



# **DEPARTMENT OF MEDICINE**

## **ANNUAL REPORT**

April 1, 2010 - March 31, 2011

### **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 2010-2011 the Department of Medicine has undergone a number of changes. Dr John Conly stepped down as the Zone Clinical Department Head in June 2010. Dr Maria Bacchus was appointed as the Interim Zone Clinical Department Head from July 2010 – January 2011. On January 17, 2011, Dr Subrata Ghosh was appointed as the Zone Clinical Department Head. The Department of Medicine has experienced 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 12 new members were recruited to the Department of Medicine. In addition, the Department also recruited Dr. John Esdaile to the Arthur JE Child Chair in Rheumatology Research and Dr. Mark Swain accepted the Cal Wenzel chair in Hepatology.

#### **Clinical and Administration**

In addition to the transitions of the Department Head position, the Department of Medicine also underwent leadership changes within its Sections. Dr. Kelly Zarnke was appointed as Chief for the Section of General Internal Medicine in July, 2010. Dr. Mark Swain was appointed Interim Chief for the Section of Gastroenterology in January, 2011. Also in January, 2011 Dr. Elizabeth MacKay was appointed as Site Medical Director of the Peter Lougheed Centre and Dr. Ian Scott assumed the position of Site Chief at Peter Lougheed Centre. Dr. Karen Fruetel, Chief for the Section of Geriatric Medicine also accepted the position of Medical Leader for Integrated Seniors Health for the Calgary Zone.

The Department of Medicine had nearly 8000 patients admitted in the 2010-11 fiscal year. Over this period the DOM members provided 15,000 inpatient consults while the Central Access and Triage handled 32,000 outpatients.

Richmond Road Diagnostic and Treatment Centre saw the relocation of Endocrinology and Dermatology Sections to its site as well as General Internal Medicine Outpatient clinics. This provided additional space and infrastructure facilities that were beneficial to access and patient care quality. Other Sections being considered for relocation to the RRDTC include Infectious Diseases and Rheumatology.

A significant Quality Assurance/Quality Improvement (QA/QI) initiative across the Department is being led by Dr. Jayna Holroyd Leduc who was appointed as Lead in January, 2011 replacing Dr. Elizabeth MacKay. This initiative includes the following focus areas:

- Examination and optimization of clinic flow within various Divisions to look at improving access (decreasing wait times) to specialists
- Collaborate with Seniors Health and 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

A number of programs have been designed to align the DOM with the 5 TIPs of the Alberta Health Services.

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

- 1. Opened 122 beds across the three adult care sites. This was a cooperative effort across sections and portfolios to ensure care models were maximally efficient and patient focused.
- 2. Specialty out-reach work which included: the Renal Outreach Program to Aboriginal populations, Hepatology clinics at CUPS, Rheumatology partnership with Foothills PCN to co-manage routine patients on the Rheumatology wait list and GI Direct To Procedure work (early scope and discharge back to primary care).





- 3. Continued spread of the Medical Access to Service model: These included the city wide implementation of Pulmonary CAT and consultation and implementation of multiple CAT projects outside of DOM based on the DOM model and standards.
- 4. Pulmonary Network: A number of programs initial work on COPD pathway with focus on Sleep Services and access to Pulmonary Function Tests.
- 5. Collaborative Quality Improvement initiatives: A large number of initiatives have been completed and these include patient satisfaction surveys in the Rare Blood and Bleeding Disorders Clinic; GI Endoscopy Units across the three adult care sites; and the Colon Cancer Screening Centre. Furthermore, an important innovation was improving patient flow with Bullet rounds and Urosepsis protocol / early removal of indwelling catheters (collaboration with Family Medicine, Geriatrics and Inpatient Units at all 3 sites). A standardized clinic utilization data collection across the sites has been completed.

#### **South Health Campus**

The Department of Medicine plans to open a General Internal Medicine (GIM) in-patient service at South Health Campus (SHC) in January, 2013. Section Leads for GIM (Ralph Hawkins), Respiratory Medicine (Charlene Fell) and Gastroenterology and Department of Medicine (Maria Bacchus) have been working on models of care for SHC.

Workforce planning is underway to support a significant DOM on-site presence at SHC.

#### **Education and Research**

The ARP members of the Department offered 15323 hours of UME and 22977 hours of PGME teachings. The Internal Medicine Residency Program has 75 residents in the "core" PGY 1 to 3 years with two in the General Internal Medicine PGY 4 year. Two practicing physicians will take re-entry positions with a view to certify in Internal Medicine. 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 144 Residents in its own programs. The Department also provides clinical education to Residents from other residency training programs and our undergraduate medical training program. In 2010, the Department's Residency Programs included 18 Alberta International Medical Graduates (AIMG) whose residency level ranges from their first to fifth year of residency.

The Internal Medicine Clerkship was reduced from 12 weeks to 10 weeks as of the Class of 2011(two weeks of the original 12 are now taken up by the mandatory 2-week Emergency Medicine Clerkship). The Medical Teaching Units (MTU) at all three sites consistently take students for their mandatory four-week rotations.

Over the fiscal year, over 700 peer reviewed publications were authored by DOM members. Over the 2010-11 fiscal year nearly 10 million dollars of external funding was obtained by DOM members.

#### **Recognition and Awards**

The Department of Medicine is proud to recognize Dr. Otto Rorstad from the Section of Endocrinology for receiving the RCPSC Donald Richards Wilson Award and Dr. David Hogan from the Section of Geriatric Medicine for receiving the RCPSC Prix d'Excellence Award. Also Dr. Eldon Shaffer and Dr. Kelly Burak for receiving the Education Excellence Award and Young Educator Award respectively from the Canadian Association of Gastroenterology.

The Department would also like to acknowledge Drs. Steven Edworthy and Ronald Sigal who were promoted to Full Professor and Drs. Robert Myers and Jayna Holroyd-Leduc who were promoted to Associate Professor.

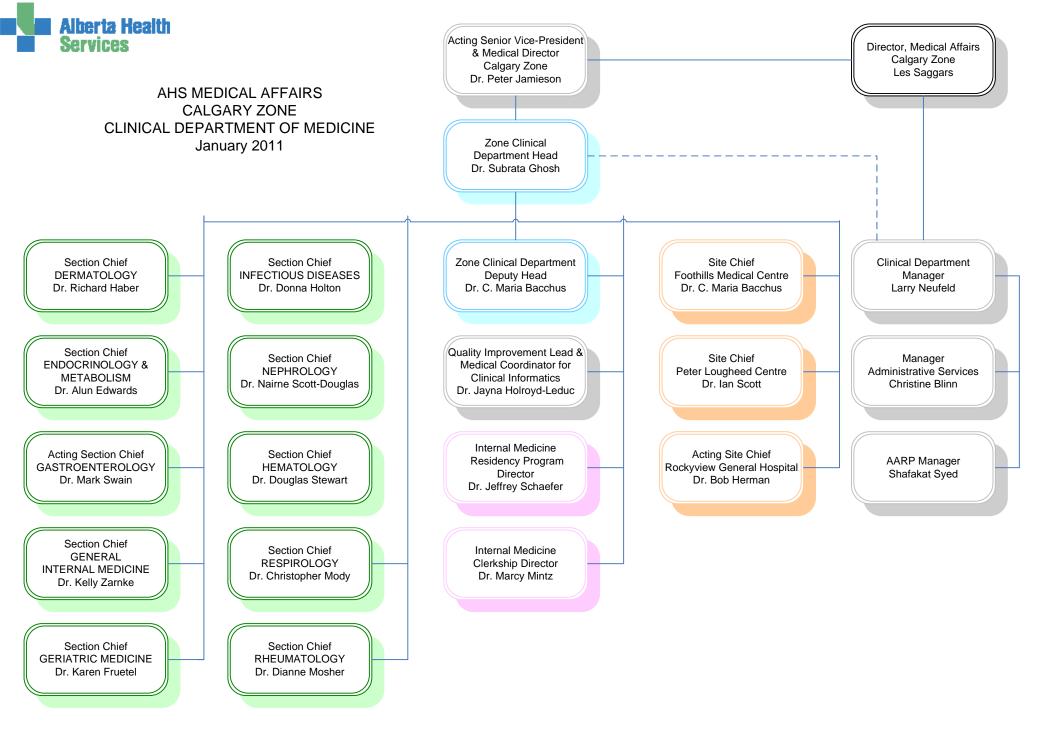
#### **Future Vision and plans**

The Department of Medicine will hold 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 conducted a survey of its members to identify priorities, strengths and weaknesses. The DOM will develop two important programs via its office – Office for care of special populations and Office for Patient Centred care in alignment with the ZCMO office and its programs. The Department will also hold regular open forums to discuss and obtain feedback from its members. The DOM will host key evening lectures of interest to its broad membership. A strong





focus over the next year will be on QA/QI and access, implementation of plan for further development of DOM presence at RRDTC site, planning and initiation of the SHC site including physician workforce planning and 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, improve accountability of physician ISAs, involvement of the DOM in the Province-wide AARP planning and support of clinician scientists in the post-AHFMR era.







#### **DEPARTMENT OF MEDICINE – STRUCTURE AND ORGANIZATION**

#### Fiscal Year: April 1, 2010– March 31, 2011

Department Head w.e.f. January 17, 2011	Dr. Subrata Ghosh
Department Head Interim (until January16, 2011)	Dr. C. Maria Bacchus
Deputy Head	Dr. C. Maria Bacchus

# Site ChiefsFoothills Medical CentreDr. C. Maria BacchusPeter Lougheed Centre w.e.f. January 10, 2011<br/>Peter Lougheed Centre until January 9, 2011Dr. Ian Scott<br/>Dr. Elizabeth MacKayRockyview General Hospital (Interim)Dr. Robert Herman

#### Division/Section Chiefs (suggest putting in alpha order of sections)

Dermatology	Dr. Richard Haber
Endocrinology & Metabolism	Dr. Alun Edwards
Gastroenterology (Interim) w.e.f. January 17, 2011	Dr. Mark Swain
Gastroenterology (until January 16, 2011)	Dr. Subrata Ghosh
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. Marcy Mintz
CME Directors	Dr. Bernie Corenblum Dr. David Lau

Quality	
QI Lead w.e.f. January 1, 2011	Dr. Jayna Holroyd-Leduc
QI Lead until December 31, 2010	Dr. Elizabeth MacKay





## **Internal Medicine Residency Training Program – Annual Report**

## Fiscal Year: April 1, 2010 to March 30, 2011

The Internal Medicine Residency Program has been very active in educating Specialists and Clinical Teachers to meet the present and future health care needs of society. As of July 1, 2010 our Internal Medicine Residency Program has 75 residents in the "core" PGY 1 to 3 years with two in the General Internal Medicine PGY 4 year. Two practicing physicians will take re-entry positions with a view to certify in Internal Medicine. 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 144 Residents in its own programs. The Department also provides clinical education to Residents from nearly all other residency training programs and our undergraduate medical training program.

In 2010, the Department's Residency Programs included 18 Alberta International Medical Graduates (AIMG) whose residency level ranges from their first to fifth year of residency. All but one of the AIMG residents had been previously employed by the Calgary Health Region Clinical Assistant Program. The model of International Medical Graduates entering the Clinical Assistant Program and then subsequently Residency education funded by the Provincial Government AIMG Program has been very successful. These AIMG residents represent a substantial incorporation of International Medical Graduates into our health care system. Nine of the AIMG residents will likely be entering specialty practice in the next one to three years.

Parallel to the increasing number of graduating medical students, the number of Government-funded Internal Medicine Residency positions will increase substantially over the next few years. For July 2011 we will have 23 regular ministry funded PGY 1 positions. Infrastructure support for the increase in number of medical students and residents will include recruitment of new faculty through the very successful Departmental Alternative Relationship Plan, additional clinical space at the Richmond Road Diagnostic and Treatment Centre, additions to the three Calgary Adult Hospitals of about 450 beds, and the new Calgary South Health Campus (SHC) in 2011/2012.

The 23<sup>rd</sup> Annual Resident Research Days were held on April 28, 2011 with Dr. Georges Bourdage, University of Illinois (Chicago) being our keynote speaker and guest judge. Dr. Bourdage is an international leader in medical education. He spoke on the importance of mentorship and innovation. 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.

The Fall Awards dinner was held in November 2010 with awards to Drs. Ghazwan Altabbaa, Maria Bacchus, Sharon Leclercq, Jayna Holroyd-Leduc, Irene Ma, and Troy Pederson for excellence in teaching and research preceptorship at the Residency level. Drs. Michael Fisher and Paul LeBlanc as well as our Residents, Drs. Kathryn Brown and Gabe Fabreau received awards for excellence in teaching from undergraduate medical program. Residents have also won national and international awards for their research, leadership, and educational activities.

Among the major initiatives for 2010 onward include a system of in hospital call shifts that are safer and healthier for patients and residents, improvements to the logistics of ambulatory care teaching, and simulation based teaching of medical procedures and clinical scenarios. The Department is looking toward development of an Office for Medical Education with a view to integrate education at the undergraduate, postgraduate, and practicing physician levels.

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. Ms. Jennifer Glow, Julie Law, and Kim Robson-Lefebvre have served as Program Administrators throughout the past year with the Program welcoming Ms. Glow back from maternity leave.





## Summary of Resident rotation in Health of Special Populations (HSP)

## Fiscal Year: April 1, 2010 to March 31, 2011

This is a summary of the Internal Medicine Residency Program rotation in Health of Special Populations (HSP). 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 HSP 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 HSP 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 HSP rotation is to focus on the health of people who encounter challenges in accessing health care in the traditional Canadian Medical Model. For the purposes of this rotation the following people are emphasized: (1) Aboriginal (Indigenous) First Nations people, (2) Refugees from other countries, (3) Recent immigrants from developing countries with inadequate health care resources, (4) The homeless (predominantly 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 HSP. Clinics include diabetes at the Stoney Health Centre (SHC) (Dr. Rorstad), General Internal Medicine at SHC (Dr. Pin LI), and a hepatitis clinic at the Calgary Urban Project Society (CUPS) clinic (Dr. McPhail). The SHC is located in Morley, AB, about 50 km west of Calgary. There is opportunity also at the Calgary TB clinic. The HSP started in July 2010 and during its first year, six core 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. For the 2011-2012 academic year, all thirteen blocks have been selected by a resident. The HSP 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 people.

The mini-project during the HSP 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 first year of the rotation (2010-2011) are:

- Dr. Gabe Fabreau: Health care conditions prominent for refugees in Canada.
- Dr. LeeAnne Luft: Acquisition of non B HIV-I infection in Southern Alberta.
- Dr. Tiffany Poon: A critical review of interferon release assay in screening of latent tuberculosis as compared to mantoux testing.
- Dr. Meredith Borman: Hepatitis B virus and proteinuria in the aboriginal population.
- Dr. Meghan Elliott: Chronic kidney disease and proteinuria in the aboriginal population.

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

Finally, the Health of Special Populations rotation should be regarded as a work in progress on which we have made a start. 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 with the inability to take on additional duties. The numerous organizations which provide care for special populations present challenges of jurisdiction and the role of the Department of Medicine in providing clinics. Discussions of opportunities are ongoing with the organizations which provide care to special populations.





## **Internal Medicine Clerkship – Annual Report**

## Fiscal Year: April 1, 2010 to March 30, 2011

#### **Class Size Summary:**

CLERKSHIP SUMMARY	Class of 2011 (completed	Class of 2012	Class of 2013
	clerkship)	(in progress presently)	(see dates below)
Total # students with Calgary	147	159	153
Clerkship	Block 1: 38	Block 1: 42	Block 1: 40
	Block 2: 37	Block 2: 40	Block 2: 38
	Block 3: 39	Block 3: 39	Block 3: 38
	Block 4: 33	Block 4: 38	Block 4: 37
Students completing rural	<b>13</b> (rolled into Blocks 3 and	17 (rolled into Blocks 3 and	17 (rolled into Blocks 3 and
clerkship (RICC)*	4)	4)	4)
Total graduated May/Nov**	153	180 (planned)	170 (planned)
Time away for National	Jan 31 - Feb 13, 2011	Jan 30 - Feb 12, 2012	Jan 28 – Feb 10, 2013
Interview period (CaRMS)	***there will be NO clerks	***there will be NO clerks	***there will be NO clerks
	available during this time	available during this time	available during this time
Xmas Holiday	Dec 20, 2010 - Jan 2, 2011	Dec 18, 2011 – Jan 1, 2012	Dec 17, 2012 – Jan 1, 2013
Additional information		Clerkship ENDS April 2012	Clerkship Begins April 2012

\*RICC students complete the majority of their clerkship in the rural setting but return in blocks 3 and 4 to do MTU and selective rotations \*\*predicted graduation class, LOA etc and remediation may alter final number

The Internal Medicine Clerkship was reduced from 12 weeks to 10 weeks as of the Class of 2011 (two weeks of the original 12 are now taken up by the mandatory 2-week Emergency Medicine Clerkship). 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, ICU, Cardiology, or Neurology selectives.

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/or 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 Internal Medicine.





## Section of Dermatology – Annual Report

## Fiscal Year: April 1, 2010 – March 31, 2011

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

#### CLINICAL

- 1. Dr. Regine 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.
- 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 monthly
- 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 establishing out-reach dermatology clinics to CUPS and the Alex on alternate weeks.

#### RESEARCH

- 1. Dr. Mydlarski continued to conduct dermatologic basic science research. Her areas of expertise are autoimmune bullous diseases, connective tissue diseases and GW bodies in the skin. The total funding she received from all sources was \$150,000.
- 2. During the reporting period the Section published 11 peer-reviewed publications, 19 non-peer reviewed publications and 7 abstracts.

#### **EDUCATION**

#### 1. Invited Lectures/Presentations:

- a. The Section of Dermatology was very strong in medical education.
- b. 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).
- c. The Section sponsored the Fifth Annual Day in Dermatology CME in October 2010 and this event was attended by over 60 family physicians and approximately 20 final year family practice residents.
- d. Drs. Gili, Haber, Kurwa, Mydlarski, Parsons, Remington, Robertson, Woolner, and Zip lectured to the Undergraduate Medical Students in MDCN-360 (Course II).
- e. Dr Mydlarski presented Medical Grand Rounds on April 13, 2010 on Bullous disease-from bench to bedside.
- f. Dr. Parsons presented Medical Grand Rounds on Sept 14, 2010 on Pyoderma Gangrenosum A Clinical Perspective.
- g. Dr. Haber presented Medical Grand Rounds on Dec 14, 2010 on The Many Faces of Cutaneous Sarcoidosis.
- h. Dr. Haber was an invited speaker on Laboratory Investigations of Auto-Immune Bullous skin Disease at the Ottawa Dermatology Society Biannual Meeting in October 2010.
- i. Dr. Parsons and Mydlarski presented oral presentations and Drs. Haber and Mydlarski presented poster presentations at the 85<sup>th</sup> Canadian Dermatology Association Annual Meeting in St. John's, Newfoundland in June 2010.
- j. Dr. Mydlarski supervised 2 presentations at the Leaders in Medicine Research Symposium in Calgary, Alberta in Nov. 2010.
- k. Dr. Parsons presented on the Diabetic Foot at the National Diabetes Education Day in Calgary, Alberta in May 2010.
- 1. Dr. Parsons received a Teaching Excellence Award from University of Calgary Medical School for lecturing during Course II.

#### 2. Graduate Education:

a. Dr. Regine Mydlarski was the module co-ordinator for IMM-3, Autoimmunity and Immuodeficiency (MDSC 639.03).





b. Two graduate students 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 "Practicing Safe Sun" to 100 Encana employees in April 2010.
- b. Drs. Haber, Parsons, Robertson and Kalisiak participated in a public skin cancer screening clinic at the Eau Claire Centre in Calgary in June 2010 as part of the Canadian Dermatology Association 22<sup>st</sup> National Sun Awareness Week. Over 150 patients were screened for skin cancer.

#### ADMINISTRATION

- 1. During this reporting period, Dr. Richard Haber finished his 5<sup>th</sup> and final year as the English Co-Chair of the Dermatology Examination Committee of the Royal College of Physicians and Surgeons and was a representative on the Dermatology Specialty Committee of the Royal College. 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 as well as serving on the Medical Services Executive Council and ARP Management Committee. 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.
- 3. Dr. Regine Mydlarski began as the Program Director of the new Dermatology Residency Program at the University of Calgary on July 1, 2010. 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.

#### CHALLENGES AND FUTURE DIRECTION

- 1. The Section of Dermatology established a Royal College accredited Residency Program that began on July 1, 2010 with 3 PGY1 dermatology residents. This is the first new dermatology Residency Program in Canada in 22 years and we are proud of this achievement.
- 2. The full-time ARP members of the Section of Dermatology relocated to their new offices and clinics at the Richmond Road Diagnostic and Treatment Centre on July 1, 2010. 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. The number of examination rooms needs to be increased soon, especially in view of the large number of rotating students and training physicians in our dermatology clinics and with the prospect of having 3 PGY3 dermatology residents starting July 2012 who will be doing full-time dermatology rotations in our clinics. The demand will only increase each year as 3 new dermatology residents join our residency program and as of 2014, we will have 9 core dermatology residents (3 PGY3, 3 PGY4 and 3 PGY5).
- **3.** The Section participated in our second CaRMS interviews in January 2011 and matched three new residents to our Program to begin July 1, 2011. This will increase our total number of residents to six for the year 2011-2012.
- 4. 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.
- 5. 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. However to date, the Section has not been given the go ahead to recruit a pediatric dermatologist to the University of Calgary. This is a priority for our Section.





## Section of Endocrinology and Metabolism – Annual Report

## Fiscal Year: April 1 2010 – March 31 2011

In late September 2010 the majority of the Section's administrative, clinical outpatient and educational services relocated to Richmond Road Diagnostic and Treatment Centre (RRDTC). All UCMC Endocrinology clinics, diabetes, lipids and hypertension specialty clinics, metabolic bone diseases (osteoporosis) clinic and the Endocrine Testing Unit now operate in a common single area. Ten of the academic endocrinology faculty members have offices at RRDTC and the Training Program activity is co-located. There was, inevitably, some disruption of habituated practices and services but the flexibility and support offered by Site Administration (Ann Czapski), Personnel Organization for the Department of Medicine (Christine Blinn and Louise Kozmack) and the DHCC/Endocrinology clinics (Leslie Antymis and all her staff) were much appreciated.

#### CLINICAL

Endocrinology Central Access and Triage has continued to increase in the volume of referrals - exceeding 600 in one month during the reporting period. Monthly referrals routinely exceed 550. All Thyroid cancer (post-thyroidectomy) referrals to TBCC are now directed through CAT and referrals to the Osteoporosis and Metabolic Bone diseases clinic are similarly accommodated.

- 1. Endocrinology continues to work innovatively with support of allied health professionals in diabetes, hypertension, lipids, osteoporosis and endocrine testing. Preliminary work is underway to attempt to document the number of patients assisted in this manner
- 2. Section members remain active in providing Telehealth clinics to communities surrounding Calgary (Strathmore, Didsbury, High River and Canmore) as part of chronic disease care
- 3. Telehealth clinic support for Diabetes in Pregnancy in Lethbridge resumed in 2010 to cover the maternity leave of the attending endocrinologist.

#### RESEARCH

- 1. Dr. Ron Sigal (Senior Scholar) and Dr. Doreen Rabi (Population Health Investigator) continue to be productive with AI HS career awards. These two investigators provide a nucleus for a new focus of research excellence within the Section (Diabetes and Cardiovascular diseases) and under the auspices of the Libin Heart Institute and CIPPH). They have been joined by Dr. Sonia Butalia as a Clinical Scholar whose training is supported by a CIHR award.
- 2. In the calendar year 2010 Section members were authors of 78 peer-reviewed articles with a further 7 in press, 17 peer-reviewed abstracts and 13 non-peer-reviewed publications, book chapters and 17 abstracts. Dr. Karmon Helmle, in her first year in training, won awards for presentations of her project work at the Canadian Society of Internal Medicine (best research presentation) and the Endocrine Society (President's Award)
- 3. Several Section members are participants in research studies or team grant projects (totaling \$3.2 million)
- 4. It is hoped that further development in the research profile can be driven by recruitment to a Chair in Cardiovascular-Metabolic medicine, funded by generous donations into an endowment fund.

#### **EDUCATION**

- 1. Undergraduate education (Course 4 U of C/UME) now covers about three calendar months and increased class size requires greater numbers of teachers to act as small group facilitators. Despite the increased demand, the Section provides most of the required teachers and has relied little on supplementation from the Master Teachers Program (in contrast to many larger Sections or Departments). The Section recognizes the committed contributions to Course 4 of Dr. Greg Kline not only for his teaching quality as recognized by the students but also as he completes a term as Course Chair. Dr. Bassyouni, already a respected teacher, takes on the administrative duties.
- 2. There are regular annual commitments to Med 440 courses and to continuous clerkship teaching.
- 3. The Section welcomed Dr Vicky Parkins, initially as Clinical Scholar completing her MEd under the supervision of Dr Kevin McLaughlin, proceeding to a role as the Evaluation Coordinator for the Department of Medicine Clerkship Program.
- 4. The Endocrinology Training Program continued its successful mandate and Dr Carmen Hurd entered her second year in training with enrollment in the MEd program under the supervision of Dr. Jocelyn Lockyer. Three new resident trainees commenced in the Program in July of 2010 Drs. Karmon Helmle and Nathalie Saad (U of Calgary) and Dr. Trina McIlhargey (UBC)





- 5. Contributions to the Core IM Training program remain a commitment of the Section, for clinical exposure, didactic teaching sessions, and contributions to resident evaluations. Dr. Rorstad has taken on a leadership role for the Department in exploring Departmental initiatives for health delivery to underprivileged communities.
- 6. At the Graduate student level, members participated as supervisors or on supervisory and examination committees for 1 many graduate students from several Departments and Faculties.
- Contributions to CME are numerous and reflect the internal commitment to continuous professional learning within the Section. Drs. Corenblum and Lau represent the Department on the Faculty CME Committee. Dr. McKeen leads collaborations with the Primary Care Networks which are evolving.
- 8. Education of allied health professional is also innovative and extensive. Dr. McKeen's work with educational processes for diabetes educators is noteworthy and assisted by contributions of several Sectional colleagues.

#### ADMINISTRATION

- 1. Section members have a broad spectrum of administrative roles that range from Sectional to International in scope
- 2. Dr. Grundy is the Chair of the Departmental ARP Management Committee and Dr. Hanley is Past- President of CSEM. Dr Lau is President of Obesity Canada. Dr Symonds is Chair of the RCP National Specialty Committee for Endocrinology.
- 3. Section members contribute significantly to educational administration Dr. Symonds as Program Director in Endocrinology and Drs. Kline and Bassyouni are heavily involved in undergraduate educational administration
- 4. Diabetes services demand significant administrative time from Drs. McKeen and Donovan at Zone level and Dr. Edwards (AHS Medical Lead Diabetes).
- 5. Members contribute at provincial and national levels in scientific/clinical committees of national societies involving obesity, diabetes and osteoporosis. Drs. Hanley, Lau and Sigal contribute to international committees on Bone densitometry, obesity and exercise/diabetes respectively

#### CHALLENGES AND FUTURE DIRECTION

- 1. Previous reports have outlined the role of increasing prevalence of chronic diseases (diabetes, osteoporosis, hypertension and lipids) in the workload of all physicians in the province. In the future, chronic disease delivery offered through PCNs offers hope that endocrinologists can take on truly specialist roles in patient care and physician education with better control of clinical workload
- 2. Central Triage has been a tremendous success in ensuring appropriate and efficient handling of referrals and markedly enhanced communication with primary care physicians
- 3. The Section has embraced change and innovation, despite the need to alter longstanding practices and discomfort in doing so. Clinical targets have been met (wait times for conditions according to triage priorities) have been met





Section of Gastroenterology – Annual Report

## Fiscal Year: April 1, 2010 – March 31, 2011

#### CLINICAL

Clinical demand for Gastroenterology (GI) services has remained high, with the central GI triage receiving approximately 1200 referrals per month and hepatology central triage receiving roughly 120 referrals per month. 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. A number of innovations were successfully implemented including central triage directly to endoscopy procedures and a citywide approach to utilization of endoscopy slots. In addition, a very successful flexible sigmoidoscopy clinic was established in the UCMC area, further improving patient access to investigations. A number of streamlined guidelines for central triage of conditions such as iron deficiency anemia were introduced to further reduce wait times, and additional guidelines are being developed for rectal bleeding and dyspepsia. City-wide endoscopy templates have been accepted for implementation at all 3 sites to maintain optimal endoscopy utilization and efficiency. Currently, endoscopy utilization is close to 90% at each of the three sites.

High definition endoscopy has been established at all 3 sites with various post-processing options. New equipment such as an elastography module of endoscopic ultrasonography and confocal endomicroscopy has also been established with the promise of placing us 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 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 has been implemented 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.

The Section has made great strides in obtaining consensus and executive approval for a GI Retirement/On-Call policy that was spearheaded by Dr. Jon Love. The broad importance of this initiative is highlighted by the fact that this policy will form the basis for a similar policy that is being developed for rollout within the entire Department of Medicine (DOM).

#### RESEARCH

Similar to last year, inflammatory bowel disease (IBD), liver disease research including 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 trials involvement and remain one of the most active groups in the DOM. 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. During this fiscal year the Section received over four million dollars in total support from multiple sources for research activities. Of this, approximately one-quarter was awarded from the Canadian Institutes of Health Research and the Canada Foundation for Innovation. This, in part, allowed the Section to make a number of strategic decisions to find and allocate contiguous space near the GI clinic, and within GI office space on the 6<sup>th</sup> floor of the TRW, for the facilitation of translational clinical research, as outlined below:

1. The Clinical Integrative Research Space (CIRS) was established and comprises two adjacent rooms in close proximity to the Gastrointestinal Ambulatory Clinic within UCMC. The CIRS 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 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.





2. The GI Clinical Research Unit was established to house research staff and trainees who are supervised by several members of the Section of Gastroenterology, and is located in dedicated space on the 6th floor of the TRW building. This unit will allow for seamless interactions between translational clinical researchers and research staff, and will directly support translational research projects within the Section.

In 2010, the University of Calgary Liver Unit (UCLU) established an important partnership with YouAn Hospital, Capital Medical University (CMU) in Beijing, China (the largest hospital in China dedicated to the treatment of patients with liver disease) to facilitate collaborative translational research in liver disease (UofC Lead, Dr. Sam Lee). This partnership will support future research exchanges between these 2 programs. In addition, the Metcalfe Group has chosen a proposal by the UCLU for funding to establish a Liver Unit Biobank. The planning and material procurement for this Biobank has begun and will be linked with the IBD Consortium Biobank which has already been established within the GIRG.

The IBD group (led by Dr. Remo Panaccione) continues to flourish as a leader in IBD care and Research. The IBD clinic was ranked amongst the top 5 in the world in a recent report from the Crohn's and Colitis Foundation of Canada. Clinical care pathways are being developed by the group to maintain a high level of clinical excellence across the region. The AHFMR IBD consortium continues its success with its collaboration with the University of Alberta as the characterization of the IBD population in Alberta continues and sets the platform for innovative and exciting research in the future.

Other Research highlights include:

- a. Dr. Bertus Eksteen was awarded an American Liver Foundation Seed Grant of over \$100K over two years to study Primary Sclerosing Cholangitis (PSC).
- b. Drs. Gil Kaplan, Carla Coffin, and Chad Saunders were awarded a CFI grant (\$175,391) for the development of a comprehensive custom made database to provide information technology infrastructure needed to support IBD and hepatitis translational research within the Section.
- c. Dr. Maitreyi Raman published a book on "Diet and IBS".
- d. Dr. Carla Coffin was awarded the prestigious American Gastroenterology Association Scholarship award.
- e. Three Team Grants from Faculty of Medicine are under consideration for funding, each successfully passing the LOI phase. PI's include Dr. Robert Hilsden (Colon Cancer), Dr. Mark Swain (PSC) and Dr. Carla Coffin (Hepatocellular Carcinoma).
- f. Cynthia Seow received funding from the Future Leaders in IBD Program to study pregnancy in IBD

#### **LEADERSHIP POSITIONS**

The recruitment of Dr. Subrata Ghosh to the Zone Clinical Department Head of Medicine paved the way for Dr. Mark Swain to take on a leadership role within the Section as the Acting Section Chief in January 2011. Dr. Swain was also awarded the Cal Wenzel Family Foundation Chair in Hepatology - the first non-transplant endowed Hepatology Chair in Canada. 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 will be taking over from Dr. Dube as the "Gastroenterology Central Triage Medical Lead". Dr. Jon Meddings (Vice Dean, Faculty of Medicine) was appointed as Interim VP Research for the UofC, and Dr. Ron Bridges took over the role as Vice Dean during this period. In addition, Dr. Bridges continued in his role as Associate Dean Clinical Affairs.

#### **INNOVATIONS**

Technological advancements in endoscopy continue to provide opportunities for novel and improved delivery of health care in Gastroenterology and Hepatology. Four Pentax EG-1690K "ultra slim" endoscopes have been purchased for outpatient use in the University of Calgary Medical Clinic (UCMC). Compared to conventional endoscopes used in-hospital, the ultra slim scopes are thinner and can be used for unsedated, outpatient endoscopy. The ultra slim endoscopes will be used to implement novel delivery of unsedated, outpatient esophageal variceal screening (in UCMC) to well-compensated cirrhotic patients (instead of in-hospital where it is currently performed). In so doing, a significant proportion of sedated endoscopies performed in hospital for this indication will potentially be avoided. This intitiative is being led by Drs. Alex Aspinall, Kelly Burak and Jon Love.

The Section, through a Departmental ARP award and with supplemental dollars provided by the Section, will be purchasing a new high resolution esophageal manometry machine which will improve the accuracy of diagnosis for esophageal motility disorders. The new technology will also allow for research initiatives and potentially reduce wait times through more rapid turnover and will be led by Dr. Chris Andrews.





The Therapeutic Endoscopy group within the Section has developed a treatment care pathway for patients with Barrett's esophagus that includes endoscopic mucosal resection (EMR) and radio frequency ablation (RFA). These innovative, minimally invasive endoscopic techniques offer an effective and safer alternative to major surgery (esophagectomy) for patients with early esophageal cancer and/or significant dysplasia within a Barrett's segment. EMR is an advanced endoscopic technique that allows for a wide resection (1-2cm) of the esophageal mucosa/submucosa with the intent of completely removing suspicious lesions and obtaining more accurate staging information. Esophageal RFA is an ablative technique delivered through an endoscopic platform. The Section is participating in a nation-wide EMR/RFA registry to track and report on the impact and outcomes of this care pathway in Canada. This initiative is led by Dr. Paul Belletrutti. In addition, negotiations are in very advanced stages with industry for the establishment of continued funding for a Therapeutic Endoscopy Training Fellowship in Calgary which will further strengthen this program at the UofC. This training program will be led by Drs. Jon Love and Steve Heitman.

The link to the community through the educational program coordinated with the Primary Care Network (PCN) and the Section provided family physicians with an opportunity that would result in more appropriate GI referrals and shared management of common GI disorders. Building on this initiative, the Section is working together with the Calgary Foothills Primary Care Network (CFCPN) to address long wait-times to see a GI specialist.

Establishment of QA/QI initiatives within the Section which include the development of novel GI waitlist management paradigms and strategies which directly tie into Sectional, Departmental and AHS goals and mandates in this area. This initiative is led by Drs. Dube, Swain, Rostom and Ghosh in collaboration with Barb Kathol from AHS. 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 wait list management and endoscopy utilization (ie development and broad implementation of the EndPro template for endoscopy procedures performed throughout the city) that tie into QA/QI initiatives 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. Dr. Kelly Burak was part of the international faculty at the "Train the Trainers" course in Lima, Peru in April 2010. Sponsored by the World Gastroenterology Organization, this intensive four-day workshop was dedicated to the development of teaching and training skills in Gastroenterology and brought together experts in medical education from around the world.

#### a) Awards:

An External Award for Teaching & Services was given to Dr. Eldon Shaffer who received the Canadian Association Distinguished Service and Meritorious Achievement Award for the Study of the Liver. Dr. Kelly Burak was given an Award of Excellence from the Curriculum Design and Implementation committee in recognition of "Outstanding Enthusiasm, Dedication and Support of Students" while in the Role of Course 1 Course Chair. Dr. Paul Beck received the DOM Outstanding Clinician Award for 2010 for "Outstanding Commitment to the Patients, Staff and Students of Foothills Hospital and the Community". Dr. Carla Coffin was the only Canadian named 2011 Research Scholar by the American Gastroenterological Association Research Foundation.

#### b) CME:

Highlights of the CME series included Dr. Charles Bernstein, CAG Visiting Professor whose presentation was on "Placebos in GI", and Dr. Ray Kim who presented on "Conscious Sedation". Dr. Paul Belletrutti has taken on the lead role as Coordinator of the City Wide Continuing Medical Education Lecture Series from the outgoing Dr. Christian Turbide. The Section together with the Gastrointestinal Research Group (GIRG) celebrated 30 years of history of the group at a retreat in Banff, March 2011. At this retreat special recognition was awarded to Dr. Lloyd Sutherland for his tremendous contributions to the Section and the GIRG. The UofC Liver Unit (UCLU) hosted its second Viral Hepatitis Preceptorship Day in May 2011, organized by Drs. Kelly Burak and Rob Myers. The family doctors attended a series of didactic lectures in the morning followed by an afternoon of "bedside" teaching in the Viral Hepatitis Clinic. In November 2010, the UCLU hosted the first "Highlights in Hepatology" meeting (organized by Dr. Kelly Burak), which was held in Banff as part of a combined meeting linked with the Western IBD Meeting (organized by Dr. Remo Panaccione).

#### c) Postgraduate:

This year's graduating class had a successful celebration and awards dinner in June and included Drs. Stephen Congly (Chief GI Resident), Puja Kumar, Atyab Syed, and Abdulrahman Alfadda. Drs. Kumar and Alfadda will be staying in Calgary for another year within the Therapeutic Endoscopic Training Program, and Dr. Congly will be doing a further year of hepatology training in Calgary as the Gilead Hepatology Fellow (The Gilead Hepatology Fellowship Training program was established in 2011 through an across Canada competitively funded program awarded to the UCLU). Dr. Syed will be moving to the University of Alberta to do an IBD fellowship. The incoming new fellows are Meredith Borman, Yasmin Nasser, Meena Mathivanan, and Gordon Moran (IBD)

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

Overall Excellence in Teaching - Dr. Maitreyi Raman





Research Mentorship Excellence – Dr. Gil Kaplan Formal Teaching Excellence – Dr. Kelly Burak Clinical Teaching Excellence – Dr. Jennifer Williams Endoscopy Teaching Excellence – Dr. Jose Ferraz Excellence in Providing Feedback – Dr. Mani Kareemi

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, Stephen Congly, Laura Stinton, Puja Kumar and Atyab Syed. The "Best Presentation by a Clinical Trainee" was awarded to Dr. Laura Stinton for her topic on the "Autoantibodies to GW bodies & Other Autoantigens in Primary Biliary Cirrhosis". In addition, Dr. Edwin Cheng was given the CDDW 2011 GRIT Award (Gastroenterology Residents-In-Training) for the Best Oral Presentation at the GRIT course for his study examining education of off-service residents on GI. He was supervised by Dr. Maitreyi Raman.

#### ADMINISTRATION

#### **Recruitment:**

Dr. 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 will be establishing 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 the spring of 2012. She received her medical degree at the University of Toronto in 2005.

Dr. Rachid Mohamed is 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.

Dr. Sauyma Jayakumar has been recruited to the Section and will start in January 2012. She obtained her medical degree from the University of Manitoba and completed her specialty Gastroenterology and Hepatology training in Edmonton. She is currently a Visiting Assistant Professor of Research in Charlottesville, Virginia where she is specializing in the study of non-alcoholic fatty liver disease (NAFLD). On her return to Calgary as a hepatologist she will establish a dedicated multidisciplinary NAFLD clinic.

Dr. Milli Gupta is a potential recruit. She completed her Residency at the University of Alberta and is undertaking further training in GI motility and esophageal diseases at the Mayo Clinic. Her interests lie in Gastrointestinal Oncology, Advanced Therapeutic Endoscopy and Motility.

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. Emeran Mayer is a potential CRC Tier 1 recruit. He is a Professor in the Departments of Medicine, Physiology and Psychiatry & Biobehavioural Sciences at UCLA, and Executive Director of the NIH-funded UCLA Centre for Neurobiology of Stress and Co-director of the CURE: Digestive Diseases Research Centre at UCLA. His research interests include basic, translational and clinical aspects of brain gut and brain bladder interactions in health and disease. He has expanded his research interest to studying alterations in interoceptive mechanisms in various disorders of brain gut interactions including IBD, eating disorders, anxiety disorders and autism.





#### **Career Transitions:**

During this year, Dr. Martin Storr returned to Munich, Germany, and Dr. Christian Turbide returned to Moncton, NB, each for family reasons.

Dr. Kelly Burak will be undertaking a one year sabbatical starting July 1, 2011 (6 months in Calgary, and 6 months in Adelaide, Australia where he will undertake further training in Medical Education).





## Section of General Internal Medicine - Annual Report

## Fiscal Year: April 1, 2010 – March 31, 2011

#### CLINICAL

#### In 2010-11, General Internal Medicine (GIM) provided the following clinical services to the 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
- 2. 5 inpatient consultation services (mostly 24/7/365d/yr), including an Obstetrical Medicine service to surgical, hospitalist and psychiatry colleagues
- 3. 5 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 formerly associated with HRC and now with the McCaig MSK program at Foothills Medical Centre (FMC)
- 4. Outpatient clinics:
  - a. Difficult to tabulate the total activity given a sizeable private clinic activity among the 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 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. There was a successful transition of the FMC outpatient UCMG clinics from the HSC area 1A to RRDTC, where 75-90 clinics/month and 200-280 new referrals/month; wait list times have been successfully reduced
  - e. At the 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. 286 Obstetrical Medicine clinics at the three acute care sites
  - g. Outreach clinics occur regularly (but not daily):
    - Within the city at SAC (HIV/GIM) and CUPs (ObMed related) and
    - Outside of the city in Brooks, Canmore, Claresholm, Didsbury, Strathmore, Morley (all GIM)
  - h. The Satellite Hypertension Clinic with the Crowfoot Family Medicine Group was stopped due to priority shifts of the single clinician involved
- 5. Overall, crudely estimated, ~90K-110K clinical encounters were provided

#### 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
  - b. These same pressures will add to outpatient referral requests and opportunities to offer preventative care 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)
  - 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, while not scheduled to open within the next annual reporting cycle, will benefit from advanced planning and recruitment
  - d. Discussion with leaders in aboriginal health services reveals an opportunity to provide consultative services, especially within the urban setting
  - 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
- 4. Challenges:
  - a. Our current clinical work force is at its capacity and will be in need of augmentation at all three existing sites within the next year, given retirements and career transitions





- b. The uncertainty regarding provincial AARP negotiations has significantly increased our uncertainty about our ability to recruit and under what circumstances that might exist in one year
- c. The model for physician staffing the SHC remains unclear. The Section has developed a number of alternative models. Higher level direction is required to choose among them and to further develop them

#### RESEARCH

All GFT members, with the exception of one whose focus is education, had multiple publications and carried grant funding

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

s (whit some missing and points) are as follows:		
Peer-Reviewed Manuscripts	64	
Non Peer-Reviewed Manuscripts	22	
Book Chapters	6	
Scientific and Technical Reports	26	
Invited Presentations	108	
Funded Research	\$4.628 Million	

#### **Research Chairs held (3):**

- N Campbell: CIHR Canadian Chair Hypertension prevention and control
- W Ghali: (a) CIHR Tier II CRC Health Services Research; (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 opportunities:

- Fostering research productivity within some of the growing areas of Sectional interest: e.g., health services, obstetrical medicine, physician wellness, medical education research, and cardiovascular clinical research
- Working with and engaging the research resources associated with W21C
- Using recruitment to foster the research profile of the Section

#### **EDUCATION**

#### **Estimated Teaching Hours\***

ated Teaching Hours		
Outside of clinical settings:	Hours	Comments
UME, PGME, CME combined	4220	More easily estimated for ARP members based on reporting system
Supervision of Trainees of mixed levels in clinical settings:		
UME, PGME combined	13,550	Assumes ~20% teaching time in teaching services
Supervision/mentoring	1720	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 expansion of the UofC Medical School and Clerkship (170 UME student per year) and Internal Medicine (IM) Residency Programs (24 incoming residents) together with a healthy intake of well-trained foreign graduates (~3 per year) through the Alberta International Medical Graduate Program, we participated in the continuing expansion of the IM Residency Program to the 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.

#### **GIM R4 Fellowship and Clinical Scholars Programs:**

In 2010, the Section had 4 GIM PGY- 4 and 2 Clinical Scholars. These were:

- 1. Dr. Saren Azer (U of C)
- 2. Dr. Sundeep Deol (India)
- 3. Dr. Ranjani Aiyar (India)
- 4. Dr. Ken Parhar (U of C)





- 5. Dr. Alexander Leung (U of A) Clinical Scholar
- 6. Dr. Simona Burs (U of C) Clinical Scholar

Starting in 2011, the Section has 6 GIM PGY-4 and 2 Clinical Scholars. These are:

- 1. Dr. Alejandra Boscan (U of C)
- 2. Dr. J Paul Davis (U of C)
- 3. Dr. Gabriel Fabreau (U of C)
- 4. Dr. Horacio Groshius
- 5. Dr. Evan Minty (U of C)
- 6. Dr. Karen Tang (U of A)
- 7. Dr. Alexander Leung (U of A) Clinical Scholar
- 8. Dr. Simona Burs (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 (Expected completion June 2013).

#### **Clinical Assistant (CA) Program**

The UofC Department of Medicine CA program, while serving as a departmental and beyond resource, is by and large 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); (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 underserviced areas. Subsequent to this mixed mandate, a high rate of turn-over among the CAs is expected and if it reflects career advancement is to be celebrated.

Last year, we had five CAs successfully transitioned to the AIMG Program and two to CaRMs. Drs. Uzma Erum, Linas Kumeliauska and Mateer Abdul were accepted into the IM Residency Program in Calgary. Drs. Nyunt Kyi and William Han were accepted into Family Medicine Residencies in Calgary and Edmonton, respectively. Dr. Saima Ehsan was recruited through the CaRMs match to Family Medicine at University of Toronto and Shahina Suman Bithi to Internal Medicine at Ottawa.

Belayneh Mesheha successfully achieved an AHS Hospitalist ARP position. While serving in this role, he has been accepted for and will prepare for his Royal College exams in Internal Medicine.

Our current Clinical Assistants are the following individuals:

- 1. Yakob Berhane
- 2. Zainab Shireen
- 3. Peter Efe Idahosa
- 4. Andry Terry
- 5. Alejandra Ugarte Torres
- 6. Roolan Tabassum
- 7. Shahid Khan

#### 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. University (e.g., Scientific director, CIPPH; both co-directors W21C; Vice Chair, Health Promotion, Libin CV Institute)
  - 5. Zonal (e.g., PLC and FMC medical directors, SHC departmental physician lead; Zone medical director of therapeutics)
  - 6. Departmental (e.g., Vice Chair, Strategic planning; Vice Chair, Physician Wellness; IM RTP director).

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.





#### **Recruitment during this period included:**

Name	Area of Interest	Primary Site
Eliana Castillo (UBC)	Maternal medical disorders of pregnancy and care of	FMC
	indigent populations	
Aleem Bharwani (U of A)	Medical administration, leadership and innovation	FMC
Pin Li (Shanghai)	Research in quality assurance and outcomes; clinical	FMC
_	service to underserviced populations	
	(transition from clinical scholar to faculty)	
Oliver Haw For Chin (Laval,	Medical Education (transition from clinical scholar to	RGH
QC)	faculty)	

#### Honors and awards

Recognition: CIHR and CMAJ are acknowledging the top achievements in Canadian health research:

- Dr. Russell D Hull: his work has changed the way patients with cancer are treated for blood clots
- Dr. William Ghali and the APPROACH Team: APPROACH is now one of the largest, most comprehensive cardiac registries in the world with more than 140,000 patients from Alberta

#### National:

• National Health Sciences Academy - Inducted into the Academy - Dr. William Ghali

#### University:

- 2010 Letters of Excellence Award Dr. Marcy Mintz
- 2010 Letters of Excellence Award Dr. Jeffrey Schaefer
- Mentorship Recognition Dr. Maria Bacchus
- Mentorship Recognition Dr. William Ghali
- 2010 Clerkship Awards Dr. Mike Fisher
- 2010 Clerkship Awards Dr. Paul LeBlanc
- 2010 Clerkship Awards Dr. Gabe Fabreau

#### Departmental:

- 2010 Golden Bull Award Dr. William Ghali
- 2010 Work Life Balance Award Dr. John Walsh
- 2010 Repeat Offender Award Dr. Troy Pederson
- Post Graduate research fellowship Award Dr. Alex Leung for "Evaluating the Impact of Computerized Physician Order Entry in Community Hospitals"
- Research Development Fund awarded to Drs. Irene Ma, Maria Bacchus and Jeffrey Schaefer for "Comprehensive Assessment of Procedural Skills in Internal Medicine"

#### RGH Teaching Awards

- 2010 Star Educators for RGH Dr. Khan Ali
- 2010 Star Educators for RGH Dr. Oliver Haw For Chin
- 2010 RGH Physician Recognition Award Dr. Ghazwan Altabbaa

#### DOM Residency Training Program Awards:

- Rookie or the Year, IM Residency Program Teaching Award, 2010 Dr. Irene Ma
- Silver Finger, IM Residency Program Teaching Award, 2010 Dr. Maria Bacchus
- Silver Tongue Award Dr. Ghazwan Altabbaa

#### DOM Clerkship Awards:

- Clerkship Letter of Excellence, 2010-2011 Dr. Jeffrey Schaefer
- Clerkship Letter of Excellence, 2010-2011 Dr. Marcy Mintz
- Gold Star Award, 2010-2011 Dr. Marcy Mintz
- Gold Star Award, 2010-2011 Dr. Paul LeBlanc





- Gold Star Award, 2010-2011 Dr. Troy Pederson
- Gold Star Award, 2010-2011 Dr. Mike Fisher
- Gold Star Award, 2010-2011 Dr. Jane Lemaire

#### Faculty Development:

- Dr. David Sam completed his Masters in Clinical Epidemiology and Public Health.
- Dr. Ghazwan Altabbaa is enrolled a Masters 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.

#### New Appointments/Promotions

Dr. Kelly Zarnke – Section Chief-General Internal Medicine, U of Calgary; Alberta Health Services Zone Clinical Section Chief, General Internal Medicine

Dr. Maria Bacchus – Zone Clinical Department Deputy Head
Dr. Elizabeth MacKay – Site Medical Director PLC, Facility Medical Director
Dr. Ian Scott – PLC Site Chief for IM
Dr. Paul Gibson – FMC GIM Section Site Lead
Dr. Anna Purdy – RGH GIM Section Site Lead

#### CHALLENGES AND FUTURE DIRECTION

- 1. 20010/2011 has been a year of 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. In addition to the initial daytime ambulatory and consultative services, it is expected that GIM 24/7 inpatient services will be required in approximately 18 months from the time of this report. The planning challenges include (i) the uncertainty regarding whether or not new ARP positions will be available for recruitment; (ii) uncertainty regarding patient volumes that would permit a viable livelihood for non-ARP members; (iii) the extent of a teaching mandate at the site; and (iv) planning for 24/7 coverage given these other uncertainties
- 3. The continued expansion of clinical services at all sites is anticipated, given inevitable population growth and aging
- 4. Given these two factors (SHC and continued growth in clinical service needs at all site) as well as ongoing career transitions (retirements, departures), the Sectional leadership estimates the Section should recruit a minimum of four new FTE within the next six-twelve months, one per site. Given current models for staffing the SHC, it could be expected that an estimated five more new FTE will be required at the SHC site
- 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. Given the size and diversity of the Section, there will always be room for enhancing communication and collaboration among the membership. The Section has recently held a retreat from which approximately 30 pragmatic recommendations were declared. Seven were identified as being of greater priorities that align with both AHS clinical and UofC academic priorities. Sectional action plans and member participation are ongoing 'next steps'.
- 8. Preparedness for a larger (and soon longer) fellowship program is ongoing with full Sectional participation.
- 9. Preparedness and participation in ongoing AHS transitions such as clarifying where GIM fits into the clinical networks concept requires ongoing engagement
- 10. The summer of 2011 will see one expected recruit:

Name	Area of Interest	Site
Lynn Lambert (United Kingdom)	Health Services delivery	FMC/SHC

The Obstetric Medicine group (Drs. Paul Gibson, David Sam, Lee-Hawkins and Eliana Castillo) continue to develop their robust inpatient and outpatient consultative services for medically complicated pregnancies. Most recently, with the lead of Dr. Castillo, they established monthly Maternal Infections Clinics at the Peter Lougheed Centre as well as Outreach Medical Disorders in Pregnancy Clinic at the Calgary Urban Project Society (CUPS).





Academically, the group is developing and implementing a clinical and research database. At the North American Society of Obstetric Medicine (NASOM) Meeting on April 30, 2011 (Boston, MA, USA) Drs. Hawkins and Gibson made oral research presentations and Dr. Castillo won a Best Poster Presentation Award for her project: "Can we use the SIRS/SEPSIS Criteria in the Obstetric Population?". The group continues to foster and enjoy close clinical and academic collaborations with various groups (medical subspecialties, Anaesthesia, Medical Genetics), including bi-monthly joint Obstetric Medicine Rounds with Obstetrics and regular CME sessions with the Obstetric Medicine group in Edmonton. They will also be launching a monthly joint Preconception Counselling Clinic with the perinatologists from Maternal-Fetal Medicine (MFM) in October 2011.





## Section of Geriatric Medicine – Annual Report

## Fiscal Year: April 1, 2010 – March 31, 2011

The Section of Geriatric Medicine consists of 11 members. 7 are full time in the ARP and members of the Section. One member is cross appointed to General Internal Medicine, and 3 are part time members. While the Section has 11 members, the full time equivalent in our Section is 9.2. Three of our members have GFT appointments while the other eight have Major Clinical appointments with the University of Calgary (U of C).

#### 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.

In the summer of 2010 we had a significant manpower shortage due to the unexpected leaves of absence of three of our members.

#### **Ambulatory Services:**

- 1. RGH Seniors Health Clinic: is a multidisciplinary team and functions in a transdisciplinary model. Currently RGH Seniors clinic runs 14 half day clinics/week with the capacity to run more clinics. We are using Clinibase Scheduler and are learning to generate data to improve access and quality. In 2010 there were an estimated 1260 clinic visits, but this is based on hand count. As we become more familiar with Clinibase, more accurate data will be available.
- 2. Bridgeland Clinic: In February 2010, the Crossbow Clinic was closed and moved to the new Bridgeland Clinic. Geriatric Medicine clinics located at Foothills Medical Centre and Peter Lougheed Centre were also consolidated onto this new site. This is also the site of the Calgary Fall Prevention Clinic. This fiscal year has been a growing phase for this clinic. Currently there are 5 Geriatricians and 2 Care of the Elderly Physicians doing clinics at this site, and that totals 12 clinics per week. In 2010 there were an estimated 900 clinic visits. There are growing pains that occur with moving clinics from three different sites and we are looking to duplicate processes that have been successful at the RGH Clinic to the Bridgeland Clinic. There has been a marked decrease in wait times. In January 2010, the wait time for FMC/PLC clinics was 10 months. In January 2011 with the consolidation of the clinics to one site and the use of Clinibase Scheduler the wait time was reduced to a phenomenal 12 weeks.
- 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.

**Hospital Consultation:** The Section offers in-patient consultation services at the three adult hospitals in Calgary. For this reporting period there were about 1500 consultations provided to the 3 sites.

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

- Fanning Day Hospital
- Glenmore Day Hospital
- 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
- Orthopaedic Surgery
- Long Term Care consultation
- Alex Seniors Clinic Support for this clinic will start in September 2011
- West Central PCN Support for this clinic will start in March 2011
- South Health Campus in the future

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

#### RESEARCH

- 1. <u>Scholarly Productivity:</u> In the year of the report, the Section has produced:
  - 18 peer reviewed publications and 11 peer reviewed abstracts with a further 6 in press and 7 submitted
  - 3 non peer reviewed publications and 1 abstract
- 2. Major Funding: Total sum of successful grants allocated to members is \$ 10,825,110
- 3. <u>Research Focus of Sectional Members:</u>
  - Knowledge Translation
    - a) Prevention of Delirium in Hip Fracture Patients, Urinary Incontinence
    - b) Geriatric Medicine Order Set
  - Health Services Telehealth, Dementia Care, Community Care, Models of Geriatric Care, Clinical Informatics
  - Dr. Hogan is a lead investigator for the Canadian Longitudinal Study of Ageing
- 4. 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 Ageing. Dr. Hogan 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 as 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.

#### **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 1,149 hours to teaching at various levels.

Undergraduate	Members teach in many courses in the UGME curriculum. All Section members are expected to teach in Course V.
	Many members also teach in Physical Examination, Physicianship and Communication courses.
	• 3 members are Master Teachers and as a result have taught in a wide variety of courses to a total of almost 600 hours of UGE small group teaching.
	• 4 members supervised medical students in Course 440
	• Dr. Burback is co-chair of Course V UGE (Neurology, Ageing and Special Senses)
	• Section members supervised 32 Clerkship rotations ranging from 2-4 weeks. This includes
	electives of out of town students.
	Participation in OSCE
	Participation in CaRMs interviews
Postgraduate	• 35 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 60 hours





	<ul> <li>Supervision of Resident Research Projects</li> <li>2 Sectional Members are Members of the RCPSC Internal Medicine Examination Committee</li> <li>Dr. Burback sits on the PMR Residency Program Committee</li> <li>Participation in PGY 1-3 OSCE</li> </ul>
Graduate	• 7 students were supervised by Section members
CME	• 17 presentations locally, provincially and nationally
Multidisciplinary	NICHE Education
Educations	Mount Royal Nursing program and Interprofessional Education
Other	<ul> <li>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</li> <li>Dr. Holroyd Leduc is an editing an EPM (Evidence Pased) Cariatria Medicine Pack</li> </ul>
L	Dr. Holroyd Leduc is co-editing an EBM (Evidence Based) Geriatric Medicine Book

#### ADMINISTRATION

Members of the Section provide the following leadership:

- Dr. Fruetel: Head, Section of Geriatric Medicine. Medical Director of Seniors, Subacute and Transition Services and Medical Leader, Integrated Seniors Health.
- Dr. Holroyd Leduc: Medical Coordinator, Clinical Informatics, DOM and has been appointed to the Alberta Clinical Council
- Dr. Silvius: Appointed Senior Medical Leader, Seniors Health for the province.
- Dr. Schmaltz: Telehealth Lead and participation in Provincial Telehealth Programs (Alberta Clinical Telehealth Forum) and Western Canadian Waiting List
- Dr. Powell: Senior Physician Initiative (SPI)
- Dr. Cohen: Sectional Representative, ARP Management Committee
- Dr. Hogan is the Brenda Strafford Chair in Geriatric Medicine

#### AWARDS AND HONORS

Despite significant manpower issues, members of the Section have been recognized for their contributions, including:

- David Hogan received the Prix d'excellence from the Royal College of Physicians and Surgeons of Canada.
- Dr's Holroyd Leduc, Burback and Schmaltz received the Department of Medicine Quality Improvement and Patient Safety for their work as a team on the Hip Fracture order set.
- Dr Holroyd Leduc received the Department of Medicine Research Preceptor Award.
- 4 Section members received Associate Dean's Letters for Teaching Excellence in the UGE curriculum, and 1 member received Letter of Excellence for more than one course.

#### 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 Ageing, Dr. Holroyd Leduc taking on a leadership role in the Department of Medicine Quality Improvement Lead, and the resignation 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:

- The Section of Geriatric Medicine and Seniors Program are introducing the Hospital Elder Life Program to FMC in Fall of 2011. This program results in significant reductions in Delirium, reducing LOS, and maintaining function and cognition. This initiative is being lead by Dr. Holroyd Leduc.
- It is difficult to indicate future direction given AHS restructuring. The strategic arm of Seniors Health is now provincial and with the new Strategic Clinical Networks, strategic planning is uncertain.
- Further expansion of clinical services and building capacity in hospitals and communities is desired but dependent on recruitment





## Section of Hematology and Hematologic Malignancies - Annual Report

## July 1, 2010 – June 30, 2011

#### CLINICAL

- 1. New Clinics, Initiatives and Innovations
  - a. Continued development of the Rare Blood and Bleeding Disorders Comprehensive Care Program (Director Man-Chiu Poon), now expanding to include hemoglobinopathies under supervision of Dr Farzana Sayani.
  - b. New Advanced Practice Nurse (APN) role for outpatient BMT starting 2010. Ongoing APN roles in Tom Baker Cancer Centre (TBCC) Hematology clinics, with expanded roles for central referral/triage and CLL.
  - c. Continued development of an outpatient Thrombosis Program in Calgary in collaboration with GIM and other Sections. Review of treatment guidelines, educational program and research opportunities is ongoing.
- 2. Key Partnerships
  - a. Provincial Hematology Tumor Group (TBCC, CCI, Associate Cancer Centres, Hematopathology in Calgary and Edmonton)
  - b. Consultant, World Federation of Hemophilia Country Program for China. MC Poon
  - c. Ongoing monthly Hematology Clinics in Medicine Hat
  - d. BMT Clinics every 2 weeks in Edmonton
  - e. International Health Program Project, Laos. C Brown
  - f. Pediatric hematology: Hematology Training Programs and Hemophilia Programs

#### RESEARCH

- 1. Scholarly Productivity
  - a. Peer Reviewed Publications/Articles Total 30 published, 27 in Press; Abstracts Total 14
  - b. Non Peer Reviewed Articles Total 3
  - c. Book Chapters Total 5
- 2. Major Funding Total Approx. \$9,592,205.00

New: \$59,262.00

Sources: Alberta Cancer Foundation, Alberta Cancer Research Institute, Association of Hemophilia Clinic Directors of Canada, , Bayer, Celgene, Hoffman la Roche, Multiple Myeloma Research Foundation, Pfizer, Southern Alberta Myeloma Patient Society, Thalassemia Foundation of Canada.

Ongoing: \$9,536,000.00

3. Research Focus of Sectional Members

Malignant Hematology:

- Clinical Trials (novel monoclonal antibodies, lenalidomide, NCIC-CTG cooperative group and industry) for Multiple Myeloma (Dr. N Bahlis), Lymphoma (Dr. D Stewart, Dr. C Owen) Leukemia/MDS (Dr. L Savoie and Dr. M Geddes).
- Translational: Provincial Hematology Tumor Bank (with Alberta Cancer Research Institute Biorepository), Biomarkers for lymphoma & myeloma (Dr. D Stewart, Dr. N Bahlis).

Blood and Marrow Transplantation:

- Busulfan pharmacokinetics, adjusted dose therapy, TBI, ATG (Dr. J Russell)
- Mesenchymal stem cell treatment of GVHD (Dr. A Daly)
- PET/CT-guided high dose therapy/ASCT for aggressive lymphoma (Dr. D Stewart)

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 Clitherow Endowment Fund, Section Research and Education Fund, GSK ,Genzyme, Hoffman la Roche, NCIC, National Cancer Institute (USA), PDL/Otsuka, Sanofi Aventis Canada Inc., Terry Fox Research Institute.





- Blood vs Marrow Stem Cell Source for Unrelated Allogeneic SCT (Dr. L Savoie)
- Allergy, Immunology and Infection following Allogeneic SCT (Dr. J Storek)
- Autologous SCT for autoimmune disorders (Dr. J Storek)

#### Hemostasis/Hemophilia (Dr. MC Poon):

- 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

#### Thrombosis:

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

#### Medical Education:

• Undergraduate: teaching methods, curriculum design, EBM (Dr. D Jenkins)

Leadership in Research:

- Canada Research Chair in Immunology. Dr. J Storek
- Chief Editor, Clinical and Applied Thrombosis and Hemostasis. (Dr. R Hull)

#### **EDUCATION**

Teaching Hours (Approximate)

	Approximate. Number of Hours		
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		
СМЕ	National/International: 20 hrs Local: 26 hrs		
Thesis Supervision	4 PhD, 4 MSc		

#### 1. Awards:

- International Total 0
- National Total 2
- Local (including provincial) Total 20
- 2. Educational Leadership:
  - International: Invited CME (MC Poon and R Hull), CME International Health Program (Dr.C.Brown)
  - National: RCPSC Hematology and Internal Medicine Exam Boards (Dr. K Valentine, Dr. L Savoie)
  - Local: (including provincial) Director Hematology Residency Program (Dr. M Geddes), DirectorBlood Course (Dr. L Savoie), Director Undergraduate Medical Education Student Affairs (Dr. D Jenkins), Director Lymphoma Fellowship Program (Dr. P Duggan), Director BMT Fellowship Program (Dr. 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 Dr. Mona Shafey and Dr. Dawn Goodyear (July, 2010)
  - Hematology Strategic Planning Day held on June 2, 2011. Main topic on agenda was planning for South Health Campus, Centralized Cancer Care, Recruitment and Structure of Section.
- 3. Fundraising: Source and dollar value (approximate)
  - Patient Donations \$49,550.00
  - Industry Donations \$113,000.00
  - Used for Research and Education Purposes

#### **AWARDS**

Dr. Nizar Bahlis	
2010/01 - 2010/12	Merit Award, \$5,000
Dr. Andrew Daly	
2010/08 - 2010/10	Distinguished Service letter (Silver) for contributions to Blood Course 2010, Undergraduate Medical Education
2010/08 - 2010/10	Associate Dean's Letter of Excellence, Undergraduate Medical Education
Dr. Peter Duggan	
2010/08 - 2010/11	Silver Award for Teaching Contribution, For contribution to undergraduate teaching, University of Calgary, Instructor
Dr. Michelle Geddes	
2010/01 - 2010/12	Associate Dean's Letter of Excellence, The University of Calgary
2010/01 - 2010/12	Bronze teaching award, University of Calgary
Dr. Russell Hull	
2009/01 - 2010/12	Top Achievements in Canadian Health Research, CIHR/CMAJ
Dr. Deirdre Jenkins	
2010/01 - 2010/12	Gold Star Teaching Award, University of Calgary
2010/01 - 2010/12	Platinum Teaching Award, University of Calgary
Dr. Johan Lategan	
2010/01 - 2010/12	Dr. Howard McEwen Award for Clinical Excellence (PLC)
Dr. Carolyn Owen	
010/08 - 2010/09	Silver Distinguished Service for teaching contributions in Course 1 UME, The University of Calgary
Dr. Man-Chiu Poon	
2011/01 - 2011/12	Associate Dean's Letter of Excellence in Teaching, University of Calgary Faculty of Medicine
2011/01	2010 Lifetime Achievement Award, Canadian Hemophilia Society Alberta Chapter - Southern Alberta Region
2010/01 - 2011/01	Dept of Medicine - Section of Hematology/Hematologic Malignancies Recognition for Mentorship, Dept of Medicine, University of Calgary
Dr. Lynn Savoie	
2010/01 - 2010/12	Gold teaching award, University of Calgary
Dr. Farzana Sayani	
2010/08 - 2010/10	Associate Dean's Letter of Excellence, University of Calgary, Undergraduate medical education





Dr. Mona Shafey	
2010/08 - 2010/10	Silver Teaching Award, University of Calgary
Dr. Doug Stewart	
2010/08 - 2010/10	Bronze Teaching Award, University of Calgary
Dr. Karen Valentine	
2011/03 - 2011/12	Canadian Association of Medical Education Merit Award, CAME
2010/08 - 2010/10	Silver award for Course 1 2010, The University of Calgary
2010/01 - 2010/12	Associate Dean's Letter of Excellence, The University of Calgary

#### CHALLENGES AND FUTURE DIRECTION

- 1. Challenges
  - Alberta Health Services ongoing restructuring: bed capacity, functional planning for malignant hematology/BMT and the SHC, EMR, Patient Flow, Space Allocation.
  - New ARP and Recruitment: funded positions, office and clinic space, secretarial support
  - Program development for benign Hematology: triage, QA/QI, research program and CPGs
  - Research: BMT/Cell Therapy, Benign Hematology, support for Translational Research (protected time, start-up money, tumor bank), initiate Health Services Research. Clinical Research currently threatened by AHS: accounting, excessive fees, contract office, REBs, Calgary Zone hospitals.
  - Increased teaching responsibilities for increasing numbers of medical students and residents
- 2. Future Directions Goals for the coming year include:
  - Planning for new SHC
  - Work with AHS Board, Calgary Zone and Cancer Care to coordinate cancer treatments
  - Expanding Adult Rare Blood and Bleeding Disorders Clinic to include hemoglobinopathies.
  - Develop the Benign Hematology Program (Directed by Dr. K Valentine)
  - 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 and for benign and malignant hematology studies at PLC
  - Recruitment of staff to meet demands of current workload, academic objectives, expanded medical school, and new SHC
  - Continuing the establishment of mentorship program for diverse needs of young Section members and fellows





Section of Infectious Diseases – Annual Report

## Fiscal Year: April 1, 2010 – March 31, 2011

#### 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.

Clinic	Access	Innovations	Case Load
Home Parental Therapy (HPTP)	PLC HPTP moved to more appropriate clinic space.	Development of a shared patient care model with Urgent Care at Sheldon Chumir	15,900 clinic visits >5,000 new patient visits all patients seen within 24 hours
Southern Alberta (HIV) Clinic	Initiated nurse based patient re-assessment protocols	Initiated video conferencing for rural patients, palliative care and Corrections Canada patients	163 (151) new patients 5235 patient visits
STD Clinic	Outreach – via satellite clinic in Banff, collaboration with SafeWorks program; NE	Increased program re syphilis: 2 nurse educators, provincial campaign	22,892 (23620) patient visits 7,185 (7043) new patients
	Women's Clinic; Drop-In Centre, CUPS and Margaret Chisholm	SCHC outreach clinic Creation of STDdoc on Twitter	
	Resettlement Centre. Development of Herpes Support Program developed with Sexual		
	Health Access Calgary. Direct to teen STD education via Nexopia.com		
Cystic Fibrosis Clinic	Continued use of telehealth for rural patients	Welcomed a nurse practitioner Developed new infection control practices Won funding to create an electronic database Won funding to create a Pseudomonas library	<ul><li>150 (143) total patients</li><li>595 (579) clinic visits</li><li>7 new patients</li></ul>
General ID Clinics		General infectious disease consults through ID Fellows clinics	60 (32) clinics 234 new patients 456 patients seen
Hepatitis C Clinic (CUPS)	Discussion of ID working in GI HCV clinics		
MRSA Decolonization Clinic	Space created at RRDTC for clinic		266 new patients 518 patients seen

#### Other Programs which the Infectious Diseases Section is a major player in include:

#### 1. Infection Prevention and Control (IPC)

- a. Monitored needle/syringe reuse programs
- b. Hand hygiene and glove audit
- c. Collaborated in province wide surveillance program for antibiotic resistant organisms





- d. Controlled VRE, RSV and Serratia outbreaks
- e. Hired a new medical site officer for RGH

#### 2. Calgary Zone Antimicrobial Committee (formerly CHRAUC [Calgary Health Region Antibiotic Utilization Committee])

- a. Completed projects to wisely use antibiotics and save money. Three projects were completed: switch Cefotaxime to ceftriaxone, cefadroxil to cephalexin and optimize meropenem dosing
- b. Engaged in an education program promoting wise use of antibiotics. In a three month period U 36 saved \$45,000.
- c. Developed an antibiotic algorithm for nurses to use if a pre-op patient has a beta-lactam allergy.
- d. Completed the order set for *Clostridium difficile* diarrhea and cautious graded challenge for Ampicillin. Began reviewing the Emergency Department order sets that involve antibiotics.
- e. Collaborated on the provincial pneumonia pathway
- f. Improved patient safety by developing a saline loading protocol when patients receive Amphotericin B

#### 3. Calgary Zone Clinical Informatics

a. 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 293 hours working as editors on journal boards, as editors for journals and reviewing grant applications

Reported Section research activities include:

- 65 (69 in 2009-10) Papers in peer-reviewed journals
- 19 (19 in 2009-10) Papers in non-peer reviewed journals
- 38 (39 in 2009-10) Abstracts and conference presentations
- Were speakers at 19 local/provincial, 10 national and 15 international Invited keynote presentations/plenary sessions at major scientific meetings

#### **Major Funding**

Section members currently hold \$3.2 million in research grants for the 2010 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, *E. coli* O157, environmental antibiotic resistance
- **Dr. T. Louie** *C. difficile*, 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. H. Rabin Cystic fibrosis, major collaboration project with Department of Microbiology
- Dr. R. Read Sexually transmitted infection, antibiotic resistance in agriculture



#### ADMINISTRATION



Members of the Infectious Disease (ID) Section are involved in Medical Administration at a number of levels. Dr. John Conly was the Head of the Department of Medicine for eight years and resigned from this post on June 30, 2010. Dr. Dave Megran is the Zone Clinical Department Head Administration. The ID Section has the equivalent of 1.9 FTEs (17% of our FTEs) assigned to administrative responsibilities if Dr. Megran's 1.0 FTE is excluded from the calculation. The dual trained ID and microbiologist are also excluded since their primary designation is the Department of Pathology. The percent of time spent working on administrative responsibilities has decreased from 2009-2010 because Dr. Conly stepped down from his role and is on sabbatical, Dr. Megran was excluded and because the Section increased in size. The Section's major administrative roles, by physician, include:

#### 1. Dr. John Conly

-Zone Clinical Department Head, Department of Medicine (April 1-June 30, 2010)

-Co-Director, Synder 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 Committee on Antibiotic Resistance

#### 2. Dr. John Gill

-Medical Director, Southern Alberta HIV Clinic (SAC)

-Director, University of Calgary Retrovirology Laboratory

#### **3. Dr. Dan Gregson** (dual trained) -Section Head, Medical Microbiology, Calgary Laboratory Services

#### 4. Dr. Donna Holton

-Section Chief, Infectious Diseases

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

## 5. Dr. Andrew Johnson

-ID Resident Training Program Director

#### 6. Dr. Joseph Kim

-Medical Site Officer, Infection Prevention and Control Program

#### 7. Dr. Marie Louie (dual trained) -Acting Medical Director, Provincial Laboratory, Alberta Health Services

#### 8. Dr. Tom Louie

-IPC Program Director, Medical Site Officer - Infection Prevention and Control Program

#### 9. Dr. David Megran, -Zone Clinical Department Head Administration

**10. Dr. Andy Pattullo** -Medical Director, Advance Technology Clinical Informatics

## 11. Dr. Ron Read

-Medical Director, Calgary STD Clinic

#### 12. Dr. Harvey Rabin



-Medical Director, Adult Cystic Fibrosis Clinic

# Awards and Recognition

Dr. Mike Parkins 2010-2011 Clinical Fellowship in Cystic Fibrous

#### **EDUCATION**

The Section of Infectious Diseases is committed to providing education to all levels of learning, underground studies, pre clerkship years, clerkship years, postgraduate training, Masters and PhD level. 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 DOM.

Type of Education	Number of hours for Section
Undergraduate	62 hours formal teaching medical students
	<ol> <li>MDCN 504/514.17 (bedside clerkship teaching 626 days U of C, 175 days non U of C service a. 615 days or 4920 hours b. 4920 teaching hours (0.25% of service hours)</li> </ol>
Postgraduate	81 hours of formal teaching
	<ol> <li>GIM/Family Practice Residents         <ol> <li>790 days or 6320 hours service</li> <li>1580 teaching hours (0.25% of service hours)</li> </ol> </li> <li>ID Residents         <ol> <li>327 days or 2616 hours service</li> <li>654 teaching hours (0.25% of service hours)</li> </ol> </li> </ol>
Graduate	12.5 hours of formal teaching
CME	25 hours
Thesis Supervision	Supervision of students: undergraduate students 79 hrs, M Sc candidates 172 hrs, doctoral candidates 29 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. The program will undergo an internal review by the Royal College in April 2011.

#### **Educational Leadership**

• Dr. Ron Read and Dr. John Conly are active members of the Undergraduate Medical Education Committee of UME

#### New Initiatives and Innovations:

- STD Education direct-to-teens via <u>www.Nexopia.com</u>
- See clinical table





#### CHALLENGES AND FUTURE DIRECTIONS

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). The population of Calgary continues to a) age, b) have limited access to primary care, and c) have increasing patient acuity scores that results 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 2010-2011, the ID Section hired 3 new physicians. The Section has been actively seeking to hire individuals who have special interests in areas that have been run by a single physician. In this fiscal year IPC, the CF clinic and the general ID clinic gained a second physician. The HIV clinic gained 2 physicians to work in this area. The Section has identified someone to hire in 2011-2012 who will backup the STI clinic. Despite the new hires there remains a discord between the number of FTEs within the Section and the workload that the Section performs. In this fiscal year, the newly hired physicians were balanced by two physicians being on sabbatical. One physician has begun a three year plan for retirement. For these reasons, the Section continues to face manpower shortages. Providing an ID consultation service in the South Health Campus while coping with the increase patient numbers in the Home Parental Treatment Program (HPTP) will require hiring more ID physicians. HPTP has experienced an increase in patient numbers as a result of the Emergency Department trying to reach mandated wait time goals.

As a result of the anticipated increase in number of physicians needed in the Section, the Section remains committed to having one of the best if not the best ID training program in the country. The ID training program has been completely recreated to ensure we have high quality applicants applying to our training program. In 2010-2011, 4.5 fellows were in the training program. The ID Section did not hire anyone from outside of our program in 2010-2011. However, it is anticipated that the Section will hire 2 and possibly 3 physicians who would have trained outside of Calgary over the next two years.

The Section and the nurse practitioners (NP) have adjusted the NP workload so that one of the NPs can work part time in the CF clinic. The Section remains committed to using extensive telehealth conferencing to maximize our potential to connect 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). 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

# Fiscal Year: April 1, 2010 – March 31, 2011

# 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	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. RN triaging 90% or referrals
Access and Effectiveness	<ol> <li>Kidney Disease Prevention clinic – Outreach to aboriginal population.</li> <li>Nurse practitioner managed protocol driven evidence-based clinical practice guideline for management of diabetes, hypertension, dyslipidemia implementation</li> <li>Telehealth – Started 2010 -Nephrologist,</li> </ol>	B.Hemmelgarn Matt James Ellen Novak NP	Being studied by Interdisciplinary Chronic Disease Collaboration (ICDC) in combination with similar clinics run by Northern Alberta Renal Program for effectiveness and cost-effectiveness. In 2010 we opened a 2nd new aboriginal clinic in Standoff
	dietitians, social workers and nurse educators now communicate with patients across southern Alberta via telehealth- Oriniatiing centres include Calogary, Lethbridge abnd Medicine Hat.	Nairne Scott- Douglas, Morley Wong and Ajiaz Ahmed – paramedical staff	Patient satisfaction bring surveyed
Effectiveness and Safety	Glomerulonephritis Clinic – Clinical Nurse specialist adjunct to Physician Care of active immunosuppression patients	Manns, 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 immune suppression 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 components relating to End of Life decisions, palliative care and pain control. The Southern Alberta Renal Program has supported this initiative though 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 nearly \$20,000 for the purchase of stationary bicycle used on hemodialysis.
- 3. Community Kidney Kitchen: The Section of Nephrology financially contributes to this volunteer dietitian run program that teaches Kidney Failure patients how to grocery shop and cook diets that are friendly to kidney failure.

Key Partnerships:

• 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 disease. They have already set up partnerships with other researchers in chronic disease and with health services administrators at AHW. The aim is health administrator directed, health services research relating to chronic diseases. This is an exciting opportunity for researchers to engage health resource decision makers and give them the evidence they need to make their decisions.

- 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 high 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
- Dr Hemmelgarn continues to also work on access and delivery of care to disadvantaged and marginalized populations such as aboriginal, elderly and the poor. We have formalized an agreement with the Mosaic PCN of NE Calgary to educate their Nurse Practitioners so that they can screen and treat cardiovascular risks and slow the progression of CKD
- 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 University of Calgary. He has visited Calgary 4 times and 3 of our researchers have visited Bari, Italy.
- Ongoing collaboration with researchers from Edmonton under the umbrella of the Alberta Kidney Disease Network (AKDN)

## RESEARCH

- 1. Scholarly Productivity
  - Peer Reviewed Publications / Articles
     Section of Nephrology was involved in the publication of over 75 different peer reviewed articles, over 50 as First, Second or Senior Authors. 25 manuscripts and over 35 abstracts are in press
  - b. Non-Peer Reviewed Articles None in 2010
  - c. Book Chapters- none in 2010
  - Academic Reports or Reviews 3 guidelines Canadian Society of Nephrology and Canadian Hypertension Society and KDIGO guidelines
  - e. Over 22 invited presentations
- 2. Major Funding:

Members of the Section of Nephrology have active funding of just over \$23 million dollars of which just over \$3,000,000 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.

- 3. Research Focus of Sectional Members (e.g. health services, genomics, medical education, etc.)
  - a. Health Services Drs. Manns, Hemmelgarn, Ravani and now Dr Quinn working thorough the ICDC and the AKDN with grants totally well over \$5 million
  - b. 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. McLaughlin is particularly prolific in these areas as well as in the area of Simulation teaching.
  - c. Dr. MacRae, Ravani and Tai investigate the areas of Hemodialysis adequacy and Vascular Access
  - d. Drs. Hemmelgarn, Manns and Muruve through the AKDN are investigating genomic factors that influence chronic kidney disease
  - e. Drs. Muruve, Wang and Tibbles continue to work on basic science areas that include gene therapies, immunologic responses, fibrosis and immune tolerance
  - f. Dr. Tibbles (PI) in combination with Drs. Hemmelgarn and Manns received just under \$3 million for a multi-centred trial looking at treating BK virus in transplantation. This is a major cause of graft loss. Recruitment to this trial has started in current fiscal year.
- 4. 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 April. 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 – 2010 Dec 31. 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. CIHRAboriginal, Peoples' Health Committee Hemmelgarn, Brenda. 2010 Jan 1 - 2010 Dec 31. External reviewer. Heart and Stroke Foundation of Canada Muruve, Daniel. 2006 - 2011. 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 MacRae, Jennifer. 2006 Jan - Present. American Journal of Kidney Diseases, Kidney International, CJASN, Nephron, Canadian Journal of Cardiology.

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. 2010. Clinical Trainee Advisory Committee, MD/PhD and Clinical Fellowship reviews. Alberta Innovates - Health Solutions

Hemmelgarn, Brenda. 2010. CIHR Canada Graduate Scholarships PhD Awards Committee. CIHR Hemmelgarn, Brenda. 2010. CIHR Canada Graduate Scholarship Master's Awards Committee. CIHR Tibbles, Lee Anne. 2010 - Present. Abstract Review The Transplantation Society (International). The Transplantation Society

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 June. New Investigator. Canadian Institute 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. Tibbles was past President of the Canadian Society of Transplantation

# **Editorial Boards**

- Dr Hemmelgarn Canadian Journal 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 1800
Postgraduate	Over 1000
Graduate	Over 3500
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
- 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
- MacRae, Jennifer. Nomination for fellows Letter of Recognition. The University of Calgary
- Manns, Braden. CIHR New Investigator.
- McLaughlin, Kevin. Gold Star teaching award for the Internal Medicine clerkship, 2010
- McLaughlin, Kevin. Letter of Excellence in teaching in Course 4 (Renal, Endocrine, and Obesity), 2010
- Muruve, Daniel. Scholar. Alberta Heritage Foundation for Medical Research
- Muruve, Daniel. Canada Research Chair, Tier II
- Mustata, Stefan. Gold Star Teaching Award. The University of Calgary
- 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 diseases. Trained a nurse practitioner to run this clinic. This clinic is supervised from a distance, weekly (by phone / pager if required). Meet once or twice a week to review patients. In 2010 set up a new clinic in Standoff for Blood Nation
- Dr Tibbles, Development of a novel therapy for the treatment of BK Nephropathy in Renal Transplant patients

#### ADMINISTRATION

#### Leadership:

- Local Dr Manns Blue Cross special committee on Anemia in CKD National
  - Dr. Lee Anne Tibbles –Past-President Canadian Society of Transplantation; The Physician Manager Institute, Level II and Level IV, Canadian Medical Association
  - Dr Brenda Hemmelgarn Chair of Hypertension Guidelines Canadian Hypertension Society

International - Brenda Hemmelgarn - Member of KDIGO CKD Guidelines Committee

#### Strategic Planning:

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

Fundraising: Section of Nephrology with the help of the Kidney Foundation of Southern Alberta raised just over \$700,000 this past year during the Kidney March as part of the five year goal of \$8 million.





## CHALLENGES AND FUTURE DIRECTION

- 1. Challenges
  - a. Space for Physician Offices and support staff.
  - b. Space for Research especially space for the Roy and Vi Baay Chair in Kidney Research
  - c. Funding for expanding Home dialysis therapies
  - d. Continued expansion of and alignment with the Northern Alberta Renal Program
  - e. Cut in medical support staff numbers by AHS
  - f. Recruitment for South Health Campus
- 2. Future Directions
  - a. Recruitment of a top of the world researcher in epidemiology to fill the Baay Chair
  - b. Expand evidence-based indications and research in Therapeutic Apheresis
  - c. Expansion of Basic Science research
  - d. Expanding Telehealth





# **The Section of Respiratory Medicine – Annual Report**

# Fiscal Year: April 1, 2010 to March 31, 2011

The Section of Respiratory medicine is delighted to report on our accomplishments in 2010. 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 difficult year at AHS. Funding has remained very tight and this has presented important challenges as patient volumes and complexity continue to climb. The CEO (Dr. Stephen Duckett) was released from his position, which led to uncertainty about the structure that would be promoted by the next CEO. The new hospital at South Health Campus (SHC) is now an unmistakable landmark in South Calgary. Section recruitment for SHC has been underway for some time, but very soon we will need to start detailed planning for the Section on that site. On the three current 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 Membership continues to have great passion and dedication, and is focused on working together for a better 2011.

#### CLINICAL PROGRAMS OF EXCELLENCE

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 enabled purchase of necessary equipment to perform this highly technical and ground-breaking service. The Service is also dedicated to training young respirologists. Dr. Elaine Dumoulin began her fellowship in Interventional Pulmonary Medicine in July.

The Calgary Asthma & 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. Andrea Loewen (Respirology) achieved ABIM - Sleep Medicine certification in September 2010. Dr. Christine Chang (Psychiatry) began her fellowship in July 2010. The Section of Respirology 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.



#### RECRUITMENT



The Section recruited Dr. Andrea Loewen and Dr. Mike Roman. Dr. Loewen did an advanced fellowship in sleep and neuromuscular diseases with Drs. Pat Hanly and Magdy Younes and joins the Section at Peter Lougheed Centre where she will join the NeuroMuscular Lung Clinic under the direction of Dr. Karen Rimmer as well as being the sleep physician for PLC. Dr. Mike Roman has completed an advanced fellowship in exercise and heart and lung interactions with Dr. Neil Eves and Sonny Belenkie. He will also be pursuing additional training in San Diego. He will be joining the Section at Rockyview General Hospital, where he plans to be the Director of the Exercise Testing Facility.

## RETIREMENT

Dr. Gordon Ford has announced his retirement for early 2011. This is going to be a profound loss for the Section. Dr. Ford has made tremendous contributions to the Section in mentorship, teaching, excellent patient care, administration, and research and academic spheres. He has 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 has been nominated for Mastership in the American College of Physicians. We all hope that Dr. Ford will remain as Professor Emeritus and continue to make contributions, but will also need to realize that the Section will never be the same.

#### INNOVATION

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

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 waitlists.

Dr. Pat Hanly, along with his team at the CHR/University of Calgary 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. 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.

The Thoracic Oncology Program operates under the guidance of Dr. Alain Tremblay, David Stather and Paul MacEachern. A full time Nurse Practitioner and Clerk are dedicated to the Thoracic Oncology Program (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 2011.

#### ADVANCED FELLOWSHIP AND TRAINING

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.

The GlaxoSmithKline Advanced Fellowship Training Program continues to be highly successful. As the field of Respiratory medicine 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 predominantly 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 researchtraining experience we hope to develop true clinical and academic excellence in many areas. The past participants of the program include:

Dr. Naushad Hirani Dr. Charlene Fell Dr. Julie Jarand Dr. Paul MacEachern Dr. Tom Lim Pulmonary hypertension Interstitial lung disease Mycobacterial Diseases Interventional Pulmonology Occupational Medicine University of Bologna Univ. of Michigan (Funded by AHFMR) University of Colorado andUniversity of Cape Town UBC and Germany Toronto

Anticipated:						
Dr. Mike Roman Exercise						
Dr. Mitesh Thakrar						
Dr. Erika Penz						

Physiology/Testing Lung Transplantation Health Policy

San Diego Newcastle, UK York University, UK

## ACADEMIC ACTIVITY

The individual contribution of Members resulted in the publication of over 110 papers, abstracts and book chapters in 2010. This is an increase of 10% over last year. More than 114 presentations were given, and Section Members received over \$3.9M 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. Charlene Fell published "Clinical Predictors of a Diagnosis of Idiopathic Pulmonary Fibrosis". This important contribution to the management of patients with pulmonary fibrosis was published in the American Journal of Respiratory and Critical Care, and for the second year in a role, one of Dr. Fell's papers was highlighted in the ATS year in review

Dr. Julie Jarand published a paper describing extensively drug-resistant tuberculosis (XDR-TB) among health care workers in South Africa in Tropical Medicine and International Health.

Dr. Pat Hanly published an important contribution on the correlation between snoring and severity of obstructive sleep apnea in the Journal of Clinical Sleep Medicine.

Dr. Doug Helmersen contributed to a paper on the outcomes from pandemic influenza A H1N1 infection in recipients of solid organ transplants, which was published in Lancet Infectious Diseases.

Dr. Richard Leigh demonstrated the ability of human rhinovirus infection to up-regulate MMP-9 production in airway epithelial cells via NFkB. This work was published in the American Journal of Respiratory Cell and Molecular Biology.

Drs. MacEachern, Stather and Tremblay described the management of empyema complicating tunneled pleural catheter placement in a paper published in the Journal of Bronchology and Interventional Pulmonology.

Dr. Bob Cowie's chapter in Murray and Nadel, the major textbook of Pulmonary Medicine was renewed. This chapter provides one of the major sources of information on pneumoconiosis and other occupational dust diseases.

Dr. Chris Mody established the mechanism by which Cryptococcus travels from the lung and is arrested in the brain, causing cerebral infection and meningitis. This observation was published in The Journal of Clinical Investigation.

#### 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 "Behind the Scenes Teaching" award from Class of 2012

Dr. Naushad Hirani was awarded the Associate Dean's Letter of Excellence in Undergraduate Teaching and the "Silver" Distinguished Service Award for Undergraduate Education

Dr. Paul MacEachern was awarded the Bronze Level Distinguished Service Award





Dr. Sachin Pendharkar received an AHFMR Clinical Fellowship as well as a Health Quality Council studentship

Dr. Richard Leigh received an Alberta Heritage Foundation for Medial Research Clinical Investigator award as well as a CIHR Clinician Scientist Award

Dr. Stephen Field received the Dr. Norman L Jones Award from the Canadian Thoracic Society, which is awarded to the author of a paper judged to have the greatest potential impact on Respiratory Medicine

Dr. Robert Cowie received the Lifetime Achievement Award of the Alberta Lung Association Medical and Scientific Section.

We have two endowed professorships within the Section, the GSK-CIHR Professorship in Inflammatory Lung Disease and the Jesse Bowden Lloyd Professorship in Immunology.

## CHALLENGES AND NEW DIRECTIONS

The Division has been increasing its activity at a rapid pace. Clinical activity increased by almost 10% 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 number 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 pulmonary rehabilitation, sleep medicine, lung transplantation, neuromuscular diseases, non-invasive ventilation, cystic fibrosis and pulmonary infections, and occupational and environmental Medicine. This must all be done in an environment of "no new dollars".

Provision of outpatient services continues to be a pressing problem. Clinic space at all three sites (UCMG, RGH and PLC) is insufficient. More outpatient offices are needed. A system of central triage has been introduced and we are working through the initial growing pains. Despite these new 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 Respirologist's 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.

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 that 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 education program that conform to guidelines established by the Canadian Thoracic Society and identified as a priority for the Section.

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





# Section of Rheumatology - 2010 Annual Report

# Fiscal Year: April 1, 2010 - March31, 2011

## CLINICAL

1. Physician Manpower/Service Sites

The Section of Rheumatology continues to offer an integrated musculoskeletal program of clinical care in a collaborative manner between the rheumatologists and our allied health professional staff. 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 division 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. Recent members to our clinical service include Drs. Aurore Fifi-Mah and Olga Ziouzina, in addition to Dr. Cheryl Barnabe who is a clinical scholar. Dr. Avril Fitzgerald returns after a 6-month sabbatical to hold a 0.3 FTE position and focus on addressing our large group of routine patients in the UCMC clinic.

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 over 4600 patients for a combined total of 18,400 patient visits in 2010. 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 2010. The PLC site was serviced by two rheumatologists who saw over 400 patients for a combined total of 1600 patient visits.

Although opportunity exists at the South Campus for clinical space, our physician resources are stretched and this will remain an option for new recruits to the Section in the future. Continued collaboration at all these sites with Alberta Health Services to manage staff and space is a high priority for the Section.

Lastly, many of the patients referred to rheumatology with complex autoimmune disease have multiple end organ system involvement. The importance of being co-located within a tertiary care/hospital centre with access to other specialties and day medicine cannot be underestimated. Many of our patients are co-managed with nephrology, neurology, cardiology and hematology.

#### 2. 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 2010, we received approximately 5400 new patient referrals to our Central Triage program, this equates to just over 100 per week. These referrals were managed by 1 nurse clinician and 2 unit clerks, with input from the lead physicians Drs. Liam Martin and Susan Barr. Since its inception in 2006, over 25,500 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 2010, 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 18 weeks and routine referrals - up to 52 weeks.





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).

A new clinic for systemic lupus was added in the Fall of 2010 and plans to expand its scope and capacity are underway. We are hoping to couple this clinical work with our highly successful longitudinal database of over 350 lupus patients – the Lupus HealthNet – that was started in 1996. With several of our younger Section members leading this initiative, we are hoping to foster an active interest in lupus research.

The Nurse Practitioner clinic, led by Jim Rankin recorded another successful year at the FMC site. This clinic recorded 261 new patient visits in 2010, in addition to the regular follow up visit bookings. 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. This clinic is overseen by Dr. Liam Martin.

Our Ankylosing Spondylitis/Spondylarthropathy clinic started in January 2010 and continues to be led by Dr. Dianne Mosher. Dr. Olga Ziouzina joined in the Fall of 2010 and has added her recent experience in the area of psoriatic arthritis working with Dr. Dafna Gladman at the University Health Network in Toronto. This weekly clinic is supported by physiotherapy and nursing expertise from our Section. This clinic also relies heavily on our ties with social work to address issues for this patient group in the areas of workforce involvement and educational supports.

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. In 2010, 61 new patients were seen by combined pediatric/adult rheumatologist teams at the FMC site. Drs. Nicole Johnson and Paivi Miettunen from pediatric rheumatology along with Drs. Anne-Marie Crawford, Dianne Mosher and Norma Jibb from the adult rheumatology side run the clinic. In a recent presentation, it was noted that a higher percentage of our ACH transitioned patients are achieving post-secondary education (up to 61%) compared to the literature.

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 prospectively. 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. We are currently completing an analysis of the provincial data with our colleagues at the University of Alberta and the Health Economics Institute.

The program will continue to provide patients with access to biologic therapies as they have one point of contact for expert advice for all aspects of their biologic therapy. The concern now is that as more patients are included in this program the workload associated with obtaining and maintaining access to these agents, for patients' primary rheumatologists, will increase. This situation will have to be monitored closely.

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.

#### TEACHING

The undergraduate medical teaching program comprising of the Musculoskeletal and Skin course was led in the Fall of 2010 by Dr. Gary Morris. He also served as the course evaluator taking over this role from Dr. Chris Penney. Dr. Morris coordinated and scheduled both the site based and community based Section members to teach the course content and small group sessions.

For his contributions in this area, Dr. Gary Morris was awarded the Associate Dean's Letter of Excellence by the Faculty of Medicine at the University of Calgary for his commitment to undergraduate medical education.

Dr. Chris Penney moved into a new role, leading the Section in CME and the Clinical Clerks program. He organized a successful CME program this winter for family physicians entitled 'Back to Back'. 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 aimed at improving the examination of the musculoskeletal system in patients.





The Post Graduate Medical Education program is led by Dr. Susan Barr. Currently we have one fellow in her first year of specialty training. Dr. Sveltana Stajkovic who will finish in July 2012, has expressed an interest in practicing in Calgary. Drs. Olga Ziouzina and Aurore Fifi-Mah completed their training in 2010 and are now full members of the Section. We continue to encourage and search for new trainees to our specialty program. Our Fall Section Retreat in 2011 will focus its energies for future recruitment efforts.

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 continues in her Clinical Scholar position within the Section. She is completing her Masters in Clinical Epidemiology in Community Health Sciences with a focus on Aboriginal Health issues along with an interest in radiographic outcomes and plans to defend in the Summer of 2011. Dr. Barnabe has also acted as a preceptor for Clinical Clerks, rotating residents and Rheumatology trainees within our Section.

Dr. Sharon LeClercq was the recipient of the Dr. Terry Groves award for Clinical Excellence at the Rockyview General Hospital in 2010. Dr. LeClercq continues to be actively involved in both clinical teaching along with her interests in research in the areas of early arthritis treatment and scleroderma.

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 once a month coordinated by Ms. Theresa Lupton our Rheumatology nurse clinician.

#### RESEARCH

The Section of Rheumatology holds two prestigious 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 2010, 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 twice in 2010, becoming a member of the Alberta Bioindustry Hall of Fame by Bioindustry Alberta and being named a Fellow of the Canadian Academy of Health Sciences. He further has been named as the Chair of the newly created Alberta Research and Innovation Authority (ARIA). ARIA comprised of international research, innovation and business leaders who share their expertise, insight and connections to provide strategic advice and recommendations to the Government of Alberta.

The Arthur J.E. Child Chair in Clinical Epidemiology Research is held by Dr. John Esdaile. Joining the Section in late 2010, Dr. Esdaile's research will be focused on patient-based outcomes research in the areas of rheumatoid arthritis, osteoarthritis, systemic lupus erythematosus.

Dr. Esdaile who began his position on December 1, 2010, will spend 60% of his time in Calgary and the remainder of his time will be spent in Vancouver, as he will remain as the Scientific Director of the Arthritis Research Centre of Canada. ARC conducts consumer-driven clinical research and trials related to arthritis diagnosis, prognosis, prevention, care outcomes and quality of life issues. They are a patientoriented research centre, and approach research from a wide range of disciplines including rheumatology, rehabilitation science, public health, epidemiology, biostatistics health psychology, health economics and education. This collaboration will now span both British Columbia and Alberta, making arthritis research a regional effort in the west promoting research as well as mentor new investigators in our field.

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.

In 2010 the Section formed a Research Facilitation Committee (RFC) to communicate and facilitate basic, clinical and translational research amongst our members. Drs. Marvin Fritzler and Dianne Mosher co-chair this committee with the participation of physicians and research coordinators.

#### INNOVATION

The development of our Central Triage system and specialty clinics in 2006 occurred as a result of money allocated from the Department of Medicine's Innovation project. Building on this work, a new initiative within the Section in 2010 was our partnership with the Foothills Primary Care Network. Its goal was to develop and establish new pathways of care using a clinical nurse specialist model and physiotherapist screener to improve care and communication with our Primary Care colleagues. Drs. Dianne Mosher and Steve Edworthy are working with the primary care physicians in the NW quadrant of Calgary on this project that includes a tele-health component. To compliment this work, the Section is collaborating with the Alberta Bone and Joint Health Institute to develop metrics to evaluate the effectiveness of this program with the possibility of more widespread applicability to other PCNs. In the future, incorporation of orthopedics into the model is being explored.

Dr. Avril Fitzgrald, along with other researchers has developed a priority-setting tool. The objective of this work was to improve referral from primary care to rheumatology by formulating and testing a clinically coherent, reliable, and non-diagnosis-dependent Priority Referral Score (PRS). This tool has been piloted within the Rheumatology Central Triage system. Dr. Fitzgerald's next step is to assess whether the tool can be helpful in sorting out our large number of lower priority referrals.

Another innovative initiative is our partnership with the Southern Alberta Siksika Nation to run both an Arthritis Clinic and a Community Arthritis Screening Program. The Clinic serves both patients with established rheumatic disease and new referrals and has been running since October 2010 with Drs. Cheryl Barnabe, Sharon LeClercq and Dianne Mosher attending on a monthly basis.

The Community Screening Project is focused on identifying the frequency of musculoskeletal symptoms, rheumatic disease and the presence of arthritis-related auto antibodies in 400 Siksika Nation individuals. The first major recruitment event was the recent Siksika Health Fair. Data from this project will assist to determine prevalence rates within their population and at the same time to advocate for appropriate arthritis care.

Alberta Health Services introduced five clinical networks in the past year. The first was the Bone and Joint Network. The Section of Rheumatology has taken a leadership role in this new venture. Dr. Dianne Mosher chairs the Network which meets on a monthly basis in Edmonton or Calgary and Dr. Sharon LeClercq is co-chair with Dr. Paul Davis of Edmonton of the Arthritis Working Group. Rheumatology's work with the ABJN and the ABJI is to develop 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.

Drs. Sharon LeClercq and Dianne Mosher along with our nurse clinician Theresa Lupton are also working on a project with Dr. Deborah Marshall to improve care pathways for Osteoarthritis patients using systems dynamic modeling. Dr. LeClercq has been the lead on the development of the inflammatory joint disease clinical care pathway. This Alberta Bone and Joint Network project is aimed at improving health care services and evaluating the impact of the services on patient outcomes and health system efficiency. The two are intrinsically linked, sharing valuable information to further their work.

#### AWARDS:

BarnabeUniversity of Calgary Faculty of Graduate Studies Travel Award, University of CalgaryFuture Leaders in Rheumatology Training Mentorship ProgramEsdaileRoger Demers Prize, Laurentian Rheumatology AssociationFitzgeraldDepartment of Medicine Mentorship AwardFritzlerMember, Alberta Bioindustry Hall of Fame, BioAlbertaFellow, Canadian Academy of Health Sciences, Canadian Academy of Health Sciences

#### Le Clercq





Dr. Terry Groves Award for Clinical Excellence (RGH), Dept. of Medicine, University of Calgary <u>Morris</u> Associate Dean's Letter of Excellence, Faculty of Medicine, Teaching award

# C HALLENGES AND FUTURE DIRECTIONS

The future growth and productivity of the Section of Rheumatology will depend on its ability to continue to both recruit and retain the best physicians and researchers in our discipline. This is no easy task with an aging physician workforce and decreasing numbers choosing to enter Rheumatology after their Internal Medicine training. As with our success in recruiting for the Child Chair, we need to identify our gaps in expertise and address them in our recruitment efforts.

Recently, we completed a manpower survey of current Section members to ascertain their 5 year plans. Data from the survey will assist us in future planning for recruitment, in addition to, working with our senior physicians to review and adopt recommendations from the DOM's Senior Physician Initiative. Working with our partners in the Department of Medicine and PGME, we hope to be able to recruit a number of new Section members over the next 12-18 months.

Delivering care to patients with complex chronic disease requires a team of dedicated heath 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.





# INTERNAL MEDICINE WORKFORCE PLAN

Internal Medicine has continued to recruit new members to meet its clinical, education and research needs with the support of its Academic Alternate Relationship Plan (AARP). As at April 2011, the AARP approved Workforce Plan was 209.95 FTE. This includes 30 members of the AARP that are Cardiologists in the Department of Cardiac Sciences. The actual AARP members at April 2011 were 206 members working 188.8 FTE.

The following were Internal Medicine recruits and departures in this year:

# SUMMARY OF RECRUITMENT/DEPARTURES

#### Recruitment for 2010-2011

Keel ultiment 101 201	0-2011				
Section	Last Name	First Name	Start Date	ARP	University Appointment
GIM	Leung	Alex	July 01, 2010	Yes	Clinical Scholar
Hematology	Goodyear	Dawn	July 01, 2010	Yes	Clinical Scholar
Nephrology	Girard	Louis	July 10, 2010	Yes	Clinical Assistant Professor
Rheumatology	Zouzina	Olga	August 01, 2010	Yes	Clinical Assistant Professor
Geriatrics	Pearce	Paula	August 01, 2010	Yes	Clinical Lecturer
GIM	Castillo	Eliana	September 01, 2010	Yes	Clinical Assistant Professor
Gastro	Belletrutti	Paul	October 01, 2010	Yes	Clinical Assistant Professor
Gastro	Ravindran	Nikila	November 01, 2010	Yes	Clinical Scholar
Endocrinology	Parkins	Vicky	September 01, 2010	Yes	Clinical Assistant Professor
Infectious Diseases	Meatherall	Bonnie	July 01, 2010	Yes	Clinical Assistant Professor
Rheumatology	Esdaile	John	September 01, 2010	Yes	Professor
Gastro	Eksteen	Albertus	March 01, 2010	Yes	Associate Professor
Count	12				

#### Departures for 2010-2011

Section	Last Name	First Name	Departure Date	ARP	University Appointment
Gastro	Yan	Brian	July 16, 2010	Yes	Assistant Professor
Rheumatology	Goldstein	Rose	December 01, 2010	No	Tenured
Gastro	Nash	Carla	January 01, 2011	Yes	Clinical Assistant Professor
Gastro	Storr	Martin	March 31, 2011	Yes	Associate Professor
Count	4				





	DEMOGRAPHICS OF THE DEPARTMENT OF MEDICINE																						
	De	erm	En	do	C	H	G	IM	Ge	ri	He	em	Π	D	Ne	eph	Resp		Rheum		TOTAL		
Gender	Μ	16	М	11	М	34	М	41	М	7	М	14	М	15	Μ	21	Μ	21	М	9	Μ	189	
Gender	F	7	F	10	F	15	F	20	F	5	F	8	F	4	F	8	F	6	F	11	F	94	
FTE	2	2	19	9.3	4	4	55	5.8	8.	8.2		18.5		13.5		5.7	27	7.5	15.4		249.9		
Average Age	54	4.8	46	5.8	46	5.6	48	3.3	51	51.5		49.3		50.2		3.1	49	9.4	55.8		50.08		
Recruits		1	1	1	3	3		2	0		1	l	2	2		3		2	2	2	1	17	
Resignees	(	0	(	)	(	)		2	0		2	2	(	)	(	0		1		1		6	
No University Appointment	4	2	]	1	2	4		4	0		(	)	2	2	(	0		0	(	)	]	13	
Clinical Scholar	(	0	1	1	1	1		1	0		1		(	)	(	0	(	0		1		5	
Clinical Lecturer	3	3			]	1		5	1		(	)	(	)		1		0	(	)	]	11	
Clinical Assistant Professor		7	8	3	12		26 5			6		4		8		12		5		93			
Clinical Associate Professor		7	1	1	4	5		10		1		3		3		4		4		4		42	
Clinical Professor	(	0	(	)	4	2	4 2		~~	3 0		(	0		1 1		1	1	13				
Research Assistant Professor																1						1	
Assistant Professor	4	2	2	2	8	3		3	1			3	1	1	,	7		2		1	(°.)	30	
Associate Professor	]	1	2	2	8	3		3	1	1		l	2	4		5		2		1	2	28	
Professor Incl. Tenure	1	1	6	5	8	8		4			2	ł	-	5	,   .	3		6	(	5	2	44	
Adjunct/ Emeritus Professor	(	0	(	)	(	)		0			1		(	)	(	0		0		1		2	
TOTAL	2	.3	2	1	4	9	6	<b>5</b> 1	12	2	2	2	1	9	2	:9	2	27	2	0	2	.83	
ARP Member	4	5	1	9	3	3	3	1	1	1	1	8	1	3	1	8	2	22	1	7	1	87	

\*Please note these tables do not include data from the Departments of Oncology and Cardiac Sciences





# LIST OF AWARDEES / PROMOTIONS

## CLINICAL AWARDS

Rockyview General Hospi				
Dr. Ghazwan Altabbaa	-	General Internal Medicine		
Dr. Eugene Adamiak	-	General Internal Medicine	e	
Dr. Gordon Ford	-	Respiratory Medicine		
<b>RESEARCH AWARDS</b>				
Dr. Braden Manns	-	Nephrology	-	Cochrane Distinguished Achievement Award
Dr. Alexander Leung	-	Resident	-	Postgraduate Research Fellowship Award
Dr. Matthew James	-	Nephrology	-	Izaak Walton Kellan Memorial Trust Award
Dr. Stephen Field	-	Respiratory Medicine	-	Dr. Norman L. Jones Award
Dr. Carla Coffin	-	Gastroenterology	-	Clinical and Translational Research Award
NATIONAL HEALTH SO	CIENCE	S ACADEMY		
3 Members invited to the	Canadian	Academy of Health Scien	ces	
Dr. William Ghali	-	General Internal Medicine		
Dr. Marvin Fritzler	-	Rheumatology		
Dr. Jon Meddings	-	Gastroenterology		
ROYAL COLLEGE OF P	PHYSICI	ANS AND SURGEONS C	F CANA	DA
Dr. Otto Rorstad	-	Endocrinology	-	Donald Richards Wilson Award
Dr. David Hogan	-	Geriatric Medicine	-	Prix d'Excellence Award
CANADIAN ASSOCIAT	ION OF	GASTROENTEROLOGY		
Dr. Eldon Shaffer	_	Gastroenterology	-	Education Excellence Award
Dr. Kelly Burak	-	Gastroenterology	-	Young Educator Award
CANADIAN RHEUMAT	OLOGY	ASSOCIATION		
Dr. Martin Atkinson	-	Rheumatology	-	Distinguished Rheumatologist Award
PROMOTIONS				
Dr. Steven Edworthy	-	Rheumatology	-	Professor
Dr. Ronald Sigal	-	Endocrinology	-	Professor
Dr. Robert Myers	-	Gastroenterology	-	Associate Professor
Dr. Jayna Holroyd-Leduc	-	Geriatric Medicine	-	Associate Professor
5				





# Medical Access to Service - Annual Report Fiscal Year: April 1, 2010 – March 31, 2011

Medical Access (MAS) to Service 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. Feedback from the different stakeholders within MAS has resulted in work on the following projects:

- Revision of the Central Access and Triage guide to include a total of 55 clinics/programs/Sections. Revisions made to the following CAT teams: Women's Health, CHAMP, Calgary Headache Assessment and Management Program, Living Well, Chronic pain, Cardiac Navigation, Access Mental Health, Pelvic Floor, and Nephrology.
- Standards of Practice and Policies and Procedures for the Central Access and Triage are enforced to all current as well as joining areas to MAS.
- 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. Nephrology has been successful with developing a paper free system which allows for offsite electronic triage and chart retrieval.
- Supporting the team implementing scheduling systems to include referral and waitlist management capabilities
- Participating in the Access to Primary and Specialty Care Steering Committee and Working Groups.
- Participating in the Access from Primary to GI Specialty Care Steering Committee.
- Participation with IT to help develop Cerner® Millennium as an Outpatient Database.
- Participation with Alberta Referral Directory (ARD).
- Continuing to advocate for operational funding for the Medical Access to Service Project.
- Participation with Alberta Wait Times Management Initiative: Medical Access to Service Final Evaluation Report 2011.
- Rheumatology has established a partnership with the Foothills Primary Care Network for managing referrals for osteoarthritis referrals.

#### **Priority Referral Scoring Tools**

Due to financial issues the **Priority Referral Scoring Tools** is on hold at this time. 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 versus time spent standing and faxing from a fax machine.

#### Pulmonary Central Access and Triage (PCAT)

PCAT became operationalized as of November 2010.

#### Alberta Children's Hospital

Many of the Pediatric specialty clinics are interested in participating with MAS. As of June 2011, Infant Cranial Remodeling Program/ Head Shape Clinic, Neuromotor Program, Neuromuscular Program, Neuro Rehab Program, and Medical Genetic Service will be joining MAS.

#### Further additional CAT teams to MAS:

Colposcopy clinic will be joining MAS as of June 2011.





## 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.
  - 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
  - All initial appointments will be booked through the CAT team.
  - Triage is to be done by the triage clinician, with assistance from the triage specialist.
  - 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, 2010- March 31, 2011

DIVISIONS	CLINICIANS	UTILIZATION
Dermatology	Dr. Richard Haber (General Dermatology)	The following number of patients were assessed: Claresholm, AB – 23 High Level, AB– 21 Siksika, AB - 14
	Dr. Laurie Parsons (Wound Care)	Telehealth assessments as needed to the following sites: Brooks AB Canmore AB Crowsnest Pass AB High River AB Lethbridge AB Medicine Hat AB.
Geriatrics	Dr. David Hogan	Dr. Hogan did 1 clinic/month to Canmore AB, assessing 20 patients during the reporting period.
	Dr. Heidi Schamltz	Dr. Schamltz did 1 clinic/month to Stratmore Ab and assessed 16 patients during the reporting period. As well she did 1 clinic/month to Didsbury AB and assessed 7 patients during the reporting period.
	Dr. James Silvius	Dr. Silvius did 1 clinic/month to Drumheller AB and Brooks AB. He assessed 18 new patients and 31 followup patients during the reporting period.
Hematology	Dr. Russell Hull	Dr. Hull did a bleeding disorder clinic once every 2 weeks and assessed 9 patients in a month. Cities serviced by Dr. Hull's clinics include: Cranbrook BC Invermere BC Vancouver BC and Maple Creek SK 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
	Dr. Farzana Sayani	Lethbridge AB. Dr. Sayani used telehealth for 6 telehealth conferences. These were CanHeam rounds that involved telehealth
		conferences with haematologists, nurses, fellows and residents. She did a hematology assessment of 2 follow-





		up patients in: Cranbrook, BC and did a hemoglobinopathy assessment on a followup patient with sickle cell disease in Fort McMurray.
	Dr. Lynn Savoie	Dr. Savoie used telehealth to do bone marrow transplant interviews and 3 interviews were done to patients in Edmonton, AB during the reporting period.
Infectious Diseases	Dr. Tajdin Jadavji Dr. Janet Gilmour Dr. John Gill Dr. Donna Holton Dr. Martin LaBrie Dr. Stephen O'Keefe Dr. Kelly Young	59 total patients were seen at the following sites: Brooks AB Cardston AB Fort McMurray AB Lethbridge AB, Medicine Hat AB, Red Deer AB
Respiratory Medicine	Dr. Paul MacEachern Dr. Karen Rimmer	<ul><li>Dr. MacEachern assessed 1-2 patients/month.</li><li>Dr. Rimmer did an ALS community teaching session once yearly and occasional patient assessment and neuromuscular teaching session.</li></ul>
	Dr. Alain Tremblay	Dr. Tremblay did new patient consults and followup of patients primarily with lung cancer. He saw 1-4 patients/month.
	Dr. Mitesh Thakrar	Dr. Thakrar used telehealth for weekly multidisciplinary transplant rounds with the University of Alberta.
	Nadine Strilchuk–Nurse Practitioner Dr. Douglas Stewart	Telehealth was also used by Nadine Strilchuk NP and Dr. Douglas Stewart.
Rheumatology	Dr. Liam Martin Dr. Sharon LeClercq	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.
	•	

## **Additional Information:**

The tracking of telehealth utilization in the Department of Medicine was the role of the Clinical Facilitator (who in turn reported this information to me). However, since November 2010, this role has been eliminated.

The loss of this clinical facilitator role has made it extremely difficult to track telehealth utilization in the Department of Medicine. The information in this report is based on names and numbers kindly supplied by Section heads of their respective Sections.





# Physician Wellness and Vitality – Annual Report Fiscal Year: April 1, 2010 – March 31, 2011

#### 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 2010 to March 2011, 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 nutrition and cognition. Twenty FMC staff physicians told us how poor workplace nutrition made them feel unwell and impacted their ability to perform well at work, and how a simple intervention like eating and drinking greatly improved both of these parameters. Objective testing confirmed that their brains worked better when well nourished! The results of this study have now been extensively disseminated to stakeholders and policymakers. We also presented the study results at the International Conference of the Society of General Internal Medicine in Minneapolis, USA, in April 2010 and two papers have now been published in the peer reviewed literature (Lemaire JB, Wallace JE, Dinsmore K, Roberts D - Food for thought: an exploratory study of how physicians experience poor workplace nutrition. Nutr J. 2011; 10:18; and Lemaire JB, Wallace JE, Dinsmore Kelly, Lewin Adriane, Ghali WA, Roberts Delia - Physician nutrition and cognition during work hours: effect of a nutrition based intervention. BMC Health Serv Res. 2010; 10:241). This simple story of how physicians need to fuel their bodies in order to function well has captured much attention, and we continue to be invited to give workshops and talks related to this topic. In addition, we have been asked to inform planners (e.g. South Health Campus Design Committee) on how to meet the workplace nutrition needs for health care providers. Well Doc? Module 2 is a randomized controlled trial of 40 physicians designed to assess the impact of a portable biofeedback on physician stress. We found that physicians who used the biofeedback device over a 28 day period had a significant reduction in their stress scores. The results of this study were presented at the International Conference on Physician Health in Chicago, in Oct 2010. The paper is currently in press in the peer reviewed journal Open Medicine (Lemaire JB, Wallace JE, Lewin AM, de Grood J, Schaefer JP. The effect of a portable biofeedback-based stress management tool on physician stress: a randomized controlled clinical trial. Open Medicine). We have also shared the results of this research with policymakers and stakeholders in order to underscore that physician wellness is indeed actionable. We are currently planning Well Doc? Module 3, a study exploring the dimensions of the complex and demanding task of being a Medical Teaching Unit preceptor. We hope that the results of this study will inform us as to how we can better prepare clinicians for this role and how to evaluate their performance.

In 2005, we conducted interviews with 54 Internal Medicine physicians from the DOM. Based on these qualitative interview data we published a four article series in the Canadian Journal of General Internal Medicine over several issues in 2010 entitled "Reflections from internal medicine physicians". (Well Doc? What constitutes quality of life for physicians? - Well Doc? What are sources of work stress for physicians? - Well Doc? How do physicians cope with workplace stress? - Well Doc? What are the most satisfying aspects of work for physicians?). This series of articles disseminated the internists' wisdom and insight regarding their work/life balance. Similarly, based on research from a local study of almost 1200 colleagues from various disciplines, we published a manuscript describing how physicians cope and how those coping strategies are associated with burnout (Lemaire JB, Wallace JE. Not all coping strategies are created equal: a mixed methods study exploring physicians' self reported coping strategies. *BMC Health Serv Res.* 2010; 10:208). The results of these studies have been incorporated into workshops and lectures promoting workplace wellness for physicians. The results of a sub-study of this research, *Sources and types of physicians' support* were also presented as an oral abstract at the International Conference on Physician Health in Chicago, in Oct 2010.

In related research, we assessed the impact of the introduction of the Sunrise Clinical Manager (SCM) computer based patient care system on the health care providers on the Ward of the 21<sup>st</sup> Century (W21C), Unit 36 at the FMC. Through job observations, interviews, and surveys, we were able to understand how the providers viewed the introduction of the new system in terms of patient care issues, and their personal stress and wellness. The study also provided insight about the effectiveness of the training the health care providers received leading to the implementation of Sunrise Clinical Manager (SCM). A manuscript detailing the results of the study was published in a peer reviewed journal in 2010 (Wallace JE, Friesen S, White D, Gilmour J, Lemaire JB. The introduction of an electronic patient care information system and health care providers' job stress: a mixed-methods case study. *International Journal of Health Information Systems and Informatics* 2010; 5:35-48). We conducted a similar study assessing the introduction of Vocera, a hands-free communication device implemented on Unit 36, and a paper reporting on one aspect of the study results is currently in press (Dunphy H, Juli BA, Finlay MA, Lemaire JB, MacNairn I, Wallace JE. Hands-free communication technology: a benefit for nursing *Journal of Nursing Administration*. In press - Sept 2011 publication date).





A major part of the last year was spent evaluating 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. With the help of the Internal Medicine chief residents and the W21C Wellness research team, we developed a research proposal during the late spring and early summer of 2010, implemented the study in August 2010 through March of 2011, analyzed the results in late spring 2011, and are now in the process of disseminating the results so as to inform the Internal Medicine Residency Training program as they schedule the coming academic year. We gratefully acknowledge the \$10,000 grant awarded from the training program for support of this project. Other research initiatives include a study, in collaboration with Dr Mamta Gautam from the University of Calgary, to explore what constitutes physician resilience. For this study, we have received a grant from the Calgary University Grants Review Committee. We are also collaborating with Dr Judy Duchscher from the faculty of nursing in preparation of a research study to explore the physician's transition from trainee to staff physician in the first year.

#### **EDUCATION**

Once again we have had the privilege of speaking at multiple venues, highlighting the 'Well Doc?' research and other studies. The audience ranged from post graduate medical trainees (e.g. emergency medicine, general internal medicine), staff physicians (e.g. Internal Medicine Grand rounds), research forums and seminar series (e.g. W21C, Section of General Internal Medicine Research rounds), annual retreats (e.g. Academic Department of Family Medicine), and a presentation at Madeleine D'Houet Junior High School in Calgary. We also participated in a podcast for the Family Medicine Series Talks for Doctors, Department of Family Medicine. <a href="http://www.talksfordocs.com/index.php?option=com\_content&view=article&id=166:physician-wellness&catid=2:pearlcasts&Itemid=10">http://www.talksfordocs.com/index.php?option=com\_content&view=article&id=166:physician-wellness&catid=2:pearlcasts&Itemid=10</a>. In addition, on many informal occasions, we are asked to give advice and guidance about physician wellness and vitality.

#### 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 advocates for physician wellness at the Medical Services Executive Meetings, and as a member of the ARP Management Committee. Wellness is now officially a portfolio within the W21C Research and Innovation Centre and Dr. Wallace and Jane are Co-Leads. She is the U of C representative for the Association of Faculties of Medicine of Canada Resource Group on Physician Health and Well-Being, and an ongoing member of the AMA Physician and Family Support Group Advisory Committee. She is also a member of the International Alliance for Physician Health. In a new position, she is a member of the planning committee charged with developing a series of workshops in order to help orientate new members to the Faculty of Medicine.

#### 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 realize that well physicians are essential to achieve excellence in providing patient centered care and highly skilled intellectual and technical expertise.





# **Department of Medicine Quality Improvement Plan**

# Fiscal Year: April 1, 2010 to March 31, 2011

## **DOM QI Focus Areas**

- 1. Examination and optimization of Clinic Flow within various Sections to look at improving access (decreasing wait times) to specialists
- 2. Collaborate with Seniors Health and AHS-Calgary operations on initiation of HELP (Hospital Elders Life Program) in order to help address issues around
  - a. in-hospital delirium management
  - b. ensuring Seniors are provided with patient-centered high quality care while in hospital
  - c. hospital length of stay and downstream effects on Emergency Department wait times
- 3. Support of Sectional QI initiatives that focus in the areas of quality and access

#### Aligning with the 5 TIPS (Transformational Improvement Program)

#### **TIP 1: Building a Primary Care Foundation**

#### **Relevant AHS Targets**

- People receive timely access to more specialized levels of care coordination
- People with medically complex conditions and chronic disease have access to coordinated and holistic care and resources to
  manage and improve their overall health status
- People have access to programs that promote wellness and healthier behaviours, as well as those that prevent disease and injury

#### Relevant AHS Actions

- Enhancing care for people with complex conditions and diseases using innovative models for self management, registries, clinical care pathways and targeted approaches to reach Alberta's most disadvantaged and vulnerable populations

#### Relevant DOM QI Initiatives

- There is a SCM Discharge Summary Initiative (being led by Dr. Bill Ghali from the Section of GIM; collaboration with AHS-Calgary IT) to improve communication during care transitions
- Examples of Sectional programs currently underway: Dermatology has a sun awareness/skin cancer education program; GIM is collaborating with primary care on hypertension prevention; ID is working in the areas of STIs and HIV; Rheumatology is working with PCNs on implementing diagnostic/referral algorithms and education materials to aid in the co-management of patients with arthritis; Nephrology has been working on vascular risk factor reduction in vulnerable populations such as First Nations; GI is involved with the colon cancer screening program including establishment of QI indicators; Endocrinology is involved with the DHCC
- Nephrology is in the process of rolling out a web-based data collection platform (DMAR: Dialysis Measurement, Analysis, and Reporting system) to collect high quality data in everyday practice about the care of patients with kidney failure. This database will capture key adverse events and drivers of resource utilization and costs. The system is currently implemented in 7 regional dialysis programs in Ontario, the Province of Manitoba, and will be piloted in Alberta this year (local lead: Dr Rob Quinn).
- There is a collaboration underway with 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 (local lead: Dr Jayna Holroyd-Leduc)

#### **TIP 2: Improving Access, Reducing Wait Times**

#### Relevant AHS Targets

- Improved access for patients and clients to acute and seniors care as demonstrated by minimal wait times across all sectors. Long range maximum wait times are 8 hours for ED admissions and 1 month wait to see a Specialist then 14 weeks to receive treatment.





#### **Relevant AHS Actions**

- Improving access to specialists facilitated by: i) a single central intake model for Alberta; ii) a consistent care plan for each of the 5 diseases determined that account for the most hospitalizations
- Increasing standardization and appropriateness for practice by developing clinical pathways through work of clinical networks

#### Relevant DOM QI Initiatives

- Many Sections have implemented central triage and are working on referral pathways/algorithms/triage forms. Several clinics, with the assistance of AHS-IT and operations, will be implementing an electronic scheduler
- The clinic flow within various Sections will be examined to look at further improving access (decreasing wait times). This will initially start with looking at clinics in the Sections of Respirology and Geriatrics
- There is currently a joint venture between DOM (including members from the following Sections: Geriatrics, GIM, Endocrine) and DOS on the Bone and Joint Hip Fracture Clinical Care Pathway
- The GI Section is developing citywide acute care QI initiatives/reporting (including patient surveys; monitoring of sedation use; SLRs adaptation for more reliable reporting). There will representation from each site (including physician, nursing and administration representatives at each site)
- The ID Section is implementing measures to decrease the wait times for first visit to HIV clinic and have been involved with changing the HIV test order form to improve test ordering in the province

## **TIP 3: Choice and Quality for Seniors**

#### Relevant AHS Targets

- Seniors can be assured of access to quality care
- Visits to emergency and unplanned hospitalization of seniors will be reduced through enhanced community and primary care service options
- Comprehensive and seamless community supports and services are accessible across all of Alberta

#### **Relevant AHS Actions**

- Improving coordination and standardization of services through system-wide case management, including enhanced linkages to primary care and other health system resources
- Developing a Quality Framework using consistent provincial standards to monitor compliance and report on performance
- Improving community capacity and health promotion activities through comprehensive falls prevention strategies
- Development of a comprehensive provincial cognitive impairment program including dementia and delirium management strategy

#### Relevant DOM QI Initiatives

- The DOM is collaborating with Seniors Health and AHS-Calgary operations on the initiation of HELP (Hospital Elders Life Program) at FMC, with eventual roll out targeted for across all Calgary hospitals
- The Section of Geriatrics has developed and is evaluating an SMC Older Patient Order Set to help prevent falls and delirium and to promote optimal function, nutrition and continence of older patients admitted to hospital
- The Section of Geriatrics is involved in the Older Patient Working group, which is a multidisciplinary group whose purpose is to engage healthcare providers in planning, implementing, evaluating and disseminating quality and safety enhancements in an effort to improve the quality of healthcare services provided to older hospitalized medical patients within Calgary hospitals

#### TIP 4: Enabling Our People to Achieve Excellence in Providing Health Services to all Albertans

#### Relevant AHS Targets

- Meaningful engagement
- Provision of education, incentives, tools and information to support achievement of excellence in health services delivery

#### **Relevant AHS Actions**

- Implementation of staff and physician engagement strategies to ensure that our people have a voice and role in decisions that affect them and the people they serve, and that they have an opportunity to influence priorities and organizational performance (e.g. ACC involvement; CN involvement)





- Implementation of initiatives to support staff and physician leadership development and learning strategies; competency development; and succession planning, including operationalization of PMI modules
- Implementation of staff and physician compensation/benefits/rewards and recognition programs; and collaborative labour relations strategy
- Implementation of a workforce transformation project to pilot innovative work arrangements; scheduling projects; staff and physician recruitment planning; process improvements; and learning and development strategy for employees and physicians that incorporates interprofessional team development

#### Relevant DOM QI Initiatives

- Several DOM members are on the faculty of the U of C Certificate in Patient Safety and Quality course (Course Chair: Dr Ward Flemons)
- Dr Holroyd-Leduc (DOM QI Lead) is a member of the ACC; Several DOM members are involved with various CNs

#### **TIP 5: Enabling One Health Service**

#### **Relevant AHS Targets**

- Leaders, staff and physicians will have: i) access to the information they require to provide the services patients or staff need; ii) the information they need to monitor performance in areas such as service access, quality, safety and cost effectiveness
- Implement processes that support effective: i) service planning and prioritization based on population health needs; ii) resource allocations to ensure our resources are aligned with organizational goals and objectives

#### **Relevant AHS Actions**

- Implementation and consolidation of major business systems including IT/CI and data management

#### Relevant DOM QI Initiatives

- There is a resident project currently underway aimed at updating current DOM SCM order sets to ensure they are based on current best evidence and provide physicians with information needed at the point of care (being led by Dr Evan Minty under the supervision of Drs. Holroyd-Leduc and Ghali)
- The Section of Endocrinology has developed and will be rolling out a Basal bolus Insulin SCM project aimed at improving glucose control to hospitalized diabetics
- We have formalized linkages between DOM QI Lead/Sectional QI lead and the Alberta Health Services-Calgary Clinical Informatics group in order to foster collaborations on relevant clinical informatics projects that directly relate to improving the quality of healthcare provided by DOM members

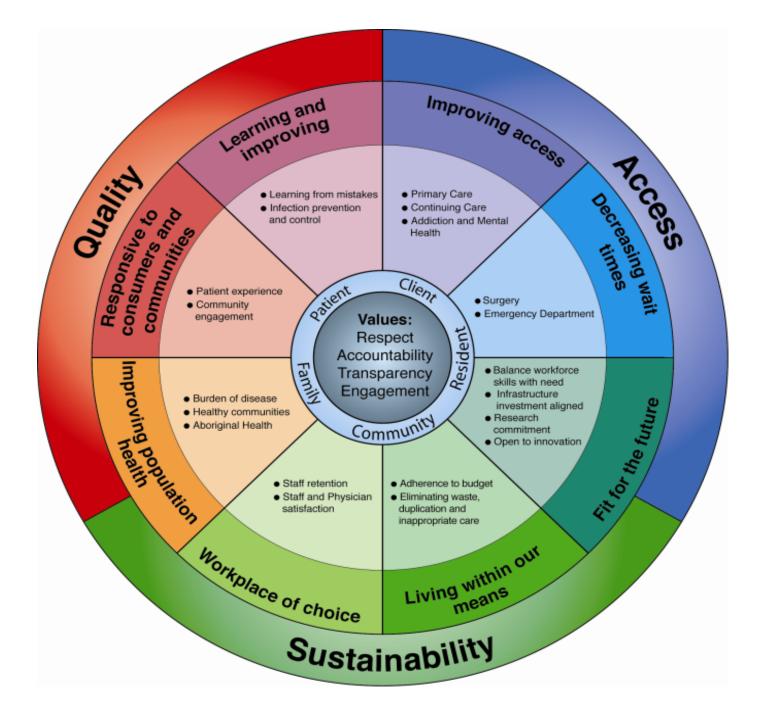
#### Sectional QI Leads

Section	QI Lead
Dermatology	Dr. Gilles Lauzon
Endocrinology	Dr Sonia Butalia
Gastroenterology	Dr Alaa Rostom
General Internal Medicine	Dr Aleem Bharwani
Geriatric Medicine	Dr Jayna Holroyd-Leduc
Hematology	Dr Karen Valentine





Infectious Diseases	Dr Donna Holton
Nephrology	Dr Rob Quinn
Respiratory Medicine	Dr. Sachin Pendharkar
Rheumatology	Dr Susan Barr







# **PATIENT FLOW - DOM Inpatient Data**

The following tables and graphs present a brief summary of inpatient data for the Department of Medicine. This information is taken from the Health Record and is grouped according to the patient's Most Responsible Physician. As the Health Record only assigns each physician to one Section, there may be a few instances where the Section does not match the care provided (e.g., for cross appointed physicians). Results may differ slightly from what was reported in the 2009-10 Annual Report due to additional revisions to the data.

There were 7,962 inpatients admitted to Department of Medicine services during the 2010-11 fiscal year. This is a 1% increase from 2009-10 across comparable Sections.

Inpatient Discharges				
Division	2009-10*	2010-11		
Dermatology	-	-		
Endocrinology	54	62		
Geriatric Medicine	-	-		
Gastroenterology	916	938		
General Internal Medicine	4,156	4,140		
Hematology	750	831		
Infectious Diseases	42	46		
Nephrology	720	703		
Respiratory Medicine	1,244	1,242		
Rheumatology	-	-		
Total / Average	7,882	7,962		

\* Medical Oncology was also part of DOM in 2009-10 and had 599 inpatients during that year.

The average acute length of stay for patients with a Department of Medicine Most Responsible Physician decreased to 10.1 days in 2010-11 from 11.0 days in 2009-10.

Average Acute Length of Stay (Days)*					
Division	2009-10	2010-11			
Dermatology	-	-			
Endocrinology	1.5	1.3			
Geriatric Medicine	-	-			
Gastroenterology	5.6	5.5			
General Internal Medicine	10.1	9.9			
Hematology	20.7	19.0			
Infectious Diseases	10.2	9.3			
Nephrology	16.9	12.0			
Respiratory Medicine	8.8	8.0			
Rheumatology	-	-			
Total / Average	11.0	10.1			

\* Excludes time spent in Alternate Level of Care (ALC) (approved/waiting for placement in a Care Centre). There were 29 patients (0.4% of patients) who spent a total of 1266 days in ALC in 2010-11.





Department of Medicine physicians also provided more than 15,000 consults for inpatients in 2010-11.

Inpatient Consults Provided*				
Division	2009-10	2010-11		
Dermatology	175	154		
Endocrinology	665	535		
Geriatric Medicine	1,118	1,155		
Gastroenterology	3,483	3,245		
General Internal Medicine	4,222	4,107		
Hematology	752	699		
Infectious Diseases	2,252	2,236		
Nephrology	891	853		
Respiratory Medicine	1,857	1,767		
Rheumatology	450	395		
Total / Average 15,865 15,1				

\* Due to processes for coding and storing the data, a few patients may not have had all of their consults recorded in the electronic Health Record.

CMG (Case Mix Groups) is a methodology designed to aggregate acute care information for inpatients with similar clinical and resourceutilization characteristics. For the five Sections of Department of Medicine listed in the table 1, the rankings of top two CMGs are quite consistent comparing 2009-10 to 2010-11.





Table 1: Top 3 CMG ranking in 2009/10 and 2010/11.

Section	Top 1 CMG		TOP 2 CMG		TOP 3 CMG	
	2009-10	2010-11	2009-10	2010-11	2009-10	2010-11
GI	Inflammatory Bowel Disease		Gastrointestinal Hemorrhage		MCC07 Unrelated Intervention	Enteritis
	20.50%	19.30%	10.00%	11.30%	6.20%	5.90%
GIM	Diabetes		Viral/Unspecifie d Pneumonia	COPD	COPD	Gastrointestinal Hemorrhage
	7.10%	5.80%	4.40%	4.80%	4.20%	4.10%
Nephrology	Renal Failure		Kidney Disease		Other Cardiac Disorder	
rtepinology	9.20%	9.50%	5.00%	4.70%	4.60%	4.40%
Hematology	Bone Marrow/Stem Cell Transplant		Lymphoma		Acute Myeloid Leukemia	Chemo/Radiotherapy for Neoplasm
	15.50%	16.60%	9.90%	9.10%	6.80%	7.50%
Respirology	COPD		Other Lung Disease		Malignant	
			Viral/Unspecifie d Pneumonia 8.70%		Neoplasm of Respiratory Sys	Pneumothorax
	20.50%	21.10%	8.00%		6.40%	6.90%

\* 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.

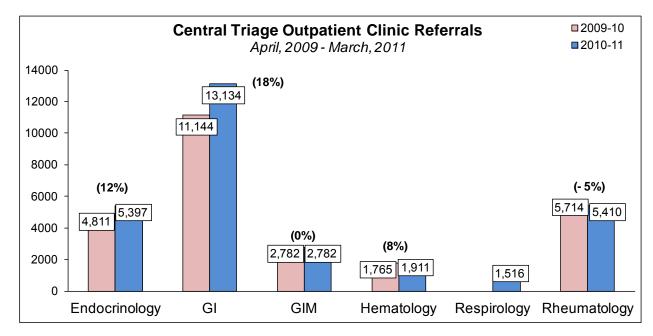




# **DOM Outpatient Data**

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. Respirology 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.

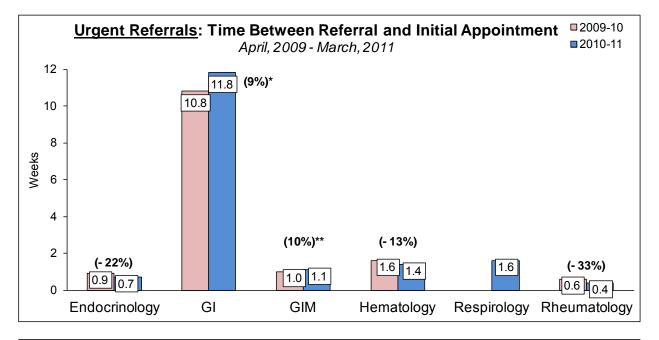
Most Sections for whom Central Triage information was available reported a similar or increased number of referrals in 2010-11 compared to 2009-10. In particular, GI experienced an 18% increase in referrals while Endocrinology reported a 12% increase.

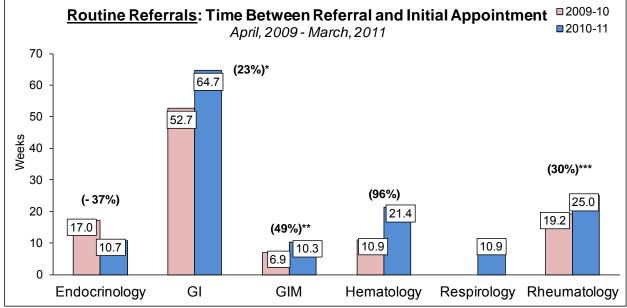






Wait times for urgent referrals in 2010-11 were typically within one week of what was reported in 2009-10, while wait times for routine referrals increased for most Sections in 2010-11 compared to the previous year.





\* 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. Average wait times for GI moderate referrals were 27.7 weeks in 2009-10 and 26.6 weeks in 2010-11.

\* GI wait time data does not include cases triaged as Direct to Procedure.

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

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





#### LIST OF PUBLICATIONS FOR THE FISCAL YEAR: APRIL 1, 2010 - MARCH 31, 2011

Name	Title	Authorship	Publish Year	IsPeerReviewed	Туре
Ahmed,Sofia	Management of patients with acute hyperkalemia	Elliott MJ, Ronksley PE, Clase CM, Ahmed SB, Hemmelgarn BR	2010	Yes	Journal Article
	Intermittent hypoxia increases arterial blood pressure in humnas through a renin- angiotensin system-dependent mechanism	Foster GE, Hanly PJ, AhmedSB, Beaudin AE, Pialoux V, Poulin MJ	2010	Yes	Journal Article
	Nocturnal hypoxia and loss of kidney function	Ahmed SB, Ronksley PE, Hemmelgarn BR, Tsai W, Tonelli M, Manns BJ, Klarenbach SW, Chin R, Clement F, Hanly PJ	2010	Yes	Journal Article
Andrews, Christopher	Characterization of intensive care unit acquired hyponatremia and hypernatremia following cardiac surgery	Stelfox HR, Ahmed SB, Zygun D, Khandwala F, Laupland K	2010	Yes	Journal Article
Andrews,Christopher	Botulinum toxin in the treatment of diffuse esophageal spasm.	Bashashati M, Andrews C, Ghosh S, Storr M.	2010	Yes	Journal Article
	Comparative gastric motility study of Enterra(TM) Therapy and neural gastric electrical stimulation in an acute canine model.	Arriagada A, Jurkov AS, Neshev E, Muench G, Mintchev MP, Andrews CN.	2010	Yes	Journal Article
	A novel method of full- thickness gastric biopsy via a percutaneous, endoscopically assisted, transenteric approach.	Fraser H, Neshev E, Storr M, Urbanski SJ, Andrews CN.	2010	Yes	Journal Article
	Microscopic colitis: A common cause of diarrhea in older adults	Williams JJ, Beck PL, Andrews CN, Hogan DB, Storr MA	2010	Yes	Journal Article
Aspinall,Alexander	CX3 CR1 and VAP-1 dependent recruitment of CD16+ monocytes across human liver sinusoidal endothelium	Aspinall AI, Curbishley SM, Lalor PF, Weston CJ, Blahova M, Liaskou E, Adams RM, Holt AP, Adams DH	2010	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	2010	Yes	Journal Article
Bahlis,Nizar					
	The addition of 400cgy total body irradiation to a regimen incorporating once daily intravenous busulfan, fludarabine and thymoglobulin reduces relapse without affecting non-relapse mortality in acute myelogenous leukemia.	Russell JA, Irish W, Balogh A, Chaudhry MA, Savoie ML, Turner AR, Larratt L, Storek J, Bahlis NJ, Brown CB, Quinlan D, Geddes M, Zacarias N, Daly A, Duggan P, Stewart DA.	2010	Yes	Journal Article
	transplant outcomes in	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.	2010	Yes	Journal Article





Name	Title Carfilzomib: High Single Agent Response Rate with Minimal Neuropathy Even In High-Risk Patients.	Authorship Ravi Vij, Jonathan L. Kaufman, Andrzej J Jakubowiak, A. Keith Stewart, Sundar Jagannath, Vishal Kukreti, Kevin T. McDonagh, Melissa Alsina, Nizar J Bahlis, Andrew Belch, Frederic J. Reu, Nashat Y Gabrail, Jeffrey Matous, David H. Vesole, Robert Z. Orlowsk	Publish Year 2010	IsPeerReviewed Yes	<b>Type</b> Journal Article
	Autologous Stem Cell Transplantation Is a Curative Relapsed or Refractory Follicular Lymphoma, and Both Recent Rituximab Exposure and Follicular Lymphoma International Prognostic Index (FLIPI) 0–1 Scores Predict Improved Outcome.	Anthea Peters, James A Russell, Andrew Daly, Nizar J Bahlis, Michelle Geddes, Peter Duggan, Mary Lynn Savoie, and Douglas A. Stewart.	2010	Yes	Journal Article
Barnabe,Cheryl	Rheumatoid Arthritis in a North American Native Population: Longitudinal Follow-up and Comparison with a Caucasian Population.	Peschken C, Hitchon C, Robinson D, Smolik I, Prematilake S, Barnabe C, El-Gabalawy H.	2010	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.	2010	Yes	Journal Article
Beck,Paul	Mechanisms by which inflammation may increase intestinal cancer risk in inflammatory bowel disease	O'Connor PM, Lapointe TK, PL Beck, Buret AG	2010	Yes	Journal Article
	Hypoxia-inducible factor signaling provides protection in Clostridium difficile- induced intestinal injury	Hirota S, Fines K, Lee J, Li Y, Willmore WG, Chung D, Colgan SP, Louie T, Medlicott S, Armstrong G, Muruve D, Ng J, Lejeune M, Chadee K, MacDonald JD, and PL Beck	2010	Yes	Journal Article
	A Pro-Resolution Mediator, Prostaglandin D2, is Specifically Up-Regulated in Individuals in Long-Term Remission from Ulcerative Colitis.	Vong L, Ferraz JGP, Panaccione R, Beck PL, Wallace JL.	2010	Yes	Journal Article
	Microscopic Colitis – A Common Cause of Diarrhea in Older Adults.	Williams JJ, Beck PL, Andrews CN, Hogan DB, Storr MA.	2010	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.	2010	Yes	Journal Article
	Role of EP4 Receptor and Prostaglandin Transporter in Prostaglandin E2 Induced Alteration in Colonic Epithelial Barrier Integrity	Lejeune M, Leung P, Beck PL, Chadee K.	2010	Yes	Journal Article





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		The NLRP3 inflammasome plays key role in the regulation of intestinal homeostasis.	Simon A. Hirota, Jeffrey Ng, Alan Lueng, Maitham, Khajah, Ken Parhar, Yan Li, Victor Lam, Mireille S. Potentier, Kelvin Ng, Misha Bawa, Donna-Marie McCafferty, Kevin P. Rioux, Subrata Ghosh, Ramnik J. Xavierl, Sean P. Colgan, Jurg Tschopp, Daniel Muru	2010	Yes	Journal Article
		Intravascular Danger Signals Guide Neutrophils to Sites of Sterile Inflammation.	Braedon McDonald, Keir Pittman, Gustavo B Menezes, Simon A Hirota, Ingrid Slaba, Christopher CM Waterhouse, Paul L Beck, Daniel A Muruve, and Paul Kubes.	2010	Yes	Journal Article
		In vitro-derived alternatively activated macrophages reduce colonic inflammation in mice.		2010	Yes	Journal Article
		The NLRP3 inflammasome regulates renal inflammation and contributes to chronic kidney disease.	Vilaysane A, Chun J, Seamone ME, Wang W, Chin R, Hirota S, Li Y, Clark SA, Trpkov K, Hemmelgarn BR, Beck PL, Muruve DA.	2010	Yes	Journal Article
		Contribution of bone marrow- derived cells to the pro- inflammatory effects of Protease-Activated Receptor-2 in colitis.	Eric Hyun, Patricia Andrade- Gordon, Martin Steinhoff, Paul L. Beck, and Nathalie Vergnolle.	2010	Yes	Journal Article
		Clostridium difficile toxin- induced inflammation and intestinal injury are mediated by the inflammasome.	Ng J, Hirota SA, Gross O, Li Y, Ulke-Lemee A, Potentier MS, Schenck LP, Vilaysane A, Seamone ME, Feng H, Armstrong GD, Tschopp J, Macdonald JA, Muruve DA, Beck PL.	2010	Yes	Journal Article
		MAP Kinase Activation Increases BK Polyomavirus Replication and Facilitates Viral Propagation In Vitro.	Seamone ME, Wang W, Acott P, Beck PL, Tibbles LA, Muruve DA.	2010	Yes	Journal Article
Belletrutti,Paul	Belletrutti,r'aui	Endoscopic ultrasound guided biliary drainage in patients with unapproachable ampullae due to malignant duodenal obstruction.	Belletrutti PJ, DiMaio CJ, Gerdes H, Schattner MA.	2010	Yes	Journal Article
	Bridges,Ronald	Successful endoscopic ultrasound-guided transduodenal biliary drainage through a pre-existing duodenal stent.	Belletrutti PJ, Gerdes H, Schattner MA.	2010	Yes	Journal Article
		Canadian Digestive Health Foundation Public Impact Series. Inflammatory bowel disease in Canada: Incidence, prevalence, and direct and indirect economic impact.	Fedorak RN, Wong K, Bridges R.	2010	Yes	Journal Article





Name	<b>Title</b> Summary of the Canadian Association of Gastroenterology 2004	Authorship Bridges, R., Paterson, W., Sinclair, P., Morgan, D.	Publish Year 2010	<b>IsPeerReviewed</b> Yes	<b>Type</b> Journal Article
	Strategic Plan. Survey of Access to GastroEnterology in Canada: the SAGE wait time program.	Leddin D., Bridges R., Morgan DG., Fallone C., Render D., Plourde V., Gray J., Switzer C., McHattie J., Singh H., Walli E., Murray I., Nestel A., Sinclair P., Chen Y., Irvine EJ.	2010	Yes	Journal Article
Brown, Christopher	The addition of 400 cGY total body irradiation to a regimen incorporating once-daily intravenous busulfan, fludarabine, and antithymocyte globulin reduces relapse without affecting nonrelapse mortality in acute myelogenous leukemia.	Russell JA, Irish W, Balogh A, Chaudhry MA, Savoie ML, Turner AR, Larratt L, Storek J, Bahlis NJ, Brown CB, Quinlan D, Geddes M, Zacarias N, Daly A, Duggan P, Stewart DA.	2010	Yes	Journal Article
	transplant outcomes in	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.	2010	Yes	Journal Article
Burak,Kelly	An Evidence-Based Multidisciplinary Approach to the Management of Hepatocellular Carcinoma (HCC): The Alberta HCC Algorithm.	Burak KW, Kneteman NM	2010	Yes	Journal Article
	Nonoperative Therapies for Combined Modality Treatment of Hepatocellular Cancer	Burak KW, Thomas MB, Zhu AX	2010	Yes	Journal Article
	Pregnancy outcomes among liver transplant recipients in the United States: A Nationwide Case-Control	Coffin CS, Shaheen AA, Burak KW, Myers RP	2010	Yes	Journal Article
	Analysis Gender, Renal Function and outcomes on the Liver Transplant waiting list: Utility of revised Meld including estimated Glomerular filtration rate	Myers RP, Shaheen AAM, Aspinall AI, Burak KW	2010	Yes	Journal Article
Campbell,Norman	Trends in diabetes treatment in Canadians, 1994-2004.	Neutel CI, Campbell NR, Morrison HI.	2010	Yes	Journal Article
	Blood pressure measurement methodology and experience from the Canadian Health Measures Survey Cycle 1.	Bryan S, St-Pierre Larose M, Campbell N, Clarke J, Tremblay MS	2010	Yes	Journal Article
	Update of the 2010 theme and	Campbell NRC, Kaczorowski J, Lewanczuk RZ, Feldman R, Poirier L, Kwong MML, Lebel M, McAlister FA, Tobe S. on behalf of the Canadian Hypertension Education Program.	2010	Yes	Journal Article
	Antihypertensive drug persistence and compliance among incident elderly hypertensives in Ontario. For the CHEP Outcomes Research Taskforce.	Friedman O, McAlister FA, Yun L, Campbell NRC, Tu K	2010	Yes	Journal Article





Name	<b>Title</b> Blood pressure in Canadian adults.	Authorship Wilkins K, Campbell NRC, Joffres MR, Johansen HL, McAlister FA, Nichol M, Quach S, Tremblay MS	Publish Year 2010	<b>IsPeerReviewed</b> Yes	<b>Type</b> Journal Article
	Putting ACCOMPLISH into context: Hypertension management in 2010.	McAlister FA, Herman R, Khan NA, Rabkin SW, Campbell N for the Canadian Hypertension Education Program.	2010	Yes	Journal Article
	Los paises de las Americas se movilizan para disminuir la hipertension y las eCV mediante la reduccion del consumo de sal en la poblacion.	Blanco A, Legetic B, Campbell NRC	2010	Yes	Journal Article
	The 2010 Canadian Hypertension Education Program (CHEP) recommendations for the management of hypertension: Part 1 - Blood pressure measurement, diagnosis, and assessment of risk.	Quinn RR, Hemmelgarn BR, Padwal RS, Myers MG, Cloutier L, Bolli P, McKay DW, Khan NA, Hill MD, Mahon J, Hackam D, Grover S, Wilson T, Penner B, Burgess E, McAllister FA, Lamarre-Cliche M, Mclean D, Schiffrin EL, Honos G, Mann K, Tremblay G, Milot A, Chock	2010	Yes	Journal Article
	Hypertension guidelines for pharmacists; 2009 update. For the Canadian Hypertension Education Program.	Thompson A, Semchuk B, Campbell NRC, Kaczorowski J, Tsuyuki RT	2010	Yes	Journal Article
	The Canadian Effort to Prevent and Control Hypertension. Can Other Countries adopt Canadian Strategies?	Campbell NRC, Tobe SW.	2010	Yes	Journal Article
	A dietary salt reduction policy		2010	Yes	Journal Article
	for the Americas. Home blood pressure monitoring among Canadian adults with hypertension: Results from the 2009 Survey on Living with Chronic Diseases in Canada.	Legetic B. Bancej CM, Campbell N, McKay DW, Nichol M, Walker RL, Kaczorowski J.	2010	Yes	Journal Article
	The Pan American Health Organization Policy Statement in dietary salt. Preventing cardiovascular disease in the Americas by reducing dietary salt intake population-wide CVD Prev Control. for the PAHOWHO Regional Expert Group on Cardiovascular Disease P	Campbell NRC, Legowski B, Legetic B, Wilks R and Vasconcellos A	2010	Yes	Journal Article
	Regional variations in treatment for diagnosed hypertension in Canada.	Mohan S, Chen G, Campbell NRC, Hemmelgarn B.	2010	Yes	Journal Article
	Canadian Efforts to Prevent and Control Hypertension.	Campbell NRC, Chen G.	2010	Yes	Journal Article
	2010 Canadian Hypertension Education Program Recommendations - An Annual Update.	Campbell N. On Behalf of CHEP.	2010	Yes	Journal Article
	A strategy to improve hypertension control: The Canadian experience.	Rabkin SW, Feldman R, Tobe SW, Drouin D, McAlister FA, Campbell N.	2010	Yes	Journal Article
	The 2010 Canadian Hypertension Education Program	Hackam DG, Khan NA, Hemmelgarn BR, Rabkin SW, Touyz RM, Campbell NRC, Padwal R, Campbell TS, Lindsay MP, Hill MD, Quinn RR, Mahon JL, Herman RJ, Schiffrin EL, Ruzicka M, Larochelle P, Feldman RD, Lebel M, Poirier L, Arnold JMO, Moe GW, Howlett JG, Trudeau	2010	Yes	Journal Article

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Name	Title Identification of factors driving differences in cost- effectiveness of first line pharmacologic therapy for uncomplicated hypertension.	Authorship Klarenbach SW, McAlister FA, Johansen H, Tu K, Hazel M, Walker R, Zarnke KB, Campbell NRC.	Publish Year 2010	IsPeerReviewed Yes	<b>Type</b> Journal Article
	Regional variations in treatment for diagnosed hypertension in Canada.	Mohan S, Chen G, Campbell NRC, Hemmelgarn B.	2010	Yes	Journal Article
	A new initiative to prevent cardiovascular disease in the Americas by reducing dietary salt.	Campbell NRC, Legowski B, Legetic B, Wilks R, Vasconcellos A for the PAHO/WHO Regional Expert Group on Cardiovascular Disease Prevention through Dietary Salt Reduction.	2010	Yes	Journal Article
Castillo,Eliana	Hypertension: Are you and your patients up to date?	Allu SO, Bellerive J, Walker RL, Campbell NRC	2010	Yes	Journal Article
Casuno,Enana	Cytomegalovirus Infection in Pregnancy. SOGC Clinical Practice Guideline.	Yinon Y, Farine D, Yudin M, van Schalkwyk J, Van eyk N, Boucher M, Cormier B, Gruslin A, Money D, Murphy K, Ogilvie G, Castillo E, Paquet C, Steenbeek A, Wong T.	2010	Yes	Journal Article
	Antibiotic Prophylaxis in Obstetric Procedures. SOGC Clinical Practice Guideline.	van Schalkwyk J, Van eyk N, Yudin M, Boucher M, Cormier B, Gruslin A, Money D, Murphy K, Ogilvie G, Castillo E, Paquet C, Steenbeek A, Wong T.	2010	Yes	Journal Article
Coderre,Sylvain	Training the and second	Codemo S. Anderson I. Dostom A.	2010	Vac	Insumal Antipla
	Training the endoscopy trainer: from general principles to specific concepts.	Coderre S, Anderson J, Rostom A, McLaughlin K.	2010	Yes	Journal Article
	Teaching in Small Portions Dispersed Over Time Enhances Long-term Knowledge Retention.	Raman, M., McLaughlin, K., Rostom, A., Violato, C., Allard, J, Coderre, S.	2010	Yes	Journal Article
	University of Calgary Faculty of Medicine review.	Coderre, S., Woloschuk, W., McLaughlin, K., Wright, B., Veale, P., McIlwrick, J., Tworek, J.	2010	Yes	Journal Article
	A prospective randomized trial of content expertise versus process expertise in small group teaching.	Peets, A., Cooke, L., Wright, B., Coderre, S., McLaughlin, K.	2010	Yes	Journal Article
	Early use of magnetic endoscopic imaging in novice colonoscopists: improved performance without increase in workload.	Coderre S, Anderson J, Rikers R, Dunckley P, Holbrook K, McLaughlin K.	2010	Yes	Journal Article
	Virtual patients: ED-2 band- aid or a valuable asset in the learning portfolio.	Tworek, J., Coderre, S., McLaughlin, K.	2010	Yes	Journal Article





Name	<b>Title</b> To think is good: querying an initial hypothesis reduces diagnostic error in medical students.	Authorship Coderre S, Wright B, McLaughlin, K	Publish Year 2010	IsPeerReviewed Yes	<b>Type</b> Journal Article
Coffin,Carla	A Population-Based Study of Pyogenic Liver Abscesses in the US: Incidence, Mortality, and Temporal Trends	Meddings L, Myers RP, Hubbard J, Shaheen AA, Laupland KP, Dixon E, Coffin CS, Kaplan G.	2010	Yes	Journal Article
		Martin GR, McKnight GW, Dicay M, Coffin CS, Ferraz JP, Wallace JL.	2010	Yes	Journal Article
	Chronic viral infections in the anti-tumour necrosis factor therapy era in inflammatory bowel disease	Shale M, Seow C, Coffin CS, Kaplan G, Panaccione R, Ghosh S.	2010	Yes	Journal Article
	Pregnancy outcomes among liver transplant recipients in the United States: A nationwide case control	Coffin CS, Shaheen AA, Burak KW, Myers RP.	2010	Yes	Journal Article
	analysis Virologic and Clinical Outcomes of Hepatitis B Virus Infection in HIV-HBV Coinfected Transplant Recipients	Coffin CS, Stock PG, Dove LM, Berg CL, Nissen NN, Curry MP, Ragni M, Regenstein FG, Sherman KE, Roland ME, Terrault N	2010	Yes	Journal Article
	Molecular characterization of intrahepatic and extrahepatic hepatitis B virus (HBV) reservoirs in patients on suppressive antiviral therapy	Coffin CS, Mulrooney-Cousins PM, Peters MG, van Marle G, Roberts JP, Michalak TI, Terrault NA.	2010	Yes	Journal Article
	Occult Hepatitis C Virus infection: What does it mean?	Pham TNQ, Coffin CS, Michalak TI	2010	Yes	Journal Article
Conly,John	Methicillin- resistantstaphylococcus aureus colonization or infection in Canada : National Surveillance and Changing Epidemiology 1995-2007	Simor AE, Gilbert NL, Gravel D, Mulvey MR, Bryce E, Loeb M, Matlow A, McGeer A, Louie L, Campbell J, Canadian Nosocomial Infection Surveillance Program (Conly J member)	2010	Yes	Journal Article
	Strategies to control community-associated antimicrobial resistance among enteric bacteria and methicillin-resistant Staphylococcus aureus in Canada	Wilson J, Conly J, Wong T, Jayaraman G, Sargeant J, Papadopoulos A, Young V, Quist- Moyer M, Bauer S	2010	Yes	Journal Article
	Antimicrobial susceptibilities of health care-associated and community-associated strains of methicillin-resistant staphylococcus aureus from hospitalized patients in Canada 1995 to 2008	Simor AE, Louie L, Watt C, Gravel D, Mulvey MR, Campbell J, McGeer A, Bryce E, Loeb M, Matlow A, Canadian Nosocomial Infection Surveillance Program (Conly J member)	2010	Yes	Journal Article
	Letter from the Authors	Conly JM, Johnston B	2010	Yes	Journal Article
	Caenorhabditis elegans as a host model for community- associated methicillin- resistant staphylococcus aureus	Wu K, Conly J, McClure JA, Elsayed S, Louie T, Zhang K	2010	Yes	Journal Article





Name	Title Wireless Temporal artery bandage thermometer - an observational study	Authorship Stelfox HT, Straus SE, Khandelwala F, Conly J, Haslett J, Zwierzchowski S,	Publish Year 2010	<b>IsPeerReviewed</b> Yes	<b>Type</b> Journal Article
	Multiplex PCR assay to facilitate identification of the recently described Staphylococcal cassette chromosome mec type VIII	McClure J, Conly J, Elsayed S, Zhang K	2010	Yes	Journal Article
Cowie,Robert	TB-HIV as an occupational disease: where are we now?	Cowie, RL	2010	Yes	Journal Article
Davidson,Warren	Effects of exercise training on physical impairment, arterial stiffness, and health-related quality of life in patients with chronic kidney disease – A pilot study.	Mustata S, Groeneveld Sharon, Kiland K, Davidson W, Ford G, Manns B.	2010	Yes	Journal Article
	Helium-Hyperoxia: Alleviating Respiratory Limitation to Improve the Benefits of Pulmonary Rehabilitation. International Journal of Respiratory Care, in Press (Accepted September 23rd 2010).	Perry SE, Koelwyn GJ, Wong LE, Davidson WJ, Eves ND	2010	Yes	Journal Article
Devlin,Shane M.	Evolving IBD Treatment Paradigms: Top Down versus Step Up.	Devlin SM, Panaccione R.	2010	Yes	Journal Article
	The appropriateness of concomitant immunomodulators withānti- TNF agents for the treatment of Crohn's disease: One size does not fit all.	Melmed GY, Spiegel BM, Bressler B, Cheifetz AS, Devlin SM, Harrell LE, Irving PM, Jones J, Kaplan GG, Kozuch PL, Velayos FS, Baidoo L, Sparrow MP, Siegel CA	2010	Yes	Journal Article
Donovan,Lois	Isolated luteinizing hormone (LH) elevation in a woman with secondary amenorrhea: a clue to the diagnosis of an inhibin B–producing thecoma and insights into the influence of inhibin B on LH	Donovan LE, Brain PH, Duggan MA	2010	Yes	Journal Article
Dube,Catherine	User's perspectives of barriers and facilitators to implementing quality colonoscopy services in Canada: a study protocol.	Jobin G, Gagnon MP, Candas B, Dubé C, Ben Abdeljelil A, Grenier S.	2010	Yes	Journal Article
Duff,Henry	Structural Refinement of the hERG1 Pore and Voltage- Sensing Domains with ROSETTA-Membrane and Molecular Dynamics Simulations.	Subbotina J, Yarov-Yarovoy V, Lees-Miller J, Durdagi S, Guo J, Duff HJ, Noskov SY.	2010	Yes	Journal Article





Name	Title Resynchronization- Defibrillation for Ambulatory Heart Failure Trial Investigators. Cardiac- resynchronization therapy for mild-to-moderate heart failure.	Authorship Tang AS, Wells GA, Talajic M, Arnold MO, Sheldon R, Connolly S, Hohnloser SH, Nichol G, Birnie DH, Sapp JL, Yee R, Healey JS, Rouleau JL; Resynchronization- Defibrillation for Ambulatory Heart Failure Trial Investigators.	Publish Year 2010	IsPeerReviewed Yes	Type Journal Article
	Combined Receptor and Ligand-Based Approach to the Universal Pharmacophore Model Development for Studies of Drug Blockade to the hERG1 Pore Domain.	Durdagi S, Noskov SY, Duff H	2010	Yes	Journal Article
	Insights into the Molecular Mechanism of hERG1 Channel Activation and Blockade by Drugs.	Durdagi S, Subbotina J, Lees- Miller J, Guo J, Duff HJ, Noskov SY.	2010	Yes	Journal Article
Duggan,Peter	High incicence of post transplant lymphoproliferative disorder after antithymocyte blobilin-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.	2010	Yes	Journal Article
	transplant outcomes in	El Kourashy S, Williamson T, Chaudhry MA, Savoie ML, Turner AR, Larratt L, Storek J, Bahlis NJ, Brown CB, Yang M, Wuinlan D, Geddes M, Zacarias N, Daly A, Duggan P, Stewart DA, Russell JA.	2010	Yes	Journal Article
	The addition of 400cgy total body irradiation to a regimen incorporating once daily intravenous busulfan, fludarabine and thymoglobulin reduces relapse without affecting non-relapse mortality in acute myelogenous leukemia.	Russell JA, Irish W, Balogh A, Chaudhry MA, Savoie ML, Turner AR, Larratt L, Storek J, Bahlis NJ, Brown CB, Quinlan D, Geddes M, Zacarias N, Daly A, Duggan P, Stewart DA	2010	Yes	Journal Article
Edwards,Alun	Effects of intensive blood-	The ACCORD Study group	2010	Yes	Journal Article
	pressure control in type 2 diabetes.	(includes Edwards AL)			
	Validity of administrative data claim-based methods for identifying individuals with diabetes at a population level.	Southern DA, Roberts B, Edwards A, Dean S, Norton P, Svenson LW, Larsen E, Sargious P, Lau DCW, Ghali WA.	2010	Yes	Journal Article
	Errors in patient perception of caloric deficit required for weight loss — observations from the Diet Plate Trial	Kline GA, Pedersen SD	2010	Yes	Journal Article
	Effect of intensive treatment of hyperglycaemia on microvascular outcomes in type 2 diabetes: an analysis of the ACCORD randomised trial.	The ACCORD Study Group	2010	Yes	Journal Article
	Effects of medical therapies on retinopathy progression in type 2 diabetes.	ACCORD Study Group	2010	Yes	Journal Article





Name	Title Self monitoring of blood glucose for individuals with type 2 diabetes not using insulin: leaving no	Authorship Rabi DM, Johnson JA, Edwards AL.	Publish Year 2010	IsPeerReviewed Yes	<b>Type</b> Journal Article
	cornerstone unturned. Diabetic Patients with Psychiatric Illness.	Myers KA, Edwards AL	2010	Yes	Journal Article
	Effects of Combination Lipid Therapy in Type 2 Diabetes Mellitus.	The ACCORD Study group (includes Edwards AL).	2010	Yes	Journal Article
	Association of Median Household Income with Burden of Coronary Artery Disease among Individuals with Diabetes.	Rabi DM , EdwardsAL, Svenson LW, Graham MM, Knudtson M, Ghali WA.	2010	Yes	Journal Article
Edworthy,Steven	Historical perspectives on the discovery and elucidation of autoantibodies to centromere protiens (CENP) and the emerging importance of antibodies to CENP-F	Marvin J. Fritzler, Jerome B. Rattner, LeeAnne M. Luft, Steven M. Edworthy, Carlos A. Casiano, Carol Peebles, Michael Mahler	2010	Yes	Journal Article
Esdaile,John	After patients are diagnosed with knee osteoarthritis, what do they do?	Grindrod KA, Marra CA, Colley L, Cibere J, Tsuyuki RT, Esdaile JM, Gastonguay L, Kopec J.	2010	Yes	Journal Article
	Frequency of bone marrow edema in knee osteoarthritis and association with pain severity: results from a population-based study.	Ip S, Cibere J, Sayre EC, Guermazi A, Nicolaou S, Wong H, Thorne A, Singer J, Kopec J, Esdaile JM.	2010	Yes	Journal Article
	The effect of cash lottery on response rates to an online health survey among members of the Canadian Association of Retired Persons: a randomized experiment.	Doerfling P, Kopec JA, Liang MH, Esdaile JM.	2010	Yes	Journal Article
	Association of clinical findings with pre-radiographic and radiographic knee osteoarthritis in a population- based study.	Cibere J, Zhang H, Thorne A, Wong H, Singer J, Kopec JA, Guermazi A, Peterfy C, Nicolaou S, Munk PL, Esdaile JM.	2010	Yes	Journal Article
	The Effect of Disease Site (Knee, Hip, Hand, Foot, Lower Back or Neck) on Employment Reduction Due to Osteoarthritis.	Sayre EC, Li LC, Kopec JA, Esdaile JM, Bar S, Cibere J.	2010	Yes	Journal Article
Exner,Derek	Prevalence and Risk Factors for Cervical and Lumbar Spondylosis in Interventional Electrophysiologists	Birnie D, Healey JS, Krahn AD, Ahmad K, Crystal E, Khaykin Y, Chauhan V, Phillippon F, Exner D, Thibault B, Hruczkowski T, Nery P, Keren A, Redfearn D	2010	Yes	Journal Article
	Reduction of Inappropriate ICD Shocks Using a Virtual ICD Model	Exner DV, Volosin KJ, Wathen MS, Sherfesee LN, Scinicariello AP, Gillberg JM	2010	Yes	Journal Article





Name	Title Meta-analysis of the effectiveness and safety of catheter ablation of atrial fibrillation in patients with versus without left ventricular systolic dysfunction	Authorship Wilton SB, Fundytus A, Ghali WA, Veenhuyzen GD, Quinn FR, Mitchelle LB, Hill MD, Faris P, Exner DV	Publish Year 2010	IsPeerReviewed Yes	<b>Type</b> Journal Article
	Chronic Performance of an Active Fixation Coronary Sinus Lead.	Crossley, GH, Exner DV, Mead, RH, Sorrentino RA, Hokason R, Li S, Adler S on behalf of the Model 4195 Investigators.	2010	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	2010	Yes	Journal Article
	Combining shock reduction strategiesto enhance ICD therapy: a role for computer modeling	Volosin KJ, Exner DV, Wathen MS, Sherfessee L, Scinicariello AP, Gillberg JM	2010	Yes	Journal Article
	-	Huikuri HK, Exner DV, Kavanagh KM, Aggarwal SG, Mitchell LB, Messier MD, Becker D, Sheldon RS, Bloch Thomsen PE.	2010	Yes	Journal Article
Fell,Charlene	Clinical Predictors of a Diagnosis of Idiopathic Pulmonary Fibrosis	Charlene D. Fell, Fernando J. Martinez, Lyrica X. Liu, Susan Murray, Meilan K. Han, Ella A. Kazerooni, Barry H. Gross, Jeffrey Myers, William D. Travis, Thomas V. Colby, Galen B. Toews, and Kevin R. Flaherty	2010	Yes	Journal Article
Ferraz,Jose	A pro-resolution mediator, prostaglandin D2, is specifically up-regulated in individuals in long-term remission from ulcerative colitis	Vong L, Ferraz JGP, Panaccione R, Beck PL, Wallace	2010	Yes	Journal Article
	Effect of anesthetics on gastric damage using two models of portal hypertension	Camara PRS, Moi GP, Ferraz JGP, Zeitune JMR	2010	Yes	Journal Article
	New Pharmacological Therapies in Gastrointestinal Disease	Wallace JL, Ferraz JGP	2010	Yes	Journal Article
Field,Stephen	A 2010 update on roflumilast, a selective phophodiesterase 4 inhibitor for the treatment of COPD	Giembycz MA, Field SK	2010	Yes	Journal Article
	A comparison of obese and nonobese asthmatics: exploring an asthma-obesity interaction.	Pakhale S, S Doucette, K Vandemheen, LP Boulet, RA McIvor, JM FitzGerald, P Hernandez, C Lemiere, S Sharma, SK Field, GG Alvarez, RE Dales, D Ferguson, SD Aaron.	2010	Yes	Journal Article
Flemons,Ward	Development of a novel electronic surveillance system for monitoring of bloodstream infections.		2010	Yes	Journal Article





Name Ford Cordon	Title	Authorship	Publish Year	IsPeerReviewed	Туре
Ford,Gordon	Effects of exercise training on physical impairment, arterial stiffness and health-related quality of life in patients with chronic kidney disease: a pilot study.	Mustata S, Groeneveld S, Davidson W, Ford GT, Kiland K, Manns B	2010	Yes	Journal Article
	Optimizing Pulmonary Rehabilitation in chronic obstructive pulmonary disease - practical issues: A Canadiand Thoracic Society Clinical Practice Guideline	The Canadian Thoracic Society COPD Committee Expert Working Group: Marciniuk DD, Brooks D, Butcher S, Debigare R, Dechman G, Ford G, Pepin V, Reid D, Sheel AW, Stickland M, Todd DC, Walker SL, Aaron S, Balter M, Bourbeau J, Hernandez P, Maltais F, O'Donne	2010	Yes	Journal Article
Fraser,Kristin	Canadian Sleep Society/Canadian Thoracic Society Position Paper on the use of Portable Monitoring for the diagnosis of obstructive sleep apnea/hypopnea (OSAH) in adults.	A Blackman, et al;	2010	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	2010	Yes	Journal Article
Fritzler,Marvin	Autoantibody profile in systemic sclerosis.	Behmanesh F, Amin R, Khajedaluee M, Fritzler MJ.	2010	Yes	Journal Article
	The microRNA and messengerRNA expression profile of the RNA-induced silencing complex in human U 87 astrocytoma cells and primary human astrocytes.	Moser JM, Fritzler MJ.	2010	Yes	Journal Article
	The antinuclear antibody (ANA) test: Last or lasting gasp?	Fritzler MJ.	2010	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.	Edworthy SM, Casiano CA,	2010	Yes	Journal Article
	Predictors of interstitial lung disease in early systemic sclerosis: A prospective longitudinal study of the GENISOS cohort.	Assassi S, MD, Sharif R, Lasky RE, McNearney TA, Estrada-Y- Martin RM, Draeger H, Nair DK, Fritzler MJ, Reveille JD, Arnett FC, Mayes MD for the GENISOS Study Group	2010	Yes	Journal Article
	Cytoplasmic Ribonucleoprotein (RNP) bodies and their relationship to GW/P Bodies.	Moser JJ, Fritzler MJ.	2010	Yes	Journal Article
	Clinical evaluation of a novel CENP-A peptide based ELISA: A novel CENP-A derived peptide is the major CENP antigen.	Mahler M, Maes I, Westhovens R, Bossuyt X, Schneider S, Hiepe F, Swart A, Fritzler MJ.	2010	Yes	Journal Article
	Epitope specificity and significance in systemic autoimmune diseases.	Mahler M, Fritzler MJ.	2010	Yes	Journal Article





Name	<b>Title</b> Association of pruritus with quality of life and disability in systemic sclerosis.	Authorship El-Baalbaki G, Razykov I, Hudson M, Bassel M, Baron M, Thombs BD, Fritzler MJ; Canadian Scleroderma Research Group.	Publish Year 2010	<b>IsPeerReviewed</b> Yes	<b>Type</b> Journal Article
	Is serum albumin a marker of malnutrition in chronic disease? The scleroderma paradigm.	Baron M, Hudson M, Steele R, Fritzler MJ; Canadian Scleroderma Research Group (CSRG).	2010	Yes	Journal Article
	Comparison between multiplex assays for autoantibody detection in systemic lupus erythematosus.	Hanly JG, Su L, Farewell V, Fritzler MJ.	2010	Yes	Journal Article
	Establishing Diagnostic Criteria. Medicine (Baltimore)	Hudson M, Fritzler MJ, Canadian Scleroderma Research Group, Baron MJ. Systemic Sclerosis:	2010	Yes	Journal Article
	Novel diagnostic and clinical aspects of anti-PCNA antibodies detected by novel detection methods	Mahler M, Silverman ED, Fritzler MJ.	2010	Yes	Journal Article
	The minimally important difference in clinical practice for patient-centered outcomes including health assessment questionnaire, fatigue, pain, sleep, global visual analog scale, and SF-36 in scleroderma.	Sekhon S, Pope J, Fritzler MJ, Canadian Scleroderma Research Group, Baron M.	2010	Yes	Journal Article
	Multi-center evaluation of autoantibodies to the major ribosomal P C22 epitope	Mahler M, Agmon-Levin N, van Liempt M, Shoenfeld Y, Waka A, Hiepe F, Swart A, Gürtler I, Fritzler MJ.	2010	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.	2010	Yes	Journal Article
	Anti-Scl-70 (topo-I) antibodies in SLE: Myth or reality?	Mahler M, Silverman ED, Schulte- Pelkum J, Fritzler MJ.	2010	Yes	Journal Article
	•	Moser JJ, MJ Fritzler, Y Ou, JB Rattner	2010	Yes	Journal Article
	Discordance between patient and physician assessments of disease severity in systemic sclerosis.	Hudson M, Impens A, Baron M, Seibold JR, Thombs BD, Walker JG, Fritzler MJ; Canadian Scleroderma Research Group, Steele R.	2010	Yes	Journal Article
	Autoantibodies to GW Bodies and Other Autoantigens in Primary Biliary Cirrhosis.	Stinton LM, Swain M, Myers R, Shaheen AA, Fritzler MJ.	2010	Yes	Journal Article
	Clinical evaluation of a novel CENP-A peptide based ELISA: A novel CENP-A derived peptide is the major CENP antigen.	Mahler M, Maes I, Westhovens R, Bossuyt X, Schneider S, Hiepe F, Swart A, Fritzler MJ Clinical evaluation of a novel CENP-A peptide based ELISA: A novel CENP-A derived peptide is the major CENP antigen. Arthr Res & Ther (accepted)	2010	Yes	Journal Article
Geddes,Michelle	The addition of 400 oCV total	Dussell ID Irick W Deleck A	2010	Vac	Tournal Anticla
	The addition of 400 CeY total body irradiation to a regimen incorporating once daily intravenous busulfan, fludarabine, and thymoglobulin reduces relapse without affecting non-relapse mortality in acute myelogenous leukemia.	Russell JR, Irish W, Balogh A, Chaudhry AH, Savoie ML, Turner AR, Larratt L, Storek J, Bahlis N, Brown CB, Quinlan D, Geddes M, Zacarias N, Daly A, Duggan P, Stewart DA.	2010	Yes	Journal Article





Name	Title Influence of comorbidities on transplant outcomes in patients aged 50 years or more after myeloablative conditioning incorporating fludarabine, BU and ATG	Authorship 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	Publish Year 2010	IsPeerReviewed Yes	<b>Type</b> Journal Article
Ghosh,Subrata	Mesalazine in Inflammatory Bowel Disease: A trendy topic once again.	Iacucci M, Ghosh S.	2010	Yes	Journal Article
	Expression of the TRPV1 receptor differs in quiescent inflammatory bowel disease with or without abdominal pain.	Akbar A, Yiangou Y, Facer P, Walters JRF, Brydon WG, Anand P, Ghosh S.	2010	Yes	Journal Article
	Anti-TNF therapy and influenza-keeping it in perspective.	Shale M, Czub M, Kaplan GG, Panaccione R, Ghosh S.	2010	Yes	Journal Article
	Survey on the use of Adalimumab as maintenance therapy in Chron's Disease in England and Ireland.	Russo EA, Iacucci M, Lindsay JO, Campbell S, Hart A, Hamlin J, Orchard T, Arebi N, Nightingale J, Jacyna MR, Gabe SM, O'Connor M, Harris AW, O'Morain C, Ghosh S.		Yes	Journal Article
	The importance of mucosal healing in Crohn's disease.	Ghosh S.	2010	Yes	Journal Article
	Optimal Use of Biologics in the Management of Crohn's Disease.	Panaccione R, Ghosh S.	2010	Yes	Journal Article
	Botulinum Toxin in the Treatment of Diffuse Esophageal Spasm.	Bashasati M, Andrews C, Ghosh S, Storr M.	2010	Yes	Journal Article
	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	2010	Yes	Journal Article
	Anti-adhesion molecule therapy in inflammatory bowel disease.	Ghosh S, Panaccione R.	2010	Yes	Journal Article
		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.		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.	2010	Yes	Journal Article
	Vitamin D and Gastrointestinal diseases: Inflammatory Bowel Disease and Colorectal Cancer.	Raman M, Milestone A, Hart A, Walters JW, Ghosh S.	2010	Yes	Journal Article
	The inflammatory bowel diseases and ambient air pollution: a novel association.	Kaplan GG, Hubbard J, Korzenik J, Sands BE, Panaccione R, Ghosh S, Wheeler AJ, Villeneuve PJ.	2010	Yes	Journal Article
	Mucosal healing in inflammatory bowel disease.	Iacucci M, Ghosh S.	2010	Yes	Journal Article
	Chronic viral infection in the anti-tamour necrosis factor therapy era in Inflammatory Bowel Disease	Shale MJ, Seow CH, Coffin CS, Kaplan GG, Panaccione R, Ghosh S.	2010	Yes	Journal Article





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Name	Title Phase I, double-blind, randomized, placebo- controlled, dose-escalation study of NI-0401 (a fully human anti-CD3 monoclonal antibody) in patients with moderate to severe active Crohn's disease.	Authorship C. Janneke van der Woude, Pieter Stokkers, Ad A. van Bodegraven, Gert Van Assche, Zbigniew Hebzda, Leszek Paradowski, Geert D'Haens, Subrata Ghosh, Brian Feagan, Paul Rutgeerts, Gerard Dijkstra, Dirk J. de Jong, Bas Oldenburg, Mahdi Farhan, Tristan Richar		IsPeerReviewed Yes	<b>Type</b> Journal Article	
	Influences of intestinal bacteria in human inflammatory bowel disease.	Vanderploeg R, Panaccione R, Ghosh S, Rioux K.	2010	Yes	Journal Article	
Gibson,Paul	Validation of a Canadian Curriculum in Obstetric Medicine.	Cumyn A, Gibson P.	2010	Yes	Journal Article	
		Dehaeck U, Thurston J, Gibson P, Stephanson K, Ross S	2010	Yes	Journal Article	
	The Hypertensive Disorders of Pregnancy: a summary of the 2008 Canadian Guidelines.	Hawkins TL, Gibson P, Magee L	2010	Yes	Journal Article	
Gill,Michael						
,	Neurologic disease burden in treated HIV/AIDS predicts survival: A population-based study	Siemieniuk R, Krentz HB, Maingat	2010	Yes	Journal Article	
	Characterizing the HIV epidemic in the Prairie Provinces.	Becker ML, Kasper K, Pindera C, Cheang M, Rodger D, Sanche S, Skinner S, Gill MJ.	2010	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.	Church D, Gregson D, Lloyd T, Klein M, Beckthold B, Laupland K, Gill MJ.	2010	Yes	Journal Article	
	Monitoring and adjusting for future needs in response to changing HIV policies.	Krentz H, Gill MJ.	2010	Yes	Journal Article	
	Z-FA-FMK as a novel potent inhibitor of reovirus	Kim M, Hansen KK, David L, van Marle G, Gill MJ, Fox JD, Hollenberg MD, Rancourt DE, Lee PWK, Yun CO, Johnston RN.		Yes	Journal Article	
	Neurologic disease burden int reated HIV/AIDS predicts survival: A population-based study	Vivithanaporn P, Heo G, Gamble J, Krentz H, Hoke AH, Gill MJ, Power C.	2010	Yes	Journal Article	
	Age- and sex-specific death rates in HIV-positive antiretroviral naive patients with CD4 count above 350 cells/mm3 compared with the general population in Europe and North America.	Study Group on death rates at high CD4 count in antiretroviral naïve patients.	2010	Yes	Journal Article	
	Causes of death in HIV-1 infected patients treated with antiretroviral therapy 1996- 2006: collaborative analysis of 13 cohort studies.	Antiretroviral Therapy Cohort Collaboration. (Dr. Gill is a member of steering and writing committee of the ART-CC Collaboration)	2010	Yes	Journal Article	





Name	Title	Authorship	Publish Year	IsPeerReviewed	Туре
	Despite CD4 rebound the higher initial costs of medical care for HIV infected patients persist five years after presentation with CD4<350/mm3.	Krentz H, Gill MJ.	2010	Yes	Journal Article
	Higher levels of zidovudine resistance in the colon compared to blood and other gastro-intestinal compartments in HIV infection.	van Marle G, Church Dl, Nunweiler KD, Cannon K, Wainberg MA, Gill MJ.	2010	Yes	Journal Article
	Limitations of Opt-Out HIV screening and month-child HIV transmission.	Siemieniuk RA, Jadavji T, Gill MJ.	2010	Yes	Journal Article
	An avoidable transmission of HIV from mother to child HIV transmission (MTCT).	O'Bryan T, Jadavji T, Kim J, Gill, MJ.	2010	Yes	Journal Article
	Does choice of combination antiretroviral therapy (cART) alter changes in cerebral function testing after 48 weeks in treatment-naïve, HIV-1 infected subjects commencing cART: a randomized controlled study.	Winston A, Duncombe C, Li PC, Gill JM, Kerr SJ, Puls R, Petoumenos K, Taylor-Robinson SD, Emery S, Cooper DA, for the Altair Study Group.	2010	Yes	Journal Article
	Late presentation for HIV care in the United States and Canada.	Althoff KN, Gange SJ, Klein MB, Brooks JT, Hogg RS, Bosch RJ, Horberg MA, Saag MS, Kitahata MM, Justice AC, Gebo KA, Eron JJ, Rourke SB, Gill MB, et al for the North American AIDS Cohort collaboration on Research and Design.	2010	Yes	Journal Article
Gillis,Anne	Canadian Cardiovascular Society atrial fibrillation guidelines 2010: management of recent-onset atrial fibrillation and flutter in the emergency department.	Stiell IG, Macle L; CCS Atrial Fibrillation Guidelines Committee.	2010	Yes	Journal Article
	Intracardiac Electrogram T- Wave Alternans/Variability Increases Before Spontaneous Ventricular Tachyarrhythmias in Implantable Cardioverter- Defibrillator Patients: A Prospective, Multi-Center Study.	Swerdlow C, Chow T, Das M, Gillis AM, Zhou X, Abeyratne A, Ghanem RN	2010	Yes	Journal Article
	Canadian Cardiovascular Society atrial fibrillation guidelines 2010: etiology and initial investigations.	Healey JS, Parkash R, Pollak T, Tsang T, Dorian P; CCS Atrial Fibrillation Guidelines Committee.	2010	Yes	Journal Article
	Canadian Cardiovascular Society atrial fibrillation guidelines 2010: catheter ablation for atrial fibrillation/atrial flutter.	Verma A, Macle L, Cox J, Skanes AC; CCS Atrial Fibrillation Guidelines Committee.	2010	Yes	Journal Article
	ICDs: Evidence,Guidelines and Glitches.	Packer DL, Gillis AM, Calkins H, Deering TF, Fogel RI, Wilkoff BL	2010	Yes	Journal Article
	Resynchronization- Defibrillation for Ambulatory Heart Failure Trial Investigators	Tang AS, Wells GA, Talajic M, Arnold MO, Sheldon R, Connolly S, Hohnloser SH, Nichol G, Birnie DH, Sapp JL, Yee R, Healey JS, Rouleau JL;	2010	Yes	Journal Article
	Canadian Cardiovascular Society Atrial Fibrillation Guidelines 2010: Implementing GRADE and Achieving Consensus.	Gillis AM, Skanes AC	2010	Yes	Journal Article





Name	Title A Heart Rhythm Society Electrophysiology Workforce Study: Current survey analysis of physician workforce trends.	Authorship Deering TF, Clair WK, Delaughter MC, Fisher WG, Garlitski AC, Wilkoff BL, Gillis AM.	Publish Year 2010	<b>IsPeerReviewed</b> Yes	<b>Type</b> Journal Article
	Canadian Cardiovascular Society Atrial Fibrillation Guidelines 2010: Rate and	Gillis AM, Verma A, Talajic M, Nattel S, Dorian P	2010	Yes	Journal Article
	Rhythm Management. Canadian Cardiovascular Society atrial fibrillation guidelines 2010: prevention of stroke and systemic thromboembolism in atrial fibrillation and flutter.	Cairns JA, Connolly S, McMurtry S, Stephenson M, Talajie M; CCS Atrial Fibrillation Guidelines Committee.	2010	Yes	Journal Article
	Comparing the 2010 North American and European Atrial Fibrillation Guidelines.	Gillis AM, Skanes AC	2010	Yes	Journal Article
	Canadian Cardiovascular Society atrial fibrillation guidelines 2010: prevention and treatment of atrial fibrillation following cardiac surgery.	Mitchell LB; CCS Atrial Fibrillation Guidelines Committee	2010	Yes	Journal Article
	Canadian Cardiovascular Society atrial fibrillation guidelines 2010: surgical therapy. Can J Cardiol.	Pagé P; CCS Atrial Fibrillation Guidelines Committee	2010	Yes	Journal Article
Gilmour,Janet	The Introducation of an Electronic Patient Care Information System and Health Care Providers' Job Stress: A Mixed-Methods Case Study	Wallace JE, Friesen SP, White DE, Gilmour JG, Lemaire JB	2010	Yes	Journal Article
	The introduction of an Electronic Patient Care information System and HEalth Care Providers' Job Stress: A Mixed-Methods Case Study.	Wallace, JE, Friesen S, White D, Gilmour J, Lemarie JB	2010	Yes	Journal Article
Girard,Louis-Philippe	Immunoglobulin A-dominant postinfectious glomerulonephritis: frequent occurrence in nondiabetic patients with Staphylococcus aureus infection.	Worawichawong S, Girard L, Trpkov K, Gough J, Gregson D and Benediktsson H.	2010	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.	2010	Yes	Journal Article
	MIC Versus MBEC to Determine the Antibiotic Sensitivity of Staphylococcus aureus in Peritoneal Dialysis Peritonitis.	Girard LP, Ceri H, Gibb AP, Olson M, Sepandj F.	2010	Yes	Journal Article
Haber,Richard	Topical Management of Recalcitrant Psoriasis &	Haber RM	2010	Yes	Journal Article
	Eczema Exacerbation of Darier's disease by lithium carbonate	Ngo J, Haber RM	2010	Yes	Journal Article
	Acute generalized exanthematous pustulosis (AGEP) simulating toxic epidermal necrolysis (TEN); case report and review of the literature	Peermohmamed, S, Haber RM	2010	Yes	Journal Article
	Methotrexate-induced cutaneous ulcers in a non- psoriatic patient:case report and review of the literature	Kurian A, Haber RM	2010	Yes	Journal Article

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Title Cost-effectiveness of a multifaceted intervention to improve quality of osteoporosis care after wrist fracture.	Authorship Majumdar SR, Lier DA, Rowe BH, Russell AS, McAlister FA, Maksymowych WP, Hanley DA, Morrish DW, Johnson JA.	Publish Year 2010	<b>IsPeerReviewed</b> Yes	<b>Type</b> Journal Article
Using the same bone density reference database for men and women provides a simpler estimation of fracture risk.	Langsetmo L, Leslie WD, Zhou W, Goltzman D, Kovacs CS, Prior J, Josse R, Olszynski WP, Davison KS, Anastassiades T, Towheed T, Hanley DA, Kaiser S, Kreiger N; CaMOS Research Group.	2010	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.	2010	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.	2010	Yes	Journal Article
Denosumab improves density and strength parameters as measured by QCT of the radius in postmenopausal women with low bone mineral density.	Genant HK, Engelke K, Hanley DA, Brown JP, Omizo M, Bone HG, Kivitz AJ, Fuerst T, Wang H, Austin M, Libanati C.	2010	Yes	Journal Article
2010 clinical practice guidelines for the diagnosis and management of osteoporosis in Canada: summary.	Papaioannou A, Morin S, Cheung AM, Atkinson S, Brown JP, Feldman S, Hanley DA, Hodsman A, Jamal SA, Kaiser SM, Kvern B, Siminoski K, Leslie WD; Scientific Advisory Council of Osteoporosis Canada.	2010	Yes	Journal Article
Normative bone mineral density z-scores for Canadians aged 16 to 24 years: the Canadian Multicenter Osteoporosis Study.		2010	Yes	Journal Article
	Hanley DA, Cranney A, Jones G, Whiting SJ, Leslie WD; Guidelines Committee of the Scientific Advisory Council of Osteoporosis Canada.	2010	Yes	Journal Article
fractures or the loss of bone mineral density: a prospective	Fenton TR, Eliasziw M, Tough SC, Lyon AW, Brown JP, Hanley DA.	2010	Yes	Journal Article
with osteopenic bone mineral	Langsetmo L, Morin S, Kovacs CS, Kreiger N, Josse R, Adachi JD, Papaioannou A, Goltzman D, Hanley DA, Olszynski WP, Prior J, Jamal SA; CaMos Research Group.	2010	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.	2010	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.	2010	Yes	Journal Article





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Name	<b>Title</b> Vitamin D in adult health and disease: a review and guideline statement from Osteoporosis Canada.	Authorship Hanley DA, Cranney A, Jones G, Whiting SJ, Leslie WD, Cole DE, Atkinson SA, Josse RG, Feldman S, Kline GA, Rosen C; Guidelines Committee of the Scientific Advisory Council of Osteoporosis Canada.	Publish Year 2010	IsPeerReviewed Yes	<b>Type</b> Journal Article	
	25-Hydroxyvitamin D in Canadian adults: biological, environmental, and behavioral correlates.	Greene-Finestone LS, Berger C, de Groh M, Hanley DA, Hidiroglou N, Sarafin K, Poliquin S, Krieger J, Richards JB, Goltzman D; CaMos Research Group.	2010	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; Canadian Multicentre Osteoporosis Study Research Group.	2010	Yes	Journal Article	
	Fracture prediction and calibration of a Canadian FRAX® tool: a population- based report from CaMos.	Fraser LA, Langsettno 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 Res	2010	Yes	Journal Article	
	Dietary patterns in Canadian men and women ages 25 and older: relationship to demographics, body mass index, and bone mineral density.	Langsetmo L, Poliquin S, Hanley DA, Prior JC, Barr S, Anastassiades T, Towheed T, Goltzman D, Kreiger N; CaMos Research Group.	2010	Yes	Journal Article	
	Microarchitectural deterioration of cortical and trabecular bone: differing effects of denosumab and alendronate.	Seeman E, Delmas PD, Hanley DA, Sellmeyer D, Cheung AM, Shane E, Kearns A, Thomas T, Boyd SK, Boutroy S, Bogado C, Majumdar S, Fan M, Libanati C, Zanchetta J.	2010	Yes	Journal Article	
	Lasofoxifene in postmenopausal women with osteoporosis.	Cummings SR, Ensrud K, Delmas PD, LaCroix AZ, Vukicevic S, Reid DM, Goldstein S, Sriram U, Lee A, Thompson J, Armstrong RA, Thompson DD, Powles T, Zanchetta J, Kendler D, Neven P, Eastell R; PEARL Study Investigators.	2010	Yes	Journal Article	
	. Kidney function and rate of bone loss at the hip and spine: the Canadian Multicentre Osteoporosis Study.	Jamal SA, Swan VJ, Brown JP, Hanley DA, Prior JC, Papaioannou A, Langsetmo L, Josse RG; Canadian Multicentre Osteoporosis Study Research Group.	2010	Yes	Journal Article	
	Dietary patterns and incident low-trauma fractures in postmenopausal women and men aged $\geq 50$ 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.	2010	Yes	Journal Article	





Name	a simplified fracture risk assessment tool for Canadian	Authorship Leslie WD, Berger C, Langsetmo L, Lix LM, Adachi JD, Hanley DA, Ioannidis G, Josse RG, Kovacs CS, Towheed T, Kaiser S, Olszynski WP, Prior JC, Jamal S, Kreiger N, Goltzman D; Canadian Multicentre Osteoporosis Study (CaMos) Research Group.	Publish Year 2010	IsPeerReviewed Yes	<b>Type</b> Journal Article
Hanly,Patrick	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.	2010	Yes	Journal Article
	Sleep apnea in patients with transient ischemic attack and minor stroke: opportunity for risk reduction of recurrent stroke?	Chan W, Coutts SB, Hanly P	2010	Yes	Journal Article
	Sleep disorders over the full range of chronic kidney disease.	Pierratos A, Hanly PJ.	2010	Yes	Journal Article
	Response of genioglossus	Loewen A, Ostrowski M, Laprarie J, Maturino F, Hanly P, Younes M.		Yes	Journal Article
	Intermittent hypoxia increases arterial blood pressure in humans though a Renin- Angiotensin System- dependent mechanism.	Foster GE, Hanly PJ, Ahmed SB, Beaudin AE, Pialoux V, Poulin MJ	2010	Yes	Journal Article
	Shift in Sleep Apnea Type in Heart Failure.	Ryan CM, Floras JM, Logan AG, Kimoff RJ, Series F, Morrison D, Ferguson KA, Belenkie I, Pfeifer M, Fleetham J, Hanly PJ, Smilovitch M, Artz M, Bradley TD for the CANPAP Investigators.	2010	Yes	Journal Article
	••	Maimon N, Hanly PJ. Brugniaux J, Pialoux V, Foster G, Duggan C, Eliasziw M, Hanly P,	2010 2010	Yes	Journal Article Journal Article
Howkins I ee-Ann	and ventilation in humans	Ahmed S, Poulin M.			
Hawkins,Lee-Ann	The hypertensive disorders of pregnancy: a summary of the 2008 Canadian Guidelines.	Hawkins TL, Gibson PS, Magee LA.	2010	Yes	Journal Article
Heitman,Steven	Non medical costs of computed tomographic colonography for colorectal cancer screening.	Heitman SJ, Fau F, Manns BJ, Hilsden RJ	2010	Yes	Journal Article
	Colorectal cancer screening for average risk North Americans: An economic evaluation.	Heitman SJ, Hilsden RJ, Au F, Dowden S, Manns BJ	2010	Yes	Journal Article
Helmersen,Douglas	Renal Failure Five Years After Lung Transplantation Due to Polyomavirus BK-Associated Nephropathy.	A Egli, DS Helmersen, K Taub, HH Hirsch, A Johnson.	2010	Yes	Journal Article
Appendix 1	Diagnostic evaluation and management of chronic thromboembolic pulmonary hypertension: A clinical practice guideline	Mehta, Sanjay ; Helmersen, Doug ; Provencher, Steeve ; Hirani, Naushad et al.	2010	Yes	Journal Article





Name	Title Outcomes from pandemic influenza A H1N1 infection in recipients of solid organ transplants : a multicentre cohort study	Authorship D Kumar, MG Michaels, MI Morris, M Green, R Avery, C Liu, L Danziger, V Stosor, M Eastbrook, S Gantt. K Marr, S Martin, F Silveira, R Razonable, U Allen, M Levi, G Lyon, L Bell, S Huprikar, G Patel, K Gregg, K Pursell, D Helmersen, K Julian, K Shiley, B B	Publish Year 2010	IsPeerReviewed Yes	Type Journal Article
Hemmelgarn,Brenda	Early recognition and prevention of chronic kidney	James MT, Hemmelgarn BR, Tonelli M.	2010	Yes	Journal Article
	disease. The effects of nocturnal compared with conventional hemodialysis on mineral metabolism: A randomized- controlled trial.	Walsh M, Manns Klarenbach S, Tonelli M, Hemmelgarn BR, Culleton B.	2010	Yes	Journal Article
	Timing of non-emergent coronary artery bypass grafting and mortality after non-ST-elevation acute	Deyell MW, Ghali WA, Ross DB, Zhang J, Hemmelgarn BR.	2010	Yes	Journal Article
	coronary syndrome. Weekend hospital admissions with acute kidney injury and mortality.	James MT, Wald R, Bell CM, Tonelli M, Hemmelgarn BR, Waikar SS, Chertow GM.	2010	Yes	Journal Article
	Dialysate potassium and risk of death in chronic hemodialysis patients.	Al-Ghamdi G, Hemmelgarn BR, Klarenbach S, Manns B, Wiebe N, Tonelli M.	2010	Yes	Journal Article
		Walker R, Chen G, Campbell N, McAlister FA, Quan H, Tu K, Khan N, Hemmelgarn BR.	2010	Yes	Journal Article
	Population based screening for chronic kidney disease: cost effectiveness study	Manns BJ, Hemmelgarn BR, Tonelli M, Au F, Chiasson TC, Dong J, Klarenbach S	2010	Yes	Journal Article
	Relation between kidney function, proteinuria, and adverse outcomes.	Hemmelgarn BR, Manns BJ, Lloyd A, James MT, Klarenbach S, Quinn RR, Wiebe N, Tonelli M.	2010	Yes	Journal Article
	Documentation of preventive screening interventions by general practitioners: A retrospective chart audit.	Ngwakongnwi E, Hemmelgarn BR, Quan H.	2010	Yes	Journal Article
	Acute management of patients with hyperkalemia	Elliott M, Ronksley P, Ahmed S, Clase C, Hemmelgarn BR	2010	Yes	Journal Article
	An economic evaluation of erythropoises-stimulationg agents in CKD	Clement FM, Klarenbach S, Tonelli M, Wiebe N, Hemmelgarn BR, Manns BJ	2010	Yes	Journal Article
		Jette N, Quann H, Hemmelgarn BR, Drosler S, Maas C, Moskal L, Paoin W, Sundararajan V, Gao S, Jakob R, Ustun B, Ghali W	2010	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	2010	Yes	Journal Article
	Glomerular filtration rate, proteinuria, and the incidence and consequences of acute kidney injury	James MT, Hemmelgarn BR, Wiebe N, Pannu N, Manns BJ, Klarenbach SW, Tonelli	2010	Yes	Journal Article
	Association between routine and standardized blood pressure measurements and left ventricular hypertrophy among patients on hemodialysis	Khangura J, Culleton B, Manns B, Zhang J, Walsh M, Klarenbach S, Tonelli M, Barnieh L, Sarna M, Hemmelgarn BR	2010	Yes	Journal Article
	Author's opinions on publication in relation to annual performace assessment	Walker RL, Sykes L, Hemmelgarn BR, Quan H	2010	Yes	Journal Article
Appendix 1	Using administrative datasets to study outcomes in dialysis patients: A validation study	Quinn RR, Laupacis A, Austin PC, Hux JE, Garg AX, Hemmelgarn BR, Oliver MJ	2010	Yes	Journal Article





Title The 2010 Canadian Hypertension Education Program recommendations for the management of hypertension: Part 2 - therapy	Authorship Hackman DG, Khan NA, Hemmelgarn Br et al	Publish Year 2010	IsPeerReviewed Yes	<b>Type</b> Journal Articl
The 2010 Canadian Hypertension Education Program recommendations for the management of hypertension: Part 1 - blood pressure measurement, diagnosis and assessment of risk	Quinn RR, Hemmelgarn BR, Padwal RS et al	2010	Yes	Journal Articl
The NLRP3 inflammasome regulates renal inflammation and contributes to chronic kidney disease	Vilaysane A, Chun J, Seamone ME, Wang W, Chin R, Hirota S, Li Y, Clark SA, Trpkov K, Hemmelgarn BR, Beck PL, Muruve DA	2010	Yes	Journal Articl
Economic evaluation of erythropoiesis-stimulating agents for anemia related cancer.	Klarenbach S, Manns BJ, Lee H, Lloyd A, Wiebe N, Hemmelgarn BR, Tonelli M, Reaume N, Reiman A.	2010	Yes	Journal Articl
Acute kidney injury and long- term decline in kidney function following coronary angiography	James MT, Ghali WA, Tonelli M, Faris P, Knudtson ML, Pannu N, Klarenbach SW, Manns BJ, Hemmelgarn BR	2010	Yes	Journal Artic
Regional variations in not treating diagnosed hypertension in Canada	Mohan S, Chen G, Campbell NRC, Hemmelgarn BR	2010	Yes	Journal Artic
Cardiovascular effects of Ace Inhibition or Angiotensin Receptor Blockage in hemodialysis: A meta- analysis.	Tai DJ, Lim TW, James MT, Manns BJ, Tonelli M, Hemmelgarn BR.	2010	Yes	Journal Articl
Prognostic implications of the urinary albumin-to-creatinine ratio in Vetrans with diabetes of different ages.	O'Hare AM, Hailpern SM, Pavkov ME, Rios-Burrows N, Gupta I, Maynard C, Todd-Stenberg J, Rodriguez RA, Hemmelgarn BR, Saran R, Williams DE.	2010	Yes	Journal Articl
Outcomes after acute myocardial infarction in South Asian, Chinese and white patients.	Khan NA, Grubisic M, Hemmelgarn BR, Humphries K, King K, Quan H.	2010	Yes	Journal Articl
Modeling survival of arteriovenous accesses for hemodialysis: semiparametric versus parametric methods	Ravani P, Parfrey P, MacRae J, James M, Quinn R, Malberti F, Brunori G, Mandolfo S, Tonelli M, Hemmelgarn BR, Manns B, Barrett B	2010	Yes	Journal Articl
Histopathologic features aid in predicting risk of progression of IgA Nephropathy.	Walsh M, Sar A, Lee D, Yilmaz S, Benediktsson H, Manns BJ, Hemmelgarn BR.	2010	Yes	Journal Articl
Home care utilization and outcomes among Asian and other Canadian patients with heart failure	Chen G, Khan N, King KK, Hemmelgarn BR, Quan H	2010	Yes	Journal Articl
Overview of the Canadian pediatric end-stage renal disease database	Samuel S, Tonelli M, Foster BJ, Nettel-Aguirre A, Na Y, Williams R, Soo A, Hemmelgarn BR	2010	Yes	Journal Artic
Nephrology visits and health care resource use before and after reporting estimated glomerular filtration rate	Hemmelgarn BR, Zhang J, Manns BJ, James MT, Quinn RR, RavaniP, Klarenbach SW, Culleton BF, Krause R, Thorlacius L, Jain AK, Tonelli M	2010	Yes	Journal Articl

## Herman,Robert





Name	Title The 2010 Canadian Hypertension Education Program Recommendations for the Management of Hypertension: Part 2- Therapy	Authorship Daniel G. Hackam MD PhD, Nadia A. Khan MD MSc, Brenda R. Hemmelgarn MD PhD, Simon W. Rabkin MD, Rhian M. Touyz MD PhD, Norman R.C. Campbell MD, Raj Padwal MD MSc, Tavis S. Campbell PhD, M. Patrice Lindsay BScN PhD, Michael D. Hill MD MSc, Robert R. Quinn	Publish Year 2010	IsPeerReviewed Yes	Type Journal Article
	in Europe, Asia and North	John F. Chiu, Alan Bell, Robert J. Herman, Michael D. Hill, John A. Stewart, Eric A. Cohen, Chiau- Suong Liau, Sidney C. Smith, Jr., P. Gabriel Steg, Deepak L. Bhatt on behalf of the REACH Registry Investigators	2010	Yes	Journal Article
	Putting ACCOMPLISH into Context: Hypertension Management in 2010	Finlay A McAlister, Robert J Herman, Nadia A Khan, Simon W Rabkin, Norm Campbell for the Canadian Hypertension Education Program	2010	Yes	Journal Article
Hilsden,Robert					
	Comparing patient and endoscopist perceptions of the colonoscopy indication	Sewitch MJ, Stein D, Joseph L, Bitton A, Hilsden RJ, Rabeneck L, Paszat L	2010	Yes	Journal Article
	Use of Complementary and Alternative Medicine by Patients with Inflammatory Bowel Disease	Hilsden RJ, M Verhoef, H Rasmussen, A Porcino, JCC DeBruyn	2010	Yes	Journal Article
	Canadian Association of Gastroenterology position statement on screening individuals at average risk for developing colorectal cancer 2010	Leddin DJ, Enns R, Hilsden R et al	2010	Yes	Journal Article
	Validation of coding algorithms for the identification of patients with primary biliary cirrhosis using administrative data.	Myers RP, Shaheen AAM, Wan AF, Swain MG, Hilsden RJ, Sutherland L, Quan H.	2010	Yes	Journal Article
	Colorectal cancer screening for average-risk North Americans: An economic evaluation	Heitman SJ, Hilsden RJ, Au F et al	2010	Yes	Journal Article
	Colorectal cancer screening using flexible sigmoidoscopy: United Kingdom study demonstrates significant incidence and mortality benefit. Can J Gastroenterol (Editorial)	Hilsden RJ, Rostom A	2010	Yes	Journal Article
Hirani,Naushad	Physician barriers to population-based FOBT based colorectal cancer screening programs for average risk patients	McGregor SE, Wang H, Hilsden RJ	2010	Yes	Journal Article
	Diagnostic evaluation and management of chronic thromboembolic pulmonary hypertension: A clinical practice guideline	Mehta S, Helmersen D, Provencher S, Hirani N, Rubens FD, De Perrot M, Blostein M, Boutet K, Chandy G, Dennie C, Granton J, Hernandez P, Hirsch AM, Laframboise K, Levy RD, Lien D, Martel S, Shoemaker G, Swiston J, Weinkauf J	2010	Yes	Journal Article





Name Heren Derid	Title	Authorship	Publish Year	IsPeerReviewed	Туре
Hogan,David	The Development of a Fraility Index for Patients with Coronary Artery Disease.	Freiheit EA, Hogan DB, Eliasziw M, Meekes MF, Ghali WA, Partlo LA, Maxwell CJ	2010	Yes	Journal Article
	Prioritizing Referrals from Primary Care Physicians to Specialists in Geriatric Medicine: A Systematic	Cepoiu-Martin M, DeCoster C, Hogan D, Noseworthy T	2010	Yes	Journal Article
	Review of the Literature. Persistence with cholinesterase inhibitor therapy in a population-based cohort of patients with	Amuah JE, Hogan DB, Eliasziw M, Supina A, Beck P, Downey W, Maxwell CJ	2010	Yes	Journal Article
	Alzheimer's disease. Randomized controlled trial of atorvastatin in mild to moderate Alzheimer disease: LEADe.	Feldman HH, Doody RS, Kivipelto M, Sparks DL, Waters DD, Jones RW, Schwam E, Schindler R, Hey- Hadavi J, DeMicco DA, Breazna A (includes DB Hogan)		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	2010	Yes	Journal Article
	Predictors of Family Caregiver Ratings of Patient Quality of Life in Alzehime'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	2010	Yes	Journal Article
	A pragmatic study exploring the prevention of delirium among hospitalized older hip fracture patients: applying evidence to routine clinical practice using clinical decision support.	Holroyd-Leduc JM Abelseth GA, Khandwala F, Silvius JL, Hogan DB, Schmaltz HN, Frank CB, Straus SE	2010	Yes	Journal Article
	Contribution of physical fitness, cerebrovascular reserve and cognitive stimulation to cognitive function in post0-menopausal women	Eskes GA, Longman S, Brown AD, McMorris CA, Langdon KD, Hogan DB, Poulin M	2010	Yes	Journal Article
	Microscopic Colitis - a Common Cause of Diarrhea in Older Adults	Williams JJ, Beck PL, Andrews CN, Hogan DB, Storr MA	2010	Yes	Journal Article
	in the consortium to investigate vascular	Moorhouse P, Song X, Rockwood K, Black S, Kertesz A, Gauthier S, Feldman H and on behalf of the consortium to investigate vascular impairment of cognition (includes D Hogan)	2010	Yes	Journal Article
	Antihypertensive agents and prevention of dementia	Maxwell CJ, Hogan DB	2010	Yes	Journal Article
Holroyd-Leduc,Jayna	Delirium: How can it be best prevented and managed among older hospitalized patients?	Holroyd-Leduc JM, F Khandwala, KM Sink	2010	Yes	Journal Article
	Translation of evidence into a self-management tool for use by women with urinary incontinence	Holroyd-Leduc JM, Straus SE, Thorpe K, Davis DA, Schmaltz HN, Tannenbaum C	2010	Yes	Journal Article
	Unintentional weight loss in older adults	Stajkovic S, Aitken EM, Holroyd- Leduc J	2010	Yes	Journal Article





Name	Title A pragmatic study exploring the prevention of delirium among hospitalized older hip fracture patients: applying evidence to routine clinical practice using decision support.	Authorship Holroyd-Leduc JM, Abelseth GA, Khandwala F, Silvius JL, Hogan DB, Schmaltz HN, Frank CB, Straus SE.	Publish Year 2010	IsPeerReviewed Yes	<b>Type</b> Journal Article
	for older community-dwelling women.	Tannenbaum C, R Drali, JM Holroyd-Leduc, L Richard	2010	Yes	Journal Article
	Validation of electronic urinary incontinence questionnaires.	Straus SE, JM Holroyd-Leduc, Orr MS	2010	Yes	Journal Article
Howlett,Jonathan	Twenty Years Beyond Heart Transplantation - Article - Clinical and Transplantation	Professor James Neuberger	2010	Yes	Journal Article
Hull,Russell	Extended-Duration Venous Thromboembolism Prophylaxis in Acutely Ill Medical Patients with Recent Reduced Mobility: A Randomized Controlled Trial.	Hull RD, Schellong SM, Tapson VF, Monreal M, Samama M, Nicol P, Vicaut E, Turpie AGG, Yusen RD.	2010	Yes	Journal Article
	Therapeutic Use of Warfarin – I.	Valentine KA, Hull RD.	2010	Yes	Journal Article
	Correcting Excess Anticoagulation After	Valentine KA, Hull RD.	2010	Yes	Journal Article
	Warfarin. Comments and Responses on Extended-Druration Venous Thromboembolism Prophylaxis for Medical Patients.	Hull RD and the EXCLAIM steering Committee.	2010	Yes	Journal Article
	Treatment of Lower Extremity Deep Vein Thrombosis.	Lip GY, Hull RD.	2010	Yes	Journal Article
	Pooled Analysis of Trials May, In the Presence of Heterogeneity Inadvertently Lead to Fragile Conclusions Due to the Importance of Clinically Relevant Variables Being Either Hidden or Lost When the Findings Are Pooled.	Hull RD, Liang J, Brant R.	2010	Yes	Journal Article
	Editorial Comment: Disorders of pulmonary circulation.	Pineo GF, Hull RD.	2010	Yes	Journal Article
	Therapeutic Use of Warfarin – II.	Valentine KA, Hull RD.	2010	Yes	Journal Article
	UpToDate, Rose, BD (Ed), UpToDate, Waltham, MA, April 2010.	Valentine KA, Hull RD. Therapeutic Use of Heparin and Low Molecular Weight Heparin-I.	2010	Yes	Journal Article
	Early Discharge of Patients with Venous Thromboembolism: Implications Regarding Therapy.	Stein PD, Hull RD, Matta F, Yaekoub AY.	2010	Yes	Journal Article
	Outpatient Management of Oral Anticoagulation.	Valentine KA, Hull RD.	2010	Yes	Journal Article
	A Consensus Conference on Complex Biologics and Low Molecular Weight Heparins.	Kalodiki E, Fareed J Tapson VF, Hoppensteadt DA, Sussman I, Carter CA, Parker S, Harenberg J, Hull RD, , Rao G, Lovinger DF, Ried LD, Kakkar A, Talarico L, Ofosu F, Bussey HI, Fanikos J, Groce JB, Skinner N, Ahluwalia M, Iqbal O, Jackson CM, Jeske WP, Geo	2010	Yes	Journal Article





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Name	Title Established Venous Thromboembolism Therapies: Heparin, Low Molecular Weight Heparins and Vitamin K Antagonists with a Discussion of Heparin- Induced Thrombocytopenia.	Authorship Pendleton RC, Rodgers GM, Hull RD.	Publish Year 2010	IsPeerReviewed Yes	<b>Type</b> Journal Article
	Outcome with Retrievable Inferior Vena Cave Filters.	Janjua M, Younas F, Moinuddin I, Badshah A, Basoor A, Yaekoub AY, Matta F, Patel KC, Liang J, Hull RD, Stein PD.	2010	Yes	Journal Article
	Aprixaban to Prevent Venous Thromboemboliam After Knee Replacement. (Editorial)		2010	Yes	Journal Article
	Delay in Translation to Home Management of Deep Venous Thrombosis.		2010	Yes	Journal Article
	UpToDate in Pulmonary and Critical Care Medicine.	Valentine KA, Hull RD. Therapeutic Use of Warfarin – I.	2010	Yes	Journal Article
	Therapeutic Use of Heparin and Low Molecular Weight Heparin-II.	Valentine KA, Hull RD.	2010	Yes	Journal Article
	Treatment of Deep Vein Thrombosis.	Lip GY, Hull RD.	2010	Yes	Journal Article
	Gadolinium- Enhanced Magnetic Resonance Angiography for Pulmonary Embolism: Results of A Multicenter Prospective Study(PIOPED III).	Stein PD, Chenevert TL, Fowler SE, Goodman LR, Gottschalk A, Hales CA, Hull RD, Jablonski KA, Leeper KV, Naidich DP, Sak DJ, Sostman HD. Tapson VF, Weg JG, Woodard PK.	2010	Yes	Journal Article
	Venous Compression in for the Prevention of Post- Thrombotic Syndrome: A Meta-analysis of Randomized Controlled Trials.	Musani MH, Matta F, Yaekoub AY, Liang J, Hull RD, Stein PD.	2010	Yes	Journal Article
	Contaminants in Heparins. Are All Facts Known? (Editorial)	Fareed J, Hoppensteadt DA, Ramacciotti E, Hull RD.	2010	Yes	Journal Article
Isaac,Debra	Cardiac Signalling Molecules Following De Novo Cardiac Transplantation.	White M, Cantin B, Haddad H, Kobashigawa J. Ross H, Ali I, Isaac D, Wang S, Pflugfelder P, Touyz R	2010	Yes	Journal Article
	The 2010 Canadian Cardiovascular Society guidelines for the diagnosis and management of heart failure update: Heart failure in ethnic minority populations, heart failure and pregnancy, disease management, and quality improvement/assurance programs.	Howlett JG, McKelvie RS, Isaac D, et al.	2010	Yes	Journal Article
James,Matthew					
	Nephrology visits and health care resource use before and after reporting estimated glomerular filtration rate.	Hemmelgarn BR, Manns BJ, James MT, Quinn RR, Ravani P, Krause R, Thorlacius L, Klarenbach SW, Culleton BF, Jain A, Zhang J, Tonelli M.	2010	Yes	Journal Article
	Cardiovascular Effects of ACE Inhibition or Angiotensin Receptor Blockade in Hemodialysis: A Meta-Analysis	Tai DJ, Lim TW, James MT, Manns BJ, Tonelli M, Hemmelgarn BR.	2010	Yes	Journal Article
	Weekend hospital admissions with acute kidney injury and mortality.	James MT, Wald R, Bell CM, Tonelli M, Hemmelgarn BR, Waikar SS, Chertow GM.	2010	Yes	Journal Article
Appendix 1	Glomerular filtration rate, proteinuria, and the incidence and consequences of acute kidney injury.	James MT, Hemmelgarn BR, Wiebe N, Pannu N, Manns BJ, Klarenbach SW, Tonelli M.	2010	Yes	Journal Article
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Name	Title Relation between acute kidney injury and long-term decline in kidney function following coronary angiography.	Authorship James MT, Ghali WA, Tonelli M, Faris P, Knudston M, Pannu N, Klarenback S, Manns BJ, Hemmelgarn BR.	Publish Year 2010	<b>IsPeerReviewed</b> Yes	<b>Type</b> Journal Article
	How to model survival of arteriovenous accesses for hemodialysis: semi-parametric or parametric methods?	Ravani P, Parfery P, MacRae J, James MT, Quinn RR, Malberti F, Brunori G, Mandolfo S, Tonelli M, Hemmelgarn BR, Manns B, Barrett B.	2010	Yes	Journal Article
	Early recognition and prevention of chronic kidney disease.	James MT, Hemmelgarn BR, Tonelli M.	2010	Yes	Journal Article
	Relation between kidney function, proteinuria, and adverse outcomes.	Hemmelgarn BR, Manns BJ, Lloyd A, James MT, Klarenbach S, Quinn RR, Wiebe N, Tonelli M.	2010	Yes	Journal Article
Jarand,Julie	Early Treatment Outcomes and HIV Status of patients with Extensively Drug- Resistant Tuberculosis in South Africa: a retrospective cohort study.	Dheda K, Shean K, Zumla A, Badri M, Streicher EM, Page- Shipp L, Willcox P, John MA, Reubenson G, Govindasamy D, Wong M, Padanilam X, Dziwiecki A, van Helden PD, Siwendu S, Jarand J, Menezes CN, Burns A, Victor T, Warren R, Grobusch MP, van der Walt M, Kv	2010	Yes	Journal Article
	High Incidence of Multidrug Resistant and Extensively Drug Resistant Tuberculosis among South African Health Care Workers	O'Donnell M, Jarand J, Loveday M, Padayatchi N, Zelnick J, Werner L, Naidoo K, Master I, Osburn G, Shean K, Pai M, Van der Walt M, Horsburgh CR, Dheda K.	2010	Yes	Journal Article
	Extensively drug-resistant tuberculosis (XDR-TB) among health care workers in South Africa.	Jarand J, Shean K, Loveday M, Kvasnovsky C, Van der Walt M, Adams S, Willcox P, O'Grady J, Zumla A, Dheda K.	2010	Yes	Journal Article
Johnson,Andrew	Renal failure five years after lung transplantation due to polyomavirus BK-associated nephropathy.	Egil A, Helmersen DS, Taub K, Hirsch HH, Johnson A.	2010	Yes	Journal Article
Jones,Charlotte	The 2010 Canadian Hypertension Education Program Recommendations for the Management of Hypertension: Part 2 – Therapy	Daniel G. Hackam, Nadia A. Khan, Brenda R. Hemmelgarn, et al.	2010	Yes	Journal Article
	Mammographic density changes with one year of aerobic exercise among postmenopausal women: a randomized controlled trial.	Woolcott CG, Courneya KS, Boyd NF, Yaffe MJ, Terry T, McTiernan A, Brant R, Ballard-Barbash R, Irwin ML, Jones CA, Brar S, Campbell KL, McNeely ML, Karvinen KH, Friedenreich CM	2010	Yes	Journal Article
	The Alberta Physical Activity and Breast Cancer Prevention Trial: Sex Hormone Changes in a Year-long Exercise Intervention among Postmenopausal Women.	Karvinen, Qinggang Wang, Kerry S. Courneya. Friedenreich CM, Woolcott CG, McTiernan A, Ballard-Barbash R, Brant RF, Stanczyk FZ, Terry T, Boyd NF, Yaffe MJ, Irwin ML, Jones CA, Yasui Y, Campbell KL, McNeely ML, Karvinen KH, Wang Q, Courneya KS.	2010	Yes	Journal Article
	Prevalence and Associated Risk Factors for Secondary Diabetes in Canadian Children."	Josephine Ho, Elizabeth Sellers, Heather Dean, Stasia Hadjiyannakis, Arati Mokashi, Reg Sauve, Charlotte Jones, Danièle Pacaud.	2010	Yes	Journal Article





Name	Title Adiposity changes after a 1- year aerobic exercise intervention among postmenopausal women: a randomized controlled trial.	Authorship 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	Publish Year 2010	<b>IsPeerReviewed</b> Yes	<b>Type</b> Journal Article
Kaplan,Gilaad	The risk of comorbidities on postoperative outcomes in inflammatory bowel disease patients.	Kaplan GG, Hubbard J, Panaccione R, Shaheen AM, Quan H, Nguyen GC, Dixon E, Ghosh S, and Myers RP.		Yes	Journal Article
	Environmental risk factors for inflammatory bowel disease.	Molodecky NA, Kaplan GG.	2010	Yes	Journal Article
	Viral infections in the anti- tumour necrosis factor therapy era in inflammatory bowel diseases.	Shale M, Seow C, Coffin C, Kaplan GG, Panaccione R, and Ghosh S.	2010	Yes	Journal Article
	The Inflammatory Bowel Diseases and Ambient Air Pollution: A Novel Association.	Kaplan GG, Hubbard JN, Korzenik J, Sands BE, Panaccione R, Ghosh S, Wheeler AJ, and Villeneuve P.	2010	Yes	Journal Article
	Appropriateness of concomitant immunomodulators with anti- TNF agents for Crohn's disease.	Melmed GY, Spiegel BM, Bressler B, Cheifetz AS, Devlin SM, Harrell LE, Irving PM, Jones J, Kaplan GG, Kozuch PL, Velayos FS, Baidoo L, Sparrow MP, and Siegel CA.	- 2010	Yes	Journal Article
	Ambient ozone and emergency department visits for cellulitis.	Szyszkowicz M, Eugeniusz Porada, Kaplan GG, Rowe BH.	2010	Yes	Journal Article
	Anti-tumor necrosis factor therapy and influenza: keeping it in perspective.	Shale M, Czub M, Kaplan GG, g Panaccione R, and Ghosh S.	2010	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.	2010	Yes	Journal Article
Kavanagh,Katherine	A multicenter, open-label study of vernakalant for the conversion of atrial fibrillation to sinus rhythm.	Stiell IG, Roos JS, Kavanagh KM, Dickinson G.	2010	Yes	Journal Article
	Attenuated recovery of heart rate turbulence early after myocardial infarction identifies patients at high risk for fatal or near-fatal arrhythmic events.	Huikuri HV, Exner DV, Kavanagh KM, Aggarwal SG, Mitchell LB, Messier MD, Becker D, Sheldon RS, Bloch Thomsen PE; CARISMA and REFINE Investigators.	2010	Yes	Journal Article
Kealey,Angela	Coronary artery disease and myocardial infarction in pregnancy: a review of epidemiology, diagnosis, and medical and surgical management.	Angela Kealey	2010	Yes	Journal Article
Kim,Joseph	Time to blood culture positivity in Staphylococcus aureus bacteremia: association with 30-day mortality	Kim J, Gregson DB, Ross T, Laupland KB	2010	Yes	Journal Article





Name	Title Changing epidemiology of methicillin-resistant Staphylococcus aureus in Alberta, Canada: population- based surveillance, 2005-2008	Authorship Kim J, Ferrato C, Golding GR, Mulvey MR, Simmonds KA, Svenson LW, Keays G, Chui L, Lovgren M, Louie M	Publish Year 2010	<b>IsPeerReviewed</b> Yes	<b>Type</b> Journal Article
Kline,Gregory	Physical Activity for Men Receiving Androgen Deprivation Therapy for Prostate Cancer: Benefits from a 16 Week Intervention.	S. Nicole Culos-Reed, John W. Robinson, Harold Lau, Lynette Stephenson, Melanie Keats, Steve Norris, Greg Kline, & Peter Faris.	2010	Yes	Journal Article
	Hypoglycaemia following upper gastrointestinal surgery: case report and review of the literature.	Bernard B, Kline GA and Service FJ	2010	Yes	Journal Article
	Rare Causes of Calcitriol Mediated Hypercalcemia: A Case Report and Literature Review.	Kallas M, Green F, Hewison M, White C, Kline GA.	2010	Yes	Journal Article
	Errors in patient perception of caloric deficit required for weight loss – observations from the Diet Plate Trial.	Kline GA, Pederson SD.	2010	Yes	Journal Article
	Addison's Disease Presenting With Acute Neurologic Deterioration: A Rare Presentation Yields New Lessons From Old Observations in Primary	Myers KA, Kline GA	2010	Yes	Journal Article
	Adrenal Failure. Vitamin D in adult health and disease: a review and guideline statement from Osteoporosis Canada.	Hanley DA, Cranney A, Jones G, Whiting SJ, Leslie WD, Cole DE, Atkinson SA, Josse RG, Feldman S, Kline GA, Rosen C.	2010	Yes	Journal Article
Knudtson,Merril	Association of Median Household Income with Burden of Coronary Artery Disease among Individuals with Diabetes	Rabi DM, Edwards AL, Svenson LW, Graham MM, Knudtson ML, Ghali WA	2010	Yes	Journal Article
	Access to primary percutaneous coronary intervention for ST-segment elevation myocardial infarction in Canada: a geographic analysis	Patel AB, Tu JV, Water NM, Ko DT, Eisenberg MJ, Huynh T, Rinfret S, Knudtson M, Ghali WA	2010	Yes	Journal Article
	Time of Day and Outcomes of Non-Urgent Percutaneous Coronary Intervention Performed During Working Hours	Cantor WJ, Strauss BH, Graham MM, Southern DA, Woo K, Tyrell B, Knudtson M, Ghali WA	2010	Yes	Journal Article
	Effect of beta-blocker use on outcomes after discharge in patients who underwent cardiac surgery	Chan AY, McAlister FA, Norris CM, Johnstone D, Bakal JA, Ross DB (Knudtson ML)	2010	Yes	Journal Article
	A Proposed Clinical Model for Efficient Utilization of Invasive Coronary Angiography	Taylor CM, Humphries KHH, Pu A, Ghali WA, Gao M, Knudtson M, Hoffman U, Carere RG	2010	Yes	Journal Article
	A Spatial Analysis of the Demographic and Socio- economic Variables Associated with Cardiovascular Disease in Calgary (Canada)	Bertazzon S, Olson S, Knudtson ML	2010	Yes	Journal Article
	Invasive cardiac procedure use and mortality among South Asian and Chinese Canadians with coronary artery disease	Quan H, Khan N, Li B, Humphries KH, Faris P, Galbraith PD, Graham M, Knudtson ML, Ghali WA	2010	Yes	Journal Article
Appendix 1	Acute kidney injury following coronary angiography is associated with a long-term decline in kidney function	James MT, Ghali WA, Tonelli M, Faris P, Knudtson ML, Pannu N, Klarenbach SW, Manns BJ, Hemmelgarn BR	2010	Yes	Journal Article





Name	Title Timing of nonemergent coronary artery bypass grafting and mortality after non-ST elevation acute coronary syndrome	Authorship Deyell MW, Ghali WA, Ross DB, Zhang J, Hemmelgarn BR (Knudtson ML)	Publish Year 2010	IsPeerReviewed Yes	Type Journal Article
	Resource use in the last 6 months of life among patients with heart failure in Canada	Kaul P, McAlister FA, Ezekowitz JA, Bakal JA, Curtis LH, Quan H, Knudtson ML, Armstrong PW	2010	Yes	Journal Article
	Intensive multifactorial intervention for stable coronary artery disease: optimal medical therapy in the COURAGE (Clinical Outcomes Utilizing Revascularization and Aggressive Drug Evaluation) trial	Maron, DJ, Boden WE, O'Rourke RA, Hartigan PM, Calfas KJ, Mancini GB, Spertus JA, Dada M, Kostuk WJ, Knudtson M, Harris CL, Sedlis SP, Zoble RG, Title LM, Gosselin G, Nawaz S, Gau GT, Blaustein AS, Bates ER, Shaw LJ, Berman DS, Chaitman BR, Weintraub WS,	2010	Yes	Journal Article
	A randomized controlled, phase 2 trial of the viral serpin Serp-1 in patients with acute coronary syndromes undergoing percutaneous coronary intervention	Tardif JC, L'Allier PL, Grégoire J, Ibrahim R, McFadden G, Kostuk W, Knudtson ML, Labinaz M, Waksman R, Pepine CJ, MacAulay C, Guertin MC, Lucas A		Yes	Journal Article
Lau,David					
2	Surgical options for people with type 2 diabetes: A review of current and emerging therapies.	Lau DCW	2010	Yes	Journal Article
	Long-term dietary restriction influences plasma ghrelin and gastric GOAT mRNA level in rats	Reimer RA, Maurer AD, Lau DCW, Auer RN	2010	Yes	Journal Article
	Bulimia nervosa (annual update)	Lau DCW, Birmingham LC	2010	Yes	Journal Article
	Reasons for failing to initiate	Padwal RS, Damjanovic S, Schulze K, Lewanczuk RZ, Lau DCW, Sharma AM	2010	Yes	Journal Article
	Identification and Management of Cardiometabolic risk in Canada-a position paper by the Cardiometabolic Risk Working Group (Executive Summary)	Cardiometabolic Risk Working Group	2010	Yes	Journal Article
	•	Southern DA, Roberts B, Edwards A, Dean S, Norton P, Svenson LW, Larsen E, Sargious P, Lau DCW, Ghali WA	2010	Yes	Journal Article
	Facilitating access to evidence- based weight management in Canada: a consensus	Tytus R, Clarke C, Duffy K, KrawchenkoI, Lau DCW, Smiley T, Sharma AM	2010	Yes	Journal Article
	Identification and Management of Cardiometabolic risk in Canada-a position paper by the Cardiometabolic Risk Working Group	Cardiometabolic Risk Working Group	2010	Yes	Journal Article
	Diabetes and weight management	Lau DCW	2010	Yes	Journal Article
	-	Plotnikoff R, Courneya KS, Sigal RJ, Johnson JA, Birkett N, Lau D, Raine K, Johnson ST, Karunamuni N	2010	Yes	Journal Article

evaluation, and dissemination

## Laupland,Kevin





<b>Title</b> Admission to hospital with community-onset bloodstream infection during the "after hours" is not associated with an increased risk for death.	Authorship Laupland KB.	Publish Year 2010	<b>IsPeerReviewed</b> Yes	<b>Type</b> Journal Article
International Bacteremia Surveillance Collaborative. Salmonella enterica bacteraemia: A multi-national population-based study.	Laupland KB, Schønheyder HC, Kennedy KJ, Lyytikäinen O, Valiquette L, Galbraith J, Collignon P.	2010	Yes	Journal Article
The impact of country and culture on end-of-life care for injured patients: results from an international survey.	Ball CG, Navsaria P, Kirkpatrick AW, Vercler C, Dixon E, Zink J, Laupland KB, Lowe M, Salomone JP, Dente CJ, Wyrzykowski AD, Hameed SM, Widder S, Inaba K, Ball JE, Rozycki GS, Montgomery SP, Hayward T, Feliciano DV.	2010	Yes	Journal Article
A decade of experience with injuries to the gallbladder.	Ball CG, Dixon E, Kirkpatrick AW, Sutherland FR, Laupland KB, Feliciano DV.	2010	Yes	Journal Article
Ten years of all-terrain vehicle (ATV) injury, mortality, and healthcare costs.	e Krauss EM, Dyer DM, Laupland KB, Buckley R.	2010	Yes	Journal Article
Early combination antibiotic therapy yields improved survival compared with monotherapy in septic shock: A propensity-matched analysis.	Kumar A, Zarychanski R, Light B, Parrillo J, Maki D, Simon D, Laporta D, Lapinsky S, Ellis P, Mirzanejad Y, Martinka G, Keenan S, Wood G, Arabi Y, Feinstein D, Kumar A, Dodek P, Kravetsky L, Doucette S, the Cooperative Antimicrobial Therapy of Septic Shoc	2010	Yes	Journal Article
Long-term mortality outcome of victims of major trauma.	Laupland KB, Svenson LW, Grant V, Ball CG, Mercado M, Kirkpatrick AW.	2010	Yes	Journal Article
Temporal artery versus bladder thermometry during adult medical-surgical intensive care monitoring. An observational study.	Stelfox HT, Straus SE, Ghali W, Laupland KB, Lewin A.	2010	Yes	Journal Article
Time to blood culture positivity in Staphylococcus aureus bacteremia: Association with 30-day mortality.	Kim J, Gregson DB, Ross T, Laupland KB.	2010	Yes	Journal Article
•	Kirkpatrick AW, Pelosi P, De Waele J, Malbrain ML, Ball CG, Meade MO, Stelfox HT, Laupland KB.	2010	Yes	Journal Article
Cost and outcome of nosocomial bloodstream infections complicating major traumatic injury.	Niven DJ, Fick GH, Kirkpatrick AW, Grant V, Laupland KB.	2010	Yes	Journal Article
Development of a novel surveillance system for monitoring bloodstream infections.	Leal J, Gregson DB, Ross T, Flemons WW, Church DL, Laupland KB.	2010	Yes	Journal Article
Characterization of intensive care unit acquired hyponatremia and hypernatremia following cardiac surgery.	Stelfox HT, Ahmed SB, Zygun DA, Khandwala F, Laupland KB.	2010	Yes	Journal Article
Long-term mortality outcome of victims of major trauma.	Laupland KB, Svenson LW, Grant V, Ball CG, Mercado M, Kirkpatrick AW.	2010	Yes	Journal Article
A population-based study of pyogenic liver abscesses in the United States: incidence, mortality, and temporal trends	Meddings L, Myers RP, Hubbard e J, Shaheen AA, Laupland KB, Dixon E, Coffin C, Kaplan GG.	2010	Yes	Journal Article





Name	Title Population-based study of the epidemiology and the risk factors for Pseudomonas aeruginosa bloodstream infection.	Authorship Parkins MD, Gregson DB, Pitout JDD, Ross T, Laupland KB.	Publish Year 2010	<b>IsPeerReviewed</b> Yes	<b>Type</b> Journal Article
	Validity of ascertainment of co-morbid illness using administrative databases for observational infectious diseases research: A systematic review.	Leal JR, Laupland KB.	2010	Yes	Journal Article
	Clinical outcome of empiric antimicrobial therapy of bacteremia due to extended- spectrum beta-lactamase producing Escherichia coli and Klebsiella pneumoniae.	Chaubey VP, Pitout JDD, Dalton B, Ross T, Church DL, Gregson DB, Laupland KB.	2010	Yes	Journal Article
LeClercq,Sharon					
	Canadian Recommendations for Use of Methotrexate in Patients with Rheumatoid Arthritis	W. Katchamart, J. Bourre-Tessier, T. Donka, J. Drouin, G. Rohekar, V. P. Bykerk, B. Haraoui, S. LeClercq, D. P. Mosher, J. E. Pope, K. Shojania, J. Thomson, J. C. Thorne, C. Bombardier, and the Canadian 3e Initiative Consensus Group	2010	Yes	Journal Article
	Sex Differences in Pain Level and Location in Inflammatory Arthritis: A Systemic Review and Meta-Analysis.	Barnabe C, Bessette L, Flanagan C, LeClercq S, Bykerk V.	2010	Yes	Journal Article
Lee,Samuel					
	Long-term entecavir therapy results in the reversal of fibrosis/cirrhosis and continued histological improvement in patients with chronic hepatitis B.	Chang TT, Liaw YF, Wu SS, Schiff E, Han KH, Lai CL, Safadi R, Lee SS, Halota W, Goodman Z, Chi YC, Zhang H, Hindes R, Iloeje U, Beebe S, Kreter B.	2010	Yes	Journal Article
	Identifying HCV genotype 1 patients at risk of relapse.	Deschenes M, Bain VG, Lee SS, Sherman M, Cooper CL, Yoshida EM, Marotta PJ, Krajden M, Balshaw R, Peltekian K.	2010	Yes	Journal Article
	Hemodynamics in the immediate post- transplantation period in alcoholic and viral cirrhosis.	Al-Hamoudi W, Al-Qahtani S, Tandon P, Ma M, Lee SS.	2010	Yes	Journal Article
	Hemodynamic alterations in cirrhosis and portal hypertension.	Kim MY, Baik SK, Lee SS.	2010	Yes	Journal Article
		Yang YY, Liu H, Nam SW, Kunos G, Lee SS.	2010	Yes	Journal Article
	Entecavir treatment for up to 5 years in patients with Hepatitis B e-antigen positive chronic hepatitis B.	Chang TT, Lai CL, Yoon SK, Lee SS, Coelho HS, Carrilho FJ, Poordad F, Halota W, Horsmans Y, Tsai N, Zhang H, Tenney DJ, Tamez R, Iloeje U.	2010	Yes	Journal Article
	Refractory ascites: definition, pathogenesis and treatment of a severe complication in cirrhotic patients.	Salerno F, Guevara M, Bernardi M, Moreau R, Wong F, Angeli P, Garcia-Tsao G, Lee SS.	2010	Yes	Journal Article
	Pay now or pay (more) later: tracking the costs of hepatitis C infection.	Myers RP, Lee SS.	2010	Yes	Journal Article
Leigh,Richard					





Name	Title Canadian Thoracic Society Asthma Management Continuum - 2010 Consensus Summary for children six years of age and over, and adults.	Authorship Lougheed MD, Lemière C, Dell SD, Ducharme FM, Fitzgerald JM, Leigh R, Licskai C, Rowe BH, Bowie D, Becker A, Boulet LP.	Publish Year 2010	IsPeerReviewed Yes	<b>Type</b> Journal Article
	Human rhinovirus infection up-regulates MMP-9 production in airway epithelial cells via NFkB.	Tacon CE, Wiehler S, Holden NS, Newton R, Proud D, Leigh R.	2010	Yes	Journal Article
		Newton R, Leigh R, Giembycz MA.	2010	Yes	Journal Article
	Effects of cardio-respiratory fitness and cerebral blood flow on cognitive outcomes in older women	Brown AD, McMorris CA, Longman RS, Leigh R, Hill MD, Friedenreich CM, Poulin MJ.	2010	Yes	Journal Article
	Effects of budesonide/formoterol on allergen-induced airway responses, inflammation and	Kelly MM, O'Connor TM, Leigh R, Otis J, Gauvreau GM, Gauldie J, O'Byrne PM.	2010	Yes	Journal Article
	remodeling. Omalizumab: practical considerations regarding the	Kim H, Leigh R, Becker A	2010	Yes	Journal Article
	risk of anaphylaxis. Canadian Thoracic Society Asthma Committee commentary on long-acting beta-2 agonist use for asthma in Canada.	Lougheed M, Lemiere C, Dell S, Ducharme F, Fitzgerald J, Leigh R, Licskai C, Rowe B, Bowie D, Becker A, Boulet LP.	2010	Yes	Journal Article
Lemaire,Jane					
	Physician Nutrition and Cognition During Work Hours: Effect of a Nutrition Based Intervention	Lemaire JB, Wallace JE, Dinsmore Kelly, Lewin Adriane, Ghali WA, Roberts Delia	2010	Yes	Journal Article
	The Introduction of an Electronic Patient Care Information System and Health Care Providers' Job Stress: A Mixed-Methods Case Study	Wallace JE, Friesen S, White D, Gilmour J, Lemaire JB	2010	Yes	Journal Article
	Not all coping strategies are created equal: a mixed methods study exploring physicians' self reported coping strategies.	Lemaire JB, Wallace JE	2010	Yes	Journal Article
Leung,Alexander	Misrepresentation by trainees: a serious threat to professionalism.	Leung AA.	2010	Yes	Journal Article
	The "July phenomenon": fact	Leung AA, Fisher BW.	2010	Yes	Journal Article
	or fiction. Surveying the medical literature: five notable articles in general internal medicine from 2008 and 2009.	Leung AA, Ghali WA.	2010	Yes	Journal Article
Ma,Irene					
1718,11 CHC	Procedural teaching tree to aid resident doctor peer-teachers	Ma IWY, Roberts JM, Wong RY, Nair P	2010	Yes	Journal Article
	Use of simulator-based medical procedural curriculum: the learner's perspectives	Shanks D, Wong RY, Roberts JM, Nair P, Ma IWY	2010	Yes	Journal Article
	Impact of target blood gases on outcome in congenital diaphragmatic hernia (CDH).	Brindle ME, Ma IW, Skarsgard ED.	2010	Yes	Journal Article

## MacEachern,Paul





Name	<b>Title</b> Repair Costs for Endobronchial Ultrasound Bronchoscopes	Authorship Christopher Hergott, Paul MacEachern, David Stather, Alain Tremblay	Publish Year 2010	<b>IsPeerReviewed</b> Yes	<b>Type</b> Journal Article
MacRae,Jennifer	Utilization and outcome of "out of Center Hemodialysis" in the United States: A Contemporary Analysis	MacRae JM, Rose CL, Jaber BL, Gill JS	2010	Yes	Journal Article
	A simple method to create buttonhold cannulation tracks in a busy hemodialysis unit	Tai D, Daniw M, Lee J, MacRae, JM	2010	Yes	Journal Article
	Utilization and Outcomes of Out-of-Center Hemodialysis in the United sTates	MacRae JM, Jaber B, Rose C and Gill J	2010	Yes	Journal Article
	Biofilm in Hemodialysis Catheters	Jones S, Hemmelgarn B, Muruve D, MacRAe JM	2010	Yes	Journal Article
Manns,Braden	Dialysate potassium and risk of death in chronic hemodialysis patients.	Al-Ghamdi G, Hemmelgarn B, Klarenbach S, Manns B, Wiebe N, Tonelli M; Alberta Kidney Disease Network.	2010	Yes	Journal Article
	Colorectal cancer screening for average risk North Americans: an economic	Heitman S, Hilsden R, Au F, Dowden S, Manns B.	2010	Yes	Journal Article
	evaluation. Barriers to living kidney donation identifed by eligible candidates with end-stage renal disease.	Barnieh L, McLaughlin K, Manns BJ, Klarenbach S, Yilmaz S, Hemmelgarn BR; for the Alberta Kidney Disease Network.	2010	Yes	Journal Article
	Relation between kidney function, proteinuria and adverse outcomes.	Hemmelgarn B, Manns B, Lloyd A, James MT, Klarenbach S, Quinn R, et al.	2010	Yes	Journal Article
	Drug Therapy Article: Oral Phosphate Binders in Patients with Kidney Failure.	Tonelli M, Pannu N, Manns B.	2010	Yes	Journal Article
	Nephrology visits and health care resource use before and after reporting estimated glomerular filtration rate.	Hemmelgarn BR, Zhang J, Manns BJ, James MT, Quinn RR, Ravani P, Klarenbach SW, Culleton BF, Krause R, Thorlacius L, Jain AK, Tonelli M.	2010	Yes	Journal Article
	Cardiovascular effects of angiotensin converting enzyme inhibition or angiotensin receptor blockade in hemodialysis: a meta- analysis.	Tai DJ, Lim TW, James MT, Manns BJ, Tonelli M,Hemmelgarn B; Alberta Kidney Disease Network.	2010	Yes	Journal Article
	Effects of exercise training on physical impairment, arterial stiffness and health-related quality of life in patients with ESRD.	Mustata S, Groeneveld S, Davidson W, Ford G, Kiland K, Manns B.	2010	Yes	Journal Article
	Glomerular filtration rate, proteinuria, and the incidence and consequences of acute kidney injury: a cohort study.	James MT, Hemmelgarn BR, Wiebe N, Pannu N, Manns BJ, Klarenbach SW, Tonelli M; Alberta Kidney Disease Network.	2010	Yes	Journal Article
	Nonmedical costs of colorectal cancer screening using CT colonography.	Heitman SJ, Au F, Manns BJ, Pattison P, Hilsden RJ.	2010	Yes	Journal Article
	An economic evaluation of erythropoiesis-stimulating agents in CKD.	Clement FM, Klarenbach S, Tonelli M, Wiebe N, Hemmelgarn B, Manns BJ.	2010	Yes	Journal Article
	Economic evaluation of erythropoiesis-stimulating agents for anemia related to cancer.	Klarenbach SW, Manns BJ, Reiman T, Reaume MN, Lee H, Lloyd A, Wiebe N, Hemmelgarn BR, Tonelli M.	2010	Yes	Journal Article





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Name	Title Canadian Society of Nephrology commentary on the 2009 KDIGO Clinical Practice Guideline for the Diagnosis, Evaluation and Treatment of CKD-Mineral and Bone Disorder (CKD- MBD).	Authorship Manns BJ, Hodsman A, Zimmerman DL, Mendelssohn DC, Soroka SD, Chan C, Jindal K, Klarenbach S.	Publish Year 2010	<b>IsPeerReviewed</b> Yes	<b>Type</b> 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; the Alberta Kidney Disease Network.	2010	Yes	Journal Article
	Association between routine and standardized blood pressure measurements and left ventricular hypertrophy among patients on hemodialysis.	Khangura J, Culleton BF, Manns BJ, Zhang J, Barnieh L, Walsh M, Klarenbach SW, Tonelli M, Sarna M, Hemmelgarn BR; Alberta Kidney Disease Network.	2010	Yes	Journal Article
	Colorectal cancer screening for average risk North Americans: an economic evaluation.	Heitman S, Hilsden R, Au F, Dowden S, Manns B.	2010	Yes	Journal Article
	Acute kidney injury following coronary angiography I associated with a long-term decline in kidney function.	James MT, Ghali WA, Tonelli M, Faris P, Knudtson ML, Pannu N, Klarenbach SW, Manns BJ, Hemmelgarn B.	2010	Yes	Journal Article
	Modeling survival of arteriovenous accesses for hemodialysis: semiparametric versus parametric methods.	Parfrey P, MacRae J, James M, Quinn R, Malberti F, Brunori G, Mandolfo S, Tonelli M, Hemmelgarn B, Manns B, Barrett B.	2010	Yes	Journal Article
	Practice pattern variation in oral glucocorticoid therapy after the induction of response in proliferative lupus nephritis.	Walsh M, Jayne D, Moist L, Tonelli M, Pannu N, Manns B.	2010	Yes	Journal Article
	-	Walsh M, Sar A, Lee D, Yilmaz S, Benediktsson H, Manns B, Hemmelgarn B.	2010	Yes	Journal Article
	Governments, pay for smoking cessation.	Penz ED, Manns B, Hebert PC, Stanbrook MB.	2010	Yes	Journal Article
	The cost-effectiveness of population-based chronic kidney disease screening,	Manns B, Hemmelgarn B, Tonelli M, Chiasson C, Au F, Dong J, Klarenbach S.	2010	Yes	Journal Article
McLaughlin,Kevin	Training the endoscopy trainer: from general principles to specific concepts. Can J Gastroenterol.	Coderre S, Anderson J, Rostom A, McLaughlin K.	2010	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.	2010	Yes	Journal Article
	It's good to think: querying an initial hypothesis reduces diagnostic error in medical students.	Coderre S, Wright B, McLaughlin K.	2010	Yes	Journal Article
	Early use of magnetic endoscopic imaging by novice colonoscopists: improved performance without increase in workload.	Coderre S, Anderson J, Rikers R, Dunckley P, Holbrook K, McLaughlin K.	2010	Yes	Journal Article
	Assessment of chronic renal allograft nephropathy using contrast-enhanced MRI: a pilot study.	Pereira RS, Gonul II, McLaughlin K, Yilmaz S, Mahallati H.	2010	Yes	Journal Article
	Does Applying Biomedical Knowledge Improve Diagnostic Performance When Solving Electrolyte Problems?	McLaughlin K, Novak K, Rikers RM, Schmidt HG.	2010	Yes	Journal Article





Name	<b>Title</b> A description of the costs of living and standard criteria deceased donor kidney transcelutation	<b>Authorship</b> Barnieh L, Manns BJ, Klarenbach S, McLaughlin K, Yilmaz S, Hemmelgarn BR.	Publish Year 2010	<b>IsPeerReviewed</b> Yes	<b>Type</b> Journal Article
	transplantation. Criteria for referring patients with renal disease for nephrology consultation: a review of the literature.	De Coster C, McLaughlin K, Noseworthy TW.	2010	Yes	Journal Article
	Virtual patients: ED-2 band- aid or a valuable asset in the learning portfolio?	Tworek J, Coderre S, Wright B, McLaughlin K.	2010	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.	2010	Yes	Journal Article
	Students' perceptions of the evaluation process dominate the overall rating of a course.	Woloschuk W, Coderre S, Wright B, McLaughlin K.	2010	Yes	Journal Article
	The effect of gender interactions on students' physical examination ratings in objective structured clinical examination stations.	Carson J, Peets A, Grant V, McLaughlin K.	2010	Yes	Journal Article
	The KRESCENT Program: an initiative to match supply and demand for kidney research in Canada.		2010	Yes	Journal Article
	Teaching in Small Portions Enhances Long-Term Knowledge Retention.	Raman M, McLaughlin K, Violato C, Rostom A, Coderre S.	2010	Yes	Journal Article
	A prospective randomized trial of content expertise versus process expertise in small group teaching.	Peets AD, Cooke L, Wright B, Coderre S, McLaughlin K.	2010	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.	2010	Yes	Journal Article
	University of Calgary Faculty of Medicine.	Coderre S, Woloschuk W, Tworek J, Veale P, McIlwrick J, Wright B, McLaughlin K.	2010	Yes	Journal Article
	Is undergraduate performance predictive of postgraduate performance?	Woloschuk W, McLaughlin K, Wright B.	2010	Yes	Journal Article
	Debiasing the hidden curriculum: academic equality among medical specialties.	Woloschuk W, Wright B, McLaughlin K.	2010	Yes	Journal Article
Meddings,Jonathan	The Rate of Bloodstream Infection is High in Infants with Short Bowel Syndrome: Relationship with Small Bowel Bacterial Overgrowth, Enteral Feeding, and Inflammatory and Immune Responses.	Cole CR, Frem JC, Schmotzer B, Gewirtz AT, Meddings JB, Gold BD, Ziegler TR	2010	Yes	Journal Article
	Naturally Occurring Glycoalkaloids in Potatoes Aggravate Intestinal Inflammation in Two Mouse Models of Inflammatory Bowel Disease	Iablokov V, Sydora BC, Foshaug R, Meddings J, Driedger D, Churchill T, Fedorak RN	2010	Yes	Journal Article
Mitchell,Lorne	Dabigatran compared with warfarin in patients with atrial fibrillation and previous transient ischemic attack or stroke: a subgroup analysis of the RE-LY Trial.	Diener HC, Connolly SJ, Ezekowitz MD, Wallentin L, Reilly PA, Yang S, Xavier D, Di Pasquale G, Yusuf S, RE-LY Study Group.	2010	Yes	Journal Article





Name	Title Recent history of vasovagal syncope in a young, referral- based patient population is a stronger predictor of recurrent syncope than lifetime syncope burden.	Authorship Sumner GL, Rose MS, Koshman ML, Richie D, Sheldon RS, POST Investigators.	Publish Year 2010	IsPeerReviewed Yes	<b>Type</b> Journal Article
	Newly identified events in the RE-LY Trial.	Connolly SJ, Ezekowitz MD, Yusuf S, Reilly PA, Wallentin L, RE-LY Investigators.	2010	Yes	Journal Article
	In a subgroup of high-risk Asians, telmisartan was non- inferior ro ramipril and better tolerated in the prevention of cardiovascular events.	Dans AL, Teo K, Gao P, Chen JH, Jae-Hyung K, Yusoff K, Chaithiraphan S, Zhu J, Lisheng L, Yusuf S, ONTARGET Investigators.		Yes	Journal Article
	Timing of nonemergent coronary artery bypass grafting and mortality after non-ST elevation acute coronary syndrome.	Deyell MW, Ghali WA, Ross DB, Zhang J, Hemmelgarn BR, APPROACH Investigators.	2010	Yes	Journal Article
	Association of median household income with burden of coronary artery disease among individuals with diabetes.	Rabi DM, Edwards AL, Svenson LW, Graham MM, Knudtson ML, Ghali WA, APPROACH Investigators.	2010	Yes	Journal Article
	Dabigatran and warfarin in vitamin K antagonist-naïve and –experienced cohorts with atrial fibrillation.	Ezekowitz MD, Wallentin L, Connolly SJ, Parekh A, Chernick MR, Pogue J, Aikens TH, Yang S, Reilly PA, Lip GY, Yusuf S, RE- LY Investigators.	2010	Yes	Journal Article
	Efficacy and safety of dabigatran compared with warfarin at different levels of international normalized ratio control for stroke prevention in atrial fibrillation: an analysis of the RE-LY trial.	Wallentin L, Yusuf S, Ezekowitz MD, Alings M, Flather M, Franzosi MG, Pais P, Dans A, Eikelboom J, Oldgren J, Pogue J, Reilly PA, Yang S, Connolly SJ, RE-LY Investigators.	2010	Yes	Journal Article
	Canadian registry of ICD testing procedures (CREDIT): current practice, risks and costs of intra-operative defibrillation testing.	Healey JS, Dorian P, Mitchell LB, Talajic M, Philippon F, Simpson C, Yee R, Morillo CA, Lamy A, Basta M, Birnie DH, Wang X, Girish GN, Crystal E, Kerr CR, Connolly SJ, CREDIT Investigators.	2010	Yes	Journal Article
	Erectile dysfunction predicts cardiovascular events in high- risk patients receiving telmisartan, ramipril, or both: the ONTARGET/TRANSCEND trials.	Böhm M, Baumhäkel M, Teo K, Sleight P, Probsfield J, Gao P, Mann JF, Diaz R, Dagenais GR, Jennings GL, Liu L, Jansky P, Yusuf S, ONTARGET/TRANSCEND Investigators.	2010	Yes	Journal Article
	Attenuated recovery of heart rate turbulence early after myocardial infarction identifies patients at high risk for fatal or near-fatal arrhythmic events.	Huikuri HV, Exner DV, Kavanagh KM, Aggarwal SG, Mitchell LB, Messier MD, Becker D, Sheldon	2010	Yes	Journal Article
Mody, Christopher					
••• • • ·	Real-time imaging of trapping and urease-dependent transmigration of Cryptococcus in the brain.	Shi, M., Li, S.S., Zheng, C.F., Jones GJ, Kim, K. S., Zhou, H., Kubes, P., Mody, C.H.	2010	Yes	Journal Article
	Granulysin production and anticryptococcal activity is dependent upon a far upstream enhancer that binds STAT5 in human peripheral blood CD4+ T cells.	Xing,J., Wu, F., Krensky, A.M., Mody, C.H. Zheng, C.	2010	Yes	Journal Article
	Direct microbicidal activity of cytotoxic T-lymphocytes		2010	Yes	Journal Article
	Cryptococcus	Li, S.S., Mody, C.H.,	2010	Yes	Journal Article





Name	Title Management of fungal lung disease in the immunocompromised	Authorship Islam, A., Mody, C.H.	Publish Year 2010	<b>IsPeerReviewed</b> Yes	<b>Type</b> Journal Article
Muruve,Daniel	Hypoxia Inducible Factor (HIF-la) plays a critical innate protective role in clostridium difficile (Cdif) toxin-induced intestinal injury and inflammation.	Hirota SA, Fines K, Ng J, Traboulsi D, Lee J, Ihara E, Li Y, Willmore WG, Chung D, Scully M, Louie T, Medlicott S, Lejeune M, Chadee K, Armstrong GD, Colgan SP, Muruve DA, MacDonald JA, Beck PL.	2010	Yes	Journal Article
	The Nlrp3 inflammasome regulates renal inflammation and contributes to chronic kidney disease.	Vilaysane A, Chun J, Seamone JE, Wang W, Chin R, Hirota SA, Li Y, Clark SA, Trykov K, Hemmelgarn BR, Beck PL, Muruve DA.		Yes	Journal Article
	The NLRP3 inflammasome plays key role in the regulation of intestinal homeostasis.	Hirota SA, Ng J, Lueng 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.		Yes	Journal Article
	MAP Kinase Activation Increases BK Polyomavirus Replication and Facilitates Viral Propagation In Vitro.	Seamone ME, Wang W, Acott P, Beck PL, Tibbles LA, Muruve DA.	2010	Yes	Journal Article
	The Inflammsome mediates Clostridium difficile toxin- induced intestinal injury.	Ng J, Hirota SA, Grob O, Li Y, Ulke-Lemee A, Potentier M, Schenk LP, Vilaysane A, Seamone ME, Feng H, Armstrong GD, Tschopp J, MacDonald JA, Muruve DA*, Beck PL*.	2010	Yes	Journal Article
	Divergent Roles of Toll-like receptor 2 in Response to Lipoteichoic Acid and Staphylococcus aureus in vivo.	Gillrie MR, Zbytnuik L, McAvoy E, Kapadia R, Lee K, Waterhouse CCM, Davis SP, Muruve DA, Kubes P, Ho M.	2010	Yes	Journal Article
		Liacini H, Seamone ME, Viskovic MM, Muruve DA, Tibbles LA.	2010	Yes	Journal Article
	Oncolytic viruses as experimental treatments for malignant gliomas: Using a scourge to treat a devil. Cytokine Growth Factor	Zemp FJ, Corredor JC, Lun X, Muruve DA, Forsyth PA.	2010	Yes	Journal Article
	Intravascular Danger Signals Guide Neutrophils to Sites of Sterile Inflammation.	McDonald B, Pittman K, Menezes GB, Hirota SA, Slaba I, Waterhouse CCM, Beck PL, Muruve DA, Kubes P.	2010	Yes	Journal Article
Mustata,Stefan	Effects of exercise training on physical impairment, arterial stiffness and quality of life in patients with chronic kidney disease: a pilot study	Mustata S, Groeneveld S, Davidson W, Ford G, Kiland K and Manns B.	2010	Yes	Journal Article
Mydlarski,P. Regine	Toll-like receptors: role in dermatological disease.	Hari A, Flach TL, Shi Y and Mydlarski PR.	2010	Yes	Journal Article
	Systemic retinoids: chemoprevention of skin cancer in transplant recipients.	Hardin J and Mydlarski PR	2010	Yes	Journal Article

Myers,Robert



Name



Title Morbidity and mortality following colorectal surgery in patients with end-stage renal failure: A population-based study	Authorship Drolet S, Maclean AR, Myers RP, Shaheen AA, Dixon E, Donald Buie W	Publish Year 2010	<b>IsPeerReviewed</b> Yes	<b>Type</b> Journal Article
The outcomes of pregnancy in patients with cirrhosis: A population-based study.	Shaheen AA, Myers RP	2010	Yes	Journal Article
A population-based study of pyogenic liver abscesses in the	Meddings L, Myers RP, Hubbard JN, Shaheen AA, Laupland K, Dixon E, Coffin C, Kaplan GG	2010	Yes	Journal Article
Validation of coding algorithms for the identification of patients with primary biliary cirrhosis using administrative data	Myers RP, Shaheen AA, Fong A, Wan AF, Swain MG, Hilsden RJ, Sutherland L, Quan H	2010	Yes	Journal Article
Epidemiology of Gallstones	Stinton LM, Myers RP, Shaffer E	2010	Yes	Journal Article
Pregnancy outcomes among liver transplant recipients in the United States: A nationwide case-control analysis.	Coffin CS, Shaheen AA, Burak KW, Myers RP	2010	Yes	Journal Article
Variants at IRF5-TNPO3, 17q12-21 and MMEL1 are	Hirschfield GM, Liu X, Han Y, Gorlov IP, Lu Y, Xu C, Lu Y, Chen W, Juran BD, Coltescu C, Mason AL, Milkiewicz P, Myers RP, et al.	2010	Yes	Journal Article
Genome-wide meta-analyses identify three loci associated with primary biliary cirrhosis	Liu X, Invernizzi P, Lu Y, Kosoy R, Lu Y, Bianchi I, Podda M, Xu C, Xie G, Macciardi F, Selmi C, Lupoli S, Shigeta R, Ransom M, Lleo A, Lee AT, Mason AL, Myers RP et al.	2010	Yes	Journal Article
Transient elastography for the noninvasive assessment of liver fibrosis: A multicenter Canadian study.	Myers RP, Elkashab M, Ma M, Crotty P, Pomier-Layrargues G	2010	Yes	Journal Article
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	2010	Yes	Journal Article
Prevalence, risk factors and causes of discordance in fibrosis staging by transient elastography and liver biopsy	Myers RP, Crotty P, Pomier- Layrargues G, Ma M, Urbanski SJ, Elkashab M	2010	Yes	Journal Article
Validation of coding algorithms for the identification of patients with primary biliary cirrhosis using administrative data.	Myers RP, Shaheen AA, Fong A, Wan AF, Swain MG, Hilsden RJ, Sutherland L, Quan H	2010	Yes	Journal Article
Quality of life and symptom control after stent placement of surgical palliation of malignant colorectal obstruction.	Nagula S, Ishill N, Nash C, Markowitz A, Schattner MA, Temple L, Weiser MR, Thaler HW, Zauber A, Gerdes H	2010	Yes	Journal Article

Nash,Carla





Name Owen,Carolyn	Title	Authorship	Publish Year	IsPeerReviewed	Туре
Uwen, Carolyn	A novel RUNX1 mutation in a kindred with familial platelet disorder with propensity to acute myeloid leukaemia: male predominance of affected individuals.	•	2010	Yes	Journal Article
	Preference of Patients and Physicians Concerning Treatment Options for Relapsed Follicular Lymphoma: A Discrete Choice Experiment.	Shafey M, Lupichuk S, Do T, Owen C, Stewart DA	2010	Yes	Journal Article
	The clinical relevance of Wilms Tumour 1 (WT1) gene mutations in acute leukaemia	Owen C, Fitzgibbon J, Paschka P	2010	Yes	Journal Article
Panaccione,Remo	Juvenile polyposis of the stomacha novel cause of hypergastrinemia.	Papay KD, Falck VG, Poulsen SS, Panaccione R, Rehfeld JF, Storr MA.	2010	Yes	Journal Article
	A pro-resolution mediator, prostaglandin D(2), is specifically up-regulated in individuals in long-term remission from ulcerative colitis.	Vong L, Ferraz JG, Panaccione R, Beck PL, Wallace JL.	2010	Yes	Journal Article
	The inflammatory bowel diseases and ambient air pollution: a novel association.	Kaplan GG, Hubbard J, Korzenik J, Sands BE, Panaccione R, Ghosh S, Wheeler AJ, Villeneuve PJ.		Yes	Journal Article
	Influences of intestinal bacteria in human inflammatory bowel disease.	Vanderploeg R, Panaccione R, Ghosh S, Rioux K	2010	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; on Behalf of the Alberta Inflammatory Bowel Disease Consortium.	2010	Yes	Journal Article
	The impact of ulcerative colitis on patients' lives compared to other chronic diseases: a patient survey.	Rubin DT, Dubinsky MC, Panaccione R, Siegel CA, Binion DG, Kane SV, Hopper J.	2010	Yes	Journal Article
	Optimal use of biologics in the management of Crohn's disease.	Panaccione R, Ghosh S.	2010	Yes	Journal Article
	Anti-adhesion molecule therapy for inflammatory bowel disease.	Ghosh S, Panaccione R.	2010	Yes	Journal Article
		D'Haens GR, Panaccione R, Higgins PD, Vermeire S, Gassull M, Chowers Y, Hanauer SB, Herfarth H, Hommes DW, Kamm M, Löfberg R, Quary A, Sands B, Sood A, Watermeyer G, Lashner B, Lémann M, Plevy S, Reinisch W, Schreiber S, Siegel C, Targan S, Watanabe M, Fe	2010	Yes	Journal Article
	Optimizing the safety of biologic therapy for IBD.	de Silva S, Devlin S, Panaccione R.	2010	Yes	Journal Article
	Evolving inflammatory bowel disease treatment paradigms: top-down versus step-up.		2010	Yes	Journal Article
	Review article: chronic viral infection in the anti-tumour necrosis factor therapy era in inflammatory bowel disease.	Shale MJ, Seow CH, Coffin CS, Kaplan GG, Panaccione R, Ghosh S.	2010	Yes	Journal Article





Name	Title Anti-tumor necrosis factor therapy and influenza: keeping	Authorship Shale M, Czub M, Kaplan GG, Panaccione R, Ghosh S.	Publish Year 2010	<b>IsPeerReviewed</b> Yes	<b>Type</b> Journal Article
		Panaccione R, Colombel JF, Sandborn WJ, Rutgeerts P, D'Haens GR, Robinson AM, Chao J, Mulani PM, Pollack PF.	2010	Yes	Journal Article
Parkins,Michael	McKay agar enables routine identification and quanitifcation of the "Streptococcus milleri"group in cystic fibrosis patients.	Sibley, C.D., Grinwis, M.E., Field, T.R., Parkins, M.D., Norgaard, J.C., Gregson, D.B., Rabin, H.R. and M.G. Surette.	2010	Yes	Journal Article
	Characterization of Streptococcus milleri Group Isolates from Expectorated Sputum of Adult Cystic Fibrosis Patients.	Grinwis, M.E., Sibley, C.D., Parkins, M.D., Eshaghurshan, C.S., Rabin, H.R. and M.G Surette.	2010	Yes	Journal Article
	Review: Newer antibacterial agents and their potential role in cystic fibrosis pulmonary exacerbation management.	Parkins, M.D. and J.S. Elborn.	2010	Yes	Journal Article
	The Streptococcus milleri population of a cystic fibrosis clinic reveals patien specificity and intra-species diversity.	Sibley, C.D., Sibley,K.A., Leong, T.A., Grinwis, M.E., Parkins, M.D., Rabin, H.R. and M.G. Surette.	2010	Yes	Journal Article
	Macrolide and clindamycin resistance in Streptococcus milleri group isolates from the airways of cystic fibrosis patients.	Grinwis M.E., Sibley C.D., Parkins M.D., Eshaghurshan C.S., Rabin H.R., Surette M.G.	2010	Yes	Journal Article
	The Genus Prevotella in Cystic Fibrosis Airways.	Field, T.R., Sibley, C.D., Parkins, M.D., Rabin, H.R. and M.G.	2010	Yes	Journal Article
	Changing epidemiology and clinical issues arising in an ageing cystic fibrosis population.	Parkins, M.D., Parkins, V.M., Rendall, J.C and J.S. Elborn.	2010	Yes	Journal Article
	The relevance of the polymicrobial nature of airway infection in the acute and chronic management of patients with cystic fibrosis.	Sibley, C.D., Parkins, M.D., Rabin, H.R. and M.G Surette.	2010	Yes	Journal Article
	Aztreonam lysinate: A novel inhalational antibiotic for cystic fibrosis.	Parkins, M.D. and J.S. Elborn.	2010	Yes	Journal Article
	rtapenem-Induced Reduction in Valproate Levels: Case Report and Review of the Literature.	Bates, D, Parkins, M.D. and K. Duggan. E	2010	Yes	Journal Article
	Population-based study of the epidemiology and the risk factors for Pseudomonas aeruginosa bloodstream infection.	Parkins, M.D., Gregson, D.B., Pitout, J.D.D., Ross, T. and K.B. Laupland.	2010	Yes	Journal Article
Parsons,Laurie	Best Practice	Mariam Botros, DCh	2010	Yes	Journal Article
	Recommendations	Kyle Goettl, RN, BSCN, MEd(c) Laurie Parsons, MD, FRCPC Sulejman Menzildzic, MD, MSc(Kin), DCh Christina Morin, DPM Tracy Smith, RN, BN Andy Hoar, C Ped(C) Heather Nesbeth, RN, BSN, CDE AND Shannon McGrath, BSc, OT Reg	2010	105	Journal Afficie
		(Ont.)			





Name Direct Careboard	Title	Authorship	Publish Year	IsPeerReviewed	Туре
Pineo,Graham	Economic impact of enoxaparin after acute ischemic stroke based on PREVAIL	Pineo G, Lin J, Stern L, Subrahmanian, T, Annemans L	2010	Yes	Journal Article
	Apixaban versus enoxaparin for thromboprophylaxis after knee replacement ( ADVANCE 2): a randomised double-blind trial	Lassen MR, Raskob GE, Gallus AS, Pineo GF, Chen D, Hornick P	2010	Yes	Journal Article
	Disorders of the Pulmonary Circulation	Pineo GF, Hull RD	2010	Yes	Journal Article
	Apixaban versus enoxaparin for thromboprophylaxis after hip replacement	Lassen MR, Gallus AS, Raskob GE, Pineo GF, Chen D, Ramiriz L	2010	Yes	Journal Article
Pollak,Paul Timothy	Influence of peroxisome proliferator-activated receptor- alpha (PPAR□) activity on adverse effects associated with amiodarone exposure in mice	Ernst M, Sinal CJ, Pollak PT	2010	Yes	Journal Article
	Therapeutically relevant blood pressure differences with two nifedipine (60 mg) osmotic delivery systems of differing design: three case reports	Pollak PT.	2010	Yes	Journal Article
	Risperidone-Induced QT Prolongation Following Overdose Correlates with Serum Drug Concentration and Resolves Rapidly with No Evidence of Altered Pharmacokinetics	Pollak PT, Verjee ZH, Lyon AW	2010	Yes	Journal Article
	How toxic is amiodarone to the liver	Pollak PT.	2010	Yes	Journal Article
Poon,Man-Chiu	2010 International consensus algorithm for the diagnosis, therapy and management of hereditary angioedema.	Bowen T, Cicardi M, Farkas H, Bork K, Longhurst H, Zuraw B, Aygoeren-Pürsün E, Craig T, Binkley K, Hebert J, Ritchie B, Bouillet L, Betschel S, Cogar D, Dean J, Devaraj R, Hamed A, Kamra P, Keith PK, Lacuesta G, Leith E, Lyons H, Mace S, Mako B, Neurath D	2010	Yes	Journal Article
	2B or not to be – The 45 year saga of the Montreal Platelet Syndrome.	Poon M-C, Rand ML, Jackson SC.	2010	Yes	Journal Article
	Assessing baseline Joint Hypermobility as a risk factor for arthopathy in moderate and severe Hemophilia.	Skeith L, Jackson SC, Brooks J, Poon, M-C.	2010	Yes	Journal Article
Quinn,F. Russell	Meta-Analysis of the Effectiveness and Safety of Catheter Ablation of Atrial Fibrillation in Patients With Versus Without Left Ventricular Systolic Dysfunction	Wilton SB, Fundytus A, Ghali WA, Veenhuyzen GD, Quinn FR, Mitchell LB, Hill MD, Faris, Exner DV	2010	Yes	Journal Article





Name Quinn,Robert	Title	Authorship	Publish Year	IsPeerReviewed	Туре
Quini,Kobert	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	2010	Yes	Journal Article
	The 2010 Canadian Hypertension Education Program (CHEP) recommendations for the management of hypertension - Part 1-Blood pressure measurement, diagnosis, and assessment of risk.	Quinn RR, Hemmelgarn BR, Padwal RS, et al.	2010	Yes	Journal Article
	Barriers to Successful Treatment with Peritoneal Dialysis: A Population-Based, Retrospective Cohort Study	Chidambaram M, Bargman JM, Quinn RR, Austin PC, Hux JE, Laupacis A	2010	Yes	Journal Article
	The 2010 Canadian Hypertension Education Program (CHEP) recommendations for the management of hypertension- Part 2-Therapy	Hackam D, Khan NA, Hemmelgarn BR, et al. (Quinn RR co-author)	2010	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.	2010	Yes	Journal Article
	How to Model Survival of Arteriovenous Accesses for Hemodialysis: Semi- Parametric or Parametric methods?	Ravani P, Parfrey P, MacRae J, James M, Quinn R, Malberti F, Brunori G, Mandolfo S, Tonelli M, Hemmelgarn B, Manns B, Barrett B	2010	Yes	Journal Article
	Technique failure in peritoneal dialysis patients: insights and challenges	Quinn RR, Ravani P, Hochman J	2010	Yes	Journal Article
	Using administrative datasets to study outcomes in dialysis patients: a validation study	Quinn RR, Laupacis A, Austin P, Hux JE, Garg AX, Hemmelgarn BR, Oliver MJ.	2010	Yes	Journal Article
	The higher risk of death on peritoneal dialysis in the United States is not explained by background general population mortality: the CANUSA study revisted.	Quinn RR, Thorpe KE, Bargman JE	2010	Yes	Journal Article
	Relation between kidney function, proteinuria and adverse outcomes	Hemmelgarn BR, Manns BJ, Lloyd A, James MT, Klarenbach S, Quinn RR, Tonelli M	2010	Yes	Journal Article
	Warfarin: safe in dialysis patients with atrial fibrillation?	Quinn RR, Scott-Douglas N	2010	Yes	Journal Article
	Reporting of estimated glomerular filtration rate: trends in nephrology visits and health care resource use	Hemmelgarn BR for the Alberta Kidney Disease Network (Quinn RR co-author)	2010	Yes	Journal Article
	Impact of contraindications, barriers to self-care and support on incident peritoneal dialysis utilization	Oliver MJ, Garg AX, Zacharias J, Verrelli M, Blake P, Johnson J, Pandeya S, Quinn RR	2010	Yes	Journal Article





Name Rabi,Doreen Marie	Title	Authorship	Publish Year	IsPeerReviewed	Туре
Kabi,Dorten Marie	Effects of combination lipid therapy in type 2 diabetes mellitus.	ACCORD Study Group, Ginsberg HN, Elam MB, Lovato LC, Crouse JR 3rd, Leiter LA, Linz P, Friedewald WT, Buse JB, Gerstein HC, Probstfield J, Grimm RH, Ismail-Beigi F, Bigger JT, Goff DC Jr, Cushman WC, Simons-Morton DG, Byington RP.	2010	Yes	Journal Article
	Effects of intensive blood- pressure control in type 2 diabetes mellitus.	ACCORD Study Group, Cushman WC, Evans GW, Byington RP, Goff DC Jr, Grimm RH Jr, Cutler JA, Simons-Morton DG, Basile JN, Corson MA, Probstfield JL, Katz L, Peterson KA, Friedewald WT, Buse JB, Bigger JT, Gerstein HC, Ismail-Beigi F.	2010	Yes	Journal Article
	Effect of intensive treatment of hyperglycaemia on microvascular outcomes in type 2 diabetes: an analysis of the ACCORD randomised trial.	Ismail-Beigi F, Craven T, Banerji MA, Basile J, Calles J, Cohen RM, Cuddihy R, Cushman WC, Genuth S, Grimm RH Jr, Hamilton BP, Hoogwerf B, Karl D, Katz L, Krikorian A, O'Connor P, Pop-Busui R, Schubart U, Simmons D, Taylor H, Thomas A, Weiss D, Hramiak I;	2010	Yes	Journal Article
	Effects of medical therapies on retinopathy progression in type 2 diabetes.	ACCORD Study Group; ACCORD Eye Study Group, Chew EY, Ambrosius WT, Davis MD, Danis RP, Gangaputra S, Greven CM, Hubbard L, Esser BA, Lovato JF, Perdue LH, Goff DC Jr, Cushman WC, Ginsberg HN, Elam MB, Genuth S, Gerstein HC, Schubart U, Fine LJ.	2010	Yes	Journal Article
	Effects of combination lipid therapy in type 2 diabetes mellitus	ACCORD Study Group, Ginsberg HN, Elam MB, Lovato LC, Crouse JR 3rd, Leiter LA, Linz P, Friedewald WT, Buse JB, Gerstein HC, Probstfield J, Grimm RH, Ismail-Beigi F, Bigger JT, Goff DC Jr., Cushman WC, Simons-Morton DG, Byington RP.	2010	Yes	Journal Article
	The Association between Income and the Burden of Coronary Atherosclerosis among Patients with Diabetes	Rabi, D.M., Edwards, A.L., Svenson, L.W., Knudtson, M, and Ghali, W.A	2010	Yes	Journal Article
	Effect of perioperative glucose-insulin-potassium infusions on mortality and atrial fibrillation after coronary artery bypass grafting: a systematic review and meta-analysis.	Rabi D, Clement F, McAlister F, Majumdar S, Sauve R, Johnson J, Ghali W.	2010	Yes	Journal Article

Appendix 1





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Raman (Kothandaruman), Maireyi       Field, TR, CD Shley, MD       2010       Yes       Journal Article         The genus Prevoted in respite diversity       Field, TR, CD Shley, MD       2010       Yes       Journal Article         The genus Prevoted in respite diversity       Field, TR, CD Shley, MD       2010       Yes       Journal Article         The genus Prevoted in respite diversity       Field, TR, CD Shley, MD       2010       Yes       Journal Article         Raman (Kothandaruman), Maitreyi       Ramar M, Mileton A, Walters, J.       2010       Yes       Journal Article         Main (Storete and State)       Ramar M, Mileton A, Walters, J.       2010       Yes       Journal Article         Main (Storete and State)       Ramar M, Mileton A, Walters, J.       2010       Yes       Journal Article         Main (Storete and State)       Ramar M, Mileton A, Walters, J.       2010       Yes       Journal Article         Noncritically II (Inputents is Association in Martinger       Gramar, M. Mileton A, Walters, J.       2010       Yes       Journal Article         Noncritically II (Inputents is Association in Martinger       Statistian, St. Feuton, TK. Shalteen       2010       Yes       Journal Article         Noncritically II (Inputents is Association Information: A Respine K, Stroete, St.       Statistis, St. Steton, St.       2010       Y	Kabin,frai vey	resistance in Streptococcus milleri group isolates from	Parkins, CS Eshaghurshan, HR	2010	Yes	Journal Article	
Inforces airways       Parkins, HR Rabin and MG Surette         The airhnomywin pandox in airway disease.       Bibby CD, Grinvis ME, Rabin       2010       Yes       Journal Article         Runan (Kothandaram-),Maireyi Vitamin D and Consease Inflammaary Dovel Disease Inflammaary Disease Inflammaary Dovel Disease Inflammaary Dovel Disease Inflammaary Dovel Disease Inflammaary Disease Inflammaa		population of a cystic fibrosis clinic reveals patient specificity and intra-species	ME Grinwis, MD Parkins, HR.	2010	Yes	Journal Article	
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Vitamin D and Gassionitestimal Diseases and Colorectal Cancer.Raman M, Mileston A, Walters, J. 2010YesJournal ArticleParenteral Nutrition- Associated Yaperglycemia in Sarkissian, S: Fenton, TR; Shaheen AA; Raman, M.2010YesJournal ArticleParenteral Nutrition- Associated with Higher Moriality.Sarkissian, S: Fenton, TR; Shaheen AA; Raman, M.2010YesJournal ArticleParenteral Nutrition Associated with Higher Moriality.Gramilich, LM; Olstad, DI: Raman, M; Innis, S; Wicklum, S; Duerksen, D; Rashid, M, Heyland, D: Duerksen, D; Rashid, M, Heyland, D: Duerksen, D; Rashid, M, Heyland, D: Charting in Small Portions Parenteral Nutrition Receiving Parental Nutrition Receivi		the treatment of cystic fibrosis		2010	Yes	Journal Article	
Associated Hyperglycemia in Noncritically III Inpatients is Associated with Higher Morality.A: Raman, M. Sassociated with Higher Morality.Medical Students' Perceptions of Nutrition Education in Canadian Universities.Gramlich, LM; Olstad, DL; Nasser, R: Gonewardene, L; Raman, M; Innis, S; Wicklam, S; Dierksen, D; Rashid, M; Heyland, D; Armstrong, D; Roy, C.2010YesJournal ArticleTeaching in Small Portions Dispersed Over Time Enhances Long-Tem Ecoderre, S.Raman, M; McLaughlin, K; Coderre, S.2010YesJournal ArticleDispersed Over Time Stawith Increased Morbigitalized Patients Receiving Parental Nutrition Is Associated With Increased Morbigitalized PatientsRaman, P; Crotty, P; Raman, M.2010YesJournal ArticleRavani, PietroLack of association between dialysis modiality and outcomes in atheroembolic renal diseaseRavani P, Hochman J2010YesJournal ArticleTechnique failure in peritoneal dialysis modiality and outcomes in atheroembolic renal diseaseQuinn R, Ravani P, Hochman J2010YesJournal ArticleTechnique failure in peritoneal dialysis gatiems: insights and challenges Atheroembolic RenesSolari F, Ravani P, and Pi 2010YesJournal ArticleMeta-analysis: erythropoicsis ensitudiating agents in patients crig IC, Ravane P, et al.2010YesJournal Article	Raman (Kothandarama	Vitamin D and Gastrointestinal Diseases: Inflammatory Bowel Disease		2010	Yes	Journal Article	
Medical Students Perceptions of Nutrition Education in Of Nutrition Education in Canadian Universities.Gramlich, LM; Olstad, DL; Subser, R; Goonewardene, L; Raman, M; Innis, S; Wickimn, S; Duerksen, D; Rashid, M; Heyland, D; Armstrong, D; Roy, C.YesJournal ArticleTeaching in Small Portions Dispersed Over Time Enhances Long-Term Hospitalized Patients Receiving Parental Nutrition Is Associated with Increased Morbidity and Mortality: A Review.2010YesJournal ArticleRavani,PietroRavani P, Gaggi R, Rollino C, et aldisease2010YesJournal ArticleTechnique failure in perioneal disalysis modality and outcomes in atheroembolic renombolic Ravani P, Gaggi R, Rollino C, et aldisease2010YesJournal ArticleTechnique failure in perioneal disalysis modality and outcomes in atheroembolic renombolic Ravani P, Gaggi R, Rollino C, et aldisease2010YesJournal ArticleMeta-analysis: erythropoicesis- stimulating agents in patienes insights and challenges Atheroembolic renothobic rend Disease2010YesJournal ArticleMeta-analysis: erythropoicesis- stimulating agents in patienes insights and challenges Atheroembolic rend Disease2010YesJournal Article		Associated Hyperglycemia in Noncritically Ill Inpatients is Associated with Higher		2010	Yes	Journal Article	
Dispersed Over Time Enhances Long-Term Knowledge Retention.Violato, C; Roston, A; Allard, JP; Coderre, S.Hyperglycemia in Hospitalized Patients Receiving Parental Nutrition Is Associated with Increased Morbidity and Mortality: A Review.Kumar, PR; Crotty, P; Raman, M.2010YesJournal ArticleRavani,PietroLack of association between dialysis modality and outcomes in atheroembolic renal diseaseRavani P, Gaggi R, Rollino C, et al.2010YesJournal ArticleTechnique failure in peritoneal dialysis patients: insights and challenges Atheroembolic Renal DiseaseQuinn R, Ravani P, Hochman J al.2010YesJournal ArticleReta-analysis: erythropoiesis stimulating agents in patientsScolari F, Ravani P, et al.2010YesJournal Article		of Nutrition Education in	Nasser, R; Goonewardene, L; Raman, M; Innis, S; Wicklum, S; Duerksen, D; Rashid, M; Heyland,	2010	Yes	Journal Article	
Hospitalized Patients Receiving Parental Nutrition Is Associated with Increased Morbidity and Mortality: A Review.Ravani P, Gaggi R, Rollino C, et 20102010YesJournal ArticleLack of association between dialysis modality and outcomes in atheroembolic renal diseaseRavani P, Gaggi R, Rollino C, et al.2010YesJournal ArticleTechnique failure in peritoneal dialysis patients: insights and challenges Atheroembolic Renal DiseaseQuinn R, Ravani P, Hochman J Scolari F, Ravani P2010YesJournal ArticleMeta-analysis: erythropoiesis- stimulating agents in patientsPalmer SC, Navaneethan SD, Craig JC, Ravani P, et al.2010YesJournal Article		Dispersed Over Time Enhances Long-Term	Violato, C; Rostom, A; Allard, JP;	2010	Yes	Journal Article	
Lack of association between dialysis modality and outcomes in atheroembolic renal diseaseRavani P, Gaggi R, Rollino C, et 20102010YesJournal ArticleTechnique failure in peritoneal dialysis patients: insights and challenges Atheroembolic Renal DiseaseQuinn R, Ravani P, Hochman J Scolari F, Ravani P2010YesJournal ArticleMeta-analysis: erythropoiesis- stimulating agents in patients:Scolari F, Ravani P, et al.2010YesJournal Article	Povoni Distro	Hospitalized Patients Receiving Parental Nutrition Is Associated with Increased Morbidity and Mortality: A	Kumar, PR; Crotty, P; Raman, M.	2010	Yes	Journal Article	
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Meta-analysis: erythropoiesis- stimulating agents in patientsPalmer SC, Navaneethan SD, Craig JC, Ravani P, et al.2010YesJournal Article		peritoneal dialysis patients: insights and challenges					
		Meta-analysis: erythropoiesis- stimulating agents in patients	Palmer SC, Navaneethan SD,				





Name	Title Circulating procalcitonin in aseptic carcinoma patients: a specificity study with (18)F- fluorodeoxyglucose positron- emission tomography/computed tormography/computed	<b>Authorship</b> Giovanella L, Suriano S, Ricci R, Ravani P, Ceriani L	Publish Year 2010	<b>IsPeerReviewed</b> Yes	<b>Type</b> Journal Article
	tomography as benchmark Nephrology visits and health care resource use before and after reporting estimated glomerular filtration rate.	Hemmelgarn B, co-author Ravani P, Alberta Kidney Disease Network	2010	Yes	Journal Article
	Modeling Survival of arteriovenous accesses for hemodialysis: semiparametric versus parametric methods	Ravani P, Parfrey P, MacRae J, et al.	2010	Yes	Journal Article
	Nephrology visits and health care resource use before and after reporting estimated glomerular filtration rate	Hemmelgarn BR, Zhang J, Manns BJ, Ravani P, et al.	2010	Yes	Journal Article
Ravindran,Nikila	Pegylated interferon plus optimised weight-based ribavirin dosing negate the influence of weight and body mass index on early viral kinetics and sustained virological response in chronic hepatitis C.	Pattullo V, Ravindran NC, Mazzulli T, Wong DKH, Heathcote EJ	2010	Yes	Journal Article
Read,Ron	Genetic Characterization and Antimicrobial Susceptibility of Mannheimia haemolytica Isolated From the Nasopoharynx of Feedlot Cattle	CL Klima, TW Alexander, RR Read, SP Gow, CW Booker, S Hannon, C Sheedy, TA McAllister, LB Sellinger	2010	Yes	Journal Article
	Comparison of CMY-2 plasmids Isolated from human, animal and environmental Escherichia coli and Salmonella spp. from Canada	Mateseje LF, Baudry PJ, Zhanel GG, Morck DW, Read RR, Louie M, Mulvey MR	2010	Yes	Journal Article
	Farm-to-Fork Characterization of Escherichia coli associated with Feedlot Cattle with a Known History of Antimicrobial Use	Alexander TW, GD Inglis, LJ Yanke, E Topp, RR Read, T Reuter, TA McAllister	2010	Yes	Journal Article
	Comparison of Repetitive PCR and Pulsed-Fleld Gel Electrophoresis for the Genotyping of Mannheimia haemolytica	Klima CI, Alexander TW, Selinger LB, Read RR, Shewan PE, Gow SP, Booker CW, McAllister TA	2010	Yes	Journal Article
	Molecular Typing of Treponema pallidum Strains in Western Canada:	IE Martin, RS Tsang, K Sutherland, B Anderson, R Read, C Roy, S Yanow, K Fonseca, W s White, K Kandola, E Kouadji, AE Singh	2010	Yes	Journal Article





Name Bioux Kovin	Title	Authorship	Publish Year	IsPeerReviewed	Туре
Rioux,Kevin	Influences of intestinal bacteria in human inflammatory bowel disease.	Vanderploeg R, Panaccione R, Ghosh S, Rioux KP.	2010	Yes	Journal Article
	The NLRP3 inflammasome plays key role in the regulation of intestinal homeostasis and inflammation	Hirota S, Ng J, Lueng A, Khajah M, Parhar K, Li Y, McCafferty D- M, Rioux KP, Lam V, MacDonald JA, Tschopp J, Muruve D, Beck PL	2010	Yes	Journal Article
	In vitro anaerobic biofilms of human colonic microflora	Sproule-Willoughby KM, Stanton M, Rioux KP, McKay DM, Buret AG, Ceri H.	2010	Yes	Journal Article
Robertson,Lynne	Biologic Therapy in Psoriasis: Perpectives on Associated Risks and Patient Management	Robertson L H	2010	Yes	Journal Article
Rorstad,Otto	Impairment of cognitive function reported by patients suffering from Carcinoid Syndrome.	Chambers AJ, Longman RS, Pasieka JL, Dixon E, Rorstad O, Rach-Longman K, Jones J	2010	Yes	Journal Article
	Role of imaging in the preoperative staging of small bowel neuroendocrine tumors.	Chambers AJ, Pasieka JL, Dixon E, Rorstad O	2010	Yes	Journal Article
Rostom,Alaa	International consensus recommendations on the management of patients with nonvariceal upper gastrointestinal bleeding.	Barkun AN, Bardou M, Kuipers EJ, Sung J, Hunt RH, Martel M, Sinclair P, International Consensus Upper Gastrointestinal Bleeding Conference Group (including Rostom A).	2010	Yes	Journal Article
	2010 Canadian Association of Gastroenterology educational needs assessment report	Rostom A, Daniels S	2010	Yes	Journal Article
	The Canadian Association of Gastroenterology ePortal - launched September 2009.	Rostom A.	2010	Yes	Journal Article
	Training the endoscopy trainer: from general principles to specific concepts.	Coderre S, Anderson J, Rostom A, McLaughlin K	2010	Yes	Journal Article
	Colorectal cancer screening using flexible sigmoidoscopy: United Kingdom study demonstrates significant incidence and mortality benefit.	Hilsden R, Rostom A.	2010	Yes	Journal Article
	International Consensus Upper Gastrointestinal Bleeding Conference Group. International consensus recommendations on the management of patients with nonvariceal upper gastrointestinal bleeding.	Barkun AN, Bardou M, Kuipers EJ, Sung J, Hunt RH, Martel M, Sinclair P.	2010	Yes	Journal Article
	Teaching in small portions dispersed over time enhances long-term knowledge retention.	Raman M, McLaughlin K, Violato C, Rostom A, Allard J, Coderre S.	2010	Yes	Journal Article
	Methodology for Randomized Trials of Patients with Nonvariceal Upper Gastrointestinal Bleeding: Recommendations from an International Consensus Conference.	Laine L, Spiegel B, Rostom A, Moayyedi P, Kuipers E, Bardou M, Sung J, Barkun A.	2010	Yes	Journal Article





Name Sourcious Doton	Title	Authorship	Publish Year	IsPeerReviewed	Туре
Sargious,Peter	Validity of administrative data claim-based methods for identifying individuals with diabetes at a population level	Southern DA, Roberts B, Edwards A, Dean S, Norton P, Svenson LW, Larsen E, Sargious P, Lau DCW, Ghali WA.	2010	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	2010	Yes	Journal Article
Schmaltz,Heidi	A pragmatic study exploting the prevention of delirium among hospitalized older hip fracture patients: applying evidence to routine clinical practice using clinical decision support.	Holroyd-Leduc JM, Abelseth GA, Khandwala F, Silvius JL, Hogan DB, Schmaltz HN, Frank CB, Straus SE.	2010	Yes	Journal Article
Seow,Cynthia	Trough Serum Infliximab Predicts Outcome for Ulcerative Colitis Treatment With Infliximab	Seow CH, Newman A, Irwin S, Steinhart AH, Silverberg MS, Greenberg GR.	2010	Yes	Journal Article
	Oral budesonide for induction of remission in ulcerative colitis	Sherlock ME, Seow CH, Steinhart AH, Griffiths AM	2010	Yes	Journal Article
	Exploring the role of monitoring anti-TNF-a drug and antibody levels in the management of Inflammatory Bowel Disease.	Lim AW, Panaccione R, Seow CH	2010	Yes	Journal Article
	Assessing Disease Activity in Ulcerative Colitis: Patient or Their Physicians?	Turner D, Griffiths AM, Mack D, Otley AR, Seow CH, Steinhart AH, Silverberg MS, Hyams J, Guyatt GH.	2010	Yes	Journal Article
	Chronic Viral Infections in the Anti-Tumour Necrosis Factor Therapy Era in Inflammatory Bowel Disease.	Shale MJ, Seow CH, Coffin CS, Kaplan GG, Panaccione R, Ghosh S.	2010	Yes	Journal Article
Shafey,Mona	Preference of Patients and Physicians Concerning Treatment Options for Relapsed Follicular Lymphoma: A Discrete Choice Experiment	Shafey M, Lupichuk SM, Do T, Owen C, Stewart DA	2010	Yes	Journal Article
Sheldon,Robert	Attenuated recovery of heart rate turbulence early after myocardial infarction identifies patients at high risk for fatal or near-fatal arrhythmic events.	Huikuri HV, Exner DV, Kavanagh KM, Aggarwal SG, Mitchell LB, Messier MD, Becker D, Sheldon RS, Bloch Thomsen PE	2010	Yes	Journal Article
	Attenuated recovery of heart rate turbulence early after myocardial infarction identifies patients at high risk for fatal or near-fatal arrhythmic events.	Heikke V. Huikuri, Derek V. Exner, Katherine M. Kavanagh, Sandeep G. Aggarwal, L. Brent Mitchell, Marc D. Messier, Daniel Becker, Robert S. Sheldon, Poul- Erik Thomsen	2010	Yes	Journal Article
Appendix 1	Syncope and Structural Heart Disease: Historical Criteria for Vasovagal Syncope and Ventricular Tachycardia.	Sheldon R, Hersi A, Ritchie D, Koshman ML, Rose S.	2010	Yes	Journal Article





Name Sigal,Ronald	Title	Authorship	Publish Year	IsPeerReviewed	Туре
organ, Konard	The effect of exercise training on physical fitness in type 2 diabetes mellitus.	Larose J, Sigal RJ, Boulé NG, Wells GA, Prud'homme D, Fortier M, Reid RD, Tulloch H, Coyle D, Phillips P, Jennings A, Khandwala F, Kenny GP.	2010	Yes	Journal Article
	Resistance exercise but not aerobic exercise lowers remnant-like lipoprotein particle cholesterol in type 2 diabetes: A randomized controlled trial.	Gavin C, Sigal RJ, Cousins M, Menard ML, Cousins M, Khandwala F, Kenny GP, Proctor S, Ooi TC.	2010	Yes	Journal Article
	Exercise and type 2 diabetes: the American College of Sports Medicine and the American Diabetes Association: joint position statement executive summary.	Colberg SR, Sigal RJ, Fernhall B, Regensteiner JG, Blissmer BJ, Rubin RR, Chasan-Taber L, Albright AL, Braun B.	2010	Yes	Journal Article
	Role of resistance exercise in reducing risk for cardiometabolic disease.	Alberga A, Sigal RJ, Kenny GP.	2010	Yes	Journal Article
	Exercise and type 2 diabetes: the American College of Sports Medicine and the American Diabetes Association joint position statement.	Colberg SR, Sigal RJ, Fernhall B, Regensteiner JG, Blissmer BJ, Rubin RR, Chasan-Taber L, Albright AL, Braun B.	2010	Yes	Journal Article
	Heat stress in older individuals, and patients with common chronic diseases.	Kenny G, Yardley J, Brown C, Sigal R, Jay O	2010	Yes	Journal Article
	Peer telephone counseling for adults with type 2 diabetes mellitus: A case-study approach to inform the design, development, and evaluation of programs targeting physical activity.	Plotnikoff R., Johnson S., Luchak M., Pollock C., Holt N., Leahy A., Liebreich T., Sigal R., Boulé N.	2010	Yes	Journal Article
	Multi-component, home- based resistance training for obese adults with type 2 diabetes: a randomized controlled trial.	Plotnikoff RC, Eves N, Jung M, Sigal RJ, Padwal R, Karunamuni N.	2010	Yes	Journal Article
	Associations between physical fitness and haemoglobin A1c in type 2 diabetes mellitus.	Larose J, Sigal RJ, Khandwala F, Prud'homme D, Boulé NG, Kenny GP on behalf of the DARE trial investigators.	2010	Yes	Journal Article
	Alberta Diabetes and Physical Activity Trial (ADAPT): A randomized theory-based efficacy trial for adults with type 2 diabetes – rationale, design, recruitment, evaluation, and dissemination.	Plotnikoff RC, Courneya K, Sigal RJ, Johnson JA, Birkett N, Lau DC, Raine K, Johnson ST, Kaunamuni N.	2010	Yes	Journal Article
	Well-being and health status outcomes from the Diabetes Aerobic and Resistance Exercise (DARE) trial	Reid RD, Tulloch H, Sigal RJ, Kenny GP, Fortier M, McDonnell L, Wells GA, Boulé NG	2010	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.	2010	Yes	Journal Article
	New evidence for the value of supervised exercise training in type 2 diabetes mellitus.	Sigal RJ, Kenny GP	2010	Yes	Journal Article
	Combined aerobic and resistance exercise for patients with type 2 diabetes.	Sigal RJ, Kenny GP	2010	Yes	Journal Article





Name	<b>Title</b> Physical activity and diabetes: an application of the theory of planned behavior to explain physical activity for type 1 and type 2 diabetes in an adult population sample.	Authorship Plotnikoff RC, Lippke S, Courneya KS, Birkett NJ, Sigal RJ.	Publish Year 2010	<b>IsPeerReviewed</b> Yes	<b>Type</b> Journal Article
	Daily steps are low year- round and dip lower in fall/winter: findings from a longitudinal diabetes cohort.	Dasgupta K, Joseph L, Pilote L, Strachan I, Sigal RJ, Chan C.	2010	Yes	Journal Article
Silvius,James	A pragmatic study exploring the prevention of delirium among hospitalized older hip fracture patients: Applying evidence to routine clinical practice using clinical decision support.	Holroyd-Leduc JM, Abelseth GA, Khandwala F, Silvius JL, Hogan DB, Schmaltz HN, Frank CB, Straus SE	2010	Yes	Journal Article
	Pathways to dementia Diagnosis Among South Asian Canadians	McCleary L, Kozak J, Persaud M, Hum S, Pimlott N, Cohen C, Koehn S, Leung K, Dalziel W, Emerson V, Silvius J, Drummond N	2010	Yes	Journal Article
Sivakumar,Chandrase	karan The ASPIRE approach for TIA risk startification	SB Coutts, PN Sylaja, YB Choi, A Al Khatami, C.Sivakumar, TJ Jeerakathil, PN Sarma, MD Hill for the Calgary Stroke Program.	2010	Yes	Journal Article
Stather,David	How should we manage empyema complicating tunneled pleural catheter placement?	Tremblay A, Stather DR, MacEachern P	2010	Yes	Journal Article
	Repair Costs for Endobronchial Ultrasound Bronchoscopes	Hergott CA, MacEachern P, Stather DR, Tremblay A	2010	Yes	Journal Article
Storek,Jan	Decreased infections in recipients of unrelated donor hematopoietic cell transplantation from donors with an activating KIR genotype.	Tomblyn M, Young JAH, Haagenson MD, Klein JP, Trachtenbert EA, Storek J, Spellman SR, Cooley S, Miller JS, Weisdorf DJ on behalf of the CIBMTR Infection and Immune Reconstitution Working Committee:	2010	Yes	Journal Article
	Genomic instability after allogeneic hematopoietic cell transplantation is frequent in oral mucosa, particularly in patients with history of chronic graft-vs-host disease, and rare in nasal mucosa (brief report).	Khan FM, Sy S, Louie P, Berka N, Sinclair G, Stewart DA, Russell JA, Storek J:	2010	Yes	Journal Article
	Low-dose total body irradiation and fludarabine	Nakamae H, Storer BE, Storb R, Storek J, Chauncey TR, Pulsipher MA, Petersen FB, Wade JC, Maris MB, Bruno B, Panse J, Petersdorf E, Woolfrey A, Maloney DG, Sandmaier BM:	2010	Yes	Journal Article
		Khan FM, Sy S, Louie P, Smith M, Chernos J, Berka N, Sinclair GD, Lewis V, Russell JA, Storek J:	2010	Yes	Journal Article





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Name	Title Combination immunotherapy using adoptive T-cell transfer and tumor antigen vaccination based on hTERT and surviving following autologous stem cell transplantation for myeloma.	Authorship Rapoport AP, Aqui NA, Stadtmauer EA, Vogl DT, Fang HB, Cai L, Janofsky S, Chew A, Storek J, Akpek G, Badros A, Yanovich S, Tan MT, Veloso E, Pasetti MF, Cross A, Philip S, Murphy H, Bhagat R, Zheng Z, Milliron T, Cotte J, Cannon A, Levine BL, Vonderheide	Publish Year 2010	IsPeerReviewed Yes	<b>Type</b> Journal Article		
	High rabbit-anti-human thymocyte globulin levels are associated with low likelihood of graft-vs-host disease and high likelihood of posttransplant lymphoproliferative disorder.	Podgorny PJ, Ugarte-Torres A, Liu Y, Williamson TS, Russell JA, Storek J:	2010	Yes	Journal Article		
	Neuroinflammation And Demyelination in Patients With Multiple Sclerosis After Allogeneic Hematopoietic Stem Cell Transplantation.	Lu JQ, Joseph JT, Stevens AM, Storek J, Nash RA, Metz L, Clark AW, Johnson ES, Yong VW:	2010	Yes	Journal Article		
Storr,Martin	Novel endomorphin analogs iwth antagonist activity at the mu opiooid receptor in the gastrointestinal tract.	Fichna J, Gach K, Perlikowska R, Cravezic A, Bonnet JJ, do-Rego JC, Janecka A, Storr MA.	2010	Yes	Journal Article		
	The novel endomorphin degradation blockers Tyr-Pro- DCIPhe-Phe-NH2 (EMDB-1) and Tyr-Pro-Ala-NH2 (EMDB-2) prolong endomorphin- action in rat ileum.		2010	Yes	Journal Article		
	The atypical cannabinoid O- 1602 prtects against experimental colitis and inhibits neutrophil recruitment.	Schicho R, Bashashati M, Bawa M, McHugh D, Saur D, Hu HM, Zimmer A, Lutz B, Mackie K, Bradshaw HB, McCafferty DM, Sharkey KA, Storr M	2010	Yes	Journal Article		
	Botulinum toxin in the treatment of diffuse esophageal spasm.	Bashashati M, Andrews C, Ghosh S, Storr M.	2010	Yes	Journal Article		
	Eosinophilic colitis: epidemiology, clinical features and current management.	Alfadda A, Storr M, Shaffer E	2010	Yes	Journal Article		
	The cannabinoid 1 receptor (CNR1) 1359 G/A polymorphism modulates susceptibility to ulcerative colitis and the phenotype in Crohn's disease.	Storr M, Emmerdinger D, Diegelmann J, Pfennig S, Ochsenkuhn T, Goke B, Lohse P, Brand S.	2010	Yes	Journal Article		
	Quantitative metabolomic profiling of serum an durine in DSS-induced ulcerative colitis of mice by (1) H NMR spectroscopy.	Schicho R, Mazyrova A, Shaykhutdinov R, Duggan G, Vogel HJ, Storr M	2010	Yes	Journal Article		
	A case of Conn syndrome revealed after oral sodium phosphate (fleet) preparation for colonoscopy.	Lee, R., Storr, M., Hershfield, N.B.	2010	Yes	Journal Article		
	Synthesis and opioid activity of novel 6-substituted-6- demetoxy-ethendomorphins.	Czako B, Marton J, Berenyi S, sipos A, Gach K, Fichna J, Storr M, Toth G, Janecka A.	2010	Yes	Journal Article		
	Targeting the endocannabinoid system for gastrointestinal diseases: implications for future therapeutic strategies.	Schicho R, Storr M.	2010	Yes	Journal Article		
	What is non-acid reflux disease?	Storr, M.	2010	Yes	Journal Article		





Name	<b>Title</b> The cannabinoid 1 receptor (CNR1) 1359 G/A polymorphism modulates susceptibility to ulcerative colitis and the phenotype in Crohn's disease.	Authorship Storr M, Emmerdinger D, dielgelmann J, Pfennig S, Ochsenkuhn T, Goke B, Lohse P, Brand S.	Publish Year 2010	<b>IsPeerReviewed</b> Yes	<b>Type</b> Journal Article
	A case of Conn syndrome revealed after oral sodium phsphate (fleet) preparation for colonoscopy.	Lee R, Storr M, Hershfiled NB.	2010	Yes	Journal Article
	Involvement of cannabinoid- 1 and cannabinoid-2 receptors in septic ileus.	Li YY, Li YN, Ni JB, Chen CJ, Lv S, Chai SY, Wu RH, Yuece B, Storr M.	2010	Yes	Journal Article
	Design, synthesis and pharmacological characterization of endomorphin analogs with non-cyclic amina acid residues in position 2.	Perlikowska R, Fichna J, Wyrebska A, Poels J, Vanden Broeck J, Toth G, Storr M, do- Rego JC, Janecka A.	2010	Yes	Journal Article
	Microscopic colitis: a common cause of diarrhea in older adults.	Williams JJ, Beck PL, Andrews CN, Hogan DB, Storr MA.	2010	Yes	Journal Article
	Juvenile polyposis of the stomach - a novel cause of hypergastrinemia.	Papay KD, Falck VG, Poulsen SS, Panaccione R, Rehfeld JF, Storr M		Yes	Journal Article
	Differential effects of CB1 neutral antagonists and inverse agaonists on gastrointestinal motility in mice.	Storr MA, Bashashati M, Hirota C, Vemuri VK, Keenan CM, Duncan M, Lutz B, Mackie K, Makriyannis A, MacNaughton WK, Sharkey KA.	2010	Yes	Journal Article
	A novel method of full- thickness gastric biopsy via a percutaneous endoscopically- assisted transenteric (PEATE) approach.	Fraser H, Neshev E, Storr M, Urbanski SJ, Andrews CN.	2010	Yes	Journal Article
	Cannabinoid 1 (CB1) receptors modulate intestinal sensory and motor function in rats.	Yuce B, Kemmer M, Qian G, Muller M, Sibaev A, Li YY, Kreis ME, Storr M.	2010	Yes	Journal Article
	Synthesis and biological evaluation of novel peripherally active morphiceptin analogs.	Gach K, do-Rego JC, Fichna J, Storr M, Delbro D, Toth G, Janecka A.	2010	Yes	Journal Article
Sumner,Glen	Device-related infection among patients with pacemakers and implantable defibrillators: incidence, risk factors, and consequences	Nery PB, Fernandes R, Nair GM, Sumner GL, et al.	2010	Yes	Journal Article
	Recent history of vasovagal syncope in a young, referral- based population is a stronger predictor of recurrent syncope than lifetime syncope burden		2010	Yes	Journal Article





Name Serviz Mark Carden	Title	Authorship	Publish Year	IsPeerReviewed	Туре
Swain,Mark Gordon	NKT cells within the liver: Conductors of the hepatic immune orchestra.	Swain MG	2010	Yes	Journal Article
	Validation of Coding Algorithms for the Identification of Patients with Primary Biliary Cirrhosis Using Administrative Data	Myers RP, Shaheen AAM, Fong A, Wan AF, Swain MG, Hilsden RJ, Sutherland L, Quan H	2010	Yes	Journal Article
	inferior to pegylated interferon-alpha in a randomized trial of patients	Nelson DR, Benhamou Y, Chuang WL, Lawitz EJ, Rodriguez-Torres, Fisiak R, Rasenack JO, Kryczka W, Lee CM, Bain VG, Pianko S, Patel K, Cronin PW, Pulkstensis E, Subramanian GM, McHutchinson JG, ACHIEVE 2-3 Study Team (including M. Swain).		Yes	Journal Article
	Albinterferon alfa-2b was not inferior to pegylated interferon-alfa in a randomized trial of patients with chronic hepatitis C virus genotype 1.	Zeuzem S, Sulkowski MS, Lawitz EJ, Rustgi VK, Rodriguez-Torres, Bacon BR, Grigorescu M, Tice AD, Laurie Y, Cianciara J, Muir AJ, Cronin PW, Pulkstensis E, Subramanian GM, McHutchinson JG, ACHIEVE-1 Study Team (including M.Swain).	2010	Yes	Journal Article
Tai,Davina	Letter To the Editor re: "A simple method to create buttonhole cannulation tracks in a busy hemodialysis unit"	MacRae JM, Tai DJ, Daniw M, Lee J	2010	Yes	Journal Article
	Cardiovascular Effects of ACE Inhibition or Angiotensin Receptor Blockade in Hemodialysis: A Meta- Analysis	Tai DJ, Lim TW, James MT, Manns BJ, Tonelli M, Hemmelgarn BR	2010	Yes	Journal Article
Tibbles,Lee Anne	MAP Kinase Activation Increases BK Polyomavirus Replication and Facilitates Viral Propagation in vitro	Seamone ME, P Acott, P Beck, LA Tibbles, DA Muruve	2010	Yes	Journal Article
	Anti-BK Virus Mechanisms of Sirolimus and Leflunomide Alone and in Combination: Towards a New Therapy for BK Virus infection.	Liacini, A., Seamone, M.E., Muruve, D.A. and Tibbles, L.A	2010	Yes	Journal Article
Tremblay,Alain	How should we manage empyema complicating tunnelled pleural catheter placement?	Tremblay A, D Stather, P MacEachern	2010	Yes	Journal Article
	Repair Costs for Endobronchial Ultrasound Bronchoscopes	Hergott C, Stather D, MacEachern P, Tremblay A.	2010	Yes	Journal Article
Volontico Vol	Exercise Capacity, Lung Function & Quality of Life after Interventional Bronchoscopy	Oviatt L, Stather D, Michaud G, MacEachern P, Tremblay A.	2010	Yes	Journal Article
Valentine,Karen	Correcting excess anticoagulation after warfarin. UpToDate in Pulmonary and Critical Care Medicine, 2010.	Valentine KA and Hull RD.	2010	Yes	Journal Article





Name	Title Outpatient management of oral anticoagulation. UpToDate in Pulmonary and Critical Care Medicine, 2010.	Authorship Valentine KA and Hull RD.	Publish Year 2010	<b>IsPeerReviewed</b> Yes	<b>Type</b> Journal Article
	Anticoagulation in acute pulmonary embolism. UpToDate in Pulmonary and Critical Care Medicine 2010.	Valentine KA and Hull RD	2010	Yes	Journal Article
	Life-threatening hemolytic anemia due to an autoanti-Pr cold agglutinin: evidence that glycophorin A antibodies may induce lipid bilayer exposure and cation permeability independent of agglutination.	Brain MC, Ruether B, Valentine K, Brown C, ter Keurs H	2010	Yes	Journal Article
	Therapeutic use of heparin and low molecular weight heparin, UpToDate in Pulmonary and Critical Care	Valentine KA and Hull RD.	2010	Yes	Journal Article
	Therapeutic use of Warfarin. UpToDate in Pulmonary and Critical Care Medicine, 2010.	Valentine KA and Hull RD	2010	Yes	Journal Article
Critical Care Medicine 2010.Life-threatening hemolytic anemia due to an autoanti-Pr cold agalutini: viduoe lipid bilipor agglutinistion.Brain MC, Ruether B, Valentine R, Brown C, ter Keurs H2010YesJournal Articleinduce lipid bilipor agglutinistion.Permeability independent of agglutinistion.Valentine KA and Hull RD.2010YesJournal ArticleTherapeutic use of heparin and low molecular weight heparin. UpToDate in Pulmonary and Critical Care Medicine 2010.Valentine KA and Hull RD.2010YesJournal ArticleVeenhuyzen,George (Vorgo) ablation of long-lasting persistent artial fibrillation persistent artial fibrillation promotes real inflammasome promotes to CKD.Hocini M, Nault I, Wright M, Socher F, Clémenty2010YesJournal ArticleWang,WenjieThe NLRP3 inflammasome promotes to CKD.Vilayane A, Chur J, Seamone RE, Wang W, Chi R, Hirota S, and contributes to CKD.2010YesJournal ArticleMAP Kinase activation replication and facilitates viral propagation in vitro.Vilayane A, Chur J, Seamone RE, Wang W, Chi R, Hirota S, and contributes to CKD.2010YesJournal ArticleWeeks,SarahMAP Kinase activation replication and facilitates viral propagation in vitro.Seamone ME, Wang W, Acott P, 20102010YesJournal ArticleWeeks,SarahPulmonary sensity replication and facilitates viral propagation in vitro.Seamone ME, Wang W, Acott P, 20102010YesJournal ArticlePulmonary wing find replication and facilitates viral propagation in vitro. <t< td=""></t<>					
(comujacii)ocorge (r	Disparate evolution of right and left atrial rate during ablation of long-lasting	Veenhuyzen G, Narayan SM, Jaïs P, Lim KT, Knecht S, Matsuo S, Forclaz A, Miyazaki S, Jadidi A, O'Neill MD, Sacher F, Clémenty	2010	Yes	Journal Article
Wang,Wenjie	promotes renal inflammation	ME, Wang W, Chin R, Hirota S, Li Y, Clark SA, Tschopp J, Trpkov K, Hemmelgarn BR, Beck	2010	Yes	Journal Article
	increases BK polyomavirus replication and facilitates			Yes	Journal Article
Weeks,Sarah	following left	<b>.</b>	2010	Yes	Journal Article
Wong,Norman	Stilbene analogs as inducers of apolipoprotein-I transcription.	Hansen HC, Chiacchia FS, Patel R, Wong NC, Khlebnikov V, Jankowska R, Patel K, Reddy MM.	2010	Yes	Journal Article
	RVX-208: a small molecule that increases apolipoprotein A-I and high-density lipoprotein cholesterol in vitro and in vivo	Bailey D, Jahagirdar R, Gordon A, Hafiane A, Campbell S, Chatur S, Wagner GS, Hansen HC, Chiacchia FS, Johansson J, Krimbou L, Wong NC, Genest J.	2010	Yes	Journal Article





Name	Title Stilbene analogs as inducers of apolipoprotein-I transcription.	Authorship Hansen HC, Chiacchia FS, Patel R, Wong NC, Khlebnikov V, Jankowska R, Patel K, Reddy MM.	Publish Year 2010	<b>IsPeerReviewed</b> Yes	<b>Type</b> Journal Article
	RVX-208: A Small Molecule That Increases ApoA-I and HDL in vitro and in vivo.	Bailey, D, Jahagirdar, R., Gordon, A., Hafiane, A., Campbell, S., Chatur, S., Wagnor, G., Hansen, H., Chiacchia, F., Johansson, J., Krimbou, L., Wong, N.C.W., Genest, J.	2010	Yes	Journal Article
Yan,Brian	Contrast Enhanced Endoscopic Ultrasound: More than just a fancy Doppler.	Mohamed R and Yan BM.	2010	Yes	Journal Article
	Endoscopic ultrasound features of "subacute" radiation proctitis: A case	Williams G and Yan BM.	2010	Yes	Journal Article
	report. EUS guided gold fiducial insertion for image guided radiation therapy of pancreatic cancer: 50 successful cases without fluoroscopy.	Park WG*,Yan BM*, Schellenberg D, Kim J, Koong AK, Van Dam J	2010	Yes	Journal Article
Zarnke,Kelly	A prospective cohort study found that provider and information continuity was low after patient discharged from hospital	C van Walraven, M Taljaard, E Etchells, CM Bell, IG Stiell, KB Zarnke, AJ Forster	2010	Yes	Journal Article
	The independent association of provider and information continuity on outcomes after hospital discharge: implications for hospitalist	C van Walraven, M Taljaard, E Etchells, CM. Bell, IG. Stiell, KB Zarnke, AJ. Forster	2010	Yes	Journal Article
	Identification of factors driving differences in cost- effectiveness of first line pharmacologic therapy for uncomplicated hypertension	SW Klarenbach, FA McAlister, H Johansen, K Tu, M Hazel, R Walker, KB Zarnke, NRC Campbell	2010	Yes	Journal Article
	Derivation and validation of the LACE index to predict early death or unplanned re- admission after discharge from hospital to the community	van Walraven C, Dhalla IA, Bell C, Etchells E, Stiell IG, Zarnke KB, Austin PC, Forster AJ.	2010	Yes	Journal Article
Ziouzina,Olga	"SLEDAI-2K Responder Index (SRI)-50: Reliable Index for Measuring Improvement in DiseaseActivity" Lupus 2011 (In press).	Touma Z., Urowitz M.B., Fortin P.R., Landolt C., Toloza S.M., Riddell C., Chandran V., Eder L., Ghanem A., Ziouzina O. Taghavi- Zadeh S, Ibañez D, Gladman D.D.	2010	Yes	Journal Article
Total	719				





## RESEARCH REVENUE FOR DEPARTMENT OF MEDICINE - APRIL 1, 2010 TO MARCH 31, 2011

				Tri Council	
				Project	
Full Name	Amount	Project Short Desc	Sponsor Name	YN	Tri Council Source
Ronald Sigal	(\$17,138.61)	TECOS 082-01 Sitagliptin	MERCK SHARP & DOHME CORPORATION	N	NON TRI-COUNCIL
Naushad Hirani	(\$8,112.65)	TDE-PH-308 Oral UT-15C	UNITED THERAPEUTICS CORPORATION	N	NON TRI-COUNCIL
Robert Myers	(\$68,573.70)	TCM435-TiDP16-C206	TIBOTEC PHARMACEUTICALS LTD	N	NON TRI-COUNCIL
Warren James Davidson	(\$4,095.00)	CQAB149B2348 indacaterol	NOVARTIS PHARMACEUTICALS CANADA INC	N	NON TRI-COUNCIL
David Arthur Hanley	(\$2,361.18)	Denosumab 20080099	AMGEN CANADA INC	N	NON TRI-COUNCIL
Douglas Helmersen		CQT1571A2301 (IMPRES)	NOVARTIS PHARMACEUTICALS CANADA INC	N	NON TRI-COUNCIL
Charlene Deanne Fell	(\$12,578.50)	GS-US-300-0128 ARTEMIS-PH	GILEAD SCIENCES INCORPORATED	N	NON TRI-COUNCIL
Richard Leigh	(\$37,965.42)	Subcutaneous MEDI-528	ASTRA ZENECA	N	NON TRI-COUNCIL
Richard Leigh	(\$25,048.35)	(RO4989991) OXF4696g	GENENTECH INC.	N	NON TRI-COUNCIL
Samuel Song-Gu Lee		Polymerase inhibitor NV22621	HOFFMANN-LA ROCHE LIMITED	N	NON TRI-COUNCIL
Martin Storr	(\$24,486.25)	Adalimumab in crohn's disease	ABBOTT LABORATORIES	N	NON TRI-COUNCIL
Douglas Helmersen		tolerability of NVA237	NOVARTIS PHARMACEUTICALS CANADA INC	N	NON TRI-COUNCIL
David Lau	(\$13,747.00)	Safety of AVE0010	SANOFI AVENTIS CANADA INCORPORTATED	N	NON TRI-COUNCIL
David Arthur Hanley	(\$3,150.00)	treatment of hypercalcemia	AMGEN CANADA INC	N	NON TRI-COUNCIL
Remo Panaccione	(\$1,820.00)	tolerability of AIN457	NOVARTIS PHARMACEUTICALS CANADA INC	N	NON TRI-COUNCIL
Robert Lawrence Cowie	(\$5,657.70)	effects of SCH 527123	SCHERING-PLOUGH CANADA INC.	N	NON TRI-COUNCIL
Carla Coffin		Contract ID#07610C	HOFFMANN-LA ROCHE LIMITED	N	NON TRI-COUNCIL
Samuel Song-Gu Lee		management of anemia.	SCHERING-PLOUGH CANADA INC.	N	NON TRI-COUNCIL
William Oliver Martin		subcutaneous golimumab (GLM)	SCHERING-PLOUGH CANADA INC.	N	NON TRI-COUNCIL
Samuel Song-Gu Lee		safety of PEG-rIL-29	ZYMOGENETICS INC.	N	NON TRI-COUNCIL
David Lau		patients with type 2 diabetes	ASTRAZENECA CANADA INC.	N	NON TRI-COUNCIL
Thomas John Louie		study of CB-183,315 in patient	CUBIST PHARMACEUTICALS, INC.	N	NON TRI-COUNCIL
Christopher Mody	(\$4,400.00)	pseudomonas aeruginosa	ARADIGM CORPORATION	N	NON TRI-COUNCIL
Richard Leigh	(\$66,834.30)	uncontrolled refractory asthma	GLAXOSMITHKLINE	N	NON TRI-COUNCIL
Stephen Kimmer Field	(\$15,563.42)	tiotropium inhalation capsules	BOEHRINGER INGELHEIM (CANADA) LTD	N	NON TRI-COUNCIL
Michael John Gill	(\$6,151.00)	elvitegravir/emtricitabine/	GILEAD SCIENCES INCORPORATED	N	NON TRI-COUNCIL
Carla Coffin	(\$5,395.00)	Pharmacogenomic analysis	NOVARTIS PHARMA AG	N	NON TRI-COUNCIL
Brenda Hemmelgarn	(\$31,274.03)	type 2 diabetes mellitus	BOEHRINGER INGELHEIM (CANADA) LTD	N	NON TRI-COUNCIL
Harvey Ronald Rabin	(\$9,493.24)	205.438	BOEHRINGER INGELHEIM (CANADA) LTD	N	NON TRI-COUNCIL
Robert Lawrence Cowie	(\$2,000.00)	MI-CP196	ASTRAZENECA CANADA INC.	N	NON TRI-COUNCIL
Richard Leigh	(\$24,500.00)	TPI ASM8-207	PHARMAXIS LTD./ETHIC CLINICAL RESEARCH	N	NON TRI-COUNCIL
Lee Anne Tibbles	(\$82,160.00)	Monitoring Plan	PFIZER CANADA INC	N	NON TRI-COUNCIL
Robert Jay Hilsden	(\$2,957.55)	Detection Colorectal Neoplasia	EXACT SCIENCES CORPORATION	N	NON TRI-COUNCIL
David Lau	(\$6,630.00)	Efficacy & Safety of BI10773	BOEHRINGER INGELHEIM (CANADA) LTD	N	NON TRI-COUNCIL
Richard Leigh	(\$1,500.00)	NOCOMPUNDASH0001	CENTOCOR ORTHO BIOTECH INC.	N	NON TRI-COUNCIL
Robert Lawrence Cowie	(\$3,000.00)	20090203	AMGEN CANADA INC	N	NON TRI-COUNCIL
Richard Leigh	(\$22,814.00)	D2340C00005	ASTRAZENECA CANADA INC.	N	NON TRI-COUNCIL
Remo Panaccione	(\$5,000.00)	20090072; CCCR-122	AMGEN CANADA INC	N	NON TRI-COUNCIL
William Oliver Martin	(\$7,500.00)	1	BRISTOL-MYERS SQUIBB CANADA INC	N	NON TRI-COUNCIL
David Lau	(\$2,906.10)	Saxagliptin Assessment of Vasc	BRIGHAM & WOMEN'S HOSPITAL	N	NON TRI-COUNCIL
Remo Panaccione		M11-271; CALM	ABBOTT LABORATORIES	N	NON TRI-COUNCIL
Charlotte Ann Jones	(\$2,500.00)	Cardiovascular Reduct Clinic	CARDIOVASCULAR RISK REDUCTION CLINIC	N	NON TRI-COUNCIL
Merril Lloy Knudtson	(\$133,747.33)	Cardiology Fellowship	ANGIOPLASTY FELLOWS SALARY	N	NON TRI-COUNCIL
Merril Lloy Knudtson		Cardiology Fellowship	ANGIOPLASTY FELLOWS SALARY	N	NON TRI-COUNCIL
Russell Douglas Hull		Residual Balance Project	RESIDUAL BALANCE - CT	N	NON TRI-COUNCIL
Mark Gordon Swain		Liver to Brain disease	CIHR - COMMON AWARDS CIHR300	Y	CIHR
Harvey Ronald Rabin		Infectious Diseases Research	INFECTIOUS DISEASES RESEARCH	N	NON TRI-COUNCIL
Christopher Mody		Respiratory Disease/Pulmonary	RESPIRATORY DISEASE/PULMONARY MEDICINE	N	NON TRI-COUNCIL
Dianne Mosher		TAS00/0192	ARTHRITIS SOCIETY	N	NON TRI-COUNCIL
Michael John Gill		Residual Balance	RESIDUAL BALANCE - CT	N	NON TRI-COUNCIL
Samuel Song-Gu Lee		GROUP ACCOUNT	RESIDUAL BALANCE - CT	N	NON TRI-COUNCIL
Christopher Mody		Psuedomonas Superantigens	CYSTIC FIBROSIS CANADA	N	NON TRI-COUNCIL
Russell Douglas Hull		HULL R D	NATIONAL INSTITUTES OF HEALTH	N	NON TRI-COUNCIL
Robert Lawrence Cowie	(\$1.00)	COPD and Asthma program	CALGARY ASTHMA PROGRAM	N	NON TRI-COUNCIL
David Arthur Hanley		MCGILL UNIVERSITY	CAMOS-CDN MULTI-CENTRE OSTEOPOROSIS STUDY	N	NON TRI-COUNCIL
Merril Lloy Knudtson		KNUDTSON M L/ANDERSON T/TRABOU	RESIDUAL BALANCE - CT	N	NON TRI-COUNCIL
Merril Lloy Knudtson		KNUDTSON M L/ANDERSON T/TRABOU	RESIDUAL BALANCE - CT	N	NON TRI-COUNCIL
James Andrew Russell	(\$22,041.84)	Russell/POON	BONE MARROW TRANSPLANT PROGRAM DEVELOPMENT	N	NON TRI-COUNCIL
Robert Lawrence Cowie	(\$800.00)	Richards Ride for Asthma	RICHARD'S RIDE FOR ASTHMA	N	NON TRI-COUNCIL
Robert Lawrence Cowie	(\$22,206.00)	Richards Ride for Asthma	RICHARD'S RIDE FOR ASTHMA	N	NON TRI-COUNCIL





David Arthur Hanley	(\$10,874.18)	TSE-424 (Bazedoxifene Acetate)	WYETH CANADA	N	NON TRI-COUNCIL
Mark Gordon Swain	(\$11,030.00)	PROTOCOL - A1463-	BRISTOL-MYERS SQUIBB CANADA INC	N	NON TRI-COUNCIL
William Oliver Martin	(\$25,169.04)	WA17531Rituximad (MabThera/Ri	HOFFMANN-LA ROCHE LIMITED	N	NON TRI-COUNCIL
William Oliver Martin		WA16855 Rituximab Version B	HOFFMANN-LA ROCHE LIMITED	N	NON TRI-COUNCIL
Vichael John Gill		A4001026 CCRS ANTAGONIST, UK-4	PFIZER CANADA INC	N	NON TRI-COUNCIL
Robert Myers	• • •	Tenofovir DR versus Adefovir	GILEAD SCIENCES INCORPORATED	N	NON TRI-COUNCIL
Samuel Song-Gu Lee	(\$33,598.12)	Tenofovir DF vs Adefovir Dipli	GILEAD SCIENCES INCORPORATED	N	NON TRI-COUNCIL
Douglas Helmersen		Endothelin Trial	ACTELION PHARMACEUTICALS CANADA INC	N	NON TRI-COUNCIL
William Oliver Martin		Ocrelizumab	HOFFMANN-LA ROCHE LIMITED	N	NON TRI-COUNCIL
Douglas Helmersen		PHIRST 1 & PHIRST 2	ELI LILLY CANADA INC	N	NON TRI-COUNCIL
William Oliver Martin	(\$30,792.00)		HOFFMANN-LA ROCHE LIMITED	N	NON TRI-COUNCIL
William Oliver Martin		Rituximab with Methotrexate	HOFFMANN-LA ROCHE LIMITED	N	NON TRI-COUNCIL
Robert Myers		Tenofovir Comparison	GILEAD SCIENCES INCORPORATED	N	NON TRI-COUNCIL
Robert Myers		PEGETRON REDIPEN	SCHERING-PLOUGH CANADA INC.	N	NON TRI-COUNCIL
Sharon Anne Le Clercq		WA18696 Tocilizumab	HOFFMANN-LA ROCHE LIMITED	N	NON TRI-COUNCIL
Jennifer Marie MacRae		EVOLE-Cinacalcet HCI	AMGEN CANADA INC	N	NON TRI-COUNCIL
Robert Myers		Realm Study	BRISTOL-MYERS SQUIBB CANADA INC	N	NON TRI-COUNCIL
Remo Panaccione		C87046 RPCEO6C1511	UCB S A/PHARMA	N	NON TRI-COUNCIL
Remo Panaccione	(\$5,500.00)	Adalimumab M06-826	ABBOTT LABORATORIES	N	NON TRI-COUNCIL
Robert Myers		Rollover of Teleprevir	VERTEX PHARMACEUTICALS INORPORATED	N	NON TRI-COUNCIL
Naushad Hirani		Freedom UT-15C SR	UNITED THERAPEUTICS CORPORATION	N	NON TRI-COUNCIL
Stephen Kimmer Field		CIGE025ACA01 XOLAIR OMALIZUMAB	NOVARTIS PHARMACEUTICALS CANADA INC	N	NON TRI-COUNCIL
Naushad Hirani		FREEDOM-C ORAL UT-15C SUSTAIN	UNITED THERAPEUTICS CORPORATION	N	NON TRI-COUNCIL
Remo Panaccione	(\$2,121.64)		ABBOTT LABORATORIES	N	NON TRI-COUNCIL
Kelly Warren Burak		RFHE3002 Rifaximin	SALIX PHARMACEUTICALS, INC	N	NON TRI-COUNCIL
P.Timothy Pollak	(\$2,524.39)	IC4-9490-123-CAN Perindopril	SERVIER CANADA INC	N	NON TRI-COUNCIL
Samuel Song-Gu Lee		GS-US-203-0101 Tenofovir DF	GILEAD SCIENCES INCORPORATED	N	NON TRI-COUNCIL
Remo Panaccione	(\$3,514.00)	P04807 06 infliximab	SCHERING-PLOUGH CANADA INC.	N	NON TRI-COUNCIL
Jonathan Love	(\$23,075.86)	CLN35311 Pentasaa Mesalamin	FERRING INC	N	NON TRI-COUNCIL
David Arthur Hanley	(\$3,394.70)	CL312911032MALEOStontiumRanela	SERVIER CANADA INC	N	NON TRI-COUNCIL
Samuel Song-Gu Lee	\$8,112.00	NV19865B Prodrug RO4588161	HOFFMANN-LA ROCHE LIMITED	N	NON TRI-COUNCIL
Stephen Kimmer Field	(\$540.00)	CIGE025A2433 Xolair	NOVARTIS PHARMACEUTICALS CANADA INC	N	NON TRI-COUNCIL
David Lau	(\$5,789.00)	MB102014 DapaglifozinMetformin	BRISTOL-MYERS SQUIBB CANADA INC	N	NON TRI-COUNCIL
David Lau	(\$4,869.20)	MB102013 Dapaglifozin	BRISTOL-MYERS SQUIBB CANADA INC	N	NON TRI-COUNCIL
Richard Leigh	(\$16,839.41)	RES 5 0010 Reslizumab CTX55700	CEPTION THERAPEUTICS INC.	N	NON TRI-COUNCIL
Robert Myers	(\$3,109.18)	VX07-950-108 Copegus Pegasys	VERTEX PHARMACEUTICALS INORPORATED	N	NON TRI-COUNCIL
Ellen Diane Burgess	(\$4,038.28)	AST-120 KRM 307	PHARMANET LLC	N	NON TRI-COUNCIL
Michael John Gill	(\$9,417.50)	AGS-004-001 ARGOS	ARGOS THERAPEUTICS INC.	N	NON TRI-COUNCIL
Michael John Gill	(\$1,080.00)	AGS-004-001 ARGOS	ARGOS THERAPEUTICS INC.	N	NON TRI-COUNCIL
Richard Leigh	(\$327.00)	MAESTRAL 11980	BAYER HEALTHCARE DIVISION	N	NON TRI-COUNCIL
Robert Jay Hilsden	(\$20,272.83)	Evaluation Cancer Risk	PHENOMENOME DISCOVERIES INC.	N	NON TRI-COUNCIL
Remo Panaccione	(\$23,219.51)	M10-222 Intravenous Infusions	ABBOTT LABORATORIES	N	NON TRI-COUNCIL
Remo Panaccione	(\$10,600.00)	P06-134 Adalimumab	ABBOTT LABORATORIES	N	NON TRI-COUNCIL
David Lau	(\$16,467.00)	D1690C0006 Dapagliflozin	ASTRA ZENECA	N	NON TRI-COUNCIL
David Arthur Hanley	(\$28,423.50)	MK-0822-031 Odanacatib	MERCK FROSST CANADA INC	N	NON TRI-COUNCIL
Alain Tremblay	(\$171,602.00)	Early Detection of Lung Cancer	TERRY FOX RESEARCH INSTITUTE	N	NON TRI-COUNCIL
Richard Leigh	(\$21,286.00)	COGEP025A2432 omalizumab	NOVARTIS PHARMACEUTICALS CANADA INC	N	NON TRI-COUNCIL
Mouhieddin Traboulsi	(\$20,538.00)	Saturn Coronary Atheroma	ASTRA ZENECA	N	NON TRI-COUNCIL
Harvey Ronald Rabin		Efficacy and safety of VX-770	VERTEX PHARMACEUTICALS INORPORATED	N	NON TRI-COUNCIL
Remo Panaccione		603 PROCHYMAL	OSIRIS THERAPEUTICS, INC.	N	NON TRI-COUNCIL
Remo Panaccione		603 PROCHYMAL	OSIRIS THERAPEUTICS, INC.	N	NON TRI-COUNCIL
Kelly Warren Burak		STORM Sorafenib	BAYER HEALTHCARE DIVISION	N	NON TRI-COUNCIL
Richard Leigh		MI CP166 Medi 563	MEDIMMUNE INC	N	NON TRI-COUNCIL
Remo Panaccione		CAIN457A2202 AIN457 10mg/kg (a	NOVARTIS PHARMACEUTICALS CANADA INC	N	NON TRI-COUNCIL
Robert Myers		AI463-110 The BELOW Study	BRISTOL-MYERS SQUIBB CANADA INC	N	NON TRI-COUNCIL
Remo Panaccione		M10-223 Adalimumab	ABBOTT LABORATORIES	N	NON TRI-COUNCIL
Vichael Curtis		SPIRIT V XIENCE TM V Everolimu	ABBOTT VASCULAR	N	NON TRI-COUNCIL
Remo Panaccione		GEM Study IBD	MOUNT SINAI HOSPITAL	N	NON TRI-COUNCIL
David Gaetan Patry		ELN115727 301 Bapineuzumab	ELAN PHARMACEUTICALS INC	N	NON TRI-COUNCIL
Felix Mauricio Monroy Cuadr		FKC-014 LOW DOSE ADGRAF	ASTELLAS PHARMA CANADA INC	N	NON TRI-COUNCIL
Man-Chiu Poon	• • •	12781 BY 79-4980	BAYER INC	N	NON TRI-COUNCIL
James Wayne Warnica		PACE-MI Pacemaker	NORTHWESTERN UNIVERSITY	N	NON TRI-COUNCIL
William Oliver Martin		C87094 Certizumab Pegol	UCB S A/PHARMA	N	NON TRI-COUNCIL
Richard Leigh		332 02 Oral Montelukast sodium	MERCK FROSST CANADA INC	N	NON TRI-COUNCIL
Mark Gordon Swain		CABF656B2202 albinterferon	NOVARTIS PHARMACEUTICALS CANADA INC	N	NON TRI-COUNCIL
Naushad Hirani		AC 055 302 SERAPHIN Study	ACTELION PHARMACEUTICALS CANADA INC	N	NON TRI-COUNCIL
Stephen Kimmer Field	(\$20,017.61)	1222 14 BI 1744 CL	BOEHRINGER INGELHEIM (CANADA) LTD	N	NON TRI-COUNCIL





Douglas Helmersen	(\$16,478.65)	GS US 300 0124 ambrisentan	GILEAD SCIENCES INCORPORATED	Ν	NON TRI-COUNCIL
Nairne Scott-Douglas	(\$39,812.50)	20070360 cinacalcet treatment	AMGEN CANADA INC	Ν	NON TRI-COUNCIL
Remo Panaccione	(\$16,737.00)	C13008 MLN0002	MILLENIUM PHARMACEUTICALS/QUINTILES CANADA INC.	Ν	NON TRI-COUNCIL
Mouhieddin Traboulsi	(\$41,868.32)	07 116 INNOVATE PCI	PORTOLA PHARMACEUTICALS INC	Ν	NON TRI-COUNCIL
Harvey Ronald Rabin	(\$7,465.25)	DPM-CF-302 Dry Powder Mannitol	PHARMAXIS LTD./ETHIC CLINICAL RESEARCH	Ν	NON TRI-COUNCIL
David Lau	(\$27,118.85)	H80 CA GWCE ExenatideMetformin	ELI LILLY CANADA INC	Ν	NON TRI-COUNCIL
Naushad Hirani	(\$9,677.00)	AC-052-510 DETECT	ACTELION PHARMACEUTICALS CANADA INC	Ν	NON TRI-COUNCIL
David Arthur Hanley	(\$7,971.47)	CL1 11 040 NPSP 558 rhPTH1 84	NPS PHARMACEUTICALS	Ν	NON TRI-COUNCIL
James Wayne Warnica	(\$1,540.50)	TOPCAT Aldosterone antagonist	NEW ENGLAND RESEARCH INSTITUTES INC	Ν	NON TRI-COUNCIL
Remo Panaccione	(\$21,060.00)	C13007 MLN0002	MILLENIUM PHARMACEUTICALS/QUINTILES CANADA INC.	Ν	NON TRI-COUNCIL
David Lau	(\$3,126.50)	A2171121 Exubera	PFIZER CANADA INC	Ν	NON TRI-COUNCIL
Shane Devlin	(\$13,112.50)	P05587 OPTIMIST Inflizimab	SCHERING-PLOUGH CANADA INC.	Ν	NON TRI-COUNCIL
Charlene Deanne Fell	(\$39,875.00)	GS-US-231-0101 ARTEMIS STUDY	GILEAD SCIENCES INCORPORATED	Ν	NON TRI-COUNCIL
Kelly Warren Burak	(\$14,013.00)	CA182-033 BRISK FL	BRISTOL-MYERS SQUIBB CANADA INC	Ν	NON TRI-COUNCIL
Samuel Song-Gu Lee	(\$34,313.24)	NV20536 HCV Polymerase Inhibit	HOFFMANN-LA ROCHE LIMITED	Ν	NON TRI-COUNCIL
Douglas Helmersen		Study 12935 BAY 63 2521	BAYER INC	Ν	NON TRI-COUNCIL
Douglas Helmersen	(\$6,212.50)	Study 11349 BAY 63 2521	BAYER INC	Ν	NON TRI-COUNCIL
Kelly Warren Burak	(\$50,130.50)	12918 TACEsorafenibdoxorubicin	BAYER HEALTHCARE DIVISION	Ν	NON TRI-COUNCIL
Douglas Helmersen	(\$17,877.88)	Study 12934 BAY 63 2521	BAYER INC	Ν	NON TRI-COUNCIL
Paul Stephen Gibson		CHIPS Study	UNIVERSITY OF BRITISH COLUMBIA	Ν	NON TRI-COUNCIL
Mark Gordon Swain		Effect on virological response	HOFFMANN-LA ROCHE LIMITED	Ν	NON TRI-COUNCIL
Douglas Helmersen		Study 11348 BAY 63 2521	BAYER INC	Ν	NON TRI-COUNCIL
Russell Douglas Hull		ThromboProphylaxis late outcom	SANOFI AVENTIS CANADA INCORPORTATED	N	NON TRI-COUNCIL
Richard Leigh		Corticoseroid refract. asthma	GENENTECH INC.	Ν	NON TRI-COUNCIL
Naushad Hirani		Cicietanine in subjects	GILEAD SCIENCES INCORPORATED	Ν	NON TRI-COUNCIL
Robert Myers		Fibroscan in obese patients	ECHOSENS SOCIETE ANONYME	Ν	NON TRI-COUNCIL
Remo Panaccione	(\$105,606.00)	Safety of Ustekinumab	CENTOCOR RESEARCH AND DEVELOPMENT	Ν	NON TRI-COUNCIL
Samuel Song-Gu Lee		pharmokinetics of TMC435	TIBOTEC PHARMACEUTICALS LTD	Ν	NON TRI-COUNCIL
Robert Myers	(\$5,794.04)	1220.40 B1 201335 NA	BOEHRINGER INGELHEIM (CANADA) LTD	Ν	NON TRI-COUNCIL
David Arthur Hanley	(\$51,625.65)	20060326 AMG785	AMGEN CANADA INC	Ν	NON TRI-COUNCIL
David Arthur Hanley	(\$3,500.00)	20060326 AMG785	AMGEN CANADA INC	Ν	NON TRI-COUNCIL
Naushad Hirani	(\$74,898.00)	Bosentan & Sildenafil therapy	ACTELION PHARMACEUTICALS CANADA INC	Ν	NON TRI-COUNCIL
Thomas John Louie		EP 08033.002 V 1.8	MERCK & CO INC	N	NON TRI-COUNCIL
Kelly Warren Burak		TRA 108132	GLAXOSMITHKLINE	N	NON TRI-COUNCIL
Kevin Bjorn Laupland		Epidemiology of haemophilus	GLAXOSMITHKLINE	N	NON TRI-COUNCIL
Stephen Kimmer Field		CQAB149B2348	NOVARTIS PHARMACEUTICALS CANADA INC	N	NON TRI-COUNCIL
David Arthur Hanley		B3D-US-GHDL	ELI LILLY CANADA INC	N	NON TRI-COUNCIL
Ronald Sigal		Thiazolidinedione intervention	GLAXOSMITHKLINE	N	NON TRI-COUNCIL
Avril Anne Fitzgerald		ANTI-TNF ANTIBODY D2E7	ABBOTT LABORATORIES	N	NON TRI-COUNCIL
William Oliver Martin	(\$9,500.00)		KNOLL PHARMA INC/ABBOTT LAB LTD	N	NON TRI-COUNCIL
Alun Lloyd Edwards	(\$67,324.00)		MCMASTER UNIVERSITY	N	NON TRI-COUNCIL
John Edward Remmers		RESPIRONICS	UNIVERSITY TECHNOLOGIES INTERNATIONAL	N	NON TRI-COUNCIL
Bernard Corenblum		B9R-EW-GDDQ	ELI LILLY CANADA INC	N	NON TRI-COUNCIL
Lee Anne Tibbles		BK Virus Nephropathy	WYETH AYERST PHARMACEUTICALS INC	N	NON TRI-COUNCIL
Paul Beck		anti-PAR2 antibodies	AMGEN INC.	N	NON TRI-COUNCIL
Mark Gordon Swain		Herbal compound A4+	SABELL CORPORATION	N	NON TRI-COUNCIL
Alain Tremblay		Catheter for Pleurodesis	UNIVERSITY TECHNOLOGIES INTERNATIONAL	N	NON TRI-COUNCIL
Gilaad Kaplan Brondo Hommolgarn		4500239310	HEALTH CANADA - POPULATION STUDIES DIVISION	N	NON TRI-COUNCIL
Brenda Hemmelgarn		Lauren Bresee Rsch Allow	AB INNOVATES-HEALTH SOLUTIONS-RES ALLW FELLOW	N	NON TRI-COUNCIL
Morley Donald Hollenberg		Schneider Prism	AHFMR-RESEARCH ALLOWANCE-STUDENTSHIPS	N	NON TRI-COUNCIL
Doreen Rabi		Sonia Butalia Rsch Allow		N	NON TRI-COUNCIL
Paul Beck		Simon Hirota Rsch Allow	AHFMR-RESEARCH ALLOWANCE-FELLOWSHIPS	N	NON TRI-COUNCIL
Gil Kaplan Pichard Leigh		Natalie Molodecky Rsch Allw	AB INNOVATES-HEALTH SOLUTIONS-RES ALLOW STUDENT	N	NON TRI-COUNCIL
Richard Leigh William Amin Ghali		Claire Tacon Rsch Allw Alexander Leung Rsch Allw	AB INNOVATES-HEALTH SOLUTIONS-RES ALLOW STUDENT AB INNOVATES-HEALTH SOLUTIONS-RES ALLW FELLOW	N N	NON TRI-COUNCIL
Braden Manns		Lianne Barnieh Rsch Allw	AB INNOVATES-HEALTH SOLUTIONS-RES ALLW FELLOW ALBERTA INNOVATES - HEALTH SOLUTIONS	N	NON TRI-COUNCIL
Willis Tsai		Obstructive Sleep Apnea	ALBERTA INNOVATES - HEALTH SOLUTIONS AHFMR	N	NON TRI-COUNCIL
Brenda Hemmelgarn	\$10,465.45		ARITMIK AB INNOVATES HLTH SOLUTIONS- INTERDEC TEAM GRANT	N	NON TRI-COUNCIL
William Amin Ghali			AB INNOVATES HETH SOLUTIONS- INTERDEC TEAM GRANT	N	NON TRI-COUNCIL
		Strategic Initiative Funding			
Sofia Ahmed Patrick Joseph Haply	(\$100,000.00)	Establishment Grant		N N	NON TRI-COUNCIL
Patrick Joseph Hanly Brenda Hemmelgarn		Loewen Andrea RA	AHFMR-CLINICAL FELLOWSHIPS		NON TRI-COUNCIL
Brenda Hemmelgarn	¢1// 151 17	James Matthew RA	AB INNOVATES-HEALTH SOLUTIONS-RES ALLW FELLOW	N	NON TRI-COUNCIL
Sharon Straus		Establishment Impl	AHFMR-ESTABLISHMENT GRANTS	N	NON TRI-COUNCIL
Gil Kaplan Gil Kaplan		Pop Hith Invest Est Grant	AB INNOVATES-HEALTH SOLUTIONS-ESTABLISHMENT GRANT	N	NON TRI-COUNCIL
Gil Kaplan		Pop Hith Invest Equipment	AB INNOVATES-HEALTH SOLUTIONS-CAPITAL EQUIP	N	NON TRI-COUNCIL
Sharon Straus		Research Allowance	AHFMR	N	NON TRI-COUNCIL
William Amin Ghali	(\$17,760.00)	Incentive Investigator Level	AHFMR	Ν	NON TRI-COUNCIL





Robert Myers	(\$24,000.00)	CI Incentive Investigator	AHFMR	Ν	NON TRI-COUNCIL
Sofia Ahmed	(\$24,000.00)	Investigator Level	AHFMR	Ν	NON TRI-COUNCIL
Paul Beck	(\$50,000.00)	SENIOR SCHOLAR RSCH ALLOW	ALBERTA INNOVATES - HEALTH SOLUTIONS	Ν	NON TRI-COUNCIL
Daniel Abraham Muruve	(\$50,000.00)	Senior Scholar Research Allow	ALBERTA INNOVATES - HEALTH SOLUTIONS	Ν	NON TRI-COUNCIL
Gil Kaplan	(\$35,000.00)	Pop HIth Invest Rsch Allow	ALBERTA INNOVATES - HEALTH SOLUTIONS	Ν	NON TRI-COUNCIL
Braden Manns	(\$35,000.00)	Health Scholarship Rsrch Allow	ALBERTA INNOVATES - HEALTH SOLUTIONS	Ν	NON TRI-COUNCIL
Daniel Abraham Muruve	(\$35,520.00)	CI Sr Scholar Investigator	ALBERTA INNOVATES - HEALTH SOLUTIONS	Ν	NON TRI-COUNCIL
Gil Kaplan	(\$24,000.00)	Investigator Level	AB INNOVATES-HEALTH SOLUTIONS-CLINICAL INVEST	N	NON TRI-COUNCIL
Robert Jay Hilsden		Effectiveness of pegylated	CIHR - COMMON AWARDS CIHR300	Y	CIHR
Christopher Mody	(\$107,945.00)	lymphocyte-mediated	CIHR - COMMON AWARDS CIHR300	Y	CIHR
Kevin Bjorn Laupland		Renal Failure	CDN INTENSIVE CARE FOUNDATION	N	NON TRI-COUNCIL
Patrick Joseph Hanly	(\$37,000.00)	CONTROL OF BREATHING IN HEALTH	ST MICHAEL'S HOSPITAL	Ν	NON TRI-COUNCIL
Norman Robert Campbell	(\$30,000.00)	Hypertensioin grant	ALGORITHM HYPERTENSION PROJECT	N	NON TRI-COUNCIL
Norman Robert Campbell	(\$18,000.00)	Hypertensioin grant	ALGORITHM HYPERTENSION PROJECT	N	NON TRI-COUNCIL
Mark Gordon Swain	(\$87,975.00)	Role CXCR3/CCR1/CCR5	CIHR - COMMON AWARDS CIHR300	Y	CIHR
Paul Beck	(\$1,000.00)	MD/PhD Rsch Allw 2005-06 start	CIHR - COMMON AWARDS CIHR300	Y	CIHR
Russell Douglas Hull	\$85,123.64	PIOPED III	NATIONAL INSTITUTES OF HEALTH	N	NON TRI-COUNCIL
Norman Robert Campbell	(\$150,000.00)	CIHR/Rx&D-Cdn Chair -Operating	CIHR - COMMON AWARDS CIHR300	Y	CIHR
Richard Leigh	(\$46,125.00)	Richard Leigh Research Chair	CIHR - COMMON AWARDS CIHR300	Y	CIHR
Ronald Rae Read	(\$40,000.00)	ACAAF project #AB0224	AGRICULTURE AND FOOD COUNCIL OF ALBERTA	N	NON TRI-COUNCIL
Lee Anne Tibbles	,	146229 ACE Inhibition	OTTAWA HEALTH RESEARCH INSTITUTE	Ν	NON TRI-COUNCIL
Paul Beck		CIHR MD/PhD Rsch Allw	CIHR - COMMON AWARDS CIHR300	Y	CIHR
Jayna Holroyd-Leduc		mgmt tool urinary incontinence	CIHR - COMMON AWARDS CIHR300	Y	CIHR
Michael John Gill	,	NORTH AMERICAN AIDS COHORT	JOHNS HOPKINS UNIVERSITY	Ν	NON TRI-COUNCIL
Norman Robert Campbell		Epidemiology of Hypertension	CIHR - COMMON AWARDS CIHR300	Y	CIHR
Brenda Hemmelgarn		ACCESS TO KIDNEY TRANSPLANTATI	UNIVERSITY OF BRITISH COLUMBIA	Ν	NON TRI-COUNCIL
Brenda Hemmelgarn	,	ACCESS TO KIDNEY TRANSPLANTATI	UNIVERSITY OF BRITISH COLUMBIA	Ν	NON TRI-COUNCIL
Daniel Abraham Muruve		Inflammasome role in response	CIHR - COMMON AWARDS CIHR300	Y	CIHR
Robert Myers		Prediction of hepatic fibrosis	CIHR - COMMON AWARDS CIHR300	Y	CIHR
Michael John Gill		HCV HAART Liver Disease	MCGILL UNIVERSITY HEALTH CENTRE	N	NON TRI-COUNCIL
Mark Gordon Swain		T Cell Interactions Hepatitis	CANADIAN LIVER FOUNDATION	N	NON TRI-COUNCIL
William Oliver Martin		Rheumatoid Arthritis therapies	MOUNT SINAI HOSPITAL	N	NON TRI-COUNCIL
Paul Beck		CIHR MD PHD Rsrch Allow	CIHR - COMMON AWARDS CIHR300	Y	CIHR
Martin Storr		ECS in Intestinal Inflammation	CROHN'S AND COLITIS FDN OF CAN	N	NON TRI-COUNCIL
Marvin Jacob Fritzler		Joanna Moser - Rsch Allw	CIHR - AWARDS CIHR300	Y	CIHR
William Amin Ghali		Alka Patel - Rsch Allw	CIHR - AWARDS CIHR300	Y	CIHR
Nairne Scott-Douglas		Residual Balance	RESIDUAL BALANCE - CT	N	NON TRI-COUNCIL
Gil Kaplan		effect outdoor air pollution	CIHR - COMMON AWARDS CIHR300	Y	CIHR
Gil Kaplan		effect of outdoor pollution	CIHR - COMMON AWARDS CIHR300	Y	CIHR
Heidi Schmaltz		Optimal Use of Telehealth	MSI FOUNDATION	N	NON TRI-COUNCIL
Richard Leigh	(\$50,000.00)	Natural Cold Study	CALGARY HEALTH TRUST	N	NON TRI-COUNCIL
Richard Leigh		Natural Cold Study	CALGARY HEALTH TRUST	N	NON TRI-COUNCIL
Man-Chiu Poon		Thrombophilia screening	CALGARY LABORATORY SERVICES	N	NON TRI-COUNCIL
Robert Jay Hilsden		CIHR Emerging Team Colorectal	SUNNYBROOK & WOMEN COLLEGE HLTH SCIENCE	N	NON TRI-COUNCIL
Nizar Jacques Bahlis		CD28-mediated regulation	HEALTH RESEARCH INC	N	NON TRI-COUNCIL
Robert Jay Hilsden		D961DL00005 - Gastro bleeding	RES INSTITUTE OF MCGILL UNIV HEALTH CENTRE	N	NON TRI-COUNCIL
Robert Jay Hilsden		D961DL00005 - Gastro bleeding	RES INSTITUTE OF MCGILL UNIV HEALTH CENTRE	N	NON TRI-COUNCIL
William Amin Ghali		GENESIS PRAXY Study	HEART AND STROKE FDN OF ALBERTA, NWT & NUNAVUT	N	NON TRI-COUNCIL
Douglas Allan Stewart		Terry Fox Project		N	NON TRI-COUNCIL
Daniel Abraham Muruve		Inflammasome in renal injury	CIHR - COMMON AWARDS CIHR300	Y	CIHR
Paul Beck		CIHR MD PhD Grant	CIHR - COMMON AWARDS CIHR300	Y	CIHR
David Bryan Hogan		Canadians willingness to pay		N	NON TRI-COUNCIL
Brenda Hemmelgarn		Cardiac care for First Nation	CIHR - COMMON AWARDS CIHR300	Y	CIHR
Stephen Kimmer Field		AECOPD TNF alpha Antagonists	OTTAWA HEALTH RESEARCH INSTITUTE	N	NON TRI-COUNCIL
Christopher Andrews		Laparoscopic Myotomy	UNIVERSITY HEALTH NETWORK	N	NON TRI-COUNCIL
Doreen Rabi		GENESIS PRAXY	RES INSTITUTE OF MCGILL UNIV HEALTH CENTRE	N	NON TRI-COUNCIL
Doreen Rabi		GENESIS PRAXY	RES INSTITUTE OF MCGILL UNIV HEALTH CENTRE	N	NON TRI-COUNCIL
Mark Gordon Swain		Charlotte DMello Rsch Allw	CIHR - AWARDS CIHR300	Y	
Jan Storek		24415 hematopoietic cell trans	ALBERTA CANCER FOUNDATION	N	NON TRI-COUNCIL
Gil Kaplan		Postop colectomy in elderly		N	NON TRI-COUNCIL
Nizar Jacques Bahlis		Integrin beta 7 mediated regul	THE LEUKEMIA & LYMPHOMA SOCIETY OF CANADA	N	NON TRI-COUNCIL
Paul Beck		Hypoxia inducible factor-1	CIHR - COMMON AWARDS CIHR300	Y	CIHR
Doreen Rabi		Sonia Butalia Rsch allw	CIHR - AWARDS CIHR300	Y	CIHR
Lee Anne Tibbles		BK: KIDNI Trail	CIHR - COMMON AWARDS CIHR300	Y	CIHR
Daniel Abraham Muruve		Approach to GN	UNIVERSITY OF ALBERTA	N	NON TRI-COUNCIL
Michael John Gill		The Maintain study CTN 238	OTTAWA HOSPITAL RESEARCH INSTITUTE	N	NON TRI-COUNCIL
Paul Beck	(\$1,000,00)	MD/PhD 2009-10 Start-Rsch Allw	CIHR - COMMON AWARDS CIHR300	Y	CIHR





Catherine (Maria) Bacchus	(\$25,000.00)	Cardiac physical examination	ROYAL COLLEGE OF PHYSICIANS & SURGEONS CA	Ν	NON TRI-COUNCIL
Robert Lawrence Cowie	(\$5,549.09)	CCAP Residual Group Account	RESIDUAL BALANCE - CT	N	NON TRI-COUNCIL
Michael John Gill	(\$3,840.00)	Canadian cohort of HIV+	CTR HOSPITALIER DE L'UNIVERSITE DE MONTREAL (CHUM)	N	NON TRI-COUNCIL
Thomas John Louie	(\$257,912.45)	Material Testing Agreement.	OPTIMER PHARMACEUTICALS INC	N	NON TRI-COUNCIL
Braden Manns	\$74,876.00	Stage 4 and 5 non-dialysis	CIHR - COMMON AWARDS CIHR300	Y	CIHR .
William Amin Ghali	(\$250,000.00)	21st Century Initiative	ALBERTA ADVANCED EDUCATION AND TECHNOLOGY	Ν	NON TRI-COUNCIL
Paul Beck	(\$500.00)	Patrick Schenck Rsch Allw	CANADIAN ASSOCIATION OF GASTROENTEROLOGY	N	NON TRI-COUNCIL
John Edward Remmers	(\$32,418.00)	Dental Appliance Therapy	UNIVERSITY TECHNOLOGIES INTERNATIONAL	Ν	NON TRI-COUNCIL
Brenda Hemmelgarn	(\$5,000.00)	Paul Ronksley Rsch Allw	CIHR - AWARDS CIHR300	Y	CIHR
Stephen Kimmer Field	(\$13,500.00)	CANOX Trial	UNIVERSITY OF LAVAL	Ν	NON TRI-COUNCIL
Warren James Davidson	(\$25,000.00)	pediatric-to-adult asthma	LUNG ASSOCIATION, ALBERTA & NWT	Ν	NON TRI-COUNCIL
William Amin Ghali	(\$48,600.00)	patient safety indicators	CIHR - COMMON AWARDS CIHR300	Y	CIHR
Kenneth Thomas	(\$5,000.00)	Geoff Schneider Rsch Allw	CIHR - AWARDS CIHR300	Y	CIHR
Kevin Bjorn Laupland	(\$20,000.00)	Safety of Anti-pyretic Therapy	NATIONAL IRANIAN OIL COMPANY	Ν	NON TRI-COUNCIL
William Amin Ghali	(\$200,000.00)	WEPA & AB Health & Wellness	ALBERTA HEALTH AND WELLNESS	Ν	NON TRI-COUNCIL
Gil Kaplan	(\$750.00)	Natalie Molodecky Rsch Allow	CROHN'S AND COLITIS FDN OF CAN	Ν	NON TRI-COUNCIL
Matthew James	(\$36,920.25)	KFOC100018	KIDNEY FOUNDATION OF CANADA	Ν	NON TRI-COUNCIL
Maitreyi Kothandaraman	(\$5,450.00)	Novice to Expert Endoscopist	ALBERTA HEALTH SERVICES - CALGARY HEALTH REGION	Ν	NON TRI-COUNCIL
Paul Allen Taenzer	(\$210,000.00)	Alliances for Health Research	MCMASTER UNIVERSITY	Ν	NON TRI-COUNCIL
Paul Beck	(\$125,000.00)	NLRP3-inflammasome	CROHN'S AND COLITIS FDN OF CAN	Ν	NON TRI-COUNCIL
John Victor Tyberg	(\$58,469.00)	Systemic Blood Flow	CIHR - COMMON AWARDS CIHR300	Y	CIHR
William Amin Ghali	(\$5,000.00)	Alexander Leung Rsch Allw	CIHR - AWARDS CIHR300	Y	CIHR
Regine Mydlarski	(\$75,000.00)	Cutaneous Squamous Cell Carcin	CANADIAN DERMATOLOGY FOUNDATION	Ν	NON TRI-COUNCIL
Christopher Mody	(\$40,000.00)	Cryptococcus Gatti	LUNG ASSOCIATION, ALBERTA & NWT	Ν	NON TRI-COUNCIL
Carla Coffin	(\$75,030.00)	Characterization of HBV	AMERICAN ASSOC FOR THE STUDY OF LIVER DISEASES	Ν	NON TRI-COUNCIL
Maitreyi Kothandaraman	(\$9,939.00)	Assess Fat Malabsorption	CALGARY LABORATORY SERVICES	Ν	NON TRI-COUNCIL
William Amin Ghali	(\$33,550.00)	ACHORD	UNIVERSITY OF ALBERTA	Ν	NON TRI-COUNCIL
Maitreyi Kothandaraman	(\$9,939.00)	Assess Fat Malabsorption	ALBERTA HEALTH SERVICES - CALGARY HEALTH REGION	Ν	NON TRI-COUNCIL
William Amin Ghali	(\$40,000.00)	Understanding "Troponinitis":	UNIVERSITY OF ALBERTA	Ν	NON TRI-COUNCIL
Steven Heitman	(\$9,875.00)	High-Definition White Light	ALBERTA HEALTH SERVICES - CALGARY HEALTH REGION	Ν	NON TRI-COUNCIL
Paul Beck	(\$1,000.00)	MD/PhD Program Grant- Rsch All	CIHR - COMMON AWARDS CIHR300	Y	CIHR
Martin Storr	(\$6,000.00)	Immune Modulators Properties	VSL PHARMACEUTICALS INC	Ν	NON TRI-COUNCIL
Carolyn Owen	(\$50,000.00)	Elucidating the Clinical Relev	ALBERTA CANCER FOUNDATION	Ν	NON TRI-COUNCIL
Pietro Ravani	(\$12,000.00)	Complications of Arteriovenous	CIHR - COMMON AWARDS CIHR300	Y	CIHR
Alun Lloyd Edwards	(\$5,000.00)	EDWARDS A L	ENDOCRINOLOGY RESEARCH & EDUCATION	Ν	NON TRI-COUNCIL
Nairne Scott-Douglas	(\$151,804.00)	Kidney Disease Research	SOUTHERN ALBERTA KIDNEY DISEASE RESEARCH FUND	Ν	NON TRI-COUNCIL
Christopher Mody	(\$8,500.00)		RESPIRATORY MEDICINE VISITING SPEAKERS	Ν	NON TRI-COUNCIL

(\$9,828,601.03)