant	Principal/Senior investigator	2011
	\$5,000.00	The quality and Safety Topic Advisory Group. Meeting grant.	Principal/Senior investigator	2011
	\$7,142.86	The Quality and Safety Topic Advisory Group. Meeting grant	Principal/Senior investigator	2011
	\$18,587.38	Development of audit with feedback intervention to improve acute cardiovascular care using APPROACH	Co-investigator	2011
	\$19,838.93	Developing quality indicators to assess the care of adults with major traumatic injuries.	Co-investigator	2011
	\$22,000.00	The Canadian Cardiovascular Outcomes Research Team – 2.	Co-investigator	2011
	\$23,611.11	Rates and waits for cancer surgery in Canada: A mix methods assessment	Co-PI	2011
	\$23,986.00	Access and quality of cardiac care for First Nations People.	Co-investigator	2011
	\$27,036.00	Development of audit with feedback intervention to improve acute cardiovascular care using APPROACH.	Co-investigator	2011
	\$29,246.33	Efficacy of a web-based seamless discharge communication tool: a randomized controlled trial	Principal/Senior investigator	2011
	\$38,463.38	Effect of physician alternative payment plans on the completeness and validity of administrative data	Co-investigator	2011
	\$43,200.00	Understanding ‘troponinitis’: exploring myocardial injury and its clinical and health services implications.	Co-PI	2011
	\$45,216.00	Deriving novel administrative data patient safety indicators for large-scale surveillance	Principal/Senior investigator	2011
	\$71,958.33	Access and quality of cardiac care for First Nations People	Co-investigator	2011
	\$74,396.00	Developing quality indicators to assess the care of adults with major traumatic injuries	Co-investigator	2011

Name	Prorated Amount	Title	Role	Reporting Year
	\$76,927.13	Effect of Physicain Alternative Payment Plans on the Completeness and Validity of Administrative Data	Co-investigator	2011
	\$96,280.00	The Alliance for Canadian Health Outcomes Research in Diabetes	Co-investigator	2011
	\$100,000.00	GENESIS-PRAXY: Gender and sex determinants of CV disease	Co-investigator	2011
	\$100,000.00	GENESIS-PRAXY: Gender and sex determinants of CV disease	Co-investigator	2011
	\$106,250.00	Rates and waits for cancer surgery in Canada: a mix methods assessment	Co-investigator	2011
	\$210,000.00	The Canadian Cardiovascular Outcomes Research Team - 2.	Co-investigator	2011
	\$1,004,651.16	The Medical Ward of the 21st.	Principal/Senior investigator	2011
Sum	\$2,148,076.32			
Ghosh,Subrata				
	\$5,833.33	Effect of cigarette smoke extract on dendritic cells isolated from inflammatory bowel disease patients	Principal/Senior investigator	2011
	\$10,000.00	Autophagy of dendritic cells: an unifying concept of Crohn's disease pathogenesis related to genetic and environmental factors	Principal/Senior investigator	2011
	\$10,000.00	Population based study of pregnancy outcomes in IBD patients	Co-investigator	2011
	\$16,666.67	A translational approach to understanding and managing primary sclerosing cholangitis'	Co-investigator	2011
	\$17,704.92	AHFMR Interdisciplinary Team Grant: Tier 1 and Tier 2 of Alberta IBD Consortium	* Executive Committee Member	2011
	\$26,666.67	Immune Function & Dendritic cell dysfunction in NLR3P KO mice	Co-PI	2011
	\$33,333.33	Expression arrays in IBD inception cohort	Principal/Senior investigator	2011
	\$40,000.00	Transabdominal Ultrasonography Contrast Enhanced –prospective study to evaluate therapeutic response (\$368,000) for 2 years.	Co-PI	2011
	\$80,000.00	Support for Laboratory Research setup	* Recruitment Package	2011
	\$93,333.33	Dendritic cell function in IBD with defined genetic mutations	Principal/Senior investigator	2011
	\$1,666,666.67	Interdisciplinary Team Grant - Gene Microbial Environmental Interactions in pathogenesis of IBD: Tier 1 and Tier 2 of Alberta IBD Consortium	Co-investigator	2011
Sum	\$2,000,204.92			
Gibson,Paul				

Name	Prorated Amount	Title	Role	Reporting Year
	\$364.38	Real-Time Clinical Audit for the Medical Disorders in Pregnancy Program: Clinical Database. Hardware and Software Requirements.	Co-investigator	2011
	\$730.77	Utilization of LMWH for Prevention and Treatment of Venous Thrombosis During Pregnancy	Principal/Senior investigator	2011
	\$1,621.62	Real-Time Clinical Audit for the Medical Disorders in Pregnancy Program: Clinical Database	Co-investigator	2011
	\$2,400.00	Control of Hypertension in Pregnancy Study (CHIPS)	Site/Local PI	2011
Sum Gill,John	\$5,116.77			
	\$6,250.00	HIV/HCV co infection	Co-investigator	2011
	\$24,590.16	NA Accord Cohort Collaboration	Co-investigator	2011
	\$263,157.89	North American HIV Cohort Collaboration.	Co-investigator	2011
	\$4,000,000.00	Canadian HIV Trails Network	Co-PI	2011
Sum Goodyear,Dawn	\$4,293,998.06			
	\$15,384.62	Barriers to Health Care Delivery in Mild Hemophilia	Co-PI	2011
Sum Hamilton,Douglas	\$15,384.62			
	\$34,482.76	Intracranial Hypertension in Astronauts after Space Travel.	Principal/Senior investigator	2011
Sum Hanley,David	\$34,482.76			
	\$9,810.83	Breast Cancer to Bone Metastases (B2B) Program: Core Research Project 1: Vitamin D, inflammation and bone metastasis in breast cancer survivors	Co-investigator	2011
	\$20,341.80	Genetic Epidemiology of Osteoporotic Fractures; From Susceptibility Genes to Susceptible Populations	Co-investigator	2011
	\$30,523.60	A biomedical engineering approach to investigating bone quality across the lifespan	Co-investigator	2011

Name	Prorated Amount	Title	Role	Reporting Year
	\$41,666.67	Creating Bone and Joint Health from the Bedside to the Bench and Back Again Reducing the Burden of Osteoarthritis (OA) - from Mechanisms to Prevention	Co-investigator	2011
	\$45,000.00	Canadian Multicentre Osteoporosis Study (I am the local Principal Investigator,)	Co-investigator	2011
Sum Hanly,Patrick	\$147,342.90			
	\$2,000.00	Regulation of Cerebral Blood Flow in Obstructive Sleep Apnea	Co-PI	2011
	\$2,000.00	Study of High Altitude and Sleep Physiology in the Mining Industry	Co-PI	2011
	\$3,583.33	Regulation of Cerebral Blood Flow in Obstructive Sleep Apnea	Co-PI	2011
	\$3,583.33	Regulation of Periperal and Cerebral Blood Flow in Obstructive Sleep Apnea	Co-PI	2011
	\$38,646.97	Regulation of Cerebral Blood Flow in Obstructive Sleep Apnea	Co-PI	2011
Sum Heitman,Steven	\$49,813.64			
	\$7,596.15	A randomized controlled trial comparing high-definition white light colonoscopy to i-scan enhanced colonoscopy for adenoma detection in a population at increased risk of colorectal cancer.	Principal/Senior investigator	2011
	\$13,541.67	Optimizing population-based colorectal cancer screening	Co-investigator	2011
Sum Helmensen,Douglas	\$21,137.82			
	\$500.00	A prospective study of the impact of first-line bosentan treatment on the QoL of adults with PAH secondary to congenital heart disease	Site/Local PI	2011
	\$750.00	Pharmacogenomics in pulmonary arterial hypertension : a multicentre international study to determine clinically in PAH patients if associations exist between efficacy and toxicity of endothelin receptor antagonists and selected gene polymorphisms	Site/Local PI	2011

Name	Prorated Amount	Title	Role	Reporting Year
	\$1,866.67	A 52 week treatment, randomized, double blind, placebo controlled parallel group study to assess the efficacy, safety and tolerability of NVA237 in patients with COPD	Site/Local PI	2011
	\$3,106.00	Long Term Extension multicentre multinational study to evaluate the efficacy and safety of oral BAY 63-2521 in chronic thromboembolic pulmonary hypertension (CTEPH)	Site/Local PI	2011
	\$5,191.33	Randomized, double blind placebo controlled multicentre multinational study to evaluate the efficacy and safety of oral BAY 63-2521 in chronic thromboembolic pulmonary hypertension (CTEPH)	Site/Local PI	2011
	\$5,500.00	A Phase II Randomized Double Blind Placebo Controlled Parallel Group Study to Evaluate the Efficacy and Safety of Once Daily Orally Administered PH-797804 for 12 weeks in adults with moderate to severe COPD on a background of Salmeterol/Fluticasone Combination	Site/Local PI	2011
	\$5,871.40	A Phase-3, Long-term, Open-Label, Multicenter Safety and Efficacy Study of Ambrisentan in Subjects with Pulmonary Hypertension	Site/Local PI	2011
	\$7,241.29	A randomized, double-blind, placebo controlled, multicentre study to assess the efficacy, safety and tolerability of bosentan in patients with mildly symptomatic pulmonary arterial hypertension	Site/Local PI	2011
	\$8,279.33	Long Term extension multicentre multinational study to evaluate the efficacy and safety of oral BAY 63-2521 in patients with PAH	Site/Local PI	2011
	\$11,267.50	A Phase 3, Randomized, Double-Blind, Placebo-Controlled, Multi-Center, Parallel-Group Study to Evaluate the Efficacy and Safety of Ambrisentan in Subjects with Idiopathic Pulmonary Fibrosis and Pulmonary Hypertension.	Co-investigator	2011
	\$11,384.00	Randomized, double blind placebo controlled multicentre multinational study to evaluate the efficacy and safety of oral BAY 63-2521 in patients with symptomatic PAH	Site/Local PI	2011
	\$13,185.00	A two-stage prospective observational cohort study in scleroderma patients to evaluate screening tests and the incidence of pulmonary arterial hypertension and pulmonary hypertension	Site-investigator	2011

Name	Prorated Amount	Title	Role	Reporting Year
	\$18,477.00	A Phase 2, Randomized, Double-blind, Placebo-controlled, Multicenter, Dose-ranging Study of Cicletanine in Subjects with Pulmonary Arterial Hypertension Sponsor	Co-investigator	2011
	\$22,811.67	A phase 3 randomized double blind placebo controlled multi centre parallel group event driven study to evaluate the efficacy and safety of ambisentan in subjects with early IPF	Site-investigator	2011
	\$23,222.80	A 16-Week, International, Multicenter, Double-Blind, Randomized, Placebo-Controlled Comparison of the Efficacy and Safety of Oral UT-15C Sustained Release Tablets in Combination with an Endothelin Receptor Antagonist and/or a Phosphodiesterase-5 Inhibitor in Subjects with Pulmonary Arterial Hypertension A 12-Week, International, Multicenter, Double-Blind, Randomized, Placebo-Controlled Comparison of the Efficacy and Safety of Oral UT-15C Sustained Release Tablets in Subjects with PAH An Open-Label Extension Trial of UT-15C SR in Subjects with Pulmonary Arterial Hypertension	Site-investigator	2011
	\$33,255.00	A 24-week randomized placebo-controlled, double-blind multi-center clinical trial evaluating the efficacy and safety of oral QT1571 as an add-on therapy in the treatment of severe pulmonary arterial hypertension: Imatinib in Pulmonary arterial hypertension, a Randomized, Efficacy Study	Site/Local PI	2011
	\$39,449.00	A pilot study of the safety and efficacy of upfront combination therapy with bosentan and sildenafil in	Co-investigator	2011
	\$59,118.67	SERAPHIN: Study with Endothelin Receptor Antagonist in Pulmonary arterial Hypertension to Improve cliNical outcome. A Multicenter, Double-blind, Randomized, Placebo-controlled, Parallel group, Event driven, Phase III study to assess the effects of ACT-064992 on Morbidity and Mortality in patients with Symptomatic Pulmonary Arterial Hypertension	Site-investigator	2011
Sum	\$270,476.65			
Hemmelgarn,Brenda				

Name	Prorated Amount	Title	Role	Reporting Year
	\$5,100.00	Longitudinal comparison of quality of life among kidney transplant recipients and nocturnal home hemodialysis patients	Co-investigator	2011
	\$6,010.00	Arthritis in First Nations People in Alberta: Prevalence and Health Care Utilization.	Principal/Senior investigator	2011
	\$10,260.85	Effects of physician alternative payments plans on the completeness and validity of administrative health data.	Co-investigator	2011
	\$35,638.56	Assessment of hypertension occurrence, management and outcomes in Canada	Co-PI	2011
	\$38,550.67	Predicting acute kidney injury (AKI) in patients undergoing cardiac surgery	Co-investigator	2011
	\$41,500.00	Influence of deficiency and excess of trace elements on outcomes in hemodialysis patients	Co-investigator	2011
	\$43,333.33	Complications of arteriovenous fistulas, arteriovenous grafts and tunneled cuffed catheters for hemodialysis: Risk patterns, comparability and impact on patient.	Co-PI	2011
	\$53,968.75	Access to and quality of cardiac care for First Nations	Principal/Senior investigator	2011
	\$72,120.00	Improving risk prediction for mortality and progression to kidney failure in older adults using eGFR and proteinuria.	Principal/Senior investigator	2011
	\$85,408.67	The impact of primary care networks on the care and outcomes of patients with diabetes	Co-PI	2011
	\$87,499.95	Access to health research: Participation and empowerment of Aboriginal Peoples in research to improve health and well-being (APH-NEAHR Proposal)	* Team Member	2011
	\$108,730.00	Role of residence location in the care of elderly Canadians with kidney failure	Co-investigator	2011
	\$109,770.06	Genetic markers of risk in hemodialysis patients	Co-investigator	2011
	\$150,000.00	The Canadian Kidney Knowledge Translation and Generation Network (CANN-NET)	Principal/Senior investigator	2011
	\$255,714.00	Enhancing existing capacity in applied health services and policy research in Western Canada	* Team Member	2011
	\$316,666.67	Innovative knowledge synthesis methods collaborative at the Li Ka Shing Knowledge Institute.	Co-investigator	2011

Name	Prorated Amount	Title	Role	Reporting Year
	\$663,937.20	The BK: KIDNI Trial (BK:Kinase inhibition to decrease nephropathy intervention trial)	Co-PI	2011
	\$834,153.33	Improving the efficient and equitable care of patients with chronic medical conditions: the Interdisciplinary Chronic Disease Collaboration (ICDC)	* Team Leader	2011
	\$2,916,666.67	Canadian Network for Observational Drug Effect Studies (cNODES)	* Team Member	2011
Sum	\$5,835,028.71			
Herman,Robert				
	\$15,454.55	Application from the Sections of General Internal Medicine (GIM), Nephrology and Endocrinology (Department of Medicine) at Foothills Medical Center for OCT-SD	Principal/Senior investigator	2011
	\$16,112.68	Proposal to Equip the Richmond Road General Internal Medicine Outpatient Clinics with Ambulatory Blood Pressure Monitoring Equipment.	Co-investigator	2011
	\$116,666.67		Principal/Senior investigator	2011
Sum	\$148,233.89			
Hilsden,Robert				
	\$58,967.38	Colon Cancer Screening Centre Biorepository Infrastructure and Equipment	Co-investigator	2011
	\$61,086.68	CIHR Team in Population-Based Colorectal Cancer Screening	Co-investigator	2011
	\$135,000.00	A research program for the rapid evaluation of novel non-invasive colon cancer screening tests	* Investigator - Salary Support	2011
	\$150,000.00	Development and validation of tools to support the Alberta Colorectal Cancer Screening Program's quality assurance program	Principal/Senior investigator	2011
Sum	\$405,054.05			
Hirani,Naushad				
	\$1,400.00	A 52-week treatment, randomized, double-blind, placebo-controlled, with open label tiotropium, parallel-group study to assess the efficacy, safety and tolerability of NVA237 in patients with chronic obstructive pulmonary disease	Co-investigator	2011
	\$1,833.33	A phase II, randomized, double-blinded, placebo controlled, parallel group study to evaluate the efficacy and safety of PH-797804 for 12 weeks in moderate COPD	Co-investigator	2011

Name	Prorated Amount	Title	Role	Reporting Year
	\$2,000.00	Potential applications of the Reservoir-Wave Model to hemodynamic analysis in patients being investigated for pulmonary	Co-investigator	2011
	\$5,022.86	DETECT Study: The natural history of early pulmonary vascular disease in Scleroderma	Site/Local PI	2011
	\$6,336.13	EARLY Trial: Endothelin antagonist trial in mildly symptomatic Pulmonary Arterial Hypertension	Site-investigator	2011
	\$8,821.33	AIRES Trials: A Phase-3, Long-term, Open-Label, Multicenter Safety and Efficacy Study of Ambrisentan in Subjects with Pulmonary Hypertension	Co-investigator	2011
	\$9,238.50	A Phase 2, Randomized, Double-blind, Placebo-controlled, Multicenter, Dose-ranging Study of Cicletanine in Subjects with Pulmonary Arterial Hypertension	Site/Local PI	2011
	\$19,352.33	FREEDOM Trials: A 16-Week, International, Multicenter, Double-Blind, Randomized, Placebo-Controlled Comparison of the Efficacy and Safety of Oral UT-15C Sustained Release Tablets in Combination with an Endothelin Receptor Antagonist and/or a Phosphodiesterase-5 Inhibitor in Subjects with Pulmonary Arterial Hypertension; 12 week placebo controlled trial and open label extension trial also included.	Site/Local PI	2011
	\$20,194.00	PATENT and CHEST Trials: Randomized, double-blind, placebo-controlled, multi-centre, multi-national study to evaluate the efficacy and safety of oral BAY 63-2521 (1 mg, 1.5mg, 2 mg, or 2.5 mg tid) in patients with symptomatic Pulmonary Arterial Hypertension (PAH) and Chronic Thromboembolic Pulmonary Hypertension (CTEPH)	Co-investigator	2011
	\$22,170.00	IMPRES Studies: A 24-week randomized placebo-controlled, double-blind multi-center clinical trial evaluating the efficacy and safety of oral QT1571 as an add-on therapy in the treatment of severe pulmonary arterial hypertension: Imatinib in Pulmonary arterial hypertension, a Randomized, Efficacy Study	Co-investigator	2011
	\$22,742.50	ARTEMIS Trial: Phase 3, Randomized, Double-Blind, Placebo-Controlled, Multi-Center, Parallel-Group, Event-Driven Study to Evaluate the Efficacy and Safety of Ambrisentan in Subjects with Early Idiopathic Pulmonary Fibrosis	Co-investigator	2011

Name	Prorated Amount	Title	Role	Reporting Year
	\$29,586.75	First-line Bosentan and Sildenafil Combination Therapy for Pulmonary Arterial Hypertension: A safety and efficacy pilot study	Principal/Senior investigator	2011
	\$33,782.10	SERAPHIN Trial: The effect of a novel dual endothelin receptor antagonist on morbidity and mortality in Pulmonary Arterial Hypertension	Site/Local PI	2011
Sum	\$182,479.83			
Hogan,David				
	\$4,285.71	An Assessment of Canadians' Willingness-to-Pay for Alzheimer's Disease Medications: Patients, Caregivers, and the General Public	Site/Local PI	2011
	\$10,633.00	Ambulatory Activity of Older Adults in Acute Care	Co-investigator	2011
	\$12,238.00	A Primary Care-based Model of Complex Chronic Disease Management for Seniors	Co-investigator	2011
	\$52,500.00	Enhancing system capacity to improve the quality and continuity of mental health care for seniors in assisted living and long-term	Co-investigator	2011
	\$60,000.00	Canadian Longitudinal Study on Aging	Site/Local PI	2011
	\$76,604.20	Canadian Longitudinal Study on Aging	Site/Local PI	2011
	\$131,840.00	Effects of Regular Exercise on Cerebrovascular Reserve in Older Adults: Role in the Prevention of Age-Related Cognitive Decline	Co-investigator	2011
	\$134,000.00	National Population Health Study of Neurological Conditions	Co-investigator	2011
	\$166,666.67	Multi-modal study of vascular function in cerebral small vessel disease	Co-investigator	2011
	\$180,000.00	Canadian Longitudinal Study on Aging	Site/Local PI	2011
	\$255,833.33	InfoRehab: Enhancing MSK Rehabilitation through Better Use of Health Information	* Collaborator	2011
	\$369,335.50	Innovations in Data, Evidence and Applications for Persons with Neurological Conditions (ideas PNC)	Co-investigator	2011
	\$575,000.00	Research to Action Program in Dementia	* Collaborator	2011
Sum	\$2,028,936.41			
Holroyd-Leduc,Jayna				
	\$3,684.21	Qualitative evaluation of an evidence-informed basal bolus insulin therapy protocol to improve the care of in-patients with diabetes.	Co-investigator	2011

Name	Prorated Amount	Title	Role	Reporting Year
	\$6,153.85	Resident driven order set development	Principal/Senior investigator	2011
	\$6,946.29	Development and usability testing of a self management web portal for older adults with chronic disease.	Co-PI	2011
	\$7,712.22	Transferring knowledge of amiodarone safety monitoring to the community practice setting using formalized care pathway	Co-investigator	2011
	\$10,576.92	Evaluation of an evidence-informed care pathway for patients with hip fractures.	Co-PI	2011
	\$11,052.63	Development and pilot testing of a self management web portal for older adults with chronic disease	Co-PI	2011
	\$24,406.67	Efficacy of a web-based seamless discharge tool	Co-investigator	2011
	\$87,709.09	Understanding the epidemiology of neurological conditions and building the methodological foundation for surveillance	Co-investigator	2011
	\$502,218.17	Knowledge Translation Canada: Strategic training initiative in health research	Site-investigator	2011
	\$2,128,949.04	Knowledge Translation Canada: A national research network	Co-investigator	2011
Sum Hull,Russell	\$2,789,409.09			
	\$4,000.00	APEX Study	Principal/Senior investigator	2011
Sum Iacucci,Marietta	\$4,000.00			
	\$40,000.00	Department of Medicine -Section of Gastroenterology start-up funds	Principal/Senior investigator	2011
	\$48,648.65	A translational approach to understanding and managing primary sclerosing cholangitis. Faculty of Medicine Emerging Team Grant, University of Calgary, \$300,000 – Team Member	Co-investigator	2011
Sum James,Matthew	\$88,648.65			
	\$8,000.00	Vascular access type and clinical outcomes in hemodialysis: a systematic review and meta-analysis	Principal/Senior investigator	2011
	\$9,000.00	Care in Alberta after coronary angiography associated acute kidney injury	Principal/Senior investigator	2011

Name	Prorated Amount	Title	Role	Reporting Year
	\$10,000.00	Definition and outcomes of chronic kidney disease using ambulatory laboratory databases	Principal/Senior investigator	2011
	\$12,073.75	Coronary angiography for patients with Stage 4 and 5 non-dialysis chronic kidney disease: a decision analysis	Co-PI	2011
	\$18,624.75	Complications of arteriovenous fistulae, grafts, and catheters for hemodialysis; risk patterns, comparability and impact on patient outcomes	Co-investigator	2011
	\$23,500.00	Coronary revascularization and quality of life for patients with chronic kidney disease in Alberta	Principal/Senior investigator	2011
	\$24,445.00	The role of chronic kidney disease in the epidemiology of acute kidney injury.	Co-investigator	2011
	\$25,250.00	Improving risk prediction for mortality and progression to kidney failure in older adults using eGFR and proteinuria	Co-investigator	2011
	\$28,913.00	Predicting Acute Kidney Injury (AKI) in Patients Undergoing Cardiac Surgery	Co-PI	2011
	\$37,438.00	Coronary angiography and revascularization for patients with Stage 4 and 5 chronic kidney disease: a decision analysis	Co-PI	2011
	\$65,214.00	Curcumin to prevent peri-operative complications after abdominal aortic aneurysm repair	Co-investigator	2011
Sum Janvier,Jack	\$262,458.50			
	\$30,300.00	Examining the Use of Traditional/Herbal/Alternative Medications by Aborigines Living with HIV/AIDS	Principal/Senior investigator	2011
Sum Jarand,Julie	\$30,300.00			
	\$862.50	Protocol: A 52-week treatment, randomized, double-blind, placebo-controlled, with open label tiotropium, parallel-group study to assess the efficacy, safety and tolerability of NVA237 in patients with chronic obstructive pulmonary disease Principal Investigator: Helmersen Sub-I's: Fell, Fisher, Hirani, Jarand, Rimmer	Co-investigator	2011

Name	Prorated Amount	Title	Role	Reporting Year
	\$1,050.00	Protocol: A 24-week randomized placebo-controlled, double-blind multi-center clinical trial evaluating the efficacy and safety of oral QT1571 as an add-on therapy in the treatment of severe pulmonary arterial hypertension: Imatinib in Pulmonary arterial hypertension, a Randomized, Efficacy Study (IMPRES) Sponsor: Novartis PI: Helmersen Sub-I's: Hirani, Fell, Fisher, Jarand, Viner	Co-investigator	2011
	\$1,283.33	Protocol: A PHASE II, RANDOMIZED, DOUBLE-BLIND, PLACEBO-CONTROLLED, PARALLEL GROUP STUDY TO EVALUATE THE EFFICACY AND SAFETY OF ONCE-DAILY ORALLY ADMINISTERED PH-797804 FOR 12 WEEKS IN ADULTS WITH MODERATE TO SEVERE CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) ON A BACKGROUND OF SALMETEROL XINAFOATE/FLUTICASONE PROPIONATE COMBINATION Sponsor: Pfizer Principal Investigator: Helmersen Sub-I's: Fell, Fisher, Hirani, Jarand, Rimmer, Thakrar, Lim	Co-investigator	2011
	\$1,449.67	Protocol: Long-term extension, multi-centre, multi-national study to evaluate the safety and tolerability of oral BAY 63-2521 (1 mg, 1.5mg, 2 mg, or 2.5 mg tid) in patients with Chronic Thromboembolic Pulmonary Hypertension (CTEPH). Sponsor: Bayer Principal Investigator: Helmersen Sub-I's: Fell, Fisher, Hirani, Jarand, Rimmer, Viner	Co-investigator	2011
	\$1,590.00	Protocol: Randomized, double-blind, placebo-controlled, multi-centre, multi-national study to evaluate the efficacy and safety of oral BAY 63-2521 (1 mg, 1.5mg, 2 mg, or 2.5 mg tid) in patients with Chronic Thromboembolic Pulmonary Hypertension (CTEPH). Sponsor: Bayer Principal Investigator: Helmersen Sub-I's: Fell, Fisher, Hirani, Jarand, Rimmer, Viner	Co-investigator	2011

Name	Prorated Amount	Title	Role	Reporting Year
	\$2,132.50	Protocol: A two-stage prospective observational cohort study in scleroderma patients to evaluate screening tests and the incidence of pulmonary arterial hypertension and pulmonary hypertension AC-0520510 Sponsor: Actelion Pharmaceuticals Principal Investigator: Hirani Sub-I's: Fell, Fisher, Helmersen, Jarand, Rimmer, Viner	Co-investigator	2011
	\$2,270.33	Protocol: ARTEMIS-PH: : A Phase 3, Randomized, Double-Blind, Placebo-Controlled, Multi-Center, Parallel-Group Study to Evaluate the Efficacy and Safety of Ambrisentan in Subjects with Idiopathic Pulmonary Fibrosis and Pulmonary Hypertension. GS-US-300-0128 Sponsor: Gilead Sciences Inc. Principal Investigator: Fell Sub-I's: Fisher, Hirani, Rimmer, Helmersen, Jarand	Co-investigator	2011
	\$2,531.33	Protocol: A Phase-3, Long-term, Open-Label, Multicenter Safety and Efficacy Study of Ambrisentan in Subjects with Pulmonary Hypertension Sponsor: Gilead PI: Helmersen Sub-I's: Fell, Fisher, Jarand, Hirani, Rimmer	Co-investigator	2011
	\$3,765.50	Protocol: Long-term extension, multi-centre, multi-national study to evaluate the efficacy and safety of oral BAY 63-2521 (1 mg, 1.5mg, 2 mg, or 2.5 mg tid) in patients with symptomatic Pulmonary Arterial Hypertension (PAH) Sponsor: Bayer Principal Investigator: Helmersen Sub-I's: Fell, Fisher, Hirani, Jarand, Rimmer, Viner	Co-investigator	2011
	\$4,109.00	Protocol: A Phase 2, Randomized, Double-blind, Placebo-controlled, Multicenter, Dose-ranging Study of Cicletanine in Subjects with Pulmonary Arterial Hypertension Sponsor: Gilead PI: Hirani Sub-I's: Helmersen, Ainslie, Fell, Fisher, Jarand, Rimmer, Viner	Co-investigator	2011

Name	Prorated Amount	Title	Role	Reporting Year
	\$4,503.75	Protocol: Randomized, double-blind, placebo-controlled, multi-centre, multi-national study to evaluate the efficacy and safety of oral BAY 63-2521 (1 mg, 1.5mg, 2 mg, or 2.5 mg tid) in patients with symptomatic Pulmonary Arterial Hypertension (PAH) Sponsor: Bayer Principal Investigator: Helmersen Sub-I's: Fell, Fisher, Hirani, Jarand, Rimmer, Viner	Co-investigator	2011
	\$8,293.75	Protocol: ARTEMIS: A Phase 3, Randomized, Double-Blind, Placebo-Controlled, Multi-Center, Parallel-Group, Event-Driven Study to Evaluate the Efficacy and Safety of Ambrisentan in Subjects with Early Idiopathic Pulmonary Fibrosis (IPF) GS-US-231-0101 Sponsor: Gilead Sciences Inc. Principal Investigator: Fell Sub-I's: Fisher, Hirani, Rimmer, Helmersen, Jarand	Co-investigator	2011
	\$20,794.75	Protocol: TDE-PH-308: A 16-Week, International, Multicenter, Double-Blind, Randomized, Placebo-Controlled Study of the Efficacy and Safety of Oral UT-15C Sustained Release Tablets in Subjects with Pulmonary Arterial Hypertension (FREEDOM-C2) PI: Hirani Sub-I's: Ainslie, Fell, Fisher, Helmersen, Jarand, Rimmer, Viner	Co-investigator	2011
Sum	\$54,636.42			
Jenkins,Deirdre				
	\$1,050.00	Improving Resident Evaluation: A Multi Source Feedback Tool to Assess CanMEDS Competancies	Principal/Senior investigator	2011
	\$1,071.43	Improving Resident Evaluation: a Multi Source Feedback Tool to Assess CanMEDS Competencies	Principal/Senior investigator	2011
Sum	\$2,121.43			
Jones,Charlotte				
	\$9,500.00	A Primary Care Network intervention to enhance Indo-Asian risk factor management \$19,000	Co-investigator	2011
	\$9,950.00	Taking care of chronic disease: Realizing approaches for Canada's aging ethnic population: a workshop.	Co-investigator	2011
	\$14,500.00	ETHOS (Ethnicity Targeted Health Optimization Strategies) team workshop	Principal/Senior investigator	2011
	\$ 14,500			

Name	Prorated Amount	Title	Role	Reporting Year
	\$18,750.00	PHAC Indo Asian CHAMP - Stage 2	Principal/Senior investigator	2011
	\$50,756.25	Community Action Teams for Cardiovascular Health (CATCH): Targeting diabetes and hypertension in low income community-dwelling seniors in Calgary: an Alberta CHAMP initiative.	Principal/Senior investigator	2011
	\$76,003.13	"Know your numbers. Track your heart". An Indo-Asian National Cardiovascular Screening Initiative	Principal/Senior investigator	2011
	\$202,675			
	\$102,240.00	Urban -CHAMP	Principal/Senior investigator	2011
Sum	\$281,699.38			
Kaplan, Gilaad				
	\$800.00	A 5-Year Registry Study of Humira (Adalimumab) in Subjects with Moderately to Severely Active Crohn's Disease (CD)	Co-investigator	2011
	\$1,302.08	A phase IIb, multinational, randomized, double-blind, placebo-controlled trial to assess the efficacy and safety of certolizumab pegol, a pegylated Fab' fragment of a humanized anti-TNF-alpha monoclonal antibody, administered subcutaneously at weeks 0, 2 and 4 in subjects with moderately to severely active Crohn's disease	Co-investigator	2011
	\$1,581.50	A Phase IIb multi-center, double-blind, placebo-controlled, randomized trial to examine the corticosteroid-sparing effect of certolizumab pegol in patients with moderate to severe Crohn's disease (COSPAR I)	Co-investigator	2011
	\$1,666.67	Pregnancy Outcomes in IBD	Co-investigator	2011
	\$2,230.00	A Multicenter, Randomized, Double-Blind, Placebo- Controlled Study of the Human Anti-TNF Monoclonal Antibody Adalimumab for the Induction of Clinical Remission in Subjects with Moderately to Severely Active Ulcerative Colitis	Co-investigator	2011
	\$2,497.00	A multicenter, randomized, double-blind, placebo-controlled, parallel-group proof-of-concept study to assess the efficacy, safety and tolerability of two single iv infusions of AIN457 10mg/kg (anti IL-17 monoclonal antibody) in patients with moderate to severe active Crohn's disease	Co-investigator	2011

Name	Prorated Amount	Title	Role	Reporting Year
	\$2,809.06	A phase IIb, multinational, open-label, follow-on trial to C87085 designed to assess the long-term safety of certolizumab pegol, a pegylated Fab' fragment of a humanized anti-TNF-alpha monoclonal antibody, administered at weeks 0, 2 and 4, and then every 4 weeks thereafter, in subjects with moderately to severely active Crohn's disease who have participated in study C87085	Co-investigator	2011
	\$3,684.20	A Multicenter, Open-Label Study of the Human Anti-TNF Monoclonal Antibody Adalimumab to Evaluate the Long Term Safety and Tolerability of Repeated Administration of Adalimumab in Subjects with Ulcerative Colitis	Co-investigator	2011
	\$4,564.00	A Phase III, multicenter, placebo-controlled, randomized, double blind durability and retreatment study to evaluate the safety and efficacy of PROCHYMAL™ (ex vivo cultured adult human mesenchymal stem cells) intravenous infusion for the maintenance and re-induction of clinical benefit and remission in subjects experiencing treatment-refractory moderate-to-severe Crohn's disease	Co-investigator	2011
	\$5,787.60	A Phase IIB, Multi-Center, Randomized, Double-Blind, Parallel Group, Placebo-Controlled, Dose Ranging Study Comparing the Efficacy, Safety, and Pharmacokinetics of Intravenous Infusions of ABT-874 vs. Placebo in Subjects with Moderately to Severely Active Crohn's Disease.	Co-investigator	2011
	\$6,289.20	A Phase III, Multi-Center, Randomized, Placebo-Controlled Study to Evaluate the Clinical Efficacy and Safety of Induction and Maintenance Therapy with Abatacept in Subjects with Active Crohn's Disease (CD) who have had an Inadequate Clinical response and/or Intolerance to Medical Therapy	Co-investigator	2011
	\$10,000.00	Genetic Markers of Outcomes in Crohn's Disease	Co-investigator	2011
	\$20,000.00	Etiology of Inflammatory Bowel Disease: Gene, Microbe, & Environment Interactions	Co-investigator	2011
	\$23,076.92	Air pollution and appendicitis	Principal/Senior investigator	2011
	\$29,855.67	The effect of acute air pollution exposure on the incidence of appendicitis: a multi-city study	Principal/Senior investigator	2011

Name	Prorated Amount	Title	Role	Reporting Year
	\$41,292.33	Long-term Outcomes Following colectomy for Ulcerative Colitis	Principal/Senior investigator	2011
	\$58,463.67	Translational Health Research Collaboratorium	Co-PI	2011
	\$58,463.67	Translational Health Research Collaboratorium	Co-PI	2011
	\$59,016.39	CIHR New Investigator Award	Principal/Senior investigator	2011
	\$64,703.89	The Incidence, Morbidity and Morality of Diverticulitis	Principal/Senior investigator	2011
	\$86,400.00	The effect of acute air pollution exposure on the incidence of appendicitis: a multi-city study	Principal/Senior investigator	2011
	\$108,705.88	Alberta Heritage Foundation for Medical Research (AHFMR) Population Health Investigator	Principal/Senior investigator	2011
Sum	\$593,189.73			
Kline, Gregory				
	\$4,800.00	Prevalence of Growth Hormone Deficiency (GHD) in Patients with Unexplained Chronic Fatigue after Undergoing Bone Marrow Transplantation (BMT) in Adulthood	Principal/Senior investigator	2011
Sum	\$4,800.00			
Kurwa, Habib				
	\$10,384.62	Polyomavirus in non-melanoma skin cancer	Principal/Senior investigator	2011
	\$36,000.00	The role of microRNAs in cutaneous squamous cell carcinomas	Co-investigator	2011
Sum	\$46,384.62			
Lau, David				
	\$2,000.00	Role of adipokines in obesity-linked insulin resistance and diabetes	Principal/Senior investigator	2011
	\$5,625.00	Novel imaging-derived biomarkers for the early detection of diabetic cardiomyopathy	Co-investigator	2011
	\$13,714.29	Saxagliptin Assessment of Vascular Outcomes Recorded in Patients with Diabetes Mellitus	Principal/Senior investigator	2011
	\$16,569.43	A randomized, double-blind, double-dummy, 2-arm parallel-group, multicenter 24-week study comparing the efficacy and safety of AVE0010 to sitagliptin as add-on to metformin in obese type 2 diabetic patients younger than 50 and not adequately controlled with Metformin.	Principal/Senior investigator	2011

Name	Prorated Amount	Title	Role	Reporting Year
	\$22,983.80	Effect of Exenatide on abdominal fat distribution in patients with type 2 diabetes pretreated with metformin	Principal/Senior investigator	2011
	\$28,838.77	A 24-week, multicentre, randomized, double-blind, placebo controlled phase 3 study with a 28-week extension period to evaluate the efficacy of Dapagliflozin 10mg once daily compared with placebo on control, blood pressure, body weight, and safety, in patients with type 2 diabetes, cardiovascular disease and hypertension who exhibit inadequate glycaemic control on usual care. Protocol No: D1690C00018	Site-investigator	2011
	\$31,666.67	A 24-week, international, randomized, parallel-group, double-blind, placebo-controlled phase III study with a 24-week extension period to evaluate the efficacy and safety of dapagliflozin therapy when added the therapy of patients with type 2 diabetes with inadequate glycaemic control on insulin.	Principal/Senior investigator	2011
	\$33,293.00	A phase III randomized, double-blind, placebo controlled, parallel-group, efficacy and safety study of BI 10773 (10 mg, 25 mg) administered orally, once daily over 24 weeks in patients with type 2 diabetes mellitus with insufficient glycaemic control despite treatment with metformin alone or metformin in combination with a sulfonylurea	Principal/Senior investigator	2011
	\$42,779.23	Physical Activity, Mobility and Health. Co-PIs: KS Courneya, SN Culos-Reed, CM Friedenreich, ML McNeely, JKH Vallance. Co-investigators: G Bell, D Lau, J Mackey, Y Yasui, Y Yuan	Co-investigator	2011
	\$65,100.00	Development of a multidimensional measure of activity energy expenditure for use in large populations	Co-investigator	2011
Sum	\$262,570.18			
Laupland, Kevin				
	\$2,647.06	Effect of antimicrobial therapy on the outcome of bloodstream infections due to AmpC and ESBL-producing Enterobacteriaceae. Laupland KB (PI), Gregson DB, Dalton B, Pitout JDD.	Principal/Senior investigator	2011
	\$41,666.67	Epidemiology of Haemophilus influenzae bacteremia: A multi-national population-based assessment.	Principal/Senior investigator	2011
Sum	\$44,313.73			

Name	Prorated Amount	Title	Role	Reporting Year
LeClercq, Sharon	\$12,748.32	A Randomized Open-Label Phase II/III Multicenter Study of High Dose Immunosuppressive Therapy Using Total Body Irradiation, Cyclophosphamide, ATGAM, and Autologous Transplantation with Auto-CD43+HPC versus Intravenous Pulse Cyclophosphamide for the Treatment of Severe Systemic Sclerosis	Co-investigator	2011
Sum	\$12,748.32			
Lee, Samuel	\$20,000.00	Operating grant: "Myosin heavy chain isoforms in cirrhotic cardiomyopathy", 2011-13, \$60,000/yr.	Site/Local PI	2011
	\$40,000.00	"Neural mechanisms of portal hypertension"	Principal/Senior investigator	2011
Sum	\$60,000.00			
Leigh, Richard	\$3,750.00	Mechanism-based evidence that Advair®, but not corticosteroid alone, induces a novel anti-asthma phenotype.	Co-investigator	2011
	\$7,000.00	Alberta Sepsis Network	Co-investigator	2011
	\$8,333.33	Treatment of acute asthma with perfluorocarbon/ carbon dioxide formulations.	Co-PI	2011
	\$9,187.50	A double-blind, randomized, placebo-controlled, 3-way crossover study to evaluate the efficacy and safety of 14-day inhaled TPI ASM8 in subjects with asthma.	Co-PI	2011
	\$10,000.00	Human Rhinovirus modulation of growth factors involved in airway remodeling	Principal/Senior investigator	2011
	\$14,764.33	A Phase 2b, Randomized Study to Evaluate the Efficacy and Safety of Subcutaneous MEDI-528 in Adults with Uncontrolled Asthma.	Site/Local PI	2011
	\$15,000.00	Treatment of acute asthma with perfluorocarbon/ carbon dioxide formulations	Co-PI	2011

Name	Prorated Amount	Title	Role	Reporting Year
	\$17,110.50	A double-blind, double-dummy, randomised, placebo-controlled, 4-way crossover, multi-centre Phase II study with budesonide as an active control to evaluate the efficacy and safety of 2 doses of inhaled AZD5423 over 7 days in patients with mild allergic asthma challenged with an inhaled allergen.	Co-PI	2011
	\$25,000.00	Rhinovirus induced exacerbations of asthma and COPD	Co-investigator	2011
	\$29,240.01	A multicentre, randomised, double-blind, placebo-controlled, parallel group, dose ranging study to determine the effect of mepolizumab on exacerbation rates in subjects with severe uncontrolled refractory asthma.	Site/Local PI	2011
	\$38,367.15	A phase II, multi-centre, randomized, double-blind, placebo-controlled, parallel-group study to evaluate the efficacy, safety and tolerability of intravenous MEMP1972A in the prevention of allergen-induced airway obstruction in patients with mild asthma.	Co-PI	2011
	\$50,000.00	Do rhinovirus infections contribute to airway remodeling in asthma?	Principal/Senior investigator	2011
	\$61,000.00	Are anti-inflammatory glucocorticoid-inducible genes in human taking ICS	Principal/Senior investigator	2011
	\$62,500.00	Establishing allergen-challenge clinical models in the upper and lower airways at the University of Calgary	Principal/Senior investigator	2011
	\$110,000.00	Human Rhinovirus modulation of growth factors involved in airway remodeling	Principal/Senior investigator	2011
	\$115,312.50	Can rhinovirus infections initiate airway remodeling in asthma?	Principal/Senior investigator	2011
	\$125,000.00	Airway inflammation and airway remodeling	Co-PI	2011
	\$200,000.00	Can rhinovirus infections initiate airway remodeling in asthma?	Principal/Senior investigator	2011
Sum	\$901,565.32			
Lemaire, Jane				
	\$3,555.00	What does resilience mean to you? A qualitative study exploring physicians' perceptions of resilience. Co-investigators Dr Jean E. Wallace, Dr Mamta Gautam.	Principal/Senior investigator	2011
Sum	\$3,555.00			
Leung, Alexander				

Name	Prorated Amount	Title	Role	Reporting Year
	\$10,000.00	Evaluating the impact of computerized physician order entry in community hospitals	* Research Fellow	2011
	\$27,692.31	Evaluating the impact of computerized physician order entry in community hospitals	* Research Fellow	2011
	\$54,999.69	Evaluating the impact of computerized physician order entry in community hospitals	* Research Fellow	2011
Sum	\$92,692.00			
Leung, Yvette				
	\$9,230.77	Population-based study of pregnancy outcomes in IBD patients	Principal/Senior investigator	2011
	\$12,500.00	Materno-fetal outcomes in inflammatory bowel disease	Co-investigator	2011
	\$37,500.00	Materno-fetal outcomes in inflammatory bowel disease	Co-investigator	2011
Sum	\$59,230.77			
Li, Pin				
	\$20,000.00	Physician Communication in ICU Patient transfer	Principal/Senior investigator	2011
Sum	\$20,000.00			
Louie, Thomas				
	\$6,216.22	Exploring the microbiome properties of fidaxomicin as a treatment for C. difficile diarrhea. Basic studies of the microbiome in patients with C. difficile diarrheal disease.	Principal/Senior investigator	2011
Sum	\$6,216.22			
Love, Jonathan				
	\$75,000.00	Use of fully-covered, self-expandable metallic stents for first-line treatment of benign bile duct strictures	Co-investigator	2011
Sum	\$75,000.00			
Ma, Irene Wai Yan				
	\$2,884.62	Effects of Educational Strategies on Cognitive Load for Teaching Medical and Surgical Procedures: An Exploratory Study	Co-PI	2011
	\$4,000.00	Real time ultrasound training	Principal/Senior investigator	2011
	\$9,230.77	Comprehensive Assessment of Procedural Skills In Internal Medicine	Principal/Senior investigator	2011

Name	Prorated Amount	Title	Role	Reporting Year
Sum	\$16,115.38			
MacEachern,Paul				
	\$0.02	Early Detection of Lung Cancer - A Pan-Canadian Study	Site-investigator	2011
Sum	\$0.02			
MacRae,Jennifer				
	\$3,333.33	Quality of Life Amongst Nocturnal Hemodialysis and Transplant Patients	Co-investigator	2011
	\$12,500.00	Dialysis Outcomes and Practice Patterns Study (DOPPS)	Site/Local PI	2011
	\$12,857.14	The effect of citrate on heparin dose in hemodialysis patients: a randomized crossover trial	Principal/Senior investigator	2011
	\$18,918.92	A Randomized Controlled trial of Buttonhole vs standard needling in Hemodialysis Patients	Principal/Senior investigator	2011
	\$27,083.33	Complications of arteriovenous fistulas, arteriovenous grafts and tunneled cuffed catheters for hemodialysis: risk patterns, comparability and impact on patient outcomes	Co-investigator	2011
	\$34,782.61	EVOLVE (Evaluation of Cinacalcet HCL Therapy to Lower Cardiovascular Events)	Principal/Senior investigator	2011
	\$56,875.00	Predicting adverse events in home hemodialysis.	Co-investigator	2011
Sum	\$166,350.34			
Manns,Braden				
	\$29,076.92	The Impact of Reduced ICU Bed Availability Due to the H1N1 Pandemic on the Care and Outcomes of Acutely Unwell Hospitalized Patients	Principal/Senior investigator	2011
	\$37,438.00	Coronary Angiography and Revascularization for patients with Stage 4 and 5 non-dialysis chronic kidney disease: Decision Analysis	Principal/Senior investigator	2011
	\$50,000.00	Improving the Efficient and Equitable Care of Patients with Chronic Medical Conditions Interdisciplinary Chronic Disease Collaboration (ICDC)	Principal/Senior investigator	2011
	\$51,245.20	The impact of primary care networks on the care and outcomes of patients with diabetes	Principal/Senior investigator	2011

Name	Prorated Amount	Title	Role	Reporting Year
	\$87,500.00	Determining the effectiveness and cost-effectiveness of chronic disease management programs for patients with diabetes.	Principal/Senior investigator	2011
	\$102,857.14	CANadian KidNey KNowledge Translation and Generation NETwork (CANN-NET)	Principal/Senior investigator	2011
	\$244,451.33	Canadian Value of the QALY (CanVaQ): An assessment of public and policy-maker perspectives	Principal/Senior investigator	2011
Sum	\$602,568.60			
Martin,Liam	\$3,747.38	'The Window of Opportunity': Seizing the Opportunity for Positive Lifestyle Modifications in Early Inflammatory Arthritis.	Co-PI	2011
	\$10,000.00	Radiographic, Clinical and Patient outcomes in a multicenter, open-label phase IV randomized trial of earlier Adalimumab introduction therapy versus later introduction as per standard of care after initial methotrexate failure in Early Rheumatoid Arthritis patients. EID: 24011 / RT: 10000267	Site/Local PI	2011
	\$11,250.00	11. and safety in re-treatment of Rituximab (MabThera/Rituxan) in patients with active rheumatoid arthritis. Hoffman La-Roche, IDEC & Genetech,	An open label study of efficacy	Site/Local PI 2011
	\$12,500.00	BMS SEVEN = IM133-001 Protocol IM133001: Phase IIB, Randomized, Multi-Center, Double-Blind, Dose-Ranging, Placebo/Active Controlled Study to Evaluate the Efficacy and Safety of BMS-945429 Subcutaneous Injection With or Without Methotrexate in Subjects with Moderate to Severe Rheumatoid Arthritis With Inadequate Response to Methotrexate. EID: 24177 / RT: 10000512	Site/Local PI	2011
	\$12,500.00	BMS VERA = IM101-226 A Phase 3b, Randomized, Active Controlled Trial to Evaluate the Efficacy and Safety of Abatacept SC in Combination with Methotrexate in Inducing Clinical Remission Compared to Methotrexate Monotherapy in Adults with Very Early Rheumatoid Arthritis RA. EID: 23484 / RT: 630139	Site/Local PI	2011
	\$13,574.47	EARLY INFLAMMATORY ARTHRITIS CLINIC ASSESSMENT	Principal/Senior investigator	2011

Name	Prorated Amount	Title	Role	Reporting Year
	\$16,363.64	An open-label study assessing the addition of subcutaneous golimumab (GLM) to conventional disease-modifying antirheumatic drug (DMARD) therapy in biologic-naïve subjects with rheumatoid arthritis (Part 1), followed by a randomized study assessing the value of combined intravenous and subcutaneous GLM administration aimed at inducing and maintaining remission (Part 2). (Phase 3b Protocol No. P06129)	Principal/Senior investigator	2011
	\$16,666.67	MERCK (Formerly SPRI) GOMORE = Site/Local PI P06129 An open-label study assessing the addition of subcutaneous golimumab (GLM) to conventional disease-modifying antirheumatic drug (DMARD) therapy in biologic-naïve subjects with rheumatoid arthritis (Part 1), followed by a randomized study assessing the value of combined intravenous and subcutaneous GLM administration aimed at inducing and maintaining remission (Part 2). EID: 21043 / RT: 630052		2011
	\$20,000.00	Rheumatoid Arthritis: Comparison of Active Therapies in patients with active disease despite methotrexate therapy (R.A.C.A.T.)	Co-investigator	2011
	\$29,212.25	2. of active therapies in patients with active disease despite methotrexate therapy (RACAT). Veterans Administration and The Canadian Arthritis Network	Rheumatoid Arthritis: Comparison	Site/Local PI 2011
	\$125,000.00	Protocol for Monitoring the Safety and Efficacy of Biologic Therapies in the Treatment of Systemic Rheumatic Diseases	Principal/Senior investigator	2011
Sum McLaughlin, Kevin	\$270,814.41			
	\$1,151,787.54	Improving the efficient and equitable care of patients with chronic medical conditions interdisciplinary chronic disease collaboration	Co-investigator	2011
Sum Meatherall, Bonnie	\$1,151,787.54			
	\$8,608.70	Discretionary Funds - Section of Infection coding, hosting, curriculum design and production.	Principal/Senior investigator	2011
Sum	\$8,608.70			

Name	Prorated Amount	Title	Role	Reporting Year
Meddings,Jonathan	\$10,000.00	Defining the pathogenesis of immune deficiency in chronic HIV infection	Co-investigator	2011
	\$54,156.67	Capsule endoscopy for the assessment of abnormal intestinal permeability in Crohn's disease relatives	Co-investigator	2011
	Sum	\$64,156.67		
Mody,Christopher	\$5,000.00	Orbit 1: A study of inhaled ciprofloxacin in non-CF bronchiectasis	Principal/Senior investigator	2011
	\$13,846.15	Host Defense to Cryptococcus gattii from Vancouver Island	Principal/Senior investigator	2011
	\$21,500.00	T lymphocyte and macrophage mediated inflammation and immunosuppression in Cystic Fibrosis	Principal/Senior investigator	2011
	\$21,538.46	Host Defense to Cryptococcus gattii from Vancouver Island	Principal/Senior investigator	2011
	\$42,330.49	Direct Lymphocyte mediated antimicrobial mechanisms	Principal/Senior investigator	2011
	\$68,400.00	T lymphocyte and macrophage mediated inflammation and immunosuppression in Cystic Fibrosis	Principal/Senior investigator	2011
	\$71,963.33	Direct Lymphocyte mediated antimicrobial mechanisms	Principal/Senior investigator	2011
	Sum	\$244,578.44		
Mosher,Dianne	\$8,125.00	YHES! Young Adults Living with JA and Employment Study	Co-investigator	2011
	\$21,650.96	Supporting 'effective consumers': Using a decision aid to improve patients' decisions about methotrexate use for rheumatoid arthritis	Site/Local PI	2011
	\$66,666.67	Impact of Arthritis 2010-2040	Co-investigator	2011
	\$120,000.00	A Decision Support (SD) Tool for Planning Integrated Sustainable Health Services for Patient with Osteoarthritis of the Hip and Knee	Co-investigator	2011
Muruve,Daniel	Sum	\$216,442.63		
	\$2,000.00	The Alberta Sepsis Network	Co-investigator	2011
	\$6,250.00	The Role of the Inflammasome in Renal Injury	Principal/Senior investigator	2011
	\$42,000.00	Calcineurin-Induced Heart Failure and the Inflammasome	Co-investigator	2011

Name	Prorated Amount	Title	Role	Reporting Year
	\$75,000.00	A Comprehensive Approach to the Management of Patients with Glomerulonephritis: From Bench to Bedside	Principal/Senior investigator	2011
	\$83,333.33	Inflammation and Kidney Disease	Principal/Senior investigator	2011
	\$85,500.00	The NLRP-3 inflammasome is a key regulator of intestinal homeostasis	Co-investigator	2011
	\$112,000.00	The role of the inflammasome in renal injury	Principal/Senior investigator	2011
Sum	\$406,083.33			
Mustata,Stefan				
	\$4,923.08	The effect of an enhanced follow-up on arterial stiffness and quality of life of kidney transplant recipients referred for exercise training to the Living Well with Chronic Condition (LWCC) Program, Southern Alberta Transplant Program (ALTRA)	Principal/Senior investigator	2011
Sum	\$4,923.08			
Mydlarski,P. Regine				
	\$1,000.00	Skin cancer in solid organ transplantation.	Principal/Senior investigator	2011
	\$7,200.00	Polyomavirus in non-melanoma skin cancer	Co-PI	2011
	\$9,000.00	A randomized, double-blind, placebo-controlled trial to assess the safety and efficacy of intravenous immunoglobulin in the treatment of pemphigus vulgaris.	Principal/Senior investigator	2011
	\$9,600.00	MiRNA:mRNA regulatory networks in squamous cell carcinomas.	Principal/Senior investigator	2011
	\$12,600.00	Microproteomics: the role of GW bodies in cutaneous squamous cell carcinomas	Principal/Senior investigator	2011
	\$33,333.33	Biomarkers of viral pathogenesis.	Co-investigator	2011
	\$36,000.00	The role of microRNAs in cutaneous squamous cell carcinomas	Principal/Senior investigator	2011
Sum	\$108,733.33			
Myers,Robert				
	\$6,407.77	Rituximab in primary biliary cirrhosis refractory to ursodeoxycholic acid.	Site-investigator	2011
	\$16,614.33	National Trends in Hepatitis C-Related Hospitalizations, Liver Transplants, Mortality, and Utilization of Antiviral Therapies	Principal/Senior investigator	2011

Name	Prorated Amount	Title	Role	Reporting Year
	\$16,666.67	Hospitalization for IBD: Risk factors, temporal trends, and health care utilization	Co-PI	2011
	\$35,333.33	Optimizing the management of patients with chronic liver disease.	Principal/Senior investigator	2011
	\$60,000.00	Noninvasive prediction of hepatic fibrosis using serum markers in patients with nonalcoholic fatty liver disease	Principal/Senior investigator	2011
Sum	\$135,022.10			
Novak, Kerri				
	\$95,000.00	Use of Transabdominal Ultrasound in The Prospective Monitoring of Disease Activity in Crohn's Disease Treated with Adalimumab: Correlation of Inflammatory Activity on Sonography with Ileocolonoscopy.	Principal/Senior investigator	2011
Sum	\$95,000.00			
Owen, Carolyn				
	\$10,416.67	Investigation of new prognostic markers in acute leukemia using a tissue microarray (TMA)	Co-PI	2011
	\$25,000.00	Examining the clinical relevance of micro RNAs (miRNA) in diffuse large B cell lymphoma	Principal/Senior investigator	2011
Sum	\$35,416.67			
Panaccione, Remo				
	\$800.00	A 5-Year Registry Study of Humira (Adalimumab) in Subjects with Moderately to Severely Active Crohn's Disease (CD)	Principal/Senior investigator	2011
	\$2,604.17	Population Health Studies in IBD Alberta IBD Consortium	Co-investigator	2011
	\$2,803.06	A phase IIIb, multinational, open-label, follow-on trial to C87085 designed to assess the long-term safety of certolizumab pegol, a pegylated Fab' fragment of a humanized anti-TNF-alpha monoclonal antibody, administered at weeks 0, 2 and 4, and then every 4 weeks thereafter, in subjects with moderately to severely active Crohn's disease who have participated in study C87085	Principal/Senior investigator	2011

Name	Prorated Amount	Title	Role	Reporting Year
	\$3,684.20	A Multicenter, Open-Label Study of the Human Anti-TNF Monoclonal Antibody Adalimumab to Evaluate the Long Term Safety and Tolerability of Repeated Administration of Adalimumab in Subjects with Ulcerative Colitis.	Principal/Senior investigator	2011
	\$5,400.00	A Multicenter, Randomized, Double-Blind, Placebo- Controlled Study of the Human Anti-TNF Monoclonal Antibody Adalimumab for the Induction of Clinical Remission in Subjects with Moderately to Severely Active Ulcerative Colitis	Principal/Senior investigator	2011
Sum	\$15,291.43			
Parkins, Mike				
	\$1,000.00	The influence of chronic renal failure on host normal microbial flora: A contributor to increased susceptibility to infection?	Co-PI	2011
	\$2,508.64	The Evolution of a Pulmonary Exacerbation: A preliminary analysis of bacterial population dynamics culminating in an acute respiratory perturbations	Principal/Senior investigator	2011
	\$3,969.07	Pseudomonas aeruginosa infection transmission among patients attends attending the Calgary Adult Cystic Fibrosis Clinic: Implications for Infection Control	Principal/Senior investigator	2011
	\$4,918.03	Factors involved in the occurrence and evolution of an acute pulmonary exacerbation in patients with cystic fibrosis and chronic lung infection: A preliminary investigation	Principal/Senior investigator	2011
Sum	\$12,395.75			
Pendharkar, Sachin				
	\$800.00	A methodologic approach to the identification of sleep disorders using electronic data	Principal/Senior investigator	2011
	\$5,200.00	A methodologic approach to the identification of sleep disorders using electronic data	Principal/Senior investigator	2011
	\$21,666.67	Identifying Airway Disease in the South Calgary Primary Care Network	Co-investigator	2011
	\$25,000.00	Optimizing Patient Flow: Using Computer Simulation to Improve Operational Efficiency of an Academic Sleep Centre	* Clinical Fellowship	2011
Sum	\$52,666.67			

Name	Prorated Amount	Title	Role	Reporting Year
Pollak,P. Timothy				
	\$2,520.00	RELY-ABLE Long Term Multi-center Extension of Dabigatran Treatment in Patients With Atrial Fibrillation Who Completed RE-LY Trial	Site/Local PI	2011
	\$7,384.62	CTAF-2. A 7-to 13-month, prospective, randomised, double-blind placebo-controlled study to determine the efficacy of 8 mg/day oral perindopril to prevent the recurrence of atrial fibrillation in patients with systemic hypertension (the Canadian Trial Fibrillation-2)	Site/Local PI	2011
	\$7,603.88	Transferring knowledge of amiodarone safety monitoring to the community practice setting using a formalized care pathway	Principal/Senior investigator	2011
	\$8,056.34	Proposal to Equip the General Internal Medicine Outpatient Clinics with Ambulatory Blood Pressure Monitoring Equipment	Principal/Senior investigator	2011
	\$11,294.12	AFFORD (Atrial Fibrillation Fish Oil Research StuDy) A multicentre, randomized trial of the effect of long-chain N-3 polyunsaturated (Omega-3) fatty acids on arrhythmia recurrence in atrial fibrillation.	Site/Local PI	2011
Sum	\$36,858.95			
Poon,Man-Chiu				
	\$2,500.00	Development of hemophilia Physiotherapy Manual in China	Co-investigator	2011
	\$7,500.00	Multicentre Canadian Study of Prophylaxis in Older Adults with Severe Hemophilia	Co-investigator	2011
	\$7,511.54	Evaluating the risk of ischemic heart disease in hemophiliacs and carriers of hemophilia: a case study	Principal/Senior investigator	2011
	\$9,033.66	In vivo assessment of bone microarchitecture using HR-pQCT in hemophilia patients: Insight into etiology of decreased BMD in this patient population	Principal/Senior investigator	2011
	\$11,250.00	A genome wide association study (GWAS) to determine factors that contribute to mcocutaneous bleeding	Co-investigator	2011
	\$13,846.15	Multicentre Canadian Study of Prophylaxis in Older Adults with Severe Hemophilia	Co-PI	2011
	\$20,389.60	Barriers to Health Care Delivery to Patients with Mild Hemophilia A	Principal/Senior investigator	2011
	\$23,552.56	Investigation of clotting activity heterogeneity in hemophilia A	Principal/Senior investigator	2011

Name	Prorated Amount	Title	Role	Reporting Year
	\$90,000.00	Barriers to Health Care Delivery to Patients with Mild Hemophilia A (clinical scholarship and research operating funding for Dr. Dawn Goodyear - Hemostasis fellow)	Principal/Senior investigator	2011
Sum	\$185,583.51			
Quinn,Robert				
	\$4,659.11	Access to and outcomes of kidney transplantation in Ontario: Is there a socioeconomic gradient?	Co-investigator	2011
	\$4,758.41	Beta blockers, dialyzability, and outcomes	Co-investigator	2011
	\$5,416.67	Improving the quality and efficiency of dialysis care: maximizing the use of peritoneal dialysis	Principal/Senior investigator	2011
	\$8,079.96	Improving risk prediction for mortality and progression to kidney failure in older adults using eGFR and proteinuria	Co-investigator	2011
	\$10,430.00	Complications of Arteriovenous Fistulas, Arteriovenous Grafts and Tunnelled Cuffed Catheters for Hemodialysis: Risk Patterns, Comparability and Impact on Patient Outcomes	Co-investigator	2011
	\$38,885.10	CIHR Team in Pharmacologic Management of Chronic Diseases in Older Adults II	Co-investigator	2011
	\$83,404.87	AHFMR Team Improving the Efficient and Equitable Delivery of Health Care for Chronic Medical Conditions	Co-investigator	2011
	\$1,750,000.00	Canadian Network for Observational Drug Effect Studies (cNODES)	Co-investigator	2011
Sum	\$1,905,634.12			
Rabi,Doreen				
	\$10,000.00	Does academic reporting on sex disparities in care lead to gradual disappearance of disparities? An evaluation of knowledge dissemination and ensuing change in cardiovascular care.	Principal/Senior investigator	2011
	\$18,864.00	Gender and sex determinants of premature coronary artery syndrome (GENESIS PRAXY)	Co-PI	2011
	\$20,432.43	Exploring Sex Differences in the Efficacy of Cardioprotective Medications.	Principal/Senior investigator	2011

Name	Prorated Amount	Title	Role	Reporting Year
	\$28,500.00	Does academic reporting on sex disparities in care lead to gradual disappearance of disparities? An evaluation of knowledge dissemination and ensuing change in cardiovascular care.	Principal/Senior investigator	2011
	\$78,571.43	Population Health Investigator Award	* Recipient	2011
	\$481,400.00	Team Funds: Alliance of Canadian Health Outcome Researchers in Diabetes	Co-investigator	2011
Sum	\$637,767.86			
Rabin,Harvey				
	\$61.62	CPDR (CCFF) - Participation in the Canadian Patient Data Registry (CDR) of the Canadian Cystic Fibrosis Foundation.	Site/Local PI	2011
	\$1,032.69	Vest Study (UBC)- Multi-centre, long-term comparative trial of high frequency chest wall oscillation ("Vest") versus positive expiratory pressure mask in the treatment of cystic fibrosis.	Site/Local PI	2011
	\$1,192.09	Aspergillus Study (U Ottawa) - A randomized, double-blind, placebo-controlled trial to determine whether itraconazole treatment helps to prevent respiratory exacerbations and improves PFTs in CF patients with Aspergillus fumigatus.	Site/Local PI	2011
	\$15,000.00	Development of a cystic fibrosis database program	Principal/Senior investigator	2011
	\$16,104.50	Cystic Fibrosis Clinic Incentive Grant	Principal/Senior investigator	2011
	\$23,840.00	Mannitol Study DPM-CF-302 (ethica Clinical) - A multi-center, Phase III, randomized, controlled, parallel arm, double-blind clinical study proceeding to an open label study to determine the safety and efficacy of inhaled dry powder mannitol in patients with CF.	Site/Local PI	2011
	\$25,140.00	Tiotropium Study (BI) - A Phase III randomized, double-blind, placebo-controlled parallel group study to investigate the safety and efficacy of two doses of tiotropium (2.5 ug and 5 ug) administered once daily via the Respimat device for 12 weeks in patients with CF	Site/Local PI	2011
	\$48,329.25	Cystic Fibrosis Clinic Incentive Grant	Principal/Senior investigator	2011
Sum	\$130,700.15			
Raman,Maitreyi				

Name	Prorated Amount	Title	Role	Reporting Year
	\$2,934.62	Transition from Novice to Expert Endoscopist: Mapping the Evolution of Endoscopic Skills Using Cognitive Load Assessment.	Principal/Senior investigator	2011
	\$3,000.00	Dietary Supplementation with Prebiotic Fiber in Overweight and Obese Patients with Non-Alcoholic Steatohepatitis (NASH): A Pilot Clinical Trial.	Co-investigator	2011
	\$3,975.60	The Vitamin A Absorption Test and Fecal Volatile Organic Compounds: Clinical and Laboratory Methods to Assess Malabsorption.	Principal/Senior investigator	2011
	\$4,259.57	The Vitamin A Absorption Test and Fecal Volatile Organic Compounds: Clinical and Laboratory Methods to Assess Fat Malabsorption.	Principal/Senior investigator	2011
	\$11,520.00	Characterizing the fecal microbiome and bacteria-derived volatile organic compounds in patients with nonalcoholic fatty liver disease (NAFLD)	Co-investigator	2011
Sum	\$25,689.79			
Ravani,Pietro				
	\$5,000.00	Analytical methods for the analysis of the vascular access survival data	Principal/Senior investigator	2011
	\$10,833.33	Vascular Access Teams in Alberta	Principal/Senior investigator	2011
	\$25,000.00	Elucidating the clinical relevance of mRNA in diffuse large B cell lymphomas	Co-investigator	2011
	\$49,666.00	Complications of Arteriovenous Fistulas, Arteriovenous Grafts and Tunnelled Cuffed Catheters for Hemodialysis: Risk Patterns, Comparability and Impact on Patient Outcomes	Principal/Senior investigator	2011
	\$55,482.67	Improving risk prediction for mortality and progression to kidney failure in older adults using eGFR and proteinuria	Co-investigator	2011
	\$59,583.33	Emerging Research Team Grant Program: "Biomarkers of Viral Pathogenesis"	Co-investigator	2011
	\$73,488.50	Promoting the arteriovenous fistula as hemodialysis access: expected benefits and unintended consequences	Principal/Senior investigator	2011
	\$486,111.17	Canadian Network for Observational Drug Effect Study (cNODES)	* Team Member	2011
	\$663,937.20	The BK:KIDNI Trial (BK:Kinase Inhibition to Decrease Nephropathy Intervention Trial)	Co-investigator	2011

Name	Prorated Amount	Title	Role	Reporting Year
	\$833,415.33	Improving the Efficient and Equitable Care of Patients with Chronic Medical Conditions: The Interdisciplinary Chronic disease Collaboration (ICDC)	Co-investigator	2011
Sum	\$2,262,517.53			
Read,Ronald				
	\$87,000.00	Development of a longitudinal antimicrobial resistance and antimicrobial use surveillance program for the feedlot sector in Canada	Principal/Senior investigator	2011
Sum	\$87,000.00			
Rioux,Kevin				
	\$3,223.78	Glucocorticoid Responsiveness in IBD Colitis: Influences of Microbiota	Principal/Senior investigator	2011
	\$5,000.00	The Vitamin A Absorption Test and Fecal Volatile Organic Compounds: Clinical and Laboratory methods to assess Fat Malabsorption	Site/Local PI	2011
	\$5,952.00	Early Microbiological Events During Post-Operative Recurrence of Crohn's Disease	Co-PI	2011
	\$11,666.67	Etiology of the Inflammatory Bowel Disease: Genetic, Microbial and Environmental Interactions	* Team Member	2011
Sum	\$25,842.45			
Rorstad,Otto				
	\$0.46	A multicenter, randomized,blinded efficacy and safety study of pasireotide LAR vs octreotide LAR in patients with metastatic carcinoid tumors whose disease-related symptoms are inadequately controlled by somatostatin analogues.	Co-investigator	2011
Sum	\$0.46			
Sargious,Peter				
	\$8,000.00	Development of Provincial Obesity Strategy	Principal/Senior investigator	2011
	\$70,259.04	Improving the Efficient and Equitable Care of Patients with Chronic Medical Conditions Interdisciplinary Chronic Disease Collaboration	* Collaborator	2011
	\$150,000.00	Provincial AHS Obesity	Co-investigator	2011
Sum	\$228,259.04			

Name	Prorated Amount	Title	Role	Reporting Year
Sayani,Farzana				
	\$29,294.40	Detectino of F2-isoprostanes as markers of iron-associated oxidative damage and the resulting effects of metabolic systems in iron overloaded beta-thalassemia major patients.	Principal/Senior investigator	2011
Sum	\$29,294.40			
Schaefer,Jeffrey				
	\$2,352.94	Comprehensive Assessment of Procedural Skills in Internal Medicine. Ma I, Bacchus M, Schaefer J, Walzak A.	Co-investigator	2011
Sum	\$2,352.94			
Schmaltz,Heidi				
	\$1,161.17	Applied Chair in Health Services Policy & Research - "Healthcare Delivery Across the Continuum for Rural/Remote Seniors with Dementia"; Total \$425 000 to PI; 30 members of research team & 31 members of advisory committee.	* Member, Advisory Committee	2011
Sum	\$1,161.17			
Seow,Cynthia				
	\$3,000.00	Population-Based Study of Pregnancy Outcomes in IBD Patients	Co-investigator	2011
	\$10,000.00	Population-Based Study of Pregnancy Outcomes in IBD Patients	Co-investigator	2011
	\$12,500.00	Materno-Fetal Outcomes in Inflammatory Bowel Disease	Principal/Senior investigator	2011
	\$37,500.00	Materno-fetal Outcomes in Inflammatory Bowel Disease	Principal/Senior investigator	2011
Sum	\$63,000.00			
Sigal,Ron				
	\$24,000.00	The Effects of Supervised, Facility-based Exercise Programs versus Lower-cost Alternatives on Glycemic Control and other Cardiac Risk Factors in Type 2 Diabetes: A Pilot Study	Principal/Senior investigator	2011
	\$75,000.00	Practical Behavioural Modifications for Type 2 Diabetes Treatment: Physical Activity and Nutrition for Diabetes in Alberta (PANDA)	Co-PI	2011
	\$75,000.00	Action to Control Cardiovascular Risk in Diabetes—International Ongoing Study (ACCORDION)	Site/Local PI	2011

Name	Prorated Amount	Title	Role	Reporting Year
Sum	\$174,000.00			
Stather,David				
	\$14,880.00	University of Calgary Bedside Ultrasound Simulation Program	Principal/Senior investigator	2011
	\$17,419.35	University of Calgary Bedside Ultrasound Simulation Program	Principal/Senior investigator	2011
	\$38,160.00	University of Calgary Bronchoscopy Simulation Program	Principal/Senior investigator	2011
Sum	\$70,459.35			
Storek,Jan				
	\$2,592.00	Pharmacokinetics and Pharmacodynamics of Thymoglobulin in Pediatric hematopoietic Stem Cell Transplant Recipients	Co-investigator	2011
	\$5,200.00	Cytokine levels as predictors of hematopoietic cell transplant outcomes	Principal/Senior investigator	2011
	\$43,500.00	Dosing and Impact on Immunity of Thymoglobulin given to HCT Recipients	* Calgary P.I., and P.I. for laboratory	2011
	\$44,145.36	SCOT (Scleroderma- Cyclophosphamide or Transplantation?) trial	Site/Local PI	2011
	\$63,495.00	Prediction of outcomes of hematopoietic cell transplant recipients using novel immune assays	Principal/Senior investigator	2011
Sum	\$158,932.36			
Storr,Martin				
	\$15,789.47	Role of TRPV4 in gastrointestinal motility.	Principal/Senior investigator	2011
	\$28,800.00	Metabolomic analysis, a potential tool to direct treatment with adalimumab in Croh's Disease	Principal/Senior investigator	2011
	\$67,438.33	Operating Grant- Canadian Crohn's and Colitis Foundation	Principal/Senior investigator	2011
	\$833,333.33	AHFMR Team Grant	Co-investigator	2011
Sum	\$945,361.14			
Straus,Sharon				
	\$51,701.25	The value and impact of quality safety teams: Do they make a difference?	Co-PI	2011
	\$125,812.00	Assessing the uptake and effectiveness of laparoscopic surgery for colorectal cancer in Ontario	Co-investigator	2011
Sum	\$177,513.25			

Name	Prorated Amount	Title	Role	Reporting Year
Swain, Mark	\$15,789.47	A translational approach to understanding and managing primary sclerosing cholangitis.	Principal/Senior investigator	2011
	\$19,200.00	Regulatory role of liver recruited myeloid derived suppressor cells in response to hepatic NKT cell activation.	Principal/Senior investigator	2011
	\$111,572.50	Regulatory role of NK cells in the hepatic innate immune response.	Principal/Senior investigator	2011
	\$129,000.00	Liver to brain signaling in experimental liver disease: implications for liver disease related fatigue.	Principal/Senior investigator	2011
Sum	\$275,561.97			
Thakrar, Mitesh	\$4,408.00	Long-term extension, multi-centre, multi-national study to evaluate the efficacy and safety of oral BAY 63-2521 (1 mg, 1.5mg, 2 mg, or 2.5 mg tid) in patients with symptomatic Pulmonary Arterial Hypertension (PAH)	Site-investigator	2011
	\$5,500.00	A PHASE II, RANDOMIZED, DOUBLE-BLIND, PLACEBO-CONTROLLED, PARALLEL GROUP STUDY TO EVALUATE THE EFFICACY AND SAFETY OF ONCE-DAILY ORALLY ADMINISTERED PH-797804 FOR 12 WEEKS IN ADULTS WITH MODERATE TO SEVERE CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) ON A BACKGROUND OF SALMETEROL XINAFOATE/FLUTICASONE PROPIONATE COMBINATION	Site-investigator	2011
	\$6,990.00	Randomized, double-blind, placebo-controlled, multi-centre, multi-national study to evaluate the efficacy and safety of oral BAY 63-2521 (1 mg, 1.5mg, 2 mg, or 2.5 mg tid) in patients with Chronic Thromboembolic Pulmonary Hypertension (CTEPH).	Site-investigator	2011
	\$7,941.00	Randomized, double-blind, placebo-controlled, multi-centre, multi-national study to evaluate the efficacy and safety of oral BAY 63-2521 (1 mg, 1.5mg, 2 mg, or 2.5 mg tid) in patients with symptomatic Pulmonary Arterial Hypertension (PAH)	Site-investigator	2011

Name	Prorated Amount	Title	Role	Reporting Year
	\$19,232.00	A Phase-3, Long-term, Open-Label, Multicenter Safety and Efficacy Study of Ambrisentan in Subjects with Pulmonary Hypertension	Site-investigator	2011
	\$31,813.00	Study with Endothelin Receptor Antagonist in Pulmonary arterial Hypertension to Improve clInical outcome. A Multicenter, Double-blind, Randomized, Placebo-controlled, Parallel group, Event driven, Phase III study to assess the effects of ACT-064992 on Morbidity and Mortality in patients with Symptomatic Pulmonary Arterial Hypertension	Site-investigator	2011
	\$118,047.00	First-line Bosentan and Sildenafil Combination Therapy for Pulmonary Arterial Hypertension: A safety and efficacy pilot study	Site-investigator	2011
Sum Tibbles, Lee Anne	\$193,931.00			
	\$12,857.14	BK Virus pathogenesis	Principal/Senior investigator	2011
	\$29,250.00	Proinflammatory and Profibrotic Mechanisms of BK Virus and Potential Therapeutics based on mTOR Inhibition	Principal/Senior investigator	2011
	\$58,716.75	Novel Markers to Improve the Detection of Declining Kidney Function	Co-investigator	2011
	\$65,780.00	Clinical Trial External Monitoring Support	Principal/Senior investigator	2011
	\$81,250.00	Biomarkers of Viral Pathogenesis	Principal/Senior investigator	2011
	\$192,772.80	Effect of Immunosuppressive Medication Use On Patient Outcomes Following Kidney Transplant Failure	Co-investigator	2011
	\$370,532.50	The Canadian ACE-inhibitor trial to improve renal outcomes and patient survival in kidney transplantation	Co-investigator	2011
	\$829,921.50	The BK: KIDNI Trial (BK Viremia: Kinase Inhibition to Decrease Nephropathy Intervention Trial)	Principal/Senior investigator	2011
Sum Tremblay, Alain	\$1,641,080.69			
	\$140,510.75	Early Detection of Lung Cancer - A Pan Canadian Study	Principal/Senior investigator	2011
Sum Wang, Wenjie	\$140,510.75			

Name	Prorated Amount	Title	Role	Reporting Year
	\$10,000.00	Role of tetraspanin CD151 in progressive kidney disease	Principal/Senior investigator	2011
Sum	\$10,000.00			
Wong,Norman				
	\$28,900.00	Dept of Medicine Innovation grant	Principal/Senior investigator	2011
	\$98,073.67	Endocrinology (Thyroid, D.M. & Lipids) - Enhancement Research	Principal/Senior investigator	2011
Sum	\$126,973.67			
Zarnke,Kelly				
	\$1,153.85	POISE 2: Peri-operative Ischemic Evaluation Study	Co-investigator	2011
	\$1,428.57	Creation of an Obstrical Medicine database to capture demographic and outcome data.	* Grant fundraising for sectional	2011
	\$7,706.22	Ambulatory Blood Pressure Monitoring	Co-investigator	2011
	\$12,142.86	Optical Coherence Tomography (OCT) for measurement of the vasculature and retinal nerve fibre layer thickness at RRDTc	Co-investigator	2011
Sum	\$22,431.49			
Grand Total	\$49,234,763.64			